

**Lincoln in the Viking Age:
A 'Town' in Context**

Aleida Tessa Ten Harkel

A thesis submitted for the degree of Doctor of Philosophy

Department of Archaeology,
University of Sheffield

March 2010

Volume 2

BEST COPY

AVAILABLE

Variable print quality

**Paginated
blank pages
are scanned
as found in
original thesis**

**No information
is missing**



Fig. 1: Location of Lincoln within the British Isles.

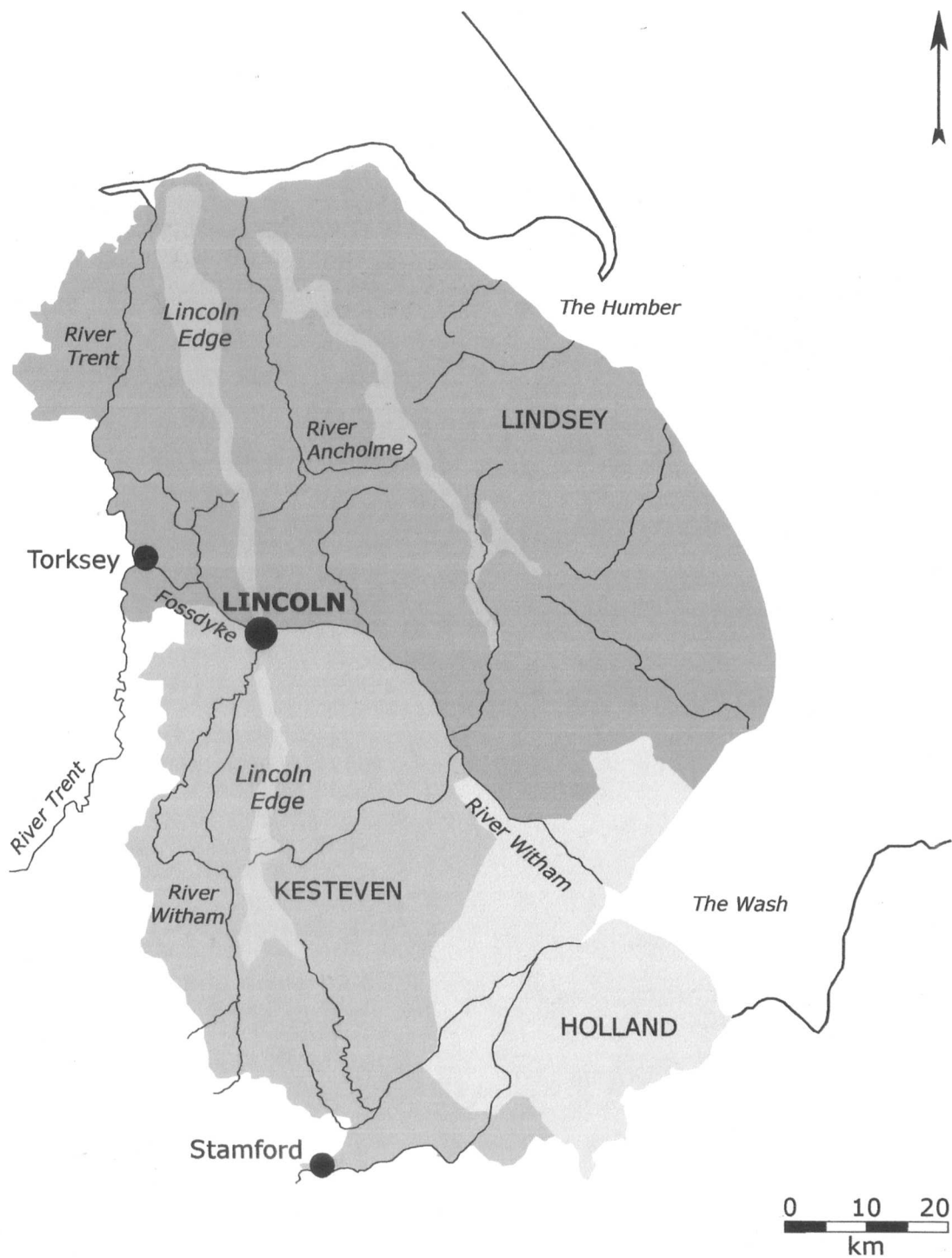


Fig. 2: Map of Lincolnshire showing the location of the districts, main rivers and main settlements mentioned in the text.

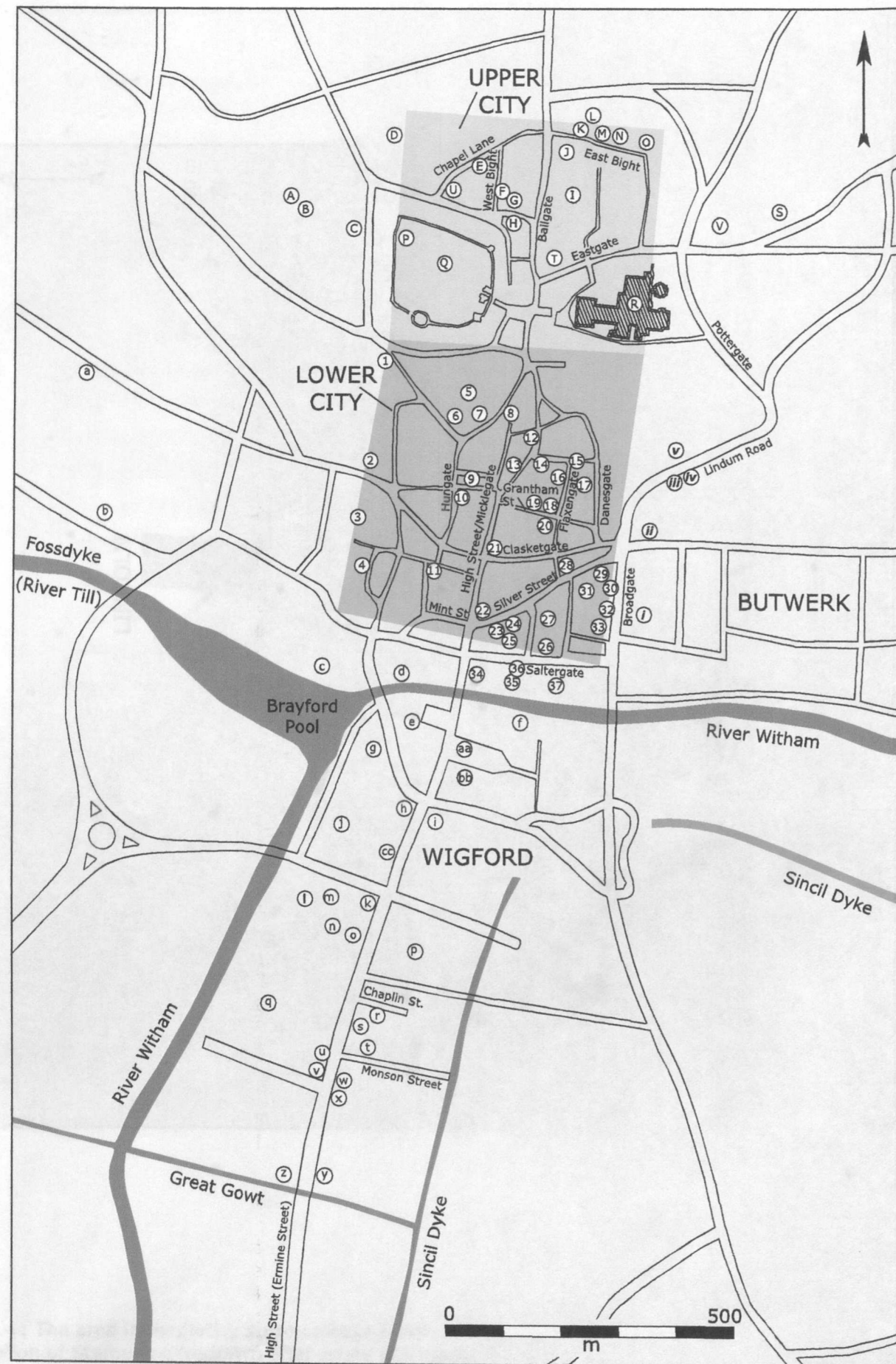


Fig. 3: Sites in Lincoln. After Jones *et al.* 2003: fig. 1.

LEGEND

Sites in and near the Upper City:

- A lh84 (The Lawn)
- B la85 (The Lawn)
- C l86 (The Lawn)
- D cy89 (Cuthbert's Yard)
- E cl85 (Chapel Lane)
- F wb76, wb80 (West Bight)
- G mw79 (Mint Wall)
- H sp72 (St Paul-in-the-Bail)
- I cp56 (Cottesford Place)
- J on261 (Bailgate Methodist Church)
- K eb70 (East Bight)
- L eb66 (East Bight)
- M eb66 (East Bight)
- N ebs70 (East Bight)
- O eb53, eb79, eb80 (East Bight)
- P cwg86, cwg88 (Castle Westgate)
- Q cas91 (Castle)
- R Cathedral sites
- S lg89 (Langworthgate)
- T The church of All Saints in the Bail (approximate location)
- U The church of St Clement in the Bail (approximate location)
- V The church of St Peter Eastgate

Sites in the Lower City and along the waterfront:

- 1 Motherby Hill
- 2 wp81 (West Parade)
- 3 p70 (The Park)
- 4 psl00 (Park Street)
- 5 mg78 (Michaelgate)
- 6 spm83 (Spring Hill/Michaelgate)
- 7 mgb99 (St Michael's Terrace, Michaelgate)
- 8 mch84 (Michaelgate Chestnut House)
- 9 The church of St Martin
- 10 h83, hun00 (Hungate)
- 11 The church of All Saints, Hungate
- 12 sh74 (Steep Hill)
- 13 The Strait
- 14 dt74 (Danes Terrace)
- 15 dcpa01, ldg03 (Danesgate/The Collection)
- 16 flax69 (Flaxengate)
- 17 flax45-47 (Flaxengate)
- 18 f72 (Flaxengate)
- 19 gp81 (Granta Place)
- 20 sw82, lgs00 (Grantham Street)
- 21 The church of St Lawrence
- 22 The churches of St Peter-at-Pleas and St Peter-at-Arches (a.k.a St Peter at Mootstone)
- 23 lin73f (Saltergate)
- 24 lin73e (Saltergate)

- 25 lin73d (Saltergate)
- 26 The church of St Swithin
- 27 The church of St Edmund
- 28 The church of the Holy Trinity, Clasketgate
- 29 lin73b (Silver Street)
- 30 lin73c (Silver Street)
- 31 lin73a (Silver Street)
- 32 glb94 (Central Library)
- 33 gl91 (Central Library)
- 34 wo89 (Woolworth's Basement)
- 35 wnw88 (Waterside)
- 36 wf89 (Waterfront)
- 37 wn85 (Waterside)

Sites in Wigford and north of the Brayford Pool:

- a nss97 (northern subsidiary sewer)
- b 57-59 Carholme Road
- c bwn75, bql03 (Brayford Wharf North)
- d on36 (214-15 High Street)
- e sb85 (St Benedict's Square)
- f ws82 (Waterside South)
- g dm72 (Dickinson's Mill)
- h hg72 (Holmes Grainwarehouse)
- i The church of St Mary-le-Wigford
- j bwe82 (Brayford Wharf East)
- k sm76 (St Mark's Church)
- l br85 (St Mark's Station)
- m zea95 (St Mark's Station)
- n z86 (St Mark's Station)
- o zeb95 (St Mark's Station)
- p ze87, ze90 (St Mark's Station East)
- q Anchor Street
- r cs73 (Chaplin Street)
- s The church of the Holy Trinity, Wigford
- t m82 (Monson Street)
- u 116 High Street
- v The church of St Andrew
- w smg82 (St. Mary's Guildhall)
- x The church of St Peter-at-Gowts
- y The church of St Botolph
- z 1-8 Mill Lane
- aa The church of St John the Evangelist
- bb Cornhill Square
- cc hs90 (170 High Street)

Sites in Butwerk:

- i be73 (Broadgate)
- ii ses97 (Session House) and site of St. Rumbold's Church
- iii tca94 (Cathedral Street)
- iv tc93 (Cathedral Street)
- v lrb00 (Greestone Centre, Lincoln University)

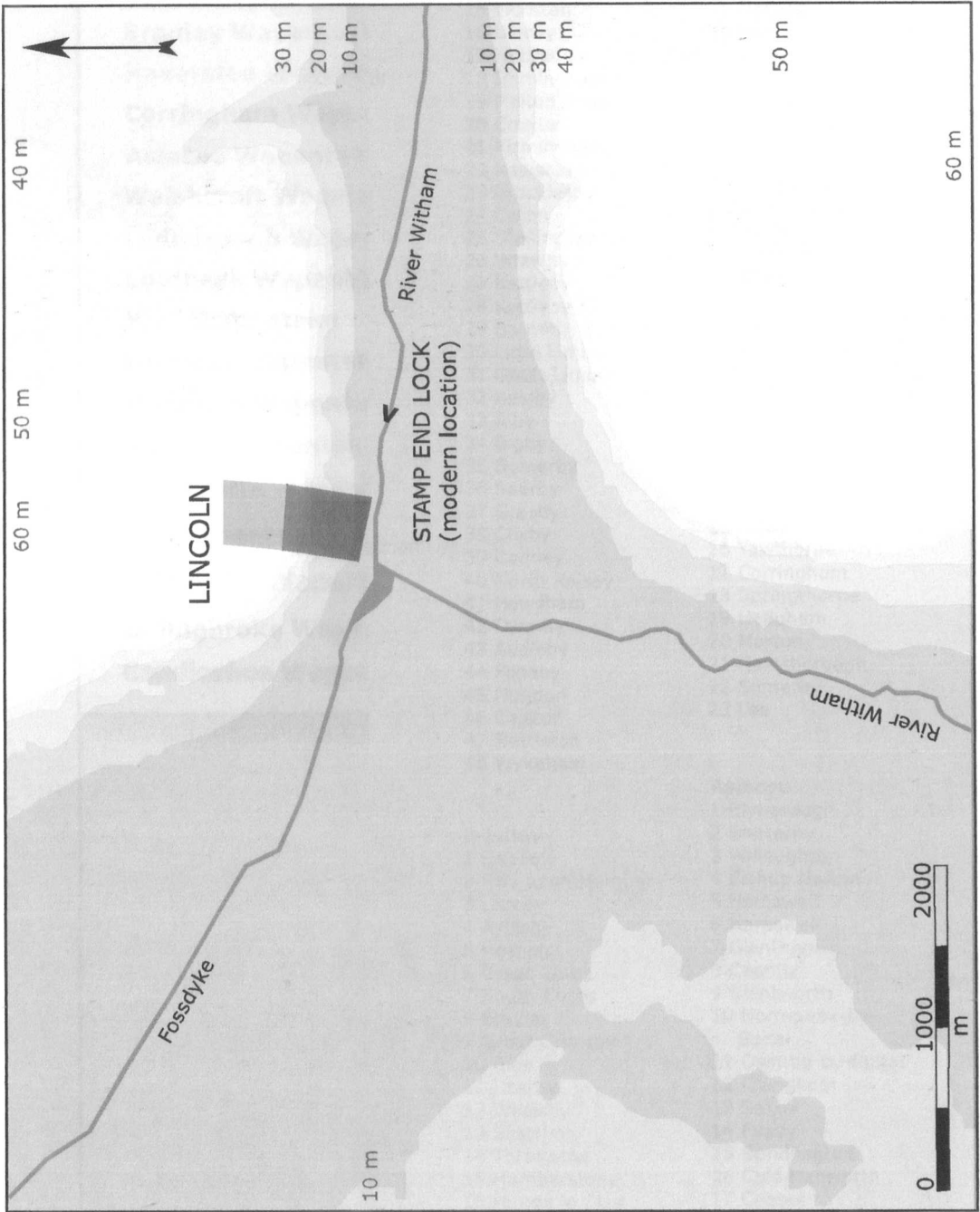
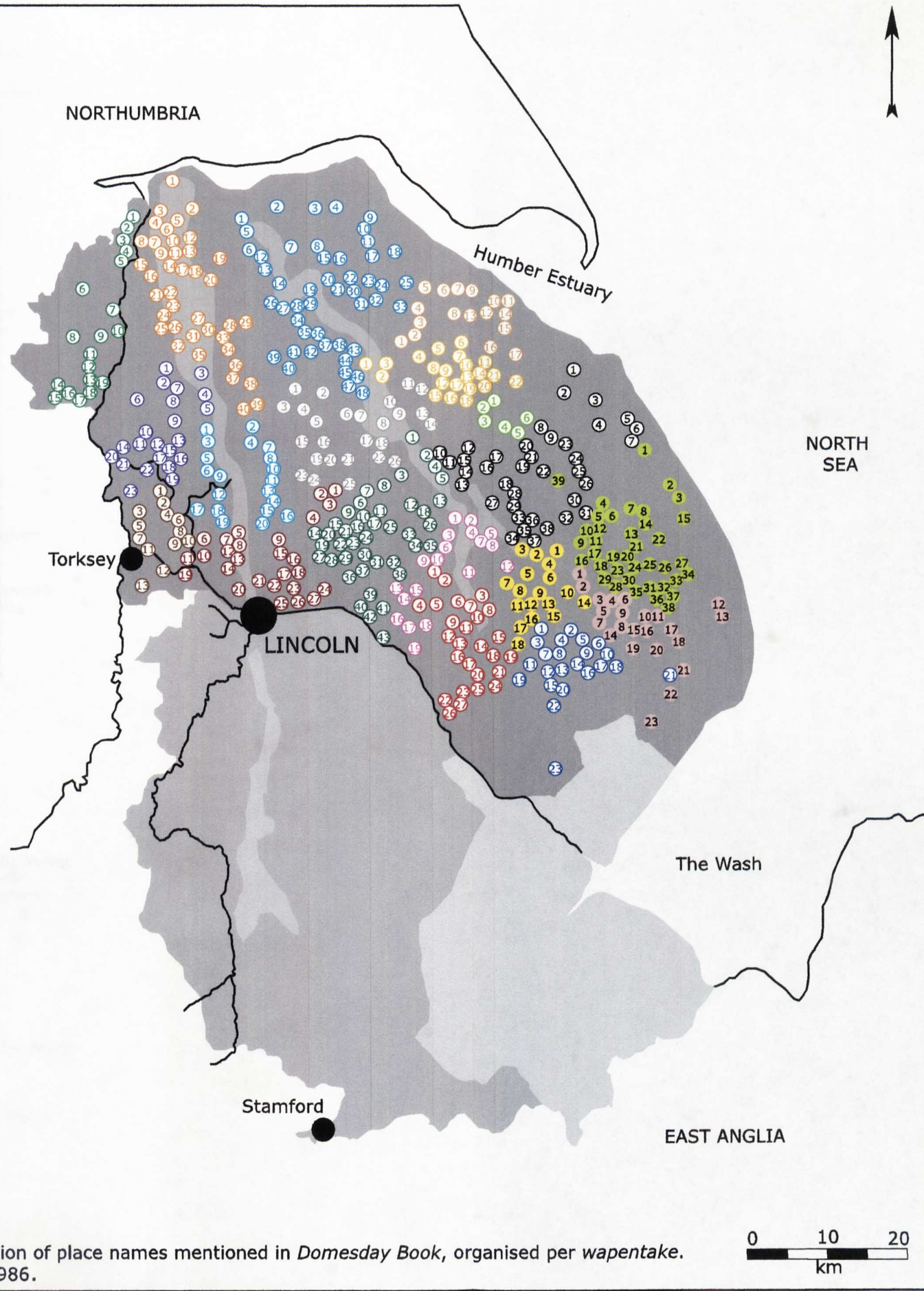


Fig. 4: The area immediately surrounding Lincoln, with contour lines and the location of Stamp End (redrawn after Jones *et al.* 2003 fig. 1.1).

LEGEND

- Epworth Wapentake**
- Manley Wapentake**
- Yarborough Wapentake**
- Bradley Wapentake**
- Haverstoe Wapentake**
- Corringham Wapentake**
- Aslaoe Wapentake**
- Walshcroft Wapentake**
- Ludborough Wapentake**
- Louthesk Wapentake**
- Well Wapentake**
- Lawress Wapentake**
- Wraggoe Wapentake**
- Gartree Wapentake**
- Horncastle Wapentake**
- Hill Wapentake**
- Calcewath Wapentake**
- Bolingbroke Wapentake**
- Candleshoe Wapentake**



- Epworth**
 - 1 Garthorpe
 - 2 Waterton
 - 3 Luddington
 - 4 'The marshes'
 - 5 Amcotts
 - 6 Crowle
 - 7 Althorpe
 - 8 Belton
 - 9 Beltoft
 - 10 West Butterwick
 - 11 Epworth
 - 12 Low Burnham
 - 13 High Burnham
 - 14 Uppethorpe
 - 15 Westwoodside
 - 16 Haxey
 - 17 Graizelound
 - 18 East Lound
 - 19 Owston Ferry
- Manley**
 - 1 Whitton
 - 2 Winteringham
 - 3 Alkborough
 - 4 Walcot
 - 5 West Halton
 - 6 Coleby
 - 7 Derby
 - 8 Burton upon Stather
 - 9 Normanby
 - 10 Haythby
 - 11 Thealby
 - 12 Winterton
 - 13 Roxby
 - 14 Great Conesby
 - 15 Flixborough
 - 16 Little Conesby
 - 17 Sawcliffe
 - 18 Risby
 - 19 Appleby
 - 20 Santon
 - 21 Crosby
 - 22 Scunthorpe
 - 23 Brumby
 - 24 Ashby
 - 25 Yaddletorpe
 - 26 Bottesford
 - 27 Manby
 - 28 Broughton
 - 29 Castletorpe
 - 30 Raventhorpe
 - 31 Holme
 - 32 Messingham
 - 33 Scawby
 - 34 Sturton
 - 35 Manton
 - 36 Hibaldstow
 - 37 Gainsthorpe
 - 38 Redbourn
 - 39 Waddingham
 - 40 Stainton
- Yarborough**
 - 1 South Ferriby
 - 2 Barton upon Humber
 - 3 Barrow on Humber
 - 4 Goxhill
 - 5 Horkstow
 - 6 Saxby All Saints
 - 7 Burnham
- Haverstoe**
 - 1 Cabourn
 - 2 Rothwell
 - 3 Cuxwold
 - 4 Beelsby
 - 5 Barnoldby le Beck
 - 6 Waltham
 - 7 Brigsley
 - 8 Hatcliffe
 - 9 Ravendale
 - 10 Ashby
- Corringham**
 - 1 Scottertorpe
 - 2 Scotter
 - 3 Cleatham
 - 4 Kirton in Lindsey
 - 5 Grayingham
 - 6 Laughton
 - 7 Scotton
 - 8 Northorpe
 - 9 Southorpe
 - 10 Blyton
 - 11 Wharton
 - 12 Pilham
 - 13 Dunstall
 - 14 Thonock
 - 15 Aisby
 - 16 Yawthorpe
 - 17 Corringham
 - 18 Springthorpe
 - 19 Heapham
 - 20 Morton
 - 21 Gainsborough
 - 22 Somerby
 - 23 Lea
- Aslaoe**
 - 1 Blyborough
 - 2 Snitterby
 - 3 Willoughton
 - 4 Bishop Norton
 - 5 Hemswell
 - 6 Harpswell
 - 7 Glentham
 - 8 Caenby
 - 9 Glentworth
 - 10 Normanby-by-Spital
 - 11 Owmbly-by-Spit
 - 12 Fillingham
 - 13 Saxby
 - 14 Firsby
 - 15 Spridlington
 - 16 Cold Hanworth
 - 17 Coates
 - 18 Ingham
 - 19 Cammeringham
 - 20 Hackthorn
- Walshcroft**
 - 1 South Kelsey
 - 2 Holton le Moor
 - 3 Winghale
 - 4 Thornton le Moor
 - 5 Owersby
 - 6 Claxby
 - 7 Normanby le Wold
 - 8 Otby
 - 9 Stainton
- Thornton Curtis**
 - 8 Thornton Curtis
 - 9 East Halton
 - 10 Lobingeham
 - 11 Killingholme
 - 12 Bonby
 - 13 Worlaby
 - 14 Elsham
 - 15 Wootton
 - 16 Ulceby
 - 17 Habrough
 - 18 Immingham
 - 19 Melton Ross
 - 20 Croxton
 - 21 Kirmingham
 - 22 Newsham
 - 23 Brocklesby
 - 24 Coton
 - 25 Stallingborough
 - 26 Wrawby
 - 27 Kettleby
 - 28 Kettleby Thorpe
 - 29 Barnetby le Wold
 - 30 Little Limber
 - 31 Great Limber
 - 32 Keelby
 - 33 Riby
 - 34 Bigby
 - 35 Somerby
 - 36 Searby
 - 37 Grasby
 - 38 Clixby
 - 39 Cadney
 - 40 North Kelsey
 - 41 Howsham
 - 42 Owmbly
 - 43 Audleby
 - 44 Fonaby
 - 45 Hundon
 - 46 Caistor
 - 47 Nettleton
 - 48 Wykeham
- Waithe**
 - 11 Waithe
 - 12 Gunnerby
 - 13 Fenby
 - 14 Grainsby
 - 15 Swinhope
 - 16 Wold Newton
 - 17 Hawerby
 - 18 North Cadeby
 - 19 Beesby
 - 20 Audby
 - 21 North Thoresby
 - 22 Fulstow

Fig. 5: The area of Lindsey and location of place names mentioned in *Domesday Book*, organised per wapentake. Redrawn after Morgan and Thorne 1986.

**Walshcroft Wapentake
(cont'd)**

- 10 Thoresway
- 11 Croxby
- 12 Thorganby
- 13 Orford
- 14 Binbrook
- 15 Kingerby
- 16 Osgodby
- 17 Walesby
- 18 Risby
- 19 West Rasen
- 20 Middle Rasen
- 21 Market Rasen
- 22 Tealby
- 23 Toft next Newton
- 24 Newton by Toft
- 25 Linwood
- 26 North Willingham

Ludborough Wapentake

- 1 Ludborough
- 2 Wyham
- 3 North Ormsby
- 4 Fotherby
- 5 Little Grimsby
- 6 Covenham

Louthesk Wapentake

- 1 Swine
- 2 Grainthorpe
- 3 Somercotes
- 4 Skidbrooke
- 5 Mare
- 6 Saltfleet
- 7 Saltfleetby
- 8 Yarburgh
- 9 Alvingham
- 10 West Wykeham
- 11 East Wykeham
- 12 Kelstern
- 13 Gayton le Wold
- 14 South Cadeby
- 15 Calcethorpe
- 16 Welton le Wold
- 17 Elkington
- 18 Hallington
- 19 Louth
- 20 Brackenborough
- 21 Keddington
- 22 Stewton
- 23 Cockerington
- 24 Grimoldby
- 25 Manby
- 26 Little Carlton
- 27 Withcall
- 28 Raithby
- 29 Maltby
- 30 North Reston
- 31 Authorpe
- 32 Muckton
- 33 Tathwell
- 34 Farforth
- 35 Maidenwell
- 36 Haugham
- 37 Ruckland
- 38 Burwell

Well Wapentake

- 1 Upton
- 2 Kexby
- 3 Knaith
- 4 Willingham by Stow
- 5 Gate Burton
- 6 Normanby by Stow
- 7 Marton

- 8 Stow St Mary
- 9 Sturton by Stow
- 10 Bransby
- 11 Brampton
- 12 Hardwick
- 13 Newton on Trent

Lawress Wapentake

- 1 Buslingthorpe
- 2 Faldingworth
- 3 Friesthorpe
- 4 Snarford
- 5 Brattleby
- 6 Thorpe le Fallows
- 7 Aisthorpe
- 8 Scampton
- 9 Welton
- 10 Broxholme
- 11 Ingleby
- 12 North Carlton
- 13 Middle Carlton
- 14 South Carlton
- 15 Dunholme
- 16 Scothern
- 17 Sudbrooke
- 18 Holme
- 19 Saxilby
- 20 Burton
- 21 Riseholme
- 22 Nettleham
- 23 Reepham
- 24 Barlings
- 25 Greetwell
- 26 Cherry Willingham
- 27 Fiskerton

Wraggoe Wapentake

- 1 Kirmond le Mire
- 2 Ludford
- 3 Sixhills
- 4 Girsby
- 5 Burgh on Bain
- 6 Bleasby
- 7 Legsby
- 8 Holtham
- 9 Lissington
- 10 Calcote
- 11 Torrington
- 12 Hainton
- 13 Biscathorpe
- 14 Swinhorpe
- 15 Wickenby
- 16 Holton cum Beckering
- 17 West Torrington
- 18 South Willingham
- 19 Reasby
- 20 Snelland
- 21 Westlaby
- 22 Fulnetby
- 23 Rand
- 24 Beckering
- 25 Barkwith
- 26 Benniworth
- 27 Stainton by Langworth
- 28 Newball
- 29 Bullington
- 30 Wragby
- 31 Langton by Wragby
- 32 Strubby
- 33 Hardwick
- 34 Panton
- 35 Sotby
- 36 Apley
- 37 Kingthorpe
- 38 Hatton
- 39 Osgodby

- 40 Stainfield
- 41 Butyate
- 42 Bardney
- 43 Southrey

Gartree Wapentake

- 1 Donington on Bain
- 2 Stenigot
- 3 Market Stainton
- 4 Goulceby
- 5 Cawkwell
- 6 Ranby
- 7 Asterby
- 8 Scamblesby
- 9 *Sudtone*
- 10 Great Sturton
- 11 Hemingby
- 12 Belchford
- 13 Thorley
- 14 Little Minting
- 15 Minting
- 16 Burreth
- 17 Bucknall
- 18 Horsington
- 19 Stixwold

Horncastle Wapentake

- 1 Little Sturton
- 2 Baumber
- 3 West Ashby
- 4 Waddingworth
- 5 Wispington
- 6 Edlington
- 7 Thimbleby
- 8 Toynton
- 9 Langton
- 10 Horncastle
- 11 Thornton
- 12 *Torp*
- 13 Martin
- 14 Scrivelsby
- 15 Mareham on the Hill
- 16 Roughton
- 17 Haltham
- 18 Wood Enderby
- 19 Moorby
- 20 Kirkby on Bain
- 21 Wilksby
- 22 Tattershall Thorpe
- 23 Fulsby
- 24 Mareham le Fen
- 25 Tumbly
- 26 Tattershall
- 27 Coningsby

Hill Wapentake

- 1 Walmsgate
- 2 Worlaby
- 3 Oxcombe
- 4 Ketsby
- 5 Tetford
- 6 South Ormsby
- 7 Fulletby
- 8 Salmonby
- 9 Somersby
- 10 Brinkhill
- 11 Greetham
- 12 Ashby Puerorum
- 13 Bag Enderby
- 14 Langton
- 15 Hagworthingham
- 16 Winceby
- 17 Hameringham
- 18 Claxby Pluckacre

Calcewath Wapentake

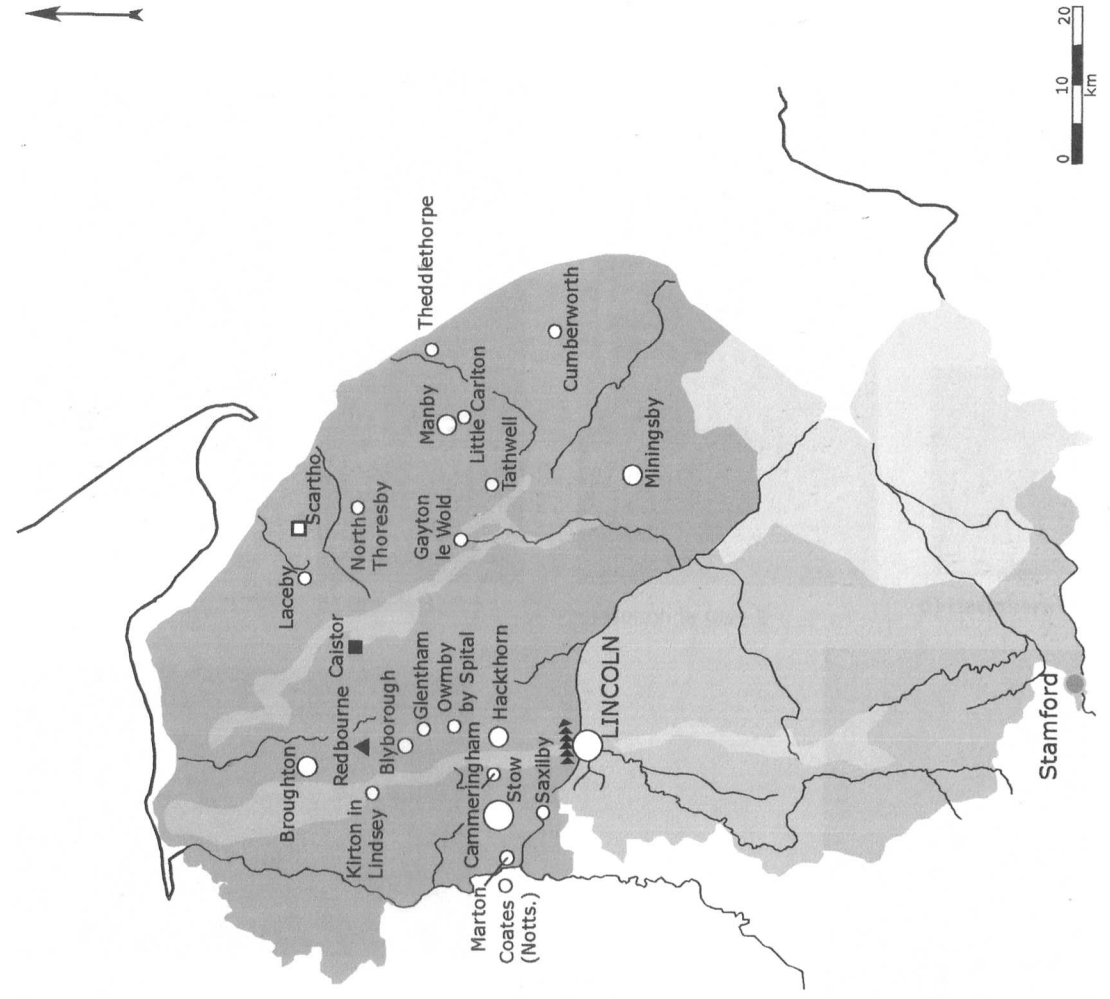
- 1 Theddlethorpe
- 2 Mablethorpe
- 3 Trusthorpe
- 4 Withern
- 5 Tothill
- 6 Woodthorpe
- 7 Strubby
- 8 Maltby le Marsh
- 9 Swaby
- 10 Belleau
- 11 Aby
- 12 Claythorpe
- 13 Saleby
- 14 Beesby
- 15 Sutton le Marsh
- 16 Calceby
- 17 South Thoresby
- 18 Haugh
- 19 Ailby
- 20 Tothby
- 21 Thoresthorpe
- 22 Markby
- 23 Rigsby
- 24 Alford
- 25 Bilsby
- 26 Thurlby
- 27 Huttoft
- 28 Ulceby
- 29 *Tatebi*
- 30 Well
- 31 Willoughby
- 32 Bonthorpe
- 33 Cumberworth
- 34 Mumby
- 35 Claxby
- 36 Hanby
- 37 Sloothby
- 38 Hasthorpe
- 39 Legbourne

Candleshoe Wapentake

- 1 Driby
- 2 Sutterby
- 3 Dexthorpe
- 4 Fordington
- 5 Dalby
- 6 Skendleby
- 7 Partney
- 8 Scremby
- 9 Grebby
- 10 Welton le Marsh
- 11 Boothby
- 12 Addlethorpe
- 13 Ingoldsmells
- 14 Ashby by Partney
- 15 Candlesby
- 16 Gunby
- 17 Orby
- 18 Burgh le Marsh
- 19 Great Steaping
- 20 Bratoft
- 21 Croft
- 22 Wainfleet
- 23 Friskney

Bolingbroke Wapentake

- 1 Lusby
- 2 Raithby
- 3 Asgarby
- 4 Mavis Enderby
- 5 Hundleby
- 6 Spilsby
- 7 Hareby
- 8 Bolingbroke
- 9 Eresby
- 10 Halton Hologate
- 11 Miningsby
- 12 Hagnaby
- 13 West Keal
- 14 East Keal
- 15 East Kirkby
- 16 Toynton All Saints
- 17 Toynton Saint Peter
- 18 Little Steeping
- 19 Revesby
- 20 Stickford
- 21 Thorpe Saint Peter
- 22 Stickney
- 23 Sibsey



LEGEND

- x 1 x 2 3+
 - ○ ○
 - ▲
 -
 -
 - ▶▶▶▶
- Sites with sculpture fragments produced in or near Lincoln
- Sculpture pre-dating the late ninth and tenth centuries (possibly produced locally)
- Architectural carvings of late ninth- or tenth-century date (possibly produced locally)
- Architectural carvings pre-dating the late ninth and tenth centuries (possibly produced locally)
- Assumed location of the quarry

Fig. 6: Possible tenth-century sculpture fragments produced in or near Lincoln. Redrawn after Everson and Stocker 1999; fig. 1.



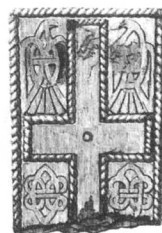
a) Lincoln St Paul-in-the-Bail 3



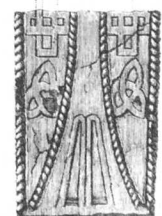
b) Crowle 1



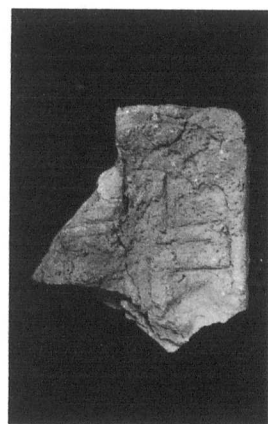
c) Holton le Clay 1



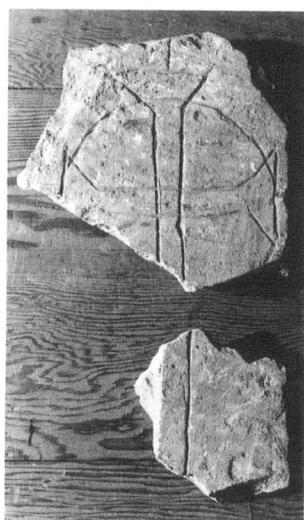
d) Hackthorn 1



e) Broughton 2



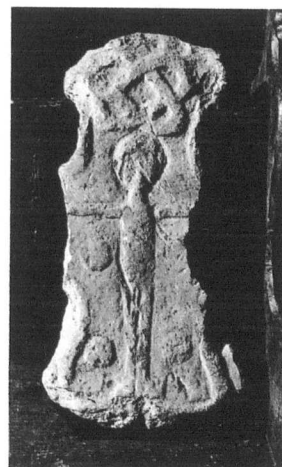
g) Lincoln St. Mark 10



h) Lincoln St. Paul-in-the-Bail 1



f) Lincoln St. Mark 6



i) Conisholme 1

Fig. 7: Tenth-century sculpture fragments from Lindsey that do not belong to the main typological groups. Copyright photographs: *Corpus of Anglo-Saxon Stone Sculpture*, photographers P. Everson and D. Stocker (figs a, c, e, h, i), N. Hawley (fig. f) and J. O'Neill (figs b, g). Copyright drawing 7 d: *Royal Archaeological Institute*. Reproduced with kind permission of D. Craig. Not to scale.

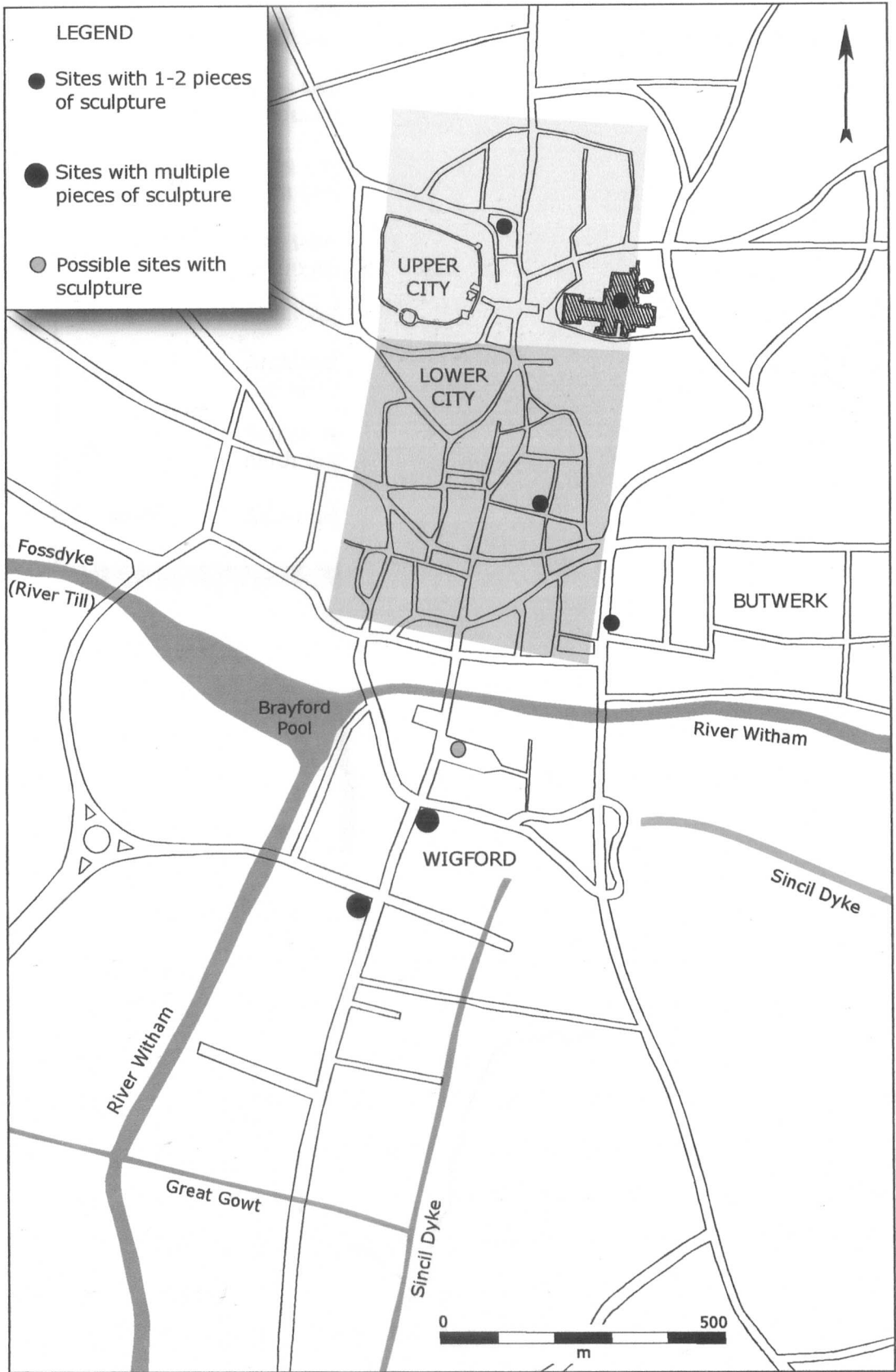


Fig. 8: Sites with sculpture in Lincoln. Plan of Lincoln redrawn after Jones *et al.* 2003: fig. 1.

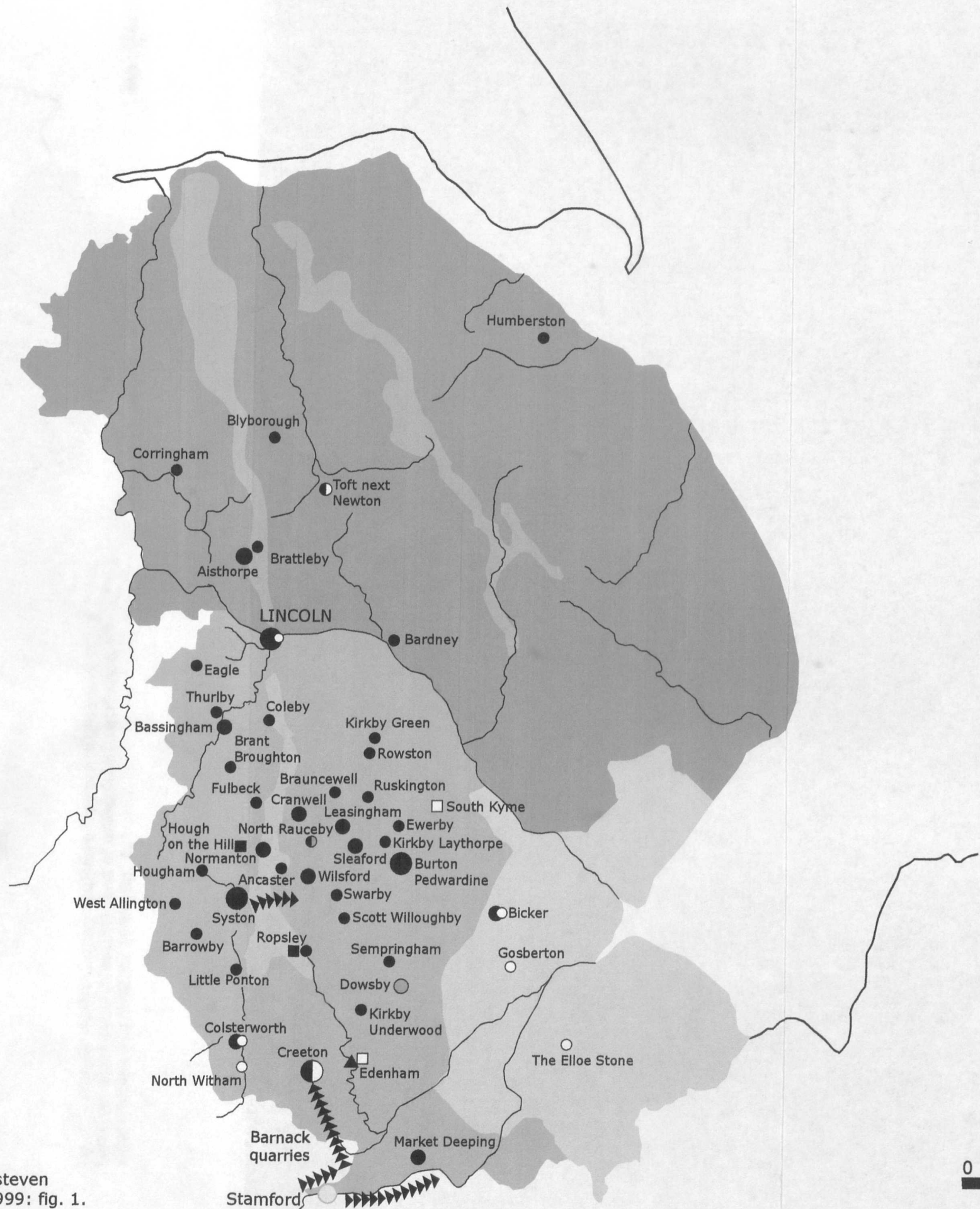
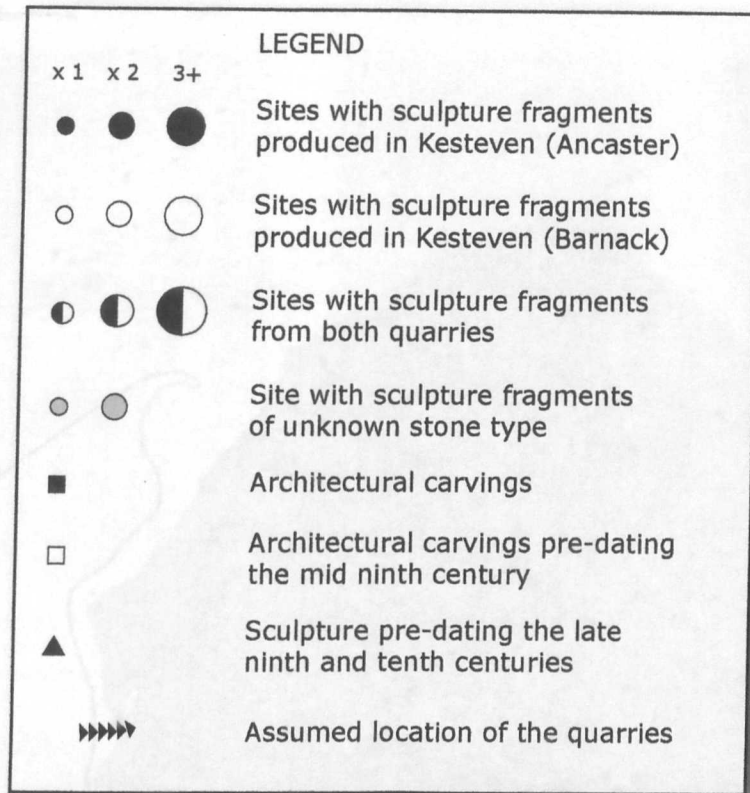


Fig. 9: Possible tenth-century sculpture fragments from the Kesteven quarries (Ancaster and Barnack). After Everson and Stocker 1999: fig. 1.

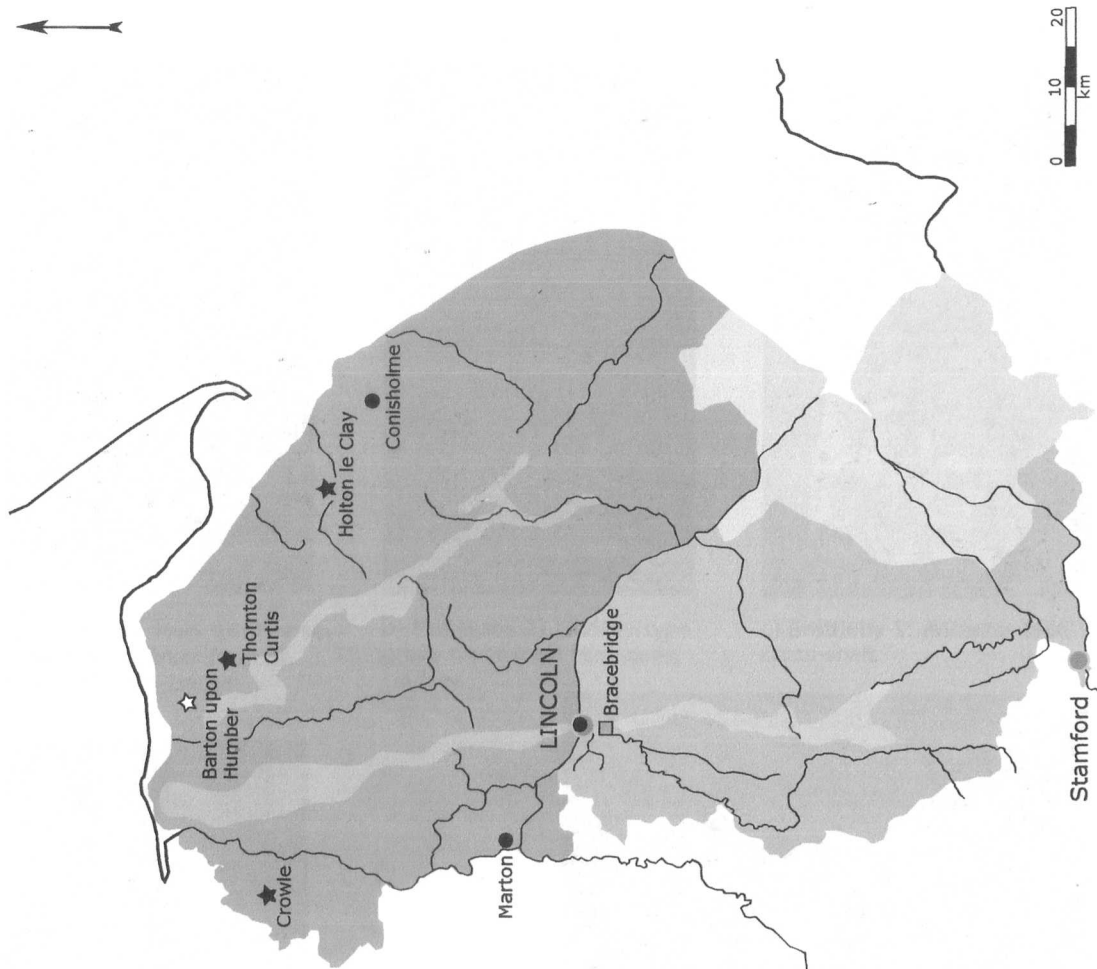
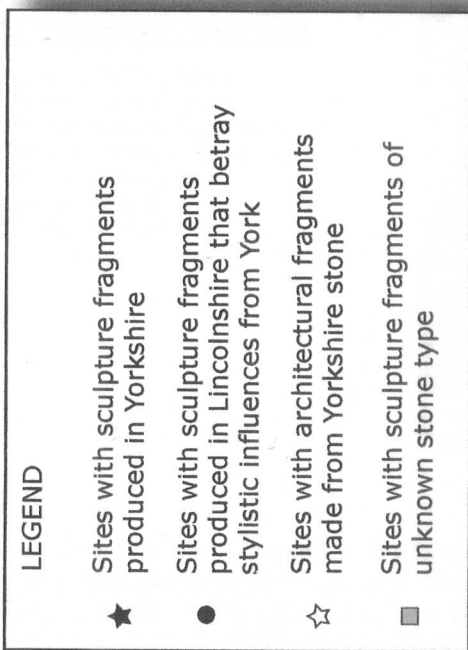
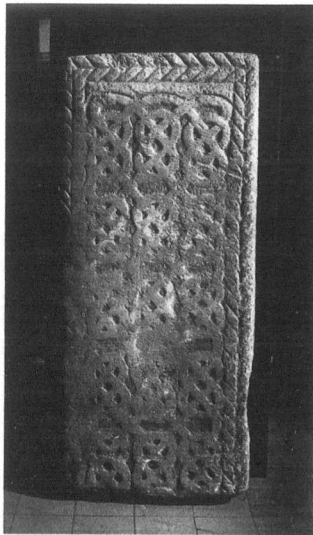


Fig. 10: Possible tenth-century sculpture fragments produced of Yorkshire stone (Millstone Grit), and of unidentified stone type. After Everson and Stocker 1999: fig. 1.



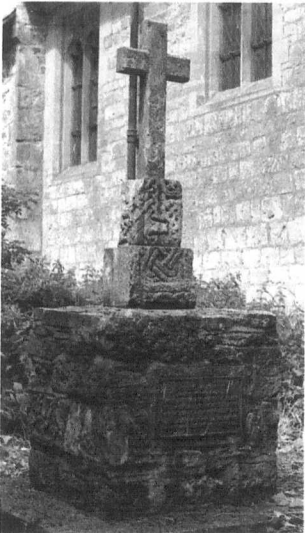
a) Lincoln St. Mark 16: Lindsey-type grave marker from St. Mark's church, Lincoln



b) Miningsby 1: Lindsey-type grave cover from Miningsby, Lindsey



c) Brattleby 1: Ancaster-type cross-shaft



d) Toft next Newton 1: South Kesteven cross-shaft (situated underneath Toft next Newton 2, a mid-Kesteven cover, and incorporated into a modern monument).



e) Lincoln St. Mary-le-Wigford 2: mid Kesteven-type grave cover



f) Lincoln Cathedral 1: Fenland-type grave cover



g) Bicker 4: Gridded marker (fragment)

Fig. 11: The main sculpture types that occurred in Lindsey in the tenth century. Copyright photographs: *Corpus of Anglo-Saxon Sculpture*, photographers P. Everson and D. Stocker (figs a, b, d-f) and D. Craig (figs c, g). Reproduced with kind permission of D. Craig. Not to scale.

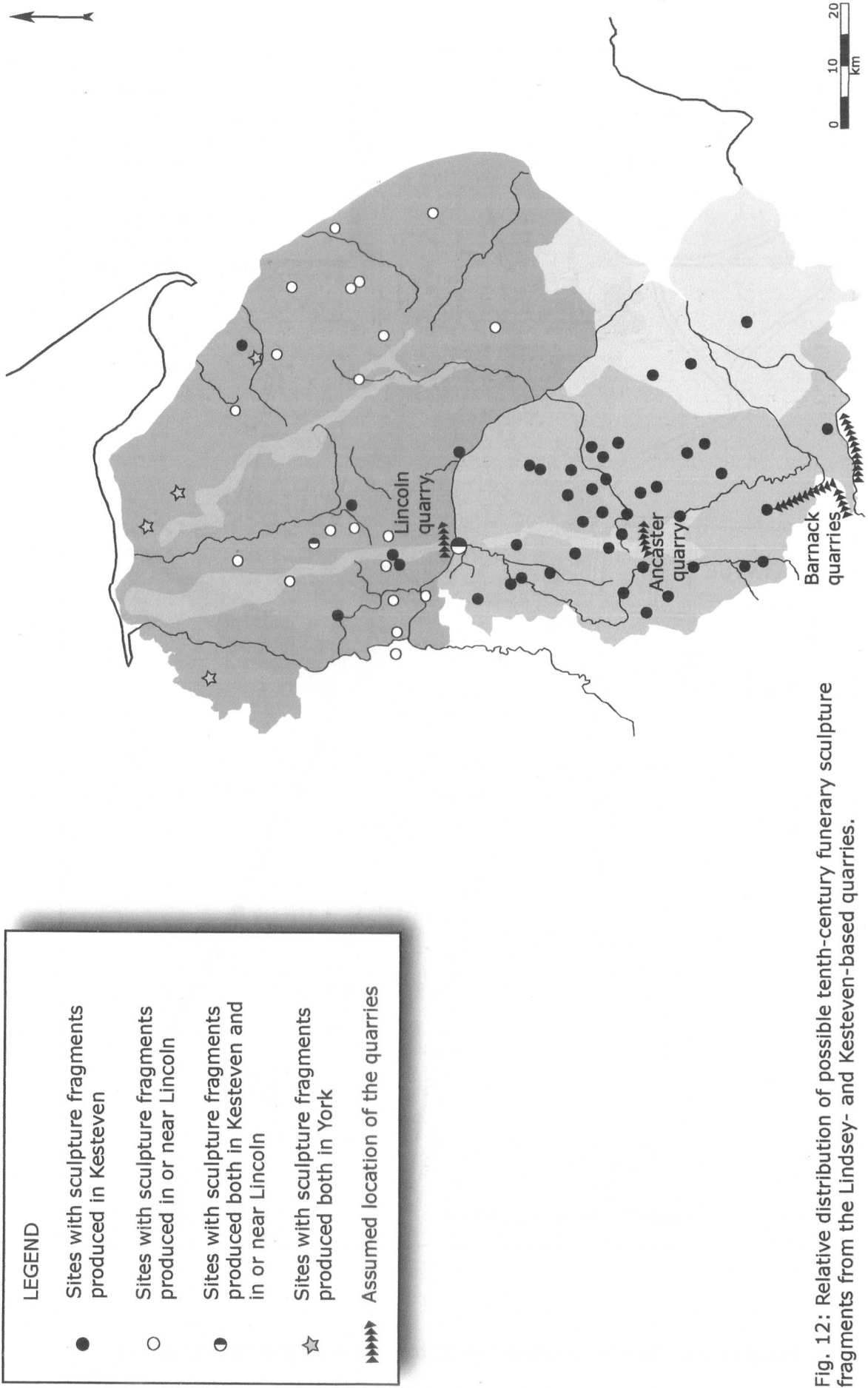


Fig. 12: Relative distribution of possible tenth-century funerary sculpture fragments from the Lindsey- and Kesteven-based quarries.

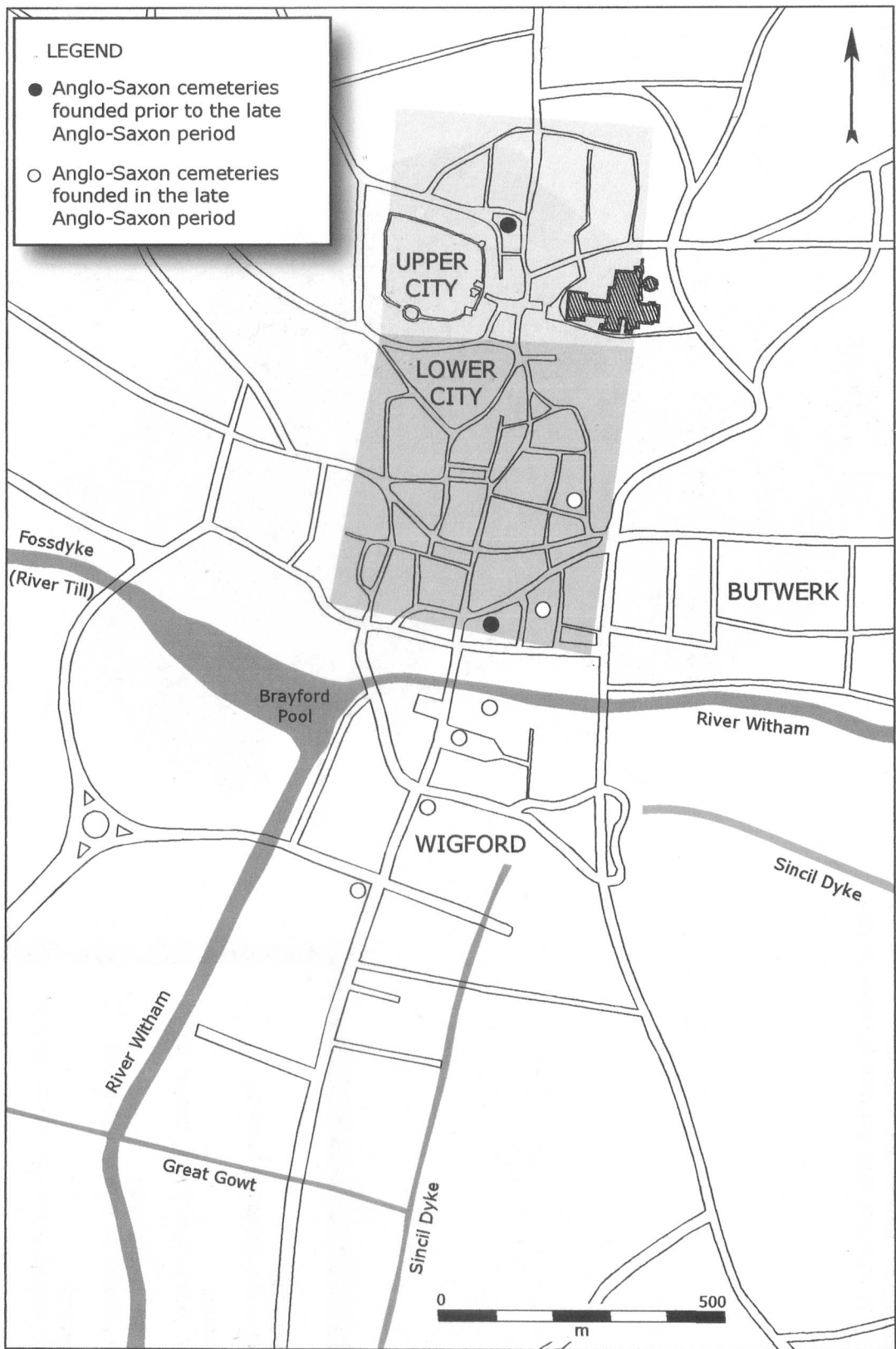
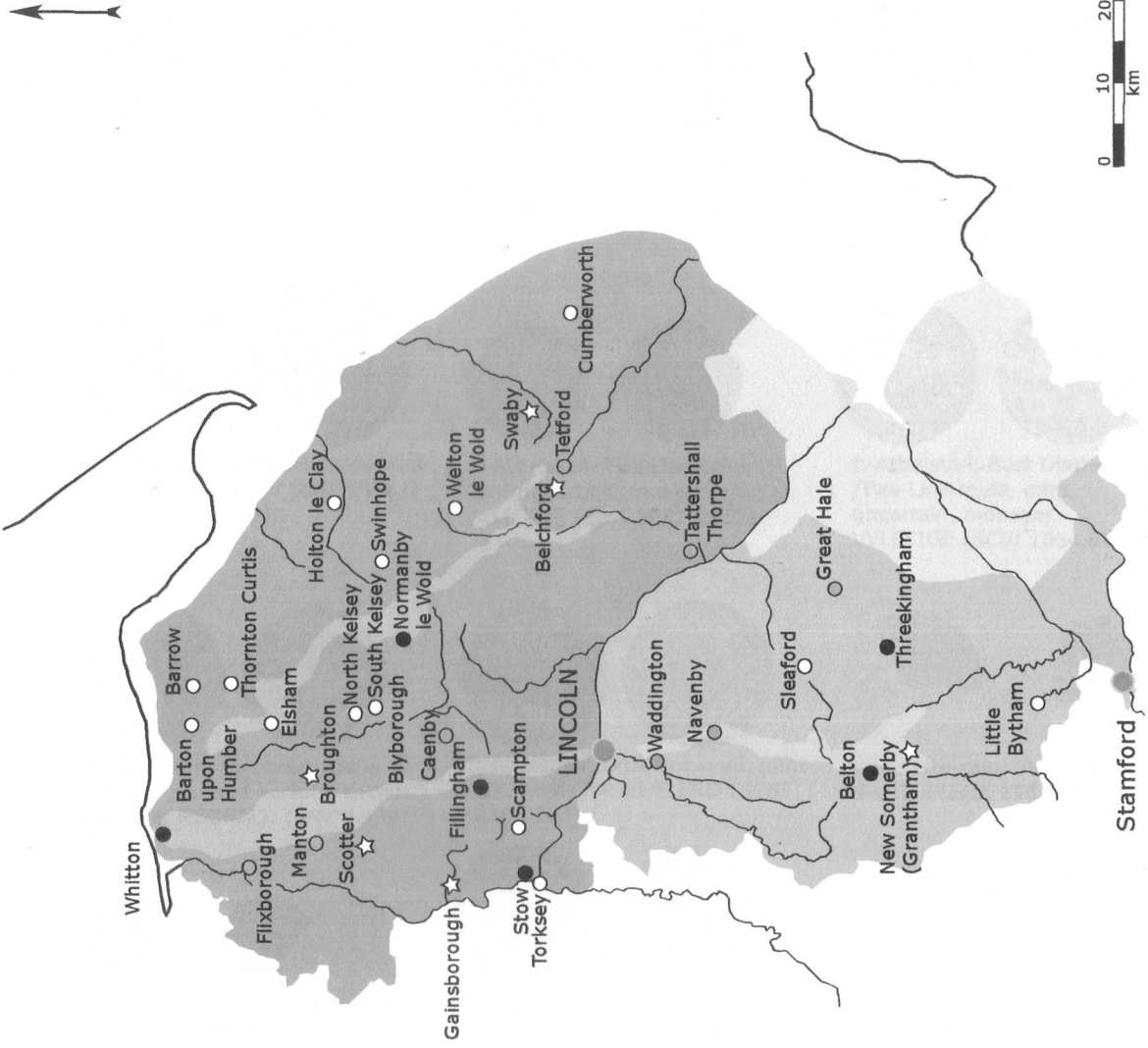


Fig. 13: Plan of sites with possible middle and late Anglo-Saxon burial sites in Lincoln.



LEGEND

- Excavated middle Anglo-Saxon burials or burial grounds
- Excavated middle to late Anglo-Saxon burials or burial grounds
- Excavated late Anglo-Saxon burials or burial grounds
- ☆ Excavated Anglo-Saxon burials of unspecified date

Fig. 14: Location of possible and definite middle- to late Anglo-Saxon burials in Lindsey and Kesteven.



a: Alfred, Second Coinage, mint uncertain, moneyer LVLLA (EMC 1977.0202)



b: Alfred, Fourth Coinage, mint Canterbury, moneyer TIRVALD (EMC 1995.0154)



c: Edward the Elder, Two Line type, mint uncertain, moneyer RAEGENULF (EMC 1987.0125)



d: Athelstan, Two Line type, mint uncertain, moneyer DEORVALD (SCBI 1026.0883)



e: Athelstan, Two Line type, mint uncertain, moneyer VVLSIGE (EMC 1991.0253)



f: Athelstan, Bust Diademed/Two Line mule, mint uncertain, moneyer VVLSIGE (SCBI 1034.0002)



g: Athelstan, Circumscription Cross type, mint York (EFORWIC), moneyer REGNALD (EMC 1999.0124)



h: Athelstan, Bust Crowned, mint York, moneyer ÆDELERD (SCBI 1034.0164)



i: Lunette coin, St. Paul-in-the-Bail (EMC 1983.9944)



j: Lunette coin, St. Paul-in-the-Bail (EMC 1983.9945)



k: Lunette coin, St. Paul-in-the-Bail (EMC 1983.9946)



l: Lunette coin, St. Paul-in-the-Bail (EMC 1983.9949)



m: 'Orsnaforda' coin, copying 'usual' Two Line design, mint uncertain, moneyer BERVALD (SCBI 1001.0561)



n: 'Orsnaforda' coin, with cross-design of Siefred of York's regal coinage, mint uncertain, moneyer BERVALD (SCBI 1009.0291)



o: Coin of Siefred of York, 895-900 (SBCI 1029.0205)



p: Canterbury (Doro-) imitation, 890s, mint uncertain, moneyer ELFSAN (EMC 2003.0045)



q: Canterbury (Doro-) coin of Alfred, 895-99, mint Canterbury, moneyer BVRNPALD, found at Cuerdale (SCBI 1048.0860)



Fig. 15: Photographs of coins mentioned in the text (1). Copyright images: *Early Medieval Corpus of Coin Finds AD 410-1180* (www.fitzmuseum.cam.ac.uk/coins/emc). Reproduced with kind permission of Martin Allen.

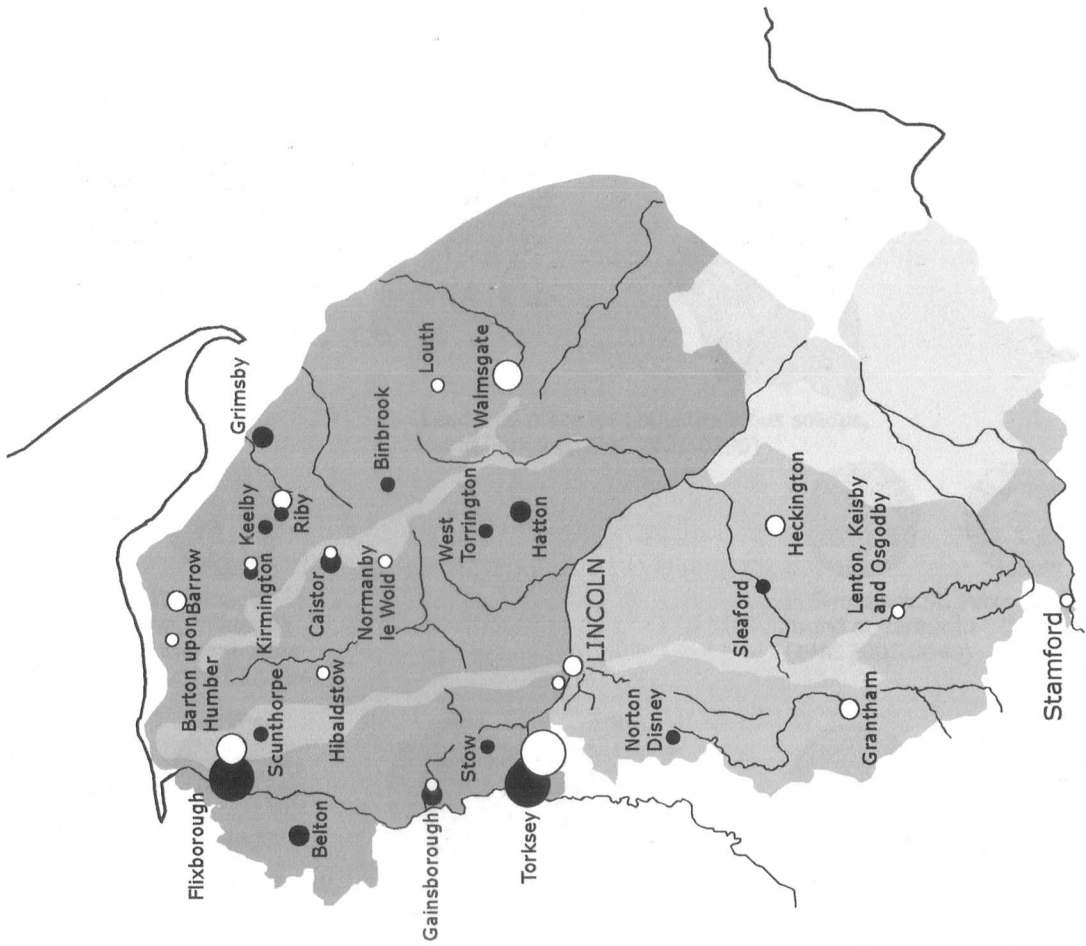
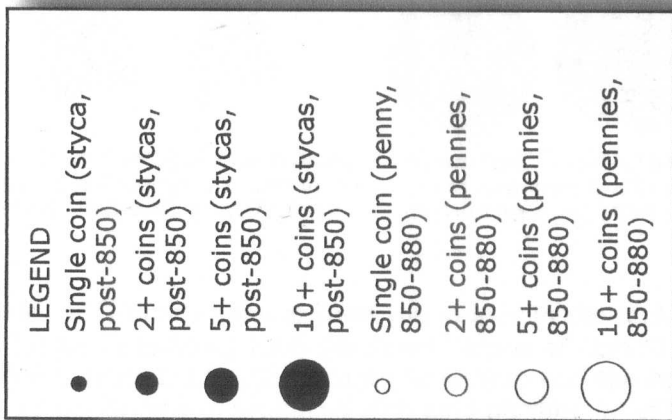
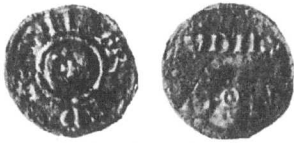


Fig. 16: Location of coin finds predating c. 880 AD in Lindsey, Kesteven and Holland.



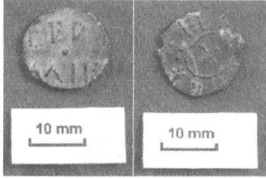
a: Imitative Two Line from Flaxengate, moneyer LUDIIG (EMC 1983.9947)



b: Imitative Two Line from Stamford, moneyer LUDIG (EMC 1983.96251)



c: Imitative Two Line type, mint uncertain, moneyer RERNART, obv. inscription ELTANGERHT (EMC 1034.1265)



d: 'Viking' imitation of Alfred's Two Line type, struck in lead, found in Swinhope (PAS NLM-8E52D1)



e: Lead trial piece for Louis the Pious solidus, found at Torksey (EMC 2001.0290)



h: St. Edmund's coinage from East Anglia, moneyer ICAI(I), found at Flaxengate (EMC 1983.9942 = 1027.1942)



i: Swordless St. Peter coin, found at Yarburgh (EMC 2005.0040)



j: Sword St. Peter coin (Sword/Cross type) (EMC 1983.9945)



k: Coin of Sihtric Caech (SCBI 1004.0627)



l: St. Martin's coin (SBCI 1004.0620)



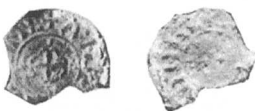
m: Raven Type of Olaf Guthfrithsson (939-41), found in 'Lincolnshire' (EMC 1996.0194)



n: Olaf Sihtricsson, Triquetra/Standard type (EMC 1002.0522)



o: Circumscription Cross, Olaf Sihtricsson, struck at York (EMC 1004.0638)



p: Cross Type of Olaf Sihtricsson, found at Flaxengate in Lincoln (EMC 1983.9940 = 1027.1940)



q: Two Line, probably Olaf Sihtricsson, mint isouth of the Humber (EMC 1034.1247)



Fig. 17: Photographs of coins mentioned in the text (2).

Copyright images: *Early Medieval Corpus of Coin Finds AD 410-1180*

(www.fitzmuseum.cam.ac.uk/coins/emc) and the *Portable Antiquities Scheme*

(17 d). Images reproduced with kind permission of Martin Allen and Roger Bland.

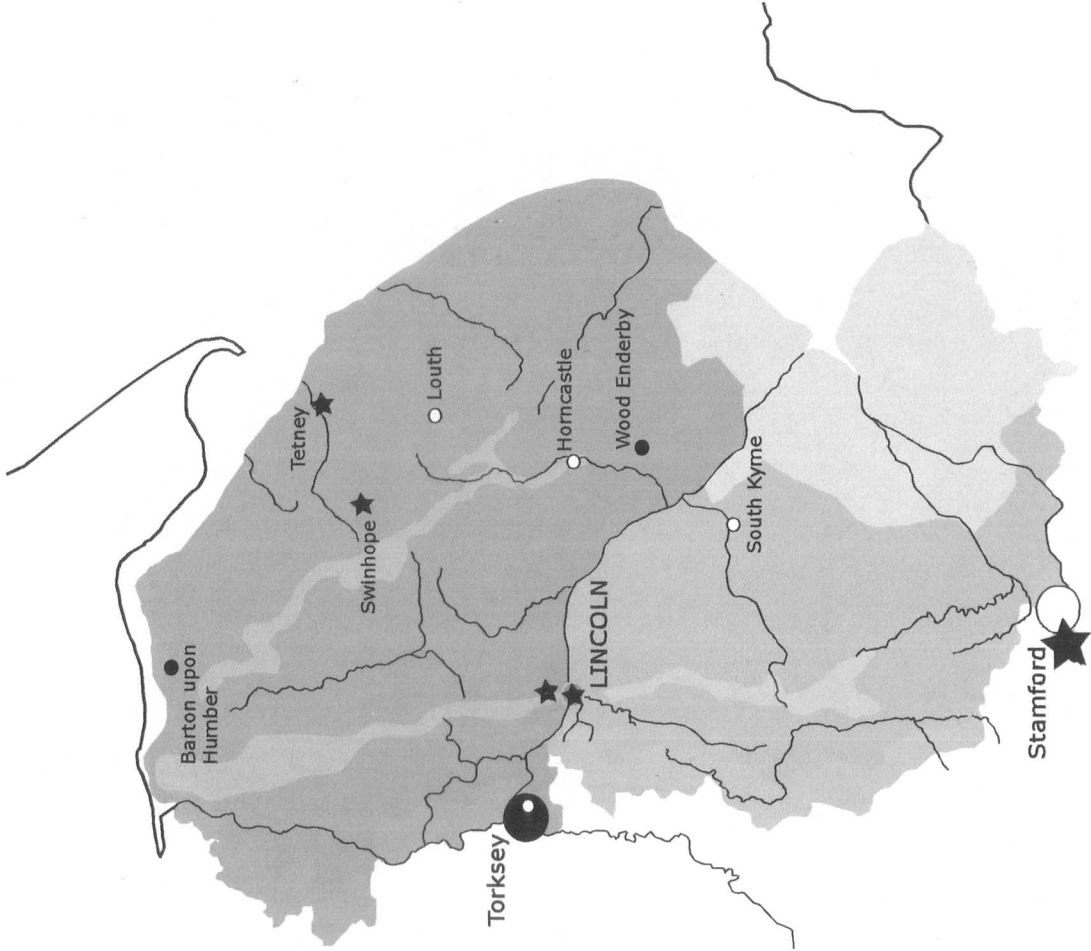
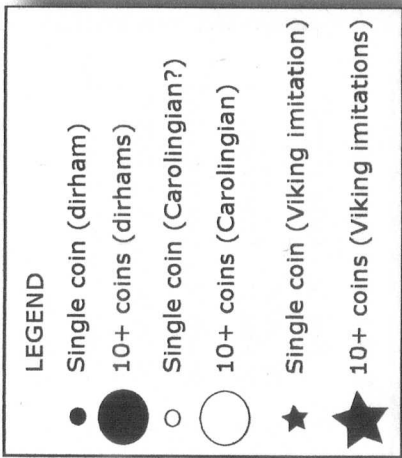


Fig. 18: Location of foreign coin finds in Lindsey, Kesteven and Holland.

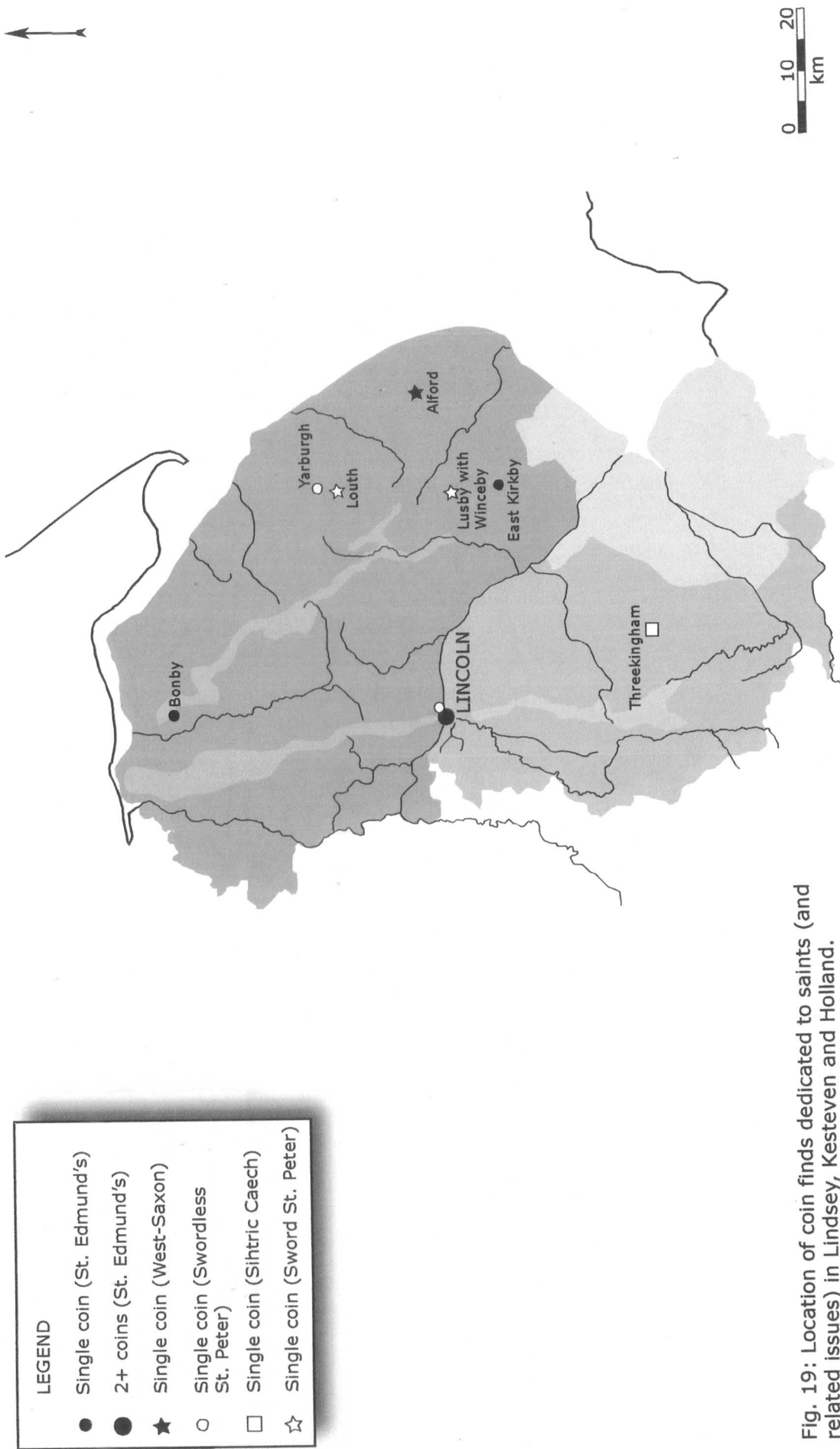


Fig. 19: Location of coin finds dedicated to saints (and related issues) in Lindsey, Kesteven and Holland.



LEGEND

- Single coin (Athelstan)
- Single coin (West-Saxon; unknown ruler)
- Single coin (Olaf Sihtricsson, first reign)
- ★ Single coin (Edmund, 942-46)

Fig. 20: Location of coin from the period of Athelstan's and Edmund's reigns in Lindsey, Kesteven and Holland.

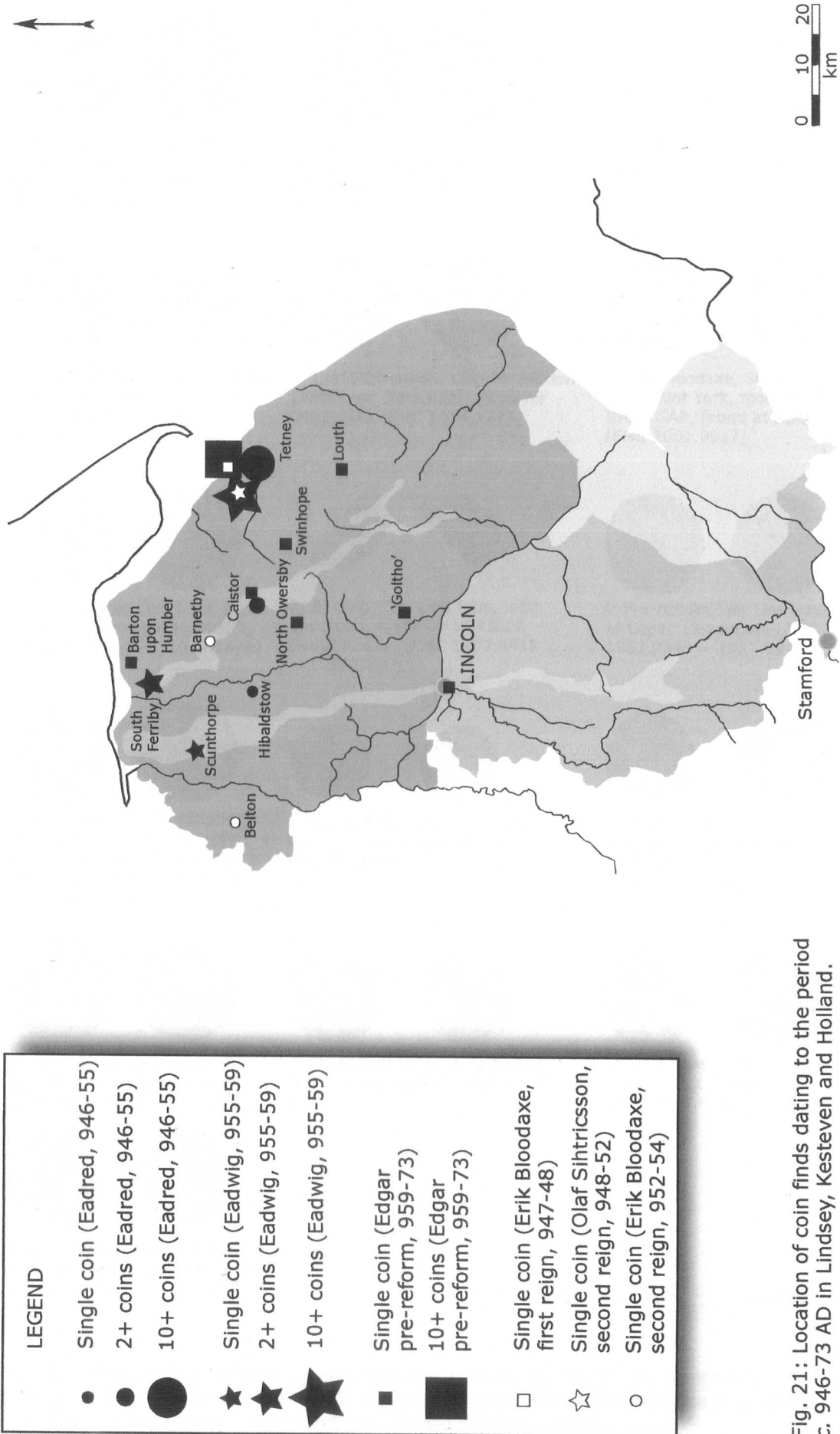


Fig. 21: Location of coin finds dating to the period c. 946-73 AD in Lindsey, Kesteven and Holland.



a: Eadred, Bust Crowned, moneyer ARE, mint LCOIAIIV, found in Irish Sea region (EMC 1034.0686)



b: Eadred, Bust Crowned, moneyer ARE, mint IINCOIA CIVIT, found in Suffolk (EMC 1997.0016)



c: Eadred; Two Line type, mint uncertain, moneyer THEODMAR (EMC 2001.0856)



d: Erik Bloodaxe, Two Line type, mint York, moneyer RADVLF, found at Tetney (SCBI 1034.1261)



e: Olaf Sihtricsson, Circumscription Cross type, York mint, moneyer INGELGAR (EMC 1034.1273)



f: Erik Bloodaxe, Sword type, mint York, moneyer INGELGAR, found at Belton (EMC 2001.0912)



g: Eadwig, Two Line type, mint uncertain, moneyer HERIGER, Tetney hoard (EMC 1027.1679)



h: Eadwig, Two Line type, mint uncertain, moneyer HERIGER, South Ferriby (EMC 1997.8918 = 1048.0198)



i: Pre-reform Two Line issue of Edgar, Flaxengate (EMC 1983.9948 = 1027.1948)



j: Pre-reform Circumscription Cross coin of Edgar, moneyer Athelverth, minted at Lincoln or London (+ÆDELVERÐ ' MON LIN) (EMC 1996.5003)



k: Edgar, reform-type, London mint, moneyer AETHELVALD (EMC 2000.0054)



l: Small Cross coin of Edward the Martyr, Lincoln mint (LNDLOIG) (EMC 2004.0247)



m: First Small Cross type of Aethelred, Lincoln mint (LIN) (EMC 1988.0169)



n: First Hand issue of Aethelred, Torksey mint (TVRC) (EMC 1794.0001)



o: Crux type of Aethelred, Lincoln mint (LINC) (EMC 1983.8056)



p: Long Cross type of Aethelred, mint Lincoln (LINC) (EMC 1983.9954)



Fig. 22: Photographs of coins mentioned in the text (3). Copyright images: Corpus of Early Medieval Coin Finds AD 410-1180 (www.fitzmuseum.cam.ac.uk/coins/emc). Reproduced with kind permission of Martin Allen.

LEGEND

- ★ Single coin (Edgar, post-reform)
- Single coin (Edward the Martyr)
- Single coin (Hiberno-Norse, struck at Dublin)
- Single coin (Aethelred)
- 2+ coins (Aethelred)
- 5+ coins (Aethelred)
- 10+ coins (Aethelred)

Place-names printed **in bold**: mints.

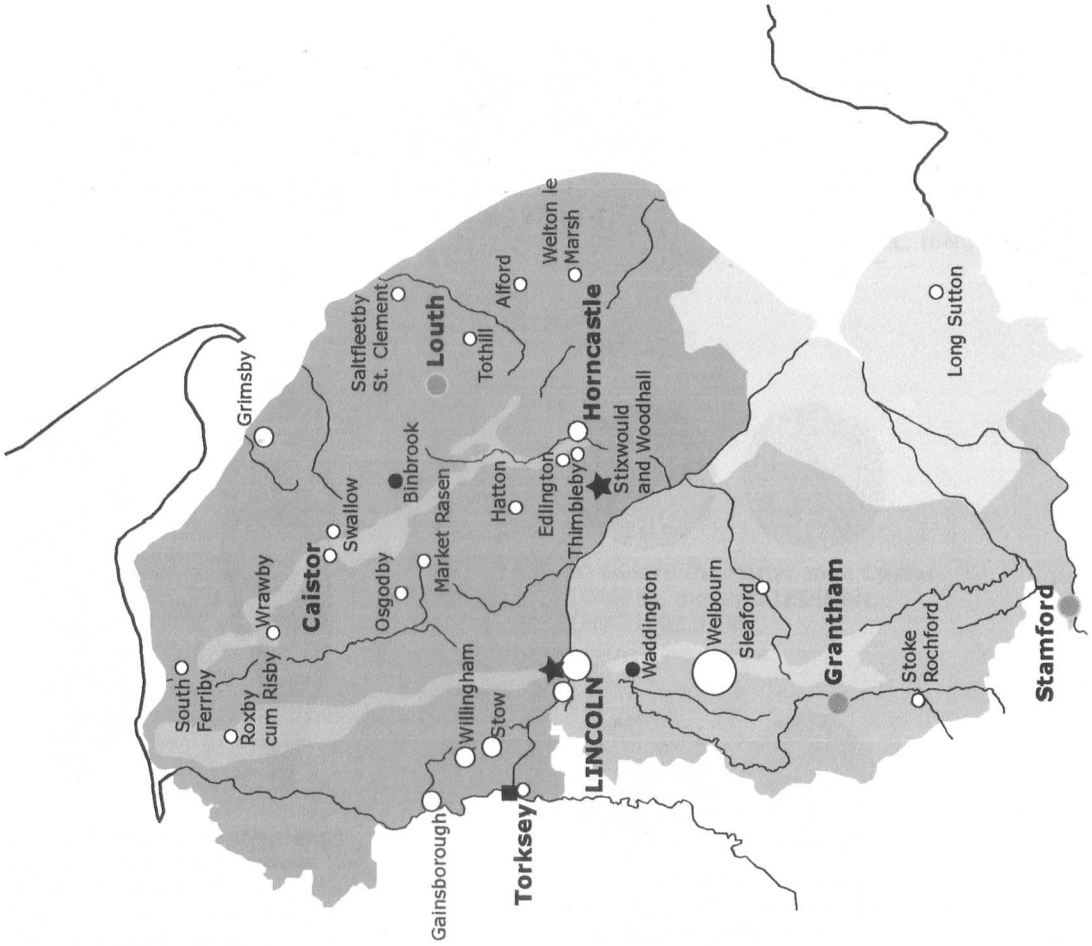


Fig. 23: Location of coin finds and mints post-dating c. 973 AD in Lindsey, Kesteven and Holland.



a: Lincoln monogram type (SBCI 1027.0002)



b: London monogram type, Alfred the Great (source: SBCI 1004.0669)



c: Halfpenny (imitation of Alfred), mint Lincoln (LINCOLA), moneyer: Herebeorht (ERIFER) (EMC 1027.0004)



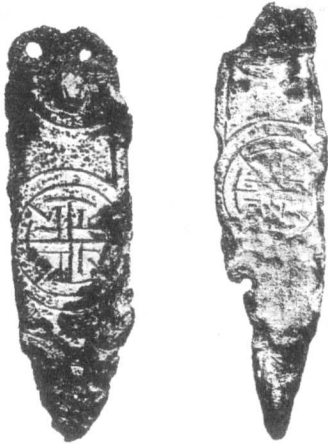
d: Fragment of Viking imitation of Alfred, mint Lincoln (LINIC), moneyer: Herebeorht (HERIBERT) (EMC 1027.0003)



e: BMC 83 (= Mossop 1970: I 4)



f: Edward the Martyr, mint Torksey (TOR), moneyer -----EL, (EMC 1017.0180)



g: Late Anglo-Saxon strap-ends from a female Viking grave at Westness, Rousay (Orkney), providing a possible parallel for the cross design on the St. Martin's coinage from Lincoln (source: Thomas 2000b)



h: Edward the Martyr, mint Caistor (CASTR), moneyer LEOIMAN, (EMC 1002.0736)



i: Edward the Martyr, mint Horncastle (HOR), moneyer ÆDELELM, (EMC 1036.0194)



j: Reform Portrait coin of Edgar, mint Lincoln (LINDCO), moneyer EANVLF (EMC 1002.0715)

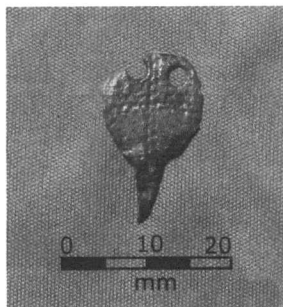


k: Reform Portrait coin of Edgar, mint Lincoln (LINDCOL), moneyer GRIND, (EMC 1004.0777)

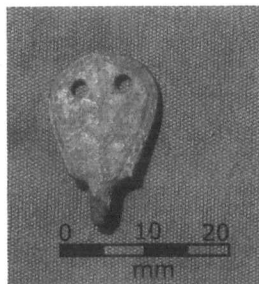


l: Reform Portrait coin of Edgar, mint Lincoln (LINCOL), moneyer LEVIG (EMC 1027.0007)

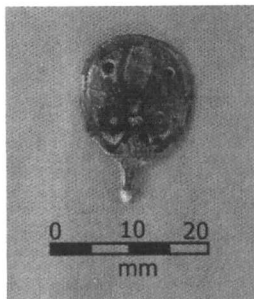
Fig. 24: Photographs of coins mentioned in the text (4). Copyright images: *Early Medieval Corpus of Coin Finds AD 410-1180* (www.fitzmuseum.cam.ac.uk/coins/emc) and the British Museum (fig. 24 e). Images reproduced with kind permission of Martin Allen and Gareth Williams.



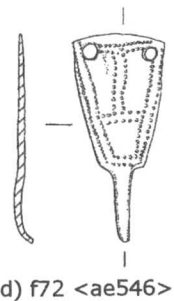
a) f72 <ae15>



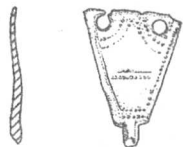
b) f72 <294>



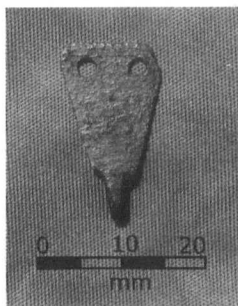
c) f72 <ae45>



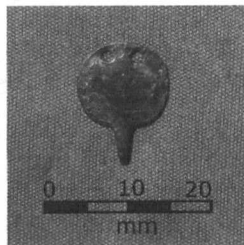
d) f72 <ae546>



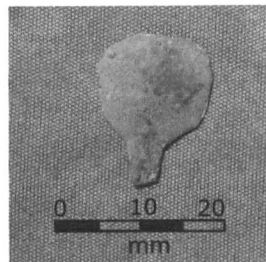
e) f72 <ae213>



f) be73 <ae37>



g) wp71 <ae62>



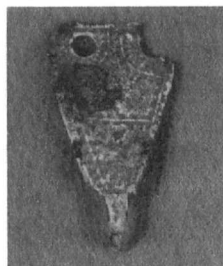
h) wp71 <ae24>



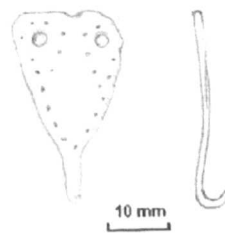
i) PAS NLM5725
(Ludford)



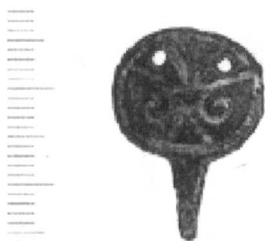
j) PAS NLM18
(Elsham)



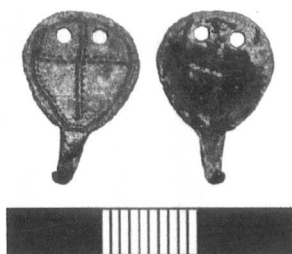
k) PAS NLM-99F413
(Haxey)



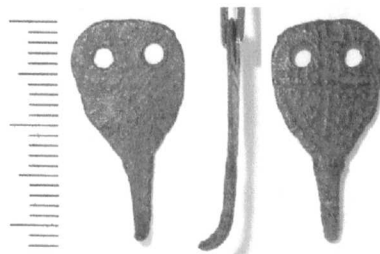
l) PAS NLM4715
(Thimbleby)



m) PAS NLM-E7A805
(Thimbleby)

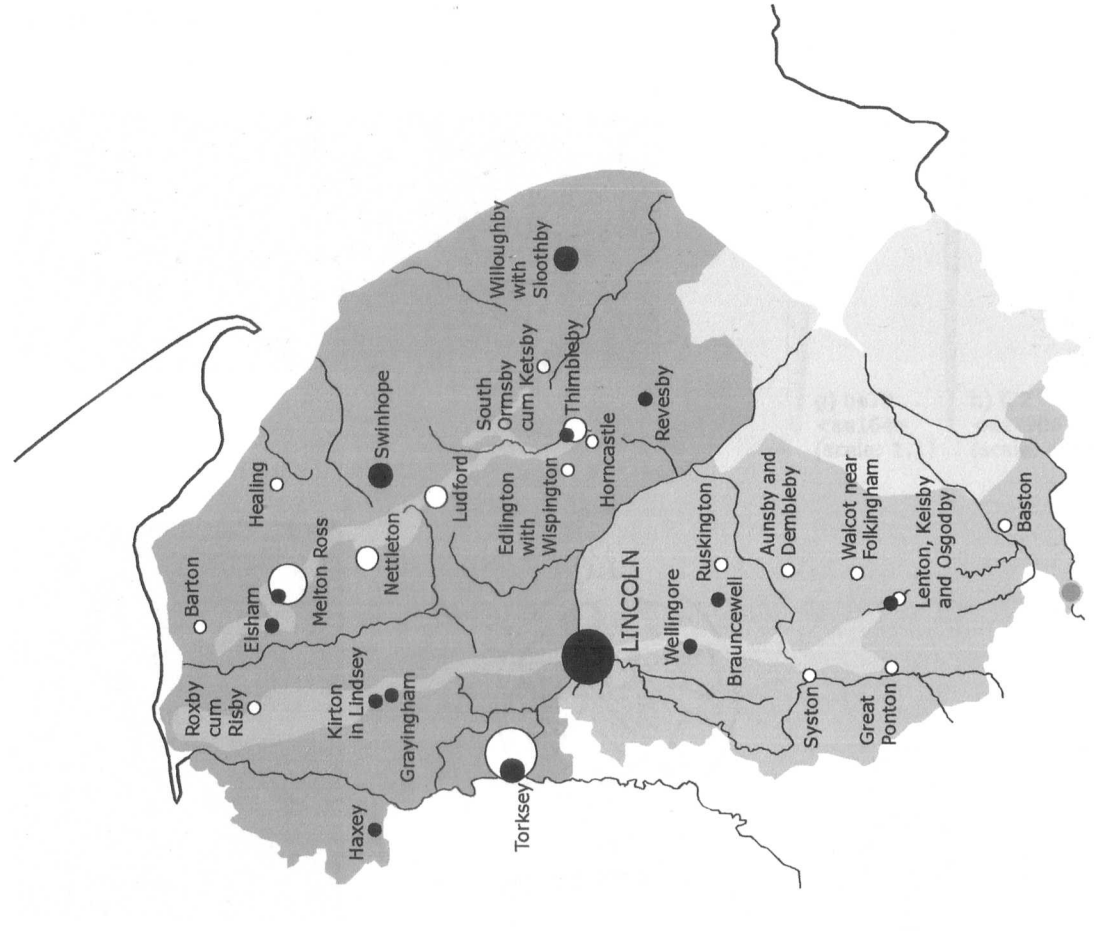


n) PAS NLM-6EFB28
(Willoughby with Sloothby)



o) PAS DENO-601C85
(Torksey)

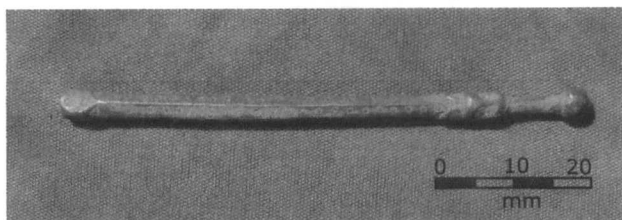
Fig. 25: Photographs and drawings of hooked tags from Lincoln (a-h) and elsewhere in Lindsey. Copyright images: Letty Ten Harkel (a-c, f-h); City of Lincoln Council, reproduced with kind permission of Michael Jones and Jenny Mann (d-e); the *Portable Antiquities Scheme*, reproduced with kind permission of Roger Bland (i-o). Figs i-j and l drawn by Marina Elwes. Figs d-e drawn by Dave Watt.



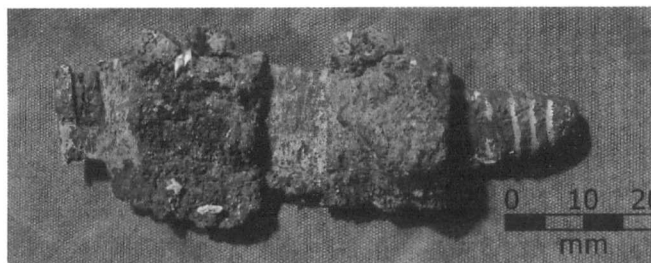
LEGEND

- Hooked tag (Lincoln production?)
- Hooked tag (other)
- 2 hooked tags
- 3-4 hooked tags
- 5+ hooked tags

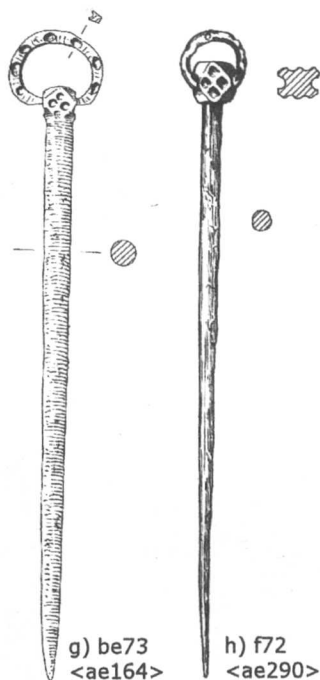
Fig. 26: Distribution of hooked tags in Lindsey, Kesteven and Holland.



a) cwg86 <1533>

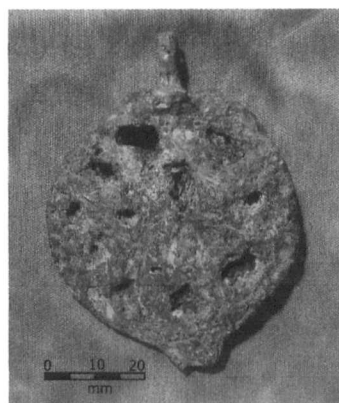


b) gp81 <57>



g) be73
<ae164>
(scale: 1:1)

h) f72
<ae290>
(scale: 1:1)



c) gp81 <44>



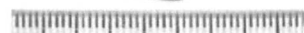
d) p70 <ae171>



i) wo89
<352>
(not to scale)

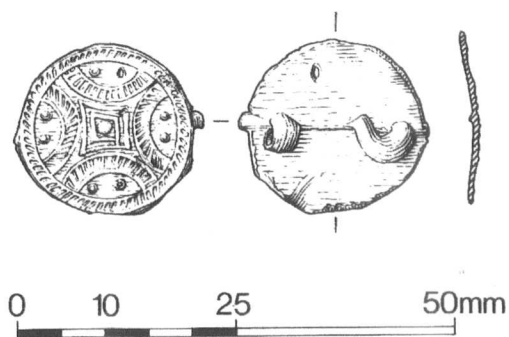


e) PAS NLM922 (Melton Ross)

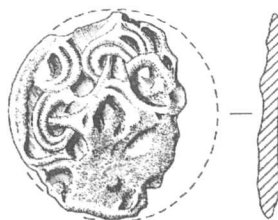


f) PAS LIN-DE3493 (Heckington)

Fig. 27: Various objects from Lincoln, Lindsey and Kesteven (1). Copyright images: Letty Ten Harkel (a-c); the *Portable Antiquities Scheme*, reproduced with kind permission of Roger Bland (e-f); and the City of Lincoln Council, reproduced with kind permission of Jenny Mann and Michael Jones (g-i). Source fig. 27 c: Colyer *et al.* 2003: 152.



a) p70 <pb13>



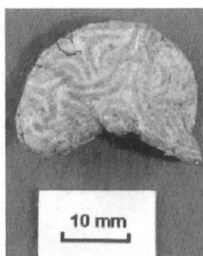
b) f72 <ae302>
(scale 1:1)



c) LIN-57B041
(Sibsey)



d) NLM956
(Sutterton)



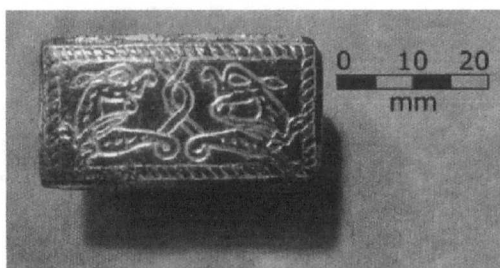
e) NLM-743AB7
(North Ormsby)



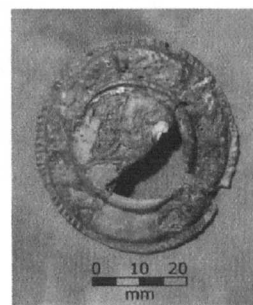
f) LIN-A35B75
(Newball)



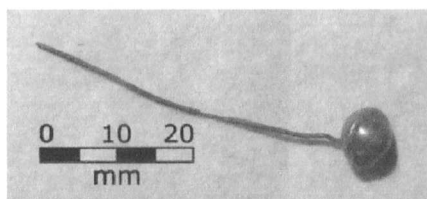
g) LIN-FC1347
(Walcot near
Folkingham)



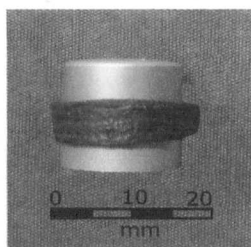
h) cwg86 <106>



i) f72 <ae296>



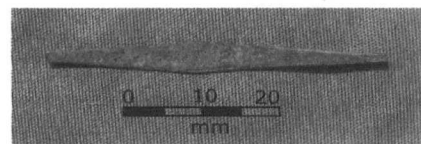
j) f72 <ae197>



l) wp71 <ae41>



m) NLM-E71AB3
(Market Stainton)



k) hg72 <ae50>

Fig. 28: Various objects from Lincoln, Lindsey and Kesteven (2). Copyright images: Letty Ten Harkel (h-l); City of Lincoln Council, reproduced with kind permission of Michael Jones and Jenny Mann (b); the *Portable Antiquities Scheme*, reproduced with kind permission of Roger Bland (c-g, m). Source fig. 27 a: Colyer et al. 1999: 158. Figs a-b drawn by Dave Watt. Fig. 28 d drawn by Marina Elwes.

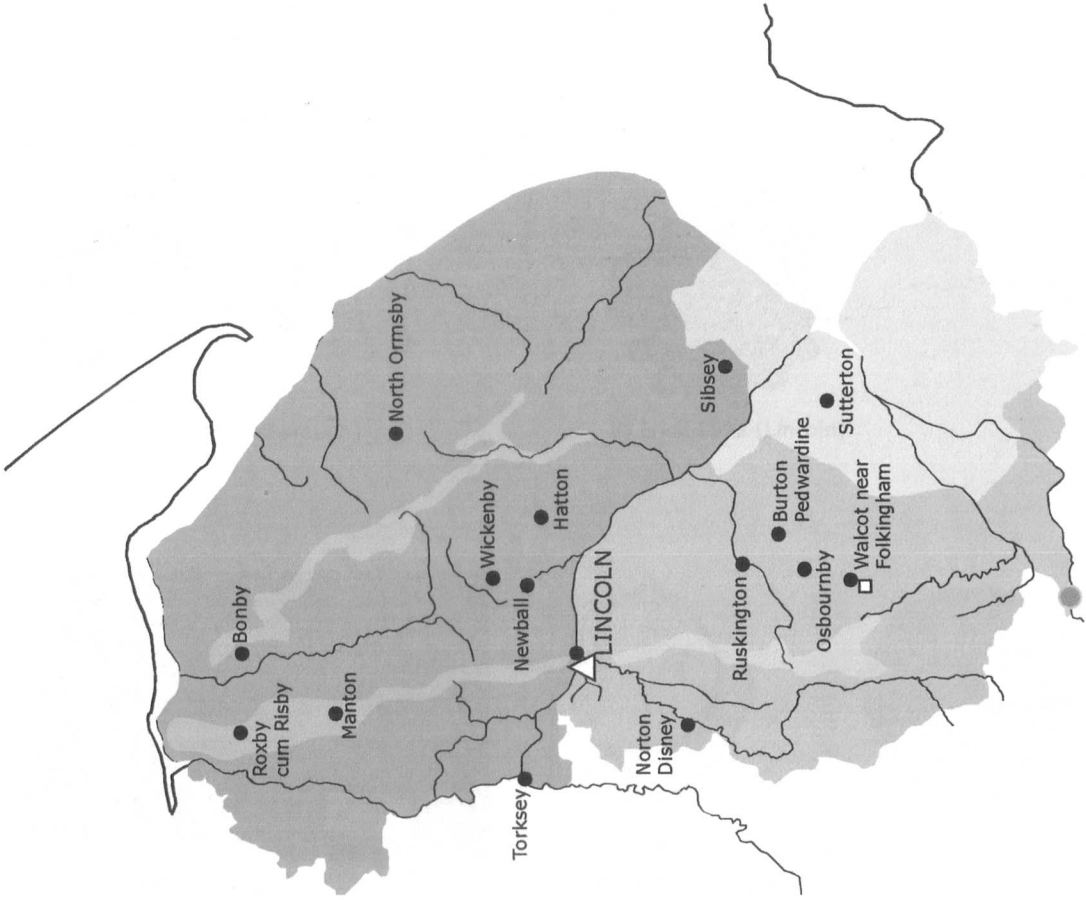
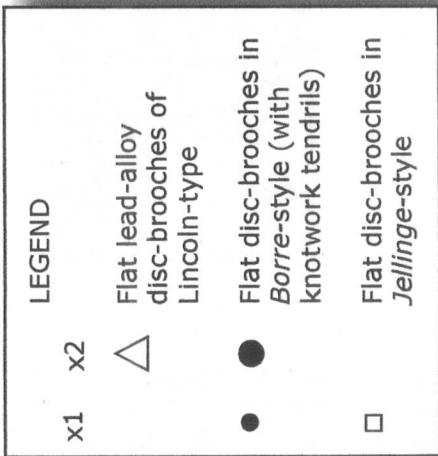
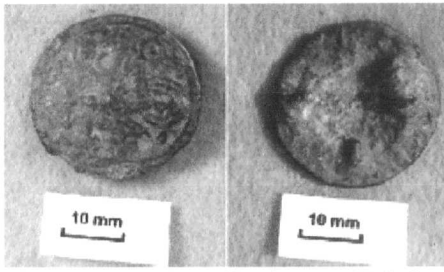
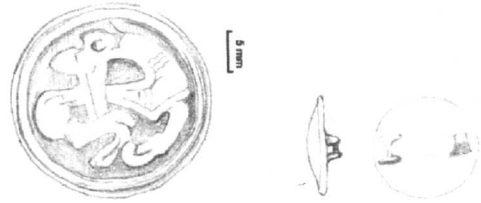


Fig. 29: Distribution of flat disc-brooches in Lindsey, Kesteven and Holland.



a) PAS NLM-0F69C5 (Roxby cum Risby)



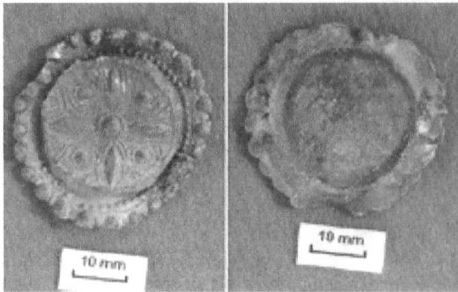
b) PAS NLM4529 (Sixhills)
(including sketch of profile and back)



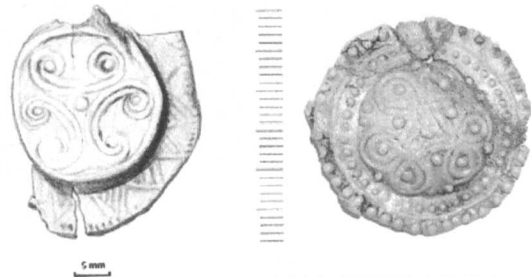
c) PAS NLM260 (Gainsborough)



d) Frick 1992 (Lincoln)

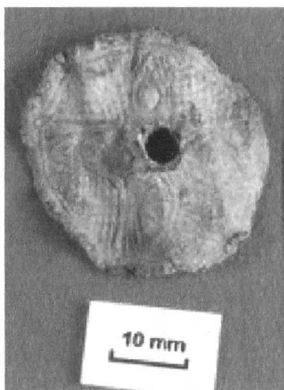


e) NLM-64E8D7 (Osgodby)



f) NLM396 (Elsham)

g) PAS SWYOR-939E21
(Weston)



h) NLM-CF5DC7 (Binbrook)



i) LIN-900B71 (Osbourneby)

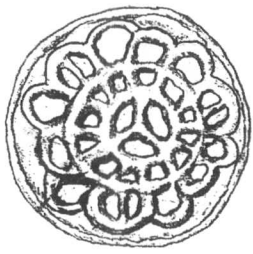
Fig. 30: Various objects from Lincoln, Lindsey and Kesteven (3). Copyright images: the *Portable Antiquities Scheme*, reproduced with kind permission of Roger Bland. Source fig. 30 d: Frick 1992. Figs b-c and f drawn by Marina Elwes.

LEGEND

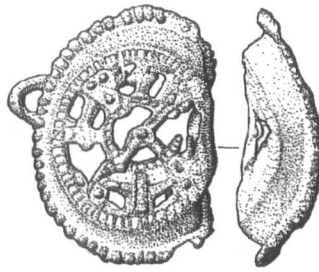
- ★ Domed disc-brooches in *Borre*-style
- ☆ Domed disc-brooches in *Jellinge*-style
- Tenth- to eleventh-century domed disc-brooches (produced locally?)
- Tenth- to eleventh-century domed disc-brooches with openwork decoration (produced locally?)



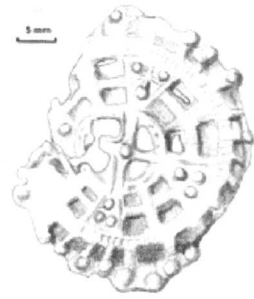
Fig. 31: Distribution of domed brooches in Lindsey, Kesteven and Holland.



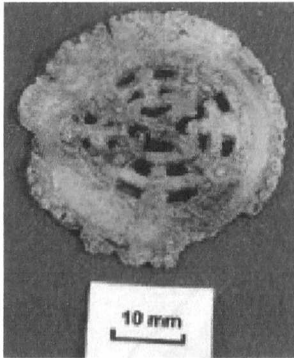
a) f72 <ae184>



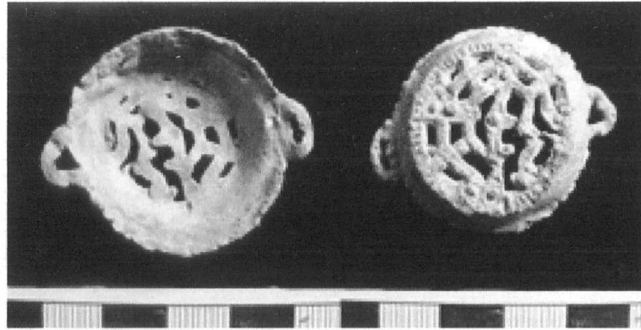
b) Bayley 1992: 780, fig. 340 (Coppergate, York)



c) NLM395 (Elsham)



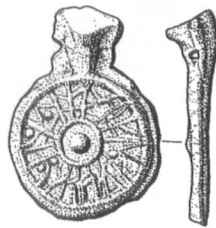
d) NLM-A6CCD1 (Whitton) (Whitton)



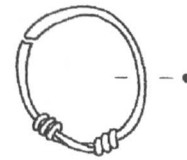
e) LIN-2666B7 (Aunsby and Dembleby, Kesteven)



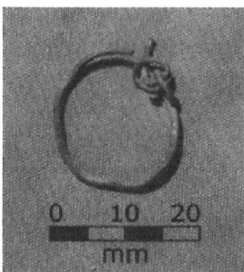
f) z86 <676>



g) Bayley 1992: 780, fig. 340 (Coppergate, York)



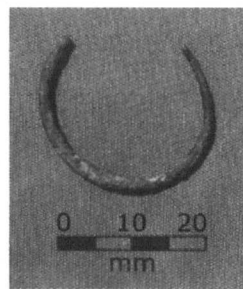
h) Idg03



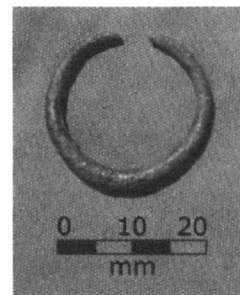
i) f72 <ag3>



j) f72 <ae221>



k) f72 <ae259>



l) f72 <ae262>

Fig. 32: Various objects from Lincoln, Lindsey and Kesteven (4). Copyright images: City of Lincoln Council, reproduced with kind permission of Michael Jones and Jenny Mann (a); the *Portable Antiquities Scheme*, reproduced with kind permission of Roger Bland (c-e); Archaeological Project Services, reproduced with kind permission of Steve Malone (h); and Letty Ten Harkel (f, i-l). Source figs b and g: Bayley 1992: 780, fig. 340. Fig. a: sketch from finds card of the City of Lincoln Archaeology Unit. Fig. c drawn by Marina Elwes. Fig. h drawn by Dave Hopkins.

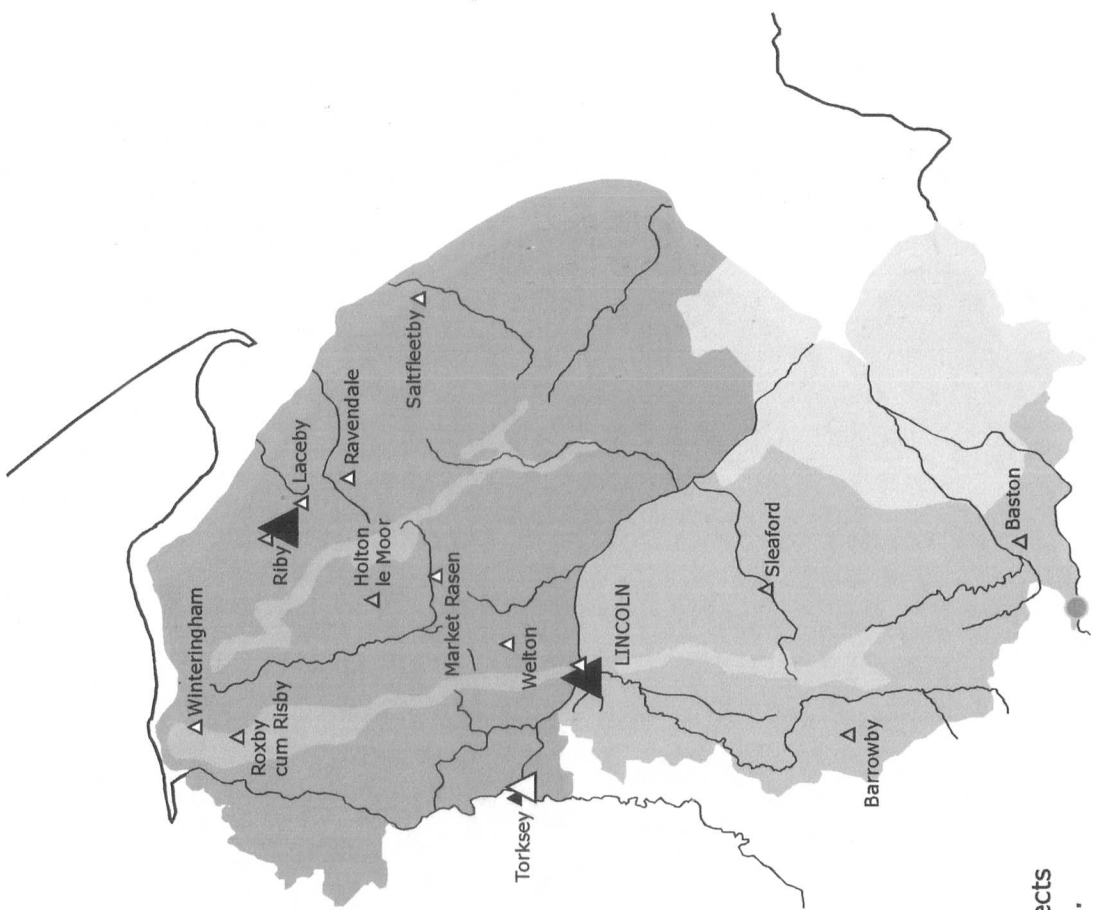
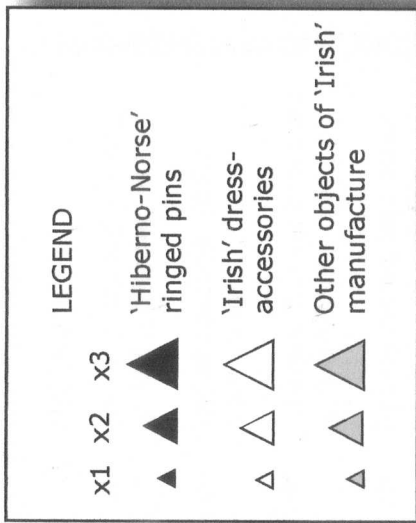


Fig. 33: Distribution of ring-headed pins and other objects of 'Irish' manufacture in Lindsey, Kesteven and Holland.

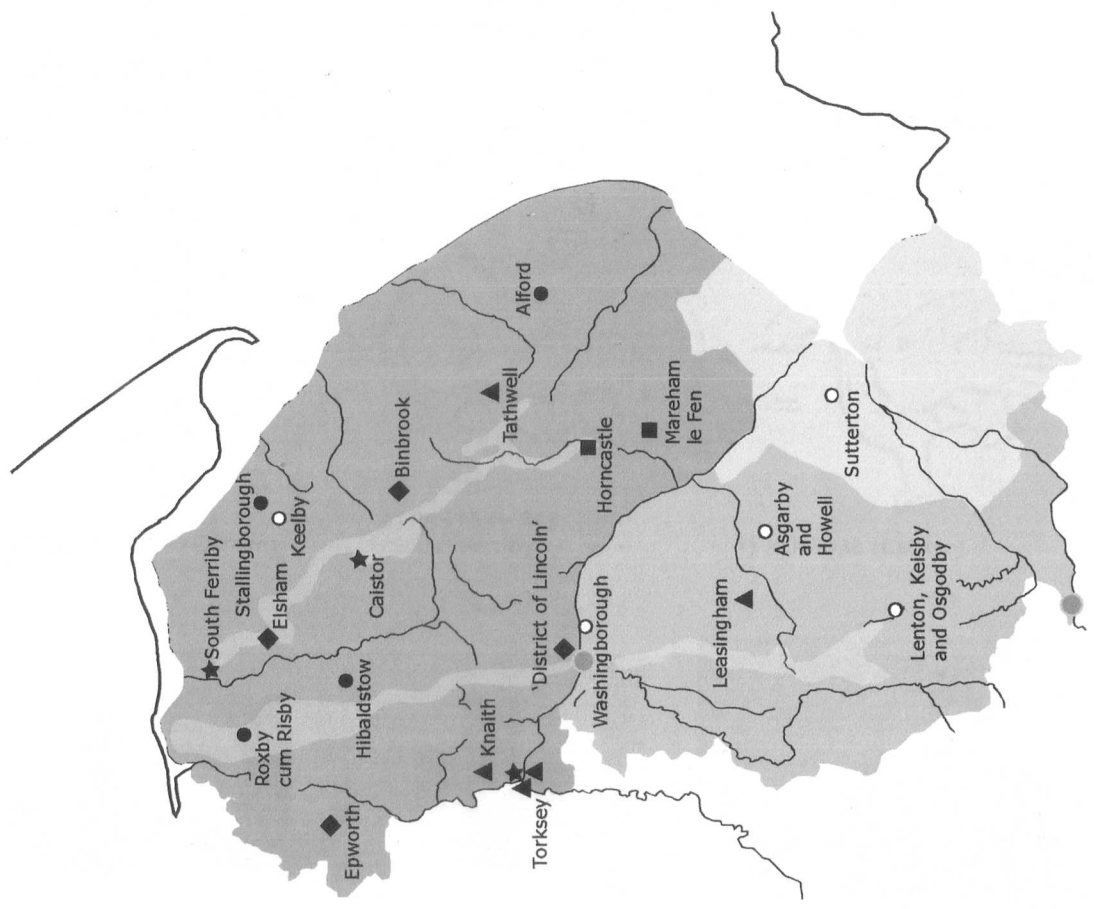
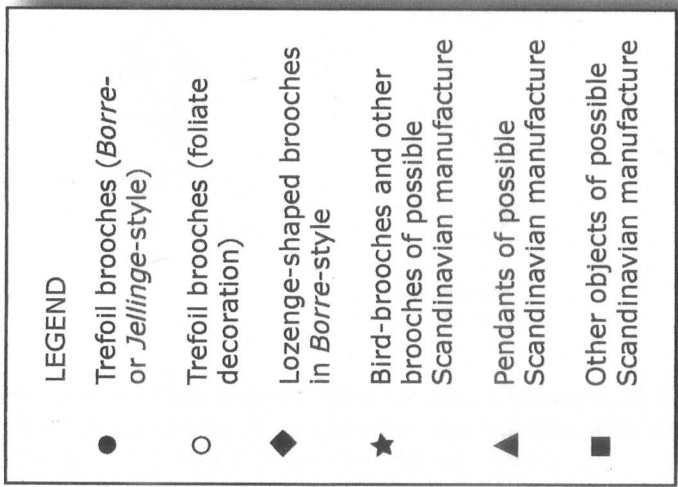


Fig. 34: Distribution of finds of typical 'Scandinavian' character in Lindsey, Kesteven and Holland.





a) PAS NLM5243 (Alford)



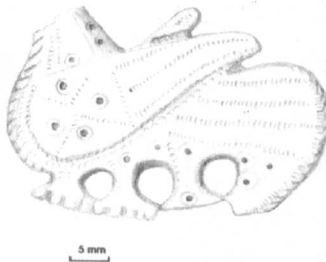
b) PAS NLM-6AFAC0 (Hibaldstow)



c) PAS DENO-E9A0F5 (Asgarby and Howell)



d) PAS NLM194 (Elsham)



e) PAS NLM4341 (South Ferriby)



f) NLM5638 (Caistor)



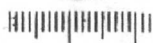
g) Brown 2006: 293 (Torksey) (not to scale)



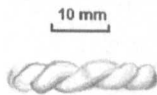
h) DENO-61E4C6 (Knaith)



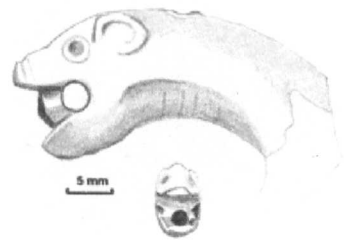
i) NARC-B3E1B5 (Leasingham)



j) DENO-DD64A4 (Torksey)

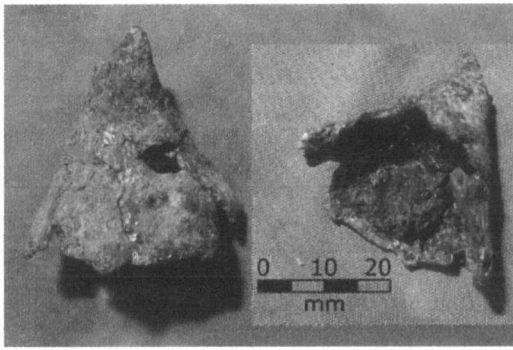


k) NLM3403 (Horncastle)

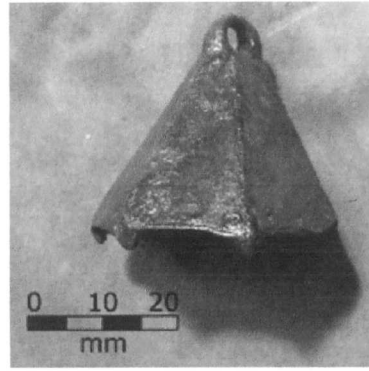


h) NLM579 (Mareham le Fen)

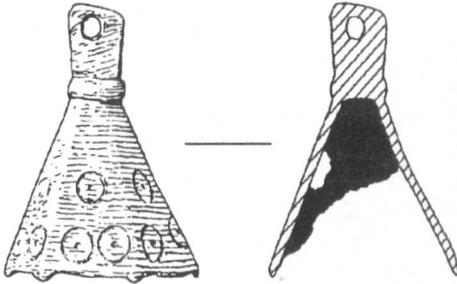
Fig. 35: Various objects from Lincoln, Lindsey and Kesteven (5). Copyright images: the *Portable Antiquities Scheme*, reproduced with kind permission of Roger Bland. Figs a, d-f, h and k drawn by Marina Elwes.



a) f72 <ae72>



b) f72 <ae166>



c) hg72 <ae49>



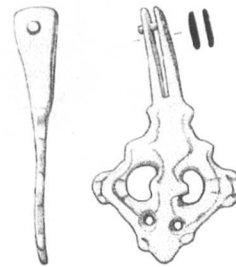
d) f72 <ae192>



e) f72 <ae234>



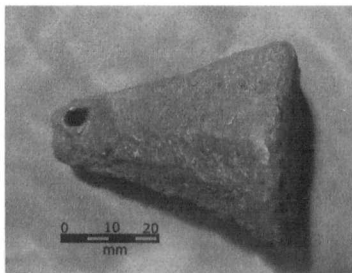
f) NLM-EB0C03 (Bonby)



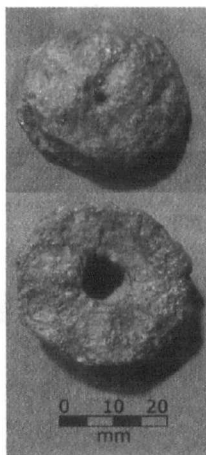
g) NLM-3CD626 (Hibaldstow)



h) NCL-76AE7 (East Kirkby)



i) lin73 <12>



j) p70 <pb11>



k) Brown 2006: 265 (Torksey)

Fig. 36: Various objects from Lincoln, Lindsey and Kesteven (6). Copyright images: Letty Ten Harkel (a-b, d-e, i-j); the *Portable Antiquities Scheme*, reproduced with kind permission of Roger Bland (f-h). Source fig. c: Steane et al. 2001: 130, fig. 8.33. Source fig. k: Brown 2006: 265. Fig. c drawn by Dave Watts. Fig. g drawn by Marina Elwes.

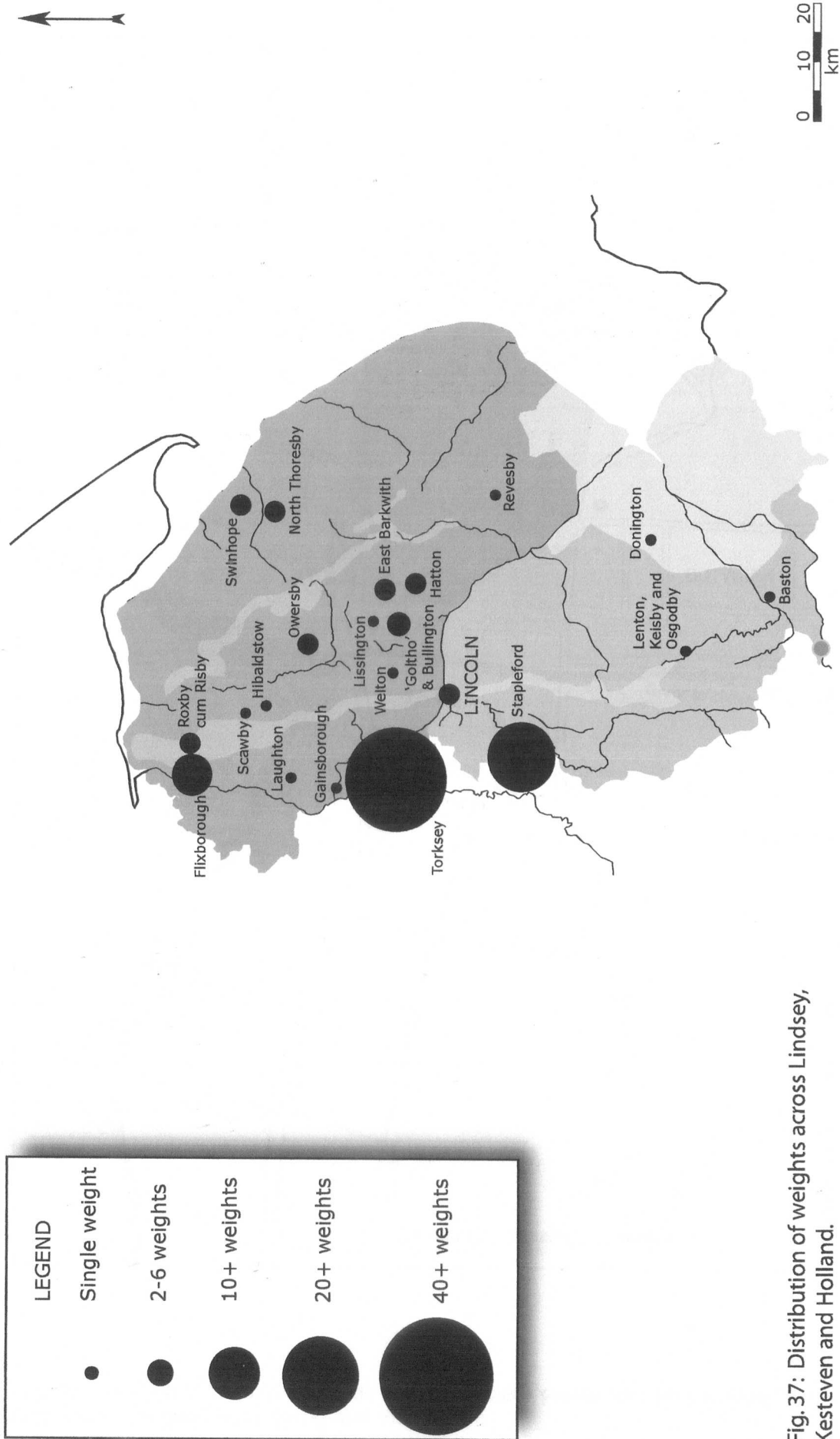


Fig. 37: Distribution of weights across Lindsey, Kesteven and Holland.

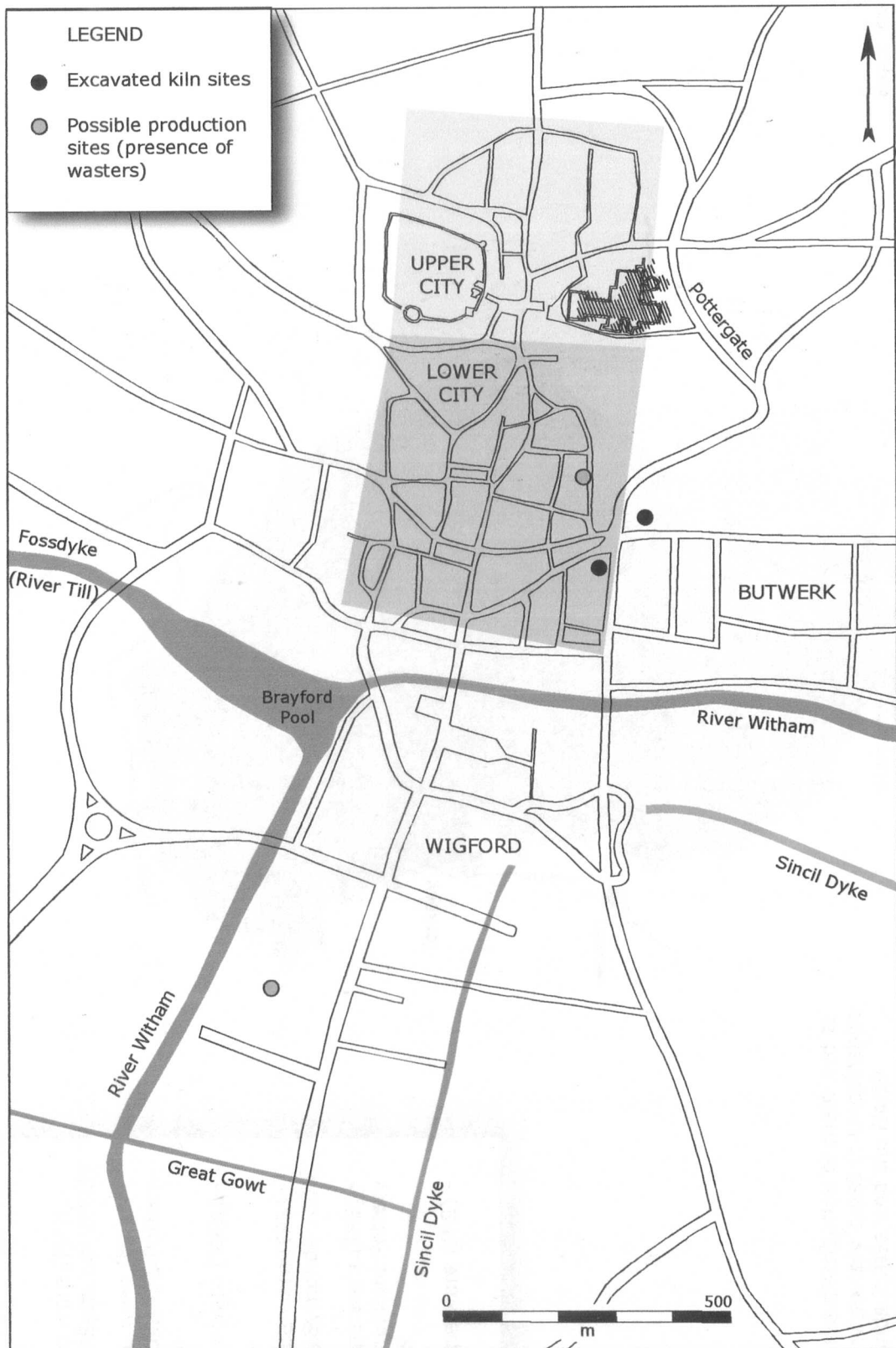


Fig. 38: Location of ninth- and tenth-century pottery production sites in Lincoln. Information derived from Young and Vince 2005.



Fig. 39: Qualitative distribution of main mid to late ninth-century pottery types in Lincolnshire (based on Symonds 2003a and the *North Lincolnshire Pottery Type Series* database).



LEGEND	
●	Lincoln kiln-type ware (LKT) - in Symonds 2003/EMASPP
★	Lincoln kiln-type ware (LKT) - in North Lincolnshire Pottery Type Series
■	Lincoln kiln-type ware (LKT) - other
○	Lincoln shell-tempered ware (LSH) - in Symonds 2003/EMASPP
☆	Lincoln shell-tempered ware (LSH) - in North Lincolnshire Pottery Type Series
□	Lincoln shell-tempered ware (LSH) - other
●	Local Late Anglo-Saxon fabrics (LSLOC) - in Symonds 2003/EMASPP
★	Local Late Anglo-Saxon fabrics (LSLOC) - in North Lincolnshire Pottery Type Series
■	Local Late Anglo-Saxon fabrics (LSLOC) - other

Fig. 40: Qualitative distribution of main late ninth- to tenth-century shell-tempered pottery types in Lincolnshire (based on Symonds 2003a and the *North Lincolnshire Pottery Type Series*).

LEGEND

- Lincoln gritty ware (LG)
- Lincoln Late Anglo-Saxon Sandy ware (LSLS)

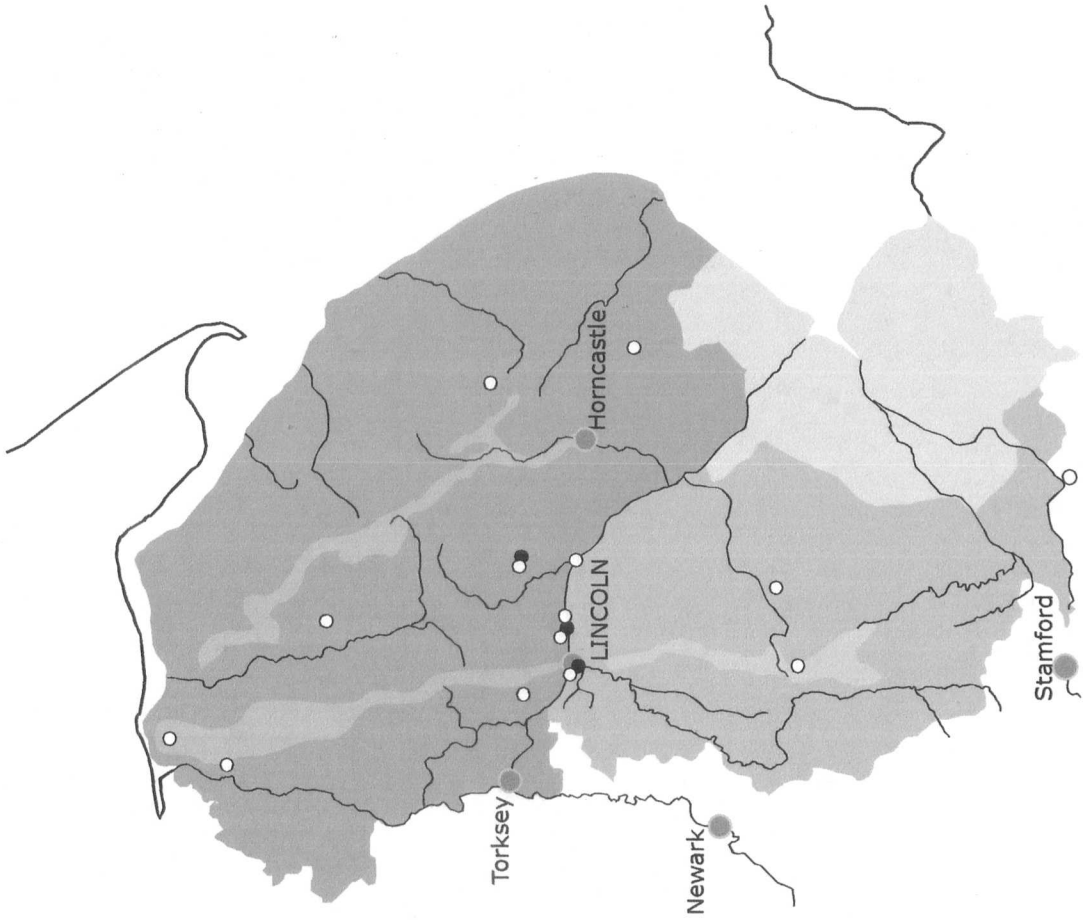
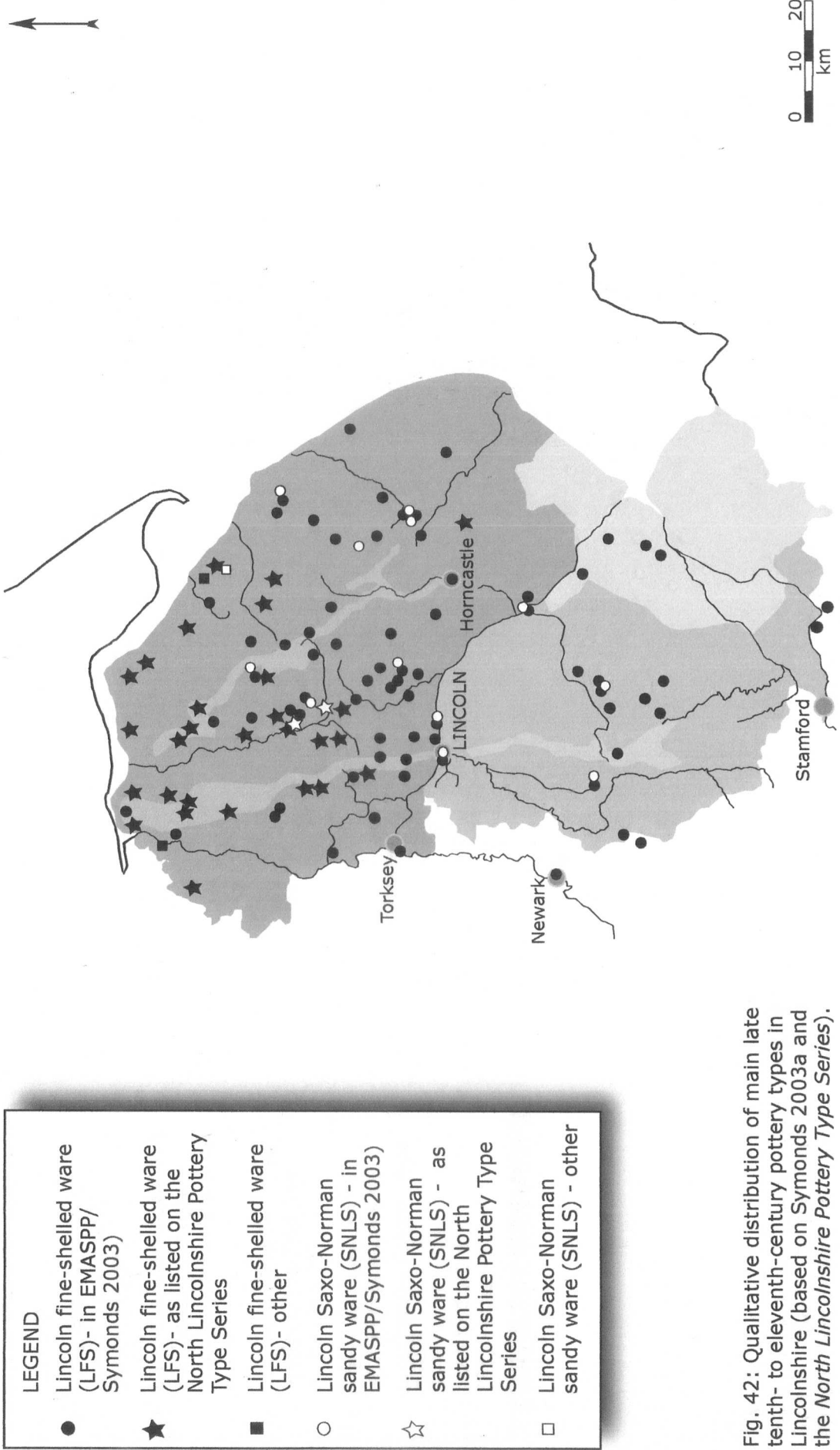


Fig. 41: Qualitative distribution of main late ninth- to tenth-century sand-tempered pottery types in Lincolnshire (based on Symonds 2003a).



- LEGEND**
- Lincoln fine-shelled ware (LFS) - in EMASPP/Symonds 2003
 - ★ Lincoln fine-shelled ware (LFS) - as listed on the North Lincolnshire Pottery Type Series
 - Lincoln fine-shelled ware (LFS) - other
 - Lincoln Saxo-Norman sandy ware (SNLS) - in EMASPP/Symonds 2003
 - ☆ Lincoln Saxo-Norman sandy ware (SNLS) - as listed on the North Lincolnshire Pottery Type Series
 - Lincoln Saxo-Norman sandy ware (SNLS) - other

Fig. 42: Qualitative distribution of main late tenth- to eleventh-century pottery types in Lincolnshire (based on Symonds 2003a and the North Lincolnshire Pottery Type Series).



LEGEND

- Early Stamford ware (EST) - in EMASPP/Symonds 2003
- ★ Early Stamford ware (EST) - as listed on the North Lincolnshire Pottery Type Series
- Stamford ware (ST) - as listed on the EMASPP/Symonds 2003
- ☆ Stamford ware (ST) - as listed on the North Lincolnshire Pottery Type Series
- Stamford ware (ST) - other

Fig. 43: Qualitative distribution of Stamford ware (EST and ST) in Lincolnshire (based on Symonds 2003a and the *North Lincolnshire Pottery Type Series*).

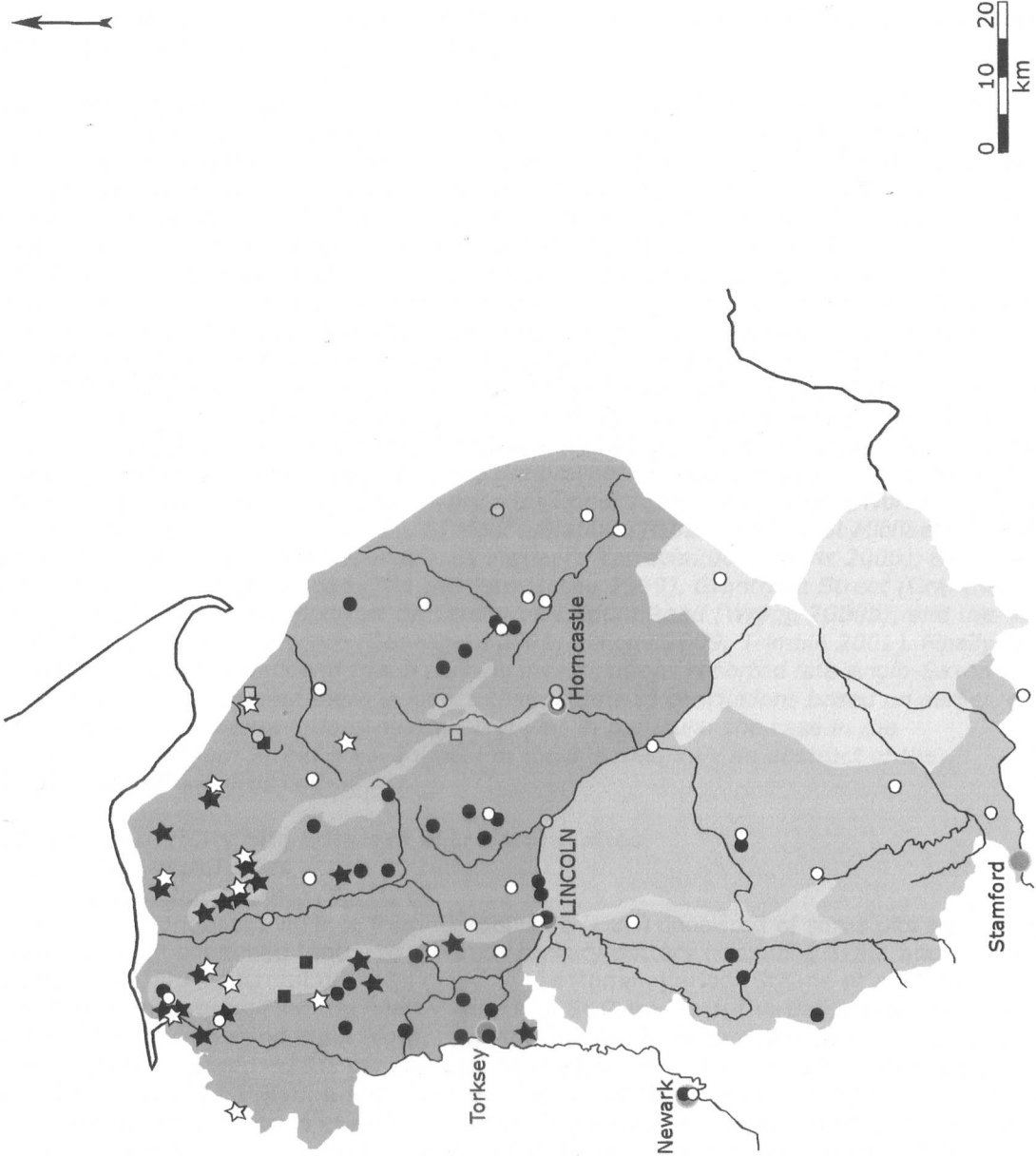
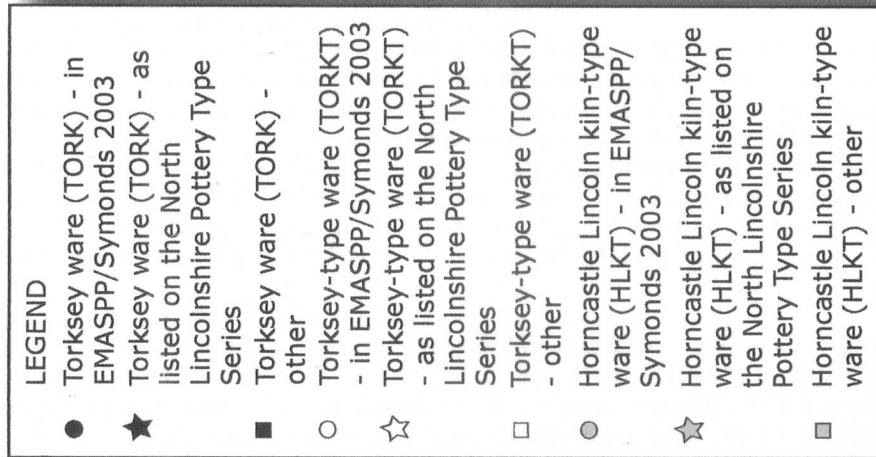


Fig. 44: Qualitative distribution of Torkey-ware (TORK), Torkey-type ware (TORKT) and Horncastle Lincoln kiln-type ware (HLKT) in Lincolnshire (based on Symonds 2003a and the *North Lincolnshire Pottery Type Series*).

APPENDIX 1: ARCHAEOLOGICAL INVESTIGATIONS IN LINCOLN WITH EVIDENCE FOR MIDDLE AND LATE ANGLO-SAXON ACTIVITY

The following appendix summarises all archaeological investigations in Lincoln that have produced evidence for middle and late Anglo-Saxon activity. It is largely based on the following sources. All excavations that were carried out in the city up to c. 1987 have been or will be published in three volumes in the Lincoln Archaeological Studies series (Steane et al. 2001; Steane et al. 2003; Steane et al. forthcoming), with additional information from excavations up to 2000 incorporated into the synthesis, *The City by the Pool* (Jones et al. 2003). In addition, some of the older excavations were published separately in the Archaeology of Lincoln series, the predecessor to the Lincoln Archaeological Studies series. These include *Flaxengate* (Adams Gilmour 1988; Mann 1982; O'Connor 1982; Perring 1981), *The Park and West Parade* (Colyer et al. 1999), *St Mary's Guildhall* (Stocker 1991), *St Mark's Church* (Gilmour and Stocker 1986), *Broadgate East* (Adams 1977), and *Silver Street* (Miles et al. 1989). For excavations carried out after c. 1990, grey reports were present at the Lincoln HER (Historic Environment Records) and UAD (Urban Archaeology Database). A total of eight sites excavated between 1991 and the present yielded evidence for late Anglo-Saxon activity. These included the *Central Library site* (Donel 1991; Jarvis 1996), *North Lincolnshire College* (Donel 1993; Trimble 1995), *St Mark's Station* (Trimble 1998), *St Michael's Terrace* (Residential Development 1999; Plot 3, *St Michael's Terrace* 2001; Jarvis 2000), the *Sessions House on Monks Road* (The Sessions House 1999), *Grantham Street* (Grantham Street, Lincoln 2000), *De Montfort University on Lindum Road* (Wragg 2000b), and the site of *The Collection on Danesgate* (Danesgate 2001; Malone 2009; Trimble 2001). Finally, a number of watching briefs and trial trenching investigations reported late Anglo-Saxon artefacts scatters, or found more evidence that confirmed conclusions based on earlier, more extensive open area excavations nearby. This was in particular the case in the *Flaxengate/Grantham Street* area. In most of these cases, only an abstract of the Lincolnshire HER records is included.

1.1: The Upper City and adjacent extra-mural sites

1.1.1: Intra-mural sites

1.1.1.1: cl85 (Chapel Lane) (fig. 3: E)

The only pre-Conquest evidence from Chapel Lane (cl85) consisted of some pits and a single posthole, which contained tenth- to eleventh-century pottery (including TORK and SNLS), and were cut into structural deposits dated to the Roman period (Steane et al. 2006: 53-54). It is sometimes argued that the nearby church of St Clement-in-the-Bail, situated between Chapel Lane and West Bight, may have originally been a pre-Conquest private chapel, although based on the general date of the finds from the nearby excavations at Chapel Lane and West Bight it has also been suggested that it was a parochial foundation of the eleventh century (Jones et al. 2003: 196). This interpretation would fit better with the dedication of the church, which was supposed to be popular amongst the new Scandinavian elite who settled in England following Cnut's accession to the English throne in the second decade of the eleventh century (Jones et al. 2003: 198). Some limited evidence for late Anglo-Saxon metalworking activity was also retrieved. Wilson (1971: 13) furthermore added that a bone mouthpiece, possibly for a flute, was found at Chapel Lane, together with Roman pottery. He assigned it a 'viking' or 'Norman' date. A possible Anglo-Saxon knife was also found (appendix 11.1.4).

1.1.1.2: wb76, wb80 (West Bight) (fig. 3: F)

Four early Anglo-Saxon potsherds have been found in the three trenches excavated at West Bight (wb80); however, none came from securely stratified contexts (Jones et al. 2003: 145). Other pre-Conquest finds included a late Anglo-Saxon whalebone casket mount, which could be paralleled with eleventh-century objects from Coppergate in York and Scandinavia, although again this came from a residual context (Jones et al. 2003: 242, 250). Late Anglo-Saxon pottery from this site included SNLS and TORK (Jones et al. 2003: 197 fig. 9.38). A late Anglo-Saxon hooked tag <13> was also found, which may be related to the nearby metalworking activity at Chapel Lane (appendix 11.1.3).

1.1.1.3: mw79 (Mint Wall) (fig. 3: G)

Here, the earliest layers overlying the Roman structures contained mostly mid-eleventh century pottery (Jones et al. 2003: 115), again confirming the notion that occupation in the Upper City was limited until the later tenth century, although TORK and SNLS of late tenth- to early eleventh-century date was also found (Jones et al. 2003: 197 fig. 9.38).

1.1.1.4: sp72 (St Paul-in-the-Bail) (fig. 3: H)

One early Anglo-Saxon potsherd has been found on this site (Jones *et al.* 2003: 145), which produced the only possible structural evidence for middle Anglo-Saxon activity from the Upper City. The site was situated in the location of the Roman *forum*, not far from the crossroads of the two major Roman streets through the Upper City, connecting the North, East, South and West Gates, which seem to have remained in use throughout the Anglo-Saxon period (Jones *et al.* 2003: 147).

The most recent discussion of the sequence at St Paul-in-the-Bail is published in Gilmour 2007: 232-39. The sequence is as follows. Cutting through the surface of the *forum* were the remains of an undated timber structure, possibly an early church (although its interpretation as one rests entirely on the later use of the site), followed by a timber apsidal-ended building with stone foundation packing, interpreted as a church, whose dating is also still a matter of debate. Gilmour (2007: 252) has suggested a late Roman or immediate post-Roman date for the first timber structure. Associated with the apsidal structure was grave 34, a collection of buried disarticulated human bones in a rectangular north-south aligned cut (Jones *et al.* 2003: 150, fig. 8.8 (34)). These bones were dated (using ¹⁴C methods) to AD CAL 441 (Jones *et al.* 2003: 147, 150 fig. 8.8; also see Gilmour 2007: 247-48). Although the exact stratigraphic relationship between these bones and the church was not clear, they were interpreted as a foundation deposit of saintly bones or relics underneath the altar of the apsidal structure, which could then be either late Roman or middle Anglo-Saxon in date (Gilmour 2007: 249; Jones *et al.* 2003: 149).

Immediately to the west of the foundation burial, inside the structure, was a cist burial containing a seventh-century hanging bowl (published in Bruce-Mitford 1993; Gilmour 2007: 240-45; Jones *et al.* 2003: 149, fig. 8.7), but no bones were found at the site, suggesting that this may have been another saintly burial, whose bones were translated (Steane *et al.* 2006: 154; Jones *et al.* 2003: 149-50). The east-west alignment of the cist was similar to that of the apsidal structure, in whose centre the burial was located. When the cemetery was originally excavated, it was thought that this cist burial was the earliest burial on the site, providing a focal point for the cemetery that developed subsequently (Gilmour 2007: 246). This seemed to be in accordance with the central location of the cist on the site, and the fact that most other early burials respected it (Gilmour 2007: 246). The apsidal structure was dated to the seventh century on the basis of the seventh-century date for the hanging bowl (Jones *et al.* 2003: 149-50). Another argument in favour of a seventh-century date is the construction method of the apsidal building, whose use of earth-fast planks is suggestive of construction methods used in certain seventh-century secular buildings (Jones *et al.* 2003: 149). In this context, the building has been associated with the church allegedly built by Paulinus in the seventh century (Bede, *HE* II: 16; Sawyer 1998; discussed in Gilmour 2007).

However, radiocarbon dating of the graves since has altered this picture. The preceding single-cell building was *also* on the same alignment, rendering it possible that the cist burial was associated with the preceding building (Steane 1991: 30). What is more, as the street-grid of the Roman fortress was also laid out on a north-south, east-west alignment, it is equally possible that the cist preceded *or* succeeded both structures (Stocker *pers. comm.*). Radiocarbon dates obtained for burials underneath the footings of the apsidal building were all Roman or earlier (Gilmour 2007: 247-49; Jones *et al.* 2003: 150; Steane *et al.* 2006: 154). After the apsidal building went out of use, there is evidence for a number of postholes, but no clear structure could be identified. The site became a graveyard, with two graves (27 and 30) cutting the backfill of the wall trench of the partition wall between the apse and nave of the apsidal building (Jones *et al.* 2003: 150, fig. 8.8). An additional three (19, 23 and 29) lay across the line of the north wall of the apsidal building, and one lay across the line of the south wall (28) (but note, Jones *et al.* 2003: 150 *also*, and probably incorrectly, lists grave 34 again amongst these graves). The six above-mentioned graves produced the following dates: 540-890 (grave 19); 650-960 (grave 23); 780-1180 (grave 27); 450-770 (grave 29); and 420-690 (grave 30) (Jones *et al.* 2003: 150, fig. 8.8; also see Gilmour 2007: 247-48). This led Gilmour (2007: 252) to suggest a date of c. 400-600 AD for the apsidal-ended building.

Two other burials were dated to c. 100-300 AD and c. 150-400 AD (Gilmour 2007: 249). These were found inside the area of the apsidal-ended church. Gilmour (2007: 249) suggests that either the dating of these burials is incorrect, or that the burials indicate an early focal point later reoccupied by the cist burial. In the latter case, the cist burial could be of any date.

The potential of the hanging bowl to date the cist grave has also been questioned. The hanging bowl was found *in* the stone packing of the cist (Gilmour 2007: 239, fig. 8), and had been in a poor state even when it was buried here, even showing signs of repair (Gilmour 2007: 241, 245; Jones *et al.* 2003: 150). Gilmour (2007: 246) has suggested a early seventh-century date for the bowl, and suggested it was at least 50 years old when buried, providing a *terminus post quem* of the mid seventh century for the cist burial. However,

Gilmour (2007: 245) also states that it is difficult to assess *exactly* how old the bowl was at burial, and it may be possible to suggest an even later date. Additional discussion of the cemetery data has been presented in chapters 2-3 and appendix 5.1.1.

There was no pottery associated with any of these layers, and with the exception of the single early Anglo-Saxon potsherd mentioned above, the ceramic sequence for this site does not start until the tenth century (chapter 6; Steane 1991: 30). The only stratified coin data from the site is represented by a late Roman coin (388-402) from a metalled surface that was stratigraphically unrelated to the two early structures, and which may have actually been part of the surface of the *forum* itself, and one late Anglo-Saxon coin (871-75) from the later graveyard soil that sealed the apsidal building (Jones *et al.* 2003: 147-48; Steane 1991: 30).

The next building phase was represented by a single-celled building with stone foundations (Jones *et al.* 2003: 249; Steane 1991: 30). The building was erected with, again, the cist burial at its centre (if indeed it was already present), although some time had passed between the disappearance of the apsidal-ended building and the construction of the single-celled stone building, because several graves were found that were cut by the footings of the single-celled stone building (Gilmour 2007: 250), one of which provided a ¹⁴C date of 910 +/- 90 (Steane 1991: 30). This single-celled building was associated with a number of burials, one of which contained a Crux penny of King Æthelred, dated to the 990s (appendix 8.1.2). If the apsidal timber building should indeed be assigned a Roman or immediate post-Roman date, this stone structure represents the first Anglo-Saxon church on site. Regardless of the dating of the apsidal building, it is clear that there was a prolonged graveyard phase without any evidence for a building. The presence of a cemetery without a church has been recorded elsewhere in Lindsey (appendix 2.1.8; 2.2.1; 2.3.2; 2.4.16; 2.17.33).

The site also produced a small group of ninth-century metal artefacts, all from residual contexts. These include four *Lunette* coins (for a full list of all coin finds from St Paul-in-the-Bail, see appendix 8.1.2) and three ninth-century silver dress fittings (appendix 11.1.2). It has been suggested that their presence should be associated with viking activity; alternatively they could represent disturbed grave goods, or casual loss from nearby activity (Jones *et al.* 2003: 151). This possibility has been discussed in more detail in chapters 4 and 5. A fragment of stone sculpture (*Lincoln St Paul-in-the-Bail 3*) may be dated to this period as well (Jones *et al.* 2003: 151; but see appendix 3.1.1.2). This piece of sculpture was too small to identify or indeed date with any certainty, and it is also possible that it belonged to the eleventh or twelfth centuries, but was finely decorated, and carved with a high level of expertise, confirming the potentially high status of the site at some point in its history (Stocker *pers. comm.*). For a full discussion of both pieces of late Anglo-Saxon sculpture from St Paul-in-the-Bail, see appendix 3.1.1.

A tenth-century sunken-featured building that yielded evidence for metalworking activities, with associated pits and surfaces, was also discovered on the site (Gilmour 2007; Steane *et al.* 2006: 154, 162-63, 170-71). The evidence for metalworking activities included seven sherds of Stamford-ware crucibles, a clay mould fragment, two copper-alloy droplets, a fragment of possible litharge, which was usually connected to the refining of silver, and a small amount of fuel-ash slag (Steane *et al.* 2006: 164-65). In the eleventh century, the evidence for metalworking increases (Steane *et al.* 2006: 166-69). Artefactual evidence from the tenth and eleventh centuries is nevertheless limited, consisting only of two hooked tags (appendix 11.1.2). The ceramic evidence increases in the second half of the tenth century, suggesting that the occupation of the site became more significant during this period, even if it was still not comparable to that of the Lower City (Jones *et al.* 2003: 194-96).

1.1.1.5: cp56 (Cottesford Place) (fig. 3: I)

The 1956 investigations at Cottesford Place (cp56) revealed a limited number of tenth-century potsherds, including TORK and SNLS (Jones *et al.* 2003: 194; 197 fig. 9.38).

1.1.1.13: on261 (Bailgate Methodist church) (fig. 3: J)

Late tenth- and eleventh-century pottery (TORK and SNLS) has been found during investigations on this site by Whitwell in 1968, although no structural remains of pre-Conquest date were recognised (Jones *et al.* 2003: 197, fig. 9.38; Jones *pers. comm.*).

1.1.1.7: eb53, eb66, eb70, ebs70, eb79, eb80 (East Bight) (fig. 3: K-Q)

Five early Anglo-Saxon potsherds as well as a quantity of late tenth- to early eleventh-century pottery (TORK and SNLS) has been found on the site (Jones *et al.* 2003: 145, 146, fig. 8.3, 197, fig. 9.38). Some tentative evidence for late Anglo-Saxon to early medieval activity was also found, in the shape of a number of pits, but these could not be dated with any precision (Jones *et al.* 2003: 73).

1.1.1.11: cwg86, cwg88 (Castle Westgate) (fig. 3: P)

Late tenth- and eleventh-century pottery (TORK and SNLS) has been found on this site, although no structural remains of pre-Conquest date were recognised (Jones *et al.* 2003: 197 fig. 9.38). In addition, a limited quantity of relatively high-status but probably post-Conquest eleventh- to twelfth-century metalwork was retrieved, as well as a knife and a key (appendix 11.1.1).

1.1.1.12: cas91 (Castle) (fig. 3: Q)

Late tenth- and eleventh-century pottery (TORK and SNLS) has been found on this site, although no structural remains of pre-Conquest date were recognised (Jones *et al.* 2003: 197 fig. 9.38).

1.1.1.6: lc84 (Cathedral sites, 1983 to 1987) (fig. 3: R)

It has been suggested that an early Anglo-Saxon cremation cemetery was located underneath the cathedral; however, the evidence for this is extremely tentative (appendix 5.1.2). It has also been suggested, on the basis of a reassessment of the architectural development of Lincoln Cathedral in the context of written sources such as *DB* and the *ASC*, that an earlier minster church, like the cathedral dedicated to St Mary, was situated on the site that is now occupied by the cathedral (Jones *et al.* 2003: 144-45; Stocker and Vince 1997). However, excavations at the cathedral sites carried out between 1983 and 1987 revealed no post-Roman archaeology pre-dating the Norman period (Steane *et al.* 2006: 1), even if parts of its cemetery are believed to have been found to the west of the present cathedral (Everson and Stocker 1999: 194-95), and a single piece of tenth- to eleventh-century funerary sculpture was found here as well (appendix 3.1.2.1). A key of possible Anglo-Saxon or medieval date was also found (appendix 11.1.5). Even if the church of St Mary was indeed located here, there has been debate over its status. Although it has been held in the past that the church was probably of comparable, single-celled size as for example the tenth-century structure at St Paul-in-the-Bail, more recently the general consensus has been that it was probably much larger, and of comparable size to the church at Stow (Jones *et al.* 2003: 198-99; Stocker and Vince 1997).

1.1.1.9: The church of All Saints-in-the-Bail (fig. 3: T)

The probable site of All Saints-in-the-Bail has been identified at roughly SK 97666 71890. This church was one of four churches mentioned in *DB*. It has been suggested that this was one of a group of churches that existed, together with St Paul-in-the-Bail, at the heart of a tenth-century or earlier monastery, or an aristocratic estate centre, but either way there is little evidence (Lincoln HER 70546-MLI89645). A possible focus point for the location of these churches was a Roman well near St Paul-in-the-Bail (SK 97629 71956). However, the well was completely cleaned out in the fourteenth century (Lincoln HER 70548-MLI89649). The precise location of the church of All Saints-in-the-Bail is not known, but *DB* suggests that it was an important church at the time of the Conquest, and recent excavations have shown that the churchyard must have extended from Bailgate to Eastgate (Jones *et al.* 2003: 198; Wragg 1997). Also see appendix 5.1.3.

1.1.1.10: The church of St Clement-in-the-Bail (fig. 3: U)

The church of St Clement in the Bail is attributed to the eleventh century on the basis of its dedication. Nothing more is known about it, not even its exact location (Lincoln HER 70547-MLI89646) (but see fig. 3 U).

1.1.2: Extra-mural sites

1.1.2.1: lh84, la85, l86 (The Lawn) (fig. 3: A-C)

Six early Anglo-Saxon and 69 middle Anglo-Saxon potsherds have been found at The Lawn (lh84, la85, l86) (Jones *et al.* 2003: 147, 152). Late tenth- and eleventh-century pottery (TORK and SNLS) has also been found on this site, although no structural remains of pre-Conquest date were recognised (Jones *et al.* 2003: 197 fig. 9.38).

1.1.2.2: cy89 (Cuthbert's Yard) (fig. 3: D)

Some middle Anglo-Saxon potsherds have been found here (Jones *et al.* 2003: 152).

1.1.2.3: lg89 (Langworthgate) (fig. 3: S)

One early Anglo-Saxon potsherd has been found here (lg89) (Jones *et al.* 2003: 147).

1.1.2.4: The church of St Peter Eastgate (fig. 3: V)

The church of St Peter Eastgate may also have been a pre-Conquest foundation, as the church tower, like that of St Mary-le-Wigford and St Peter at Gowts, is a typical later eleventh-century Lincolnshire type, which were believed to be later additions to existing

buildings as a result of changes in the liturgy (Stocker and Everson 2006). However, no archaeological evidence survives or has ever been found that predates the eleventh century (Lincoln HER 70525-MLI89563).

1.2: The Lower City and adjacent extra-mural sites

1.2.1: Intra-mural sites

1.2.1.1: Motherby Hill (fig. 3: 1)

The area was excavated in the early 1970s, and it was suggested then that it was largely deserted until the eleventh century, despite the discovery of some tenth-century wares (HER70322-MLI84354). A single glass-headed pin, possibly of late Anglo-Saxon date was also found (appendix 11.2.9).

1.2.1.2: wp81 (West Parade) (fig. 3: 2)

The pottery from this site suggests that occupation here did not begin until the eleventh century (Jones *et al.* 2003: 196). However, some metalwork has been found that may be slightly earlier in date. For a full discussion of the artefacts, see appendix 11.2.6.

1.2.1.3: p70 (The Park) (fig. 3: 3)

Residual early Anglo-Saxon pottery was found here (Colyer *et al.* 1999: 135; Jones *et al.* 2003: 152-53). It is unclear whether or not middle Anglo-Saxon pottery has been found on this site. It is denied in Jones *et al.* 2003: 153 ("none was found at The Park (p70)..."), despite the fact that fig. 8.5 (also in Jones *et al.* 2003: 148) does list The Park (p70) amongst the sites that have yielded "7th- and 8th-century (i.e. middle Saxon) pottery". Unfortunately the more recent study by Young and Vince (2005) did not treat the pottery on a site-by-site basis. Other investigations suggested that after its abandonment in the fifth century, this area of the city was not reoccupied until the eleventh century (*Archaeological Trial Trench Evaluation* 2001: 4). Some metalwork dated to the late Anglo-saxon period was also discovered (appendix 11.2.7).

1.2.1.4: psl00 (Park Street) (fig. 3: 4)

The site of Wm Wrights Premises on Park Street (PSL00) (SK97327140), located on the western side of Park Street and directly to the east of the line of the former Roman city wall, was redeveloped for new student accommodation in 2001 (*Archaeological Trial Trench Evaluation* 2001). A deep layer of 'dark soil', containing, amongst other things, eleventh-century pottery, was found overlying the Roman archaeology in all seven trenches (*Archaeological Trial Trench Evaluation* 2001: 6). The earliest evidence for post-Roman activity came from trench 1, which revealed a robber trench which had removed where a Roman wall, which contained some ninth- and tenth-century pottery (*Archaeological Trial Trench Evaluation* 2001: 6; Lincoln HER 70398-MLI87053). The suggestion that reoccupation in this part of the Lower City did not occur until the eleventh century was thereby confirmed. Further watching briefs during the actual redevelopment phase did not alter this picture either (Young and Hollamby 2004).

1.2.1.5: mg78, mch84 (Michaelgate) (fig. 3: 5, 8)

At Michaelgate, residual early Anglo-Saxon pottery was found (Jones *et al.* 2003: 146 fig. 8.3). A single middle Anglo-Saxon buckle was also found, likewise in a residual context (Jones *et al.* 2003: 153-54) (appendix 11.2.12). Excavations also identified tenth- and eleventh-century structures, dumps, and pitting. The dumps contained a small quantity of copper-working crucibles, slag (both from copper-working and from iron smithing), glassworking crucibles and glass rings, as well as a large quantity of hones, indicative of some industrial activity. The material was similar to that found at Flaxengate, but most of the activity dated to the eleventh century (Steane *et al.* forthcoming).

1.2.1.6: spm83 (Spring Hill, Michaelgate) (fig. 3: 6)

Investigations by the CLAU on the Michaelgate (mg78) site and the Spring Hill/Michaelgate (spm83) site, consisting of watching briefs, did not identify any buildings (Steane *et al.* forthcoming). However, evidence for extensive levelling in the late Anglo-Saxon period was encountered, as well as various rubbish pits, all containing late Anglo-Saxon pottery, as well as a single bone comb of possible late Anglo-Saxon or early medieval date (*Residential Development* 1999: 1).

1.2.1.7: mgb99 (St Michael's Terrace, Michaelgate) (fig. 3: 7)

In 2000 a watching brief was carried out in the context of housing development. The site, located in the Lower City just east of Spring Hill and south of Gibraltar Hill, did not yield any conclusive late Anglo-Saxon layers, but it did produce several undated deposits that were attributed to the late Anglo-Saxon period on the basis of their stratigraphic position, and

their similarities to other, dated deposits encountered on other sites in the area (*Plot 3, St Michael's Terrace* 2001: 1). Despite the absence of artefactual material, the site was believed to have been domestic in nature throughout the late Anglo-Saxon period (*Plot 3, St Michael's Terrace* 2001: 10). Previous work on the site, consisting of a small evaluation trench and a watching brief, both carried out in 1999, had revealed several domestic refuse pits, as well as a possible metal surface, but never any structural remains (*Plot 3, St Michael's Terrace* 2001: 3; Jarvis 2000: 1). This led the site director at the time to suggest that the Roman buildings were still standing, and potentially even re-used as dwellings in the late Anglo-Saxon period; alternatively, the site was only used for garbage disposal, with contemporary dwellings situated elsewhere, for example at Chestnut House (mch84) or Hungate (h83) (Jarvis 2000: 1, 11). In 2005, Network Archaeology carried out trial trenching at the site of proposed housing development "Strelizia" on Michaelgate (SK 9758 7160). The earliest finds included a single sherd of Saxo-Norman sandy ware, and a crucible fragment, as well as an unspecified quantity of animal bone (Lincoln HER 70467-MLI88272).

1.2.1.8: St Martin's Church (fig. 3: 9)

This church is commonly thought to be of pre-Conquest date on the basis of its location, situated close to the earliest settlement core in the Lower City, and its dedication, which also occurred on the early tenth-century St Martin's coinage struck at Lincoln, and a reference that states that the King granted it to the Bishop in the period 1070-87 (Lincoln HER 70553-MLI89653). However, the church was demolished in the first half of the twentieth century, and there is no further documentary or architectural evidence to substantiate this claim (Jones *et al.* 2003: 204). It has also been suggested that this was the church founded by Paulinus (Jones *et al.* 2003: 144-45).

1.2.1.9: h83, hun00 (Hungate) (fig. 3: 10)

Residual middle Anglo-Saxon pottery has been found at this site (Jones *et al.* 2003: 152-53). The majority of evidence from this site, however, dated to the early tenth century and later, suggesting that it was at this time that the settlement of the Lower City began to spread beyond the southeast corner. At Hungate (h83), a number of structures were built in quick succession from the middle of the tenth century onwards. They were built on top of a thick deposit of 'dark earth' that overlay the Roman stratigraphy (Steane *et al.* forthcoming). It was suggested that the middle Anglo-Saxon pottery found on this site, as well as some late ninth-century pottery, were brought in from elsewhere within the city to provide material for levelling or terrace building (Jones *et al.* 2003: 192). The finds associated with the buildings seemed to indicate that their purpose was mainly domestic, although some evidence for associated manufacturing activity, mostly textile working, was also discovered. The evidence included a number of iron wool-comb teeth used for spinning, and a number of spindle whorls. A very small number of crucible fragments and a small amount of lead waste should probably be interpreted in the context of metalworking activities in the vicinity (Steane *et al.* forthcoming). For a discussion of metal artefacts found on this site, see appendix 11.2.2.

Further investigations at the nearby site of St Martin's School, Hungate (hun00) revealed more evidence for terracing and levelling, as well as a single pit with re-deposited midden-type material (*Archaeological Field Evaluation Report* 2001: 3). Trench 1 revealed several layers with tenth- and eleventh-century pottery, but unfortunately the dimensions of the trench were too small to interpret the findings in a meaningful way. Beyond the conclusion that there was evidence for tenth- to eleventh-century occupation, not much could be said (*Archaeological Field Evaluation Report* 2001: 9). Trench 4 revealed a complete sequence from the Romano-British until the modern period, but here a pit containing midden material was the only cut feature that could be dated to the late Anglo-Saxon period. Several layers were also identified, the earliest of which contained late ninth- and tenth-century material (*Archaeological Field Evaluation Report* 2001: 15-16). Apparently the pottery from this trench suggested a continuous sequence from the late ninth century onwards, and it was suggested that the street of Hungate was first laid out in the late ninth century (*Archaeological Field Evaluation Report* 2001: 5, 16).

1.2.1.10: The church of All Saints, Hungate (fig. 3: 11)

This church is also believed to be of tenth-century date (Jones *et al.* 2003: 205 fig 9.45). However, the Lincoln HER suggests it was founded after 1050 (Lincoln HER 70558-MLI89658).

1.2.1.11: sh74 (Steep Hill) (fig. 3: 12)

Residual middle Anglo-Saxon pottery was found at this site (Jones *et al.* 2003: 152-53). The earliest structural evidence on this site consisted of more tenth- to eleventh-century structures, dumps, and pitting, but no evidence for industrial activity was retrieved (Steane

at *al.* forthcoming) (appendix 16). A single middle to late Anglo-Saxon pinhead was also found on this site (appendix 11.2.5).

1.2.1.12: The Strait (fig. 3: 13)

A residual pottery scatter which included ninth-century wares was found at the site of Straits Wine Bar, 8 The Strait, Lincoln LN2 1JD (HER 70311-MLI83827).

1.2.1.13: dt74 (Danes Terrace) (fig. 3: 14)

During the excavations at Danes Terrace (dt74), the City Council imposed restrictions on the depth of the trenches, and the tenth-century levels were never reached. Still, a number of important finds were retrieved from later contexts, including a late eleventh-century *Urnes*-style openwork mount (for a discussion of all the metalwork finds from Danes Terrace, see appendix 11.2.1), and a single specimen of Æthelred's Crux issue of the 990s (appendix 8.2.1). In addition, a number of late Anglo-Saxon crucible sherds were found, as well as two decorated hooked tags, made of copper alloy, of a type that was possibly produced at f72 (Steane *et al.* forthcoming; appendix 11). Residual middle Anglo-Saxon pottery was also found at this site (Jones *et al.* 2003: 148, fig. 8.5).

1.2.1.14: dcpa01, ldg03 (The Collection/Danesgate) (fig. 3: 15)

On 2 Nov 2000 the CLAU recorded 6 small trenches in the multi-storey car park prior to development of the site for the construction of the new City and County Museum, known as The Collection. In addition to a Roman building, evidence for Anglo-Saxon terracing and ground levelling was found, consisting of a number of dumps (*Danesgate* 2001: 1). The exact nature of the occupation was unclear because the trenches were too small to identify any structural remains, but the site seemed similar to other sites nearby. The Roman building was robbed for stone at some point during the late Anglo-Saxon period. Much of the pottery consisted of production waste of LKT ware from the Silver Street kilns, as well as some LSH from the Sessions House (*Danesgate* 2001: 5).

Also in 2000, five trenches were excavated elsewhere on the site. These confirmed the general idea that the area was largely abandoned during the early and middle Anglo-Saxon periods. Evidence for possible late Anglo-Saxon activity was picked up in trenches 1 and 5, although the nature of the occupation was not entirely clear due to the limited size of the trenches (Trimble 2001: 4, 8).

The ceramic profile of these excavations was similar to that which was found elsewhere in the immediate vicinity, even if it lacked the typical high amount of residual late Anglo-Saxon and Roman wares in medieval and later contexts, as had been recognised at the main Flaxengate site (f72). Consequently, Young (2001b) has suggested that "material of this date remains undisturbed in the trenches, or ... it is not present". The latter option seems unlikely, as in the 1940s a significant amount of pottery of Roman, late Anglo-Saxon and medieval material had been found just south of trenches 1-3 (flax45-47), which included the largest ninth-century assemblage from the entire city, including wasters material as well (Coppack 1973; Young 2001b).

Other finds that could be dated to the late Anglo-Saxon period included two joining fragments of a lava quernstone <14> of Niedermendig Rhineland type stone, which apparently displayed a type of 'pecking' typical for the late Anglo-Saxon period, and a fragment of the iron backplate of a wool comb <5>, found in a twelfth-century context (006). These combs were used to disentangle the fibers prior to spinning, and were in use in the late Anglo-Saxon and medieval periods. From the same context, two pieces of ceramic mould were also retrieved, associated with metalworking (Mann 2001).

More recent archaeological investigations by APS (Malone 2009) were likewise keyhole investigations, limited to a series of watching briefs related to the construction of two separate lift shafts. Again, evidence for late Anglo-Saxon antler-working and comb-making was found, as well as some metalworking debris, but due to the small scale of the investigated area no associated structures could be identified. Overall, the nature of the deposits seems to have been similar to those at f72 (Malone 2009: 13). A residual soapstone bowl, for which parallels have been found at Dublin, York and Thetford, in Wigford, and at Flaxengate, was found in a medieval context. Evidence for metalworking was retrieved from a number of contexts, and consisted of a complete-thumb-shaped crucible as well as other crucible sherds, probably mostly used for copper alloy working. Two LKT crucibles had a glassy residue on the inside that represented either experimentation with glazing, or glassmaking. In addition, one vitrified cupel sherd was found, used for refining silver, as well as a ceramic mould to cast bar ingots. Some slag was also found, but altogether the material did not occur in quantities sufficient enough to be certain that metalworking was actually carried out here on site, and it may be related to activities carried out on the main Flaxengate site across the road (Mann *pers. comm.*). For a discussion of metal artefacts from this site, see appendix 11.2.13.

Noticeable as well was a large amount of antler waste, related to comb making, and other personal/domestic items, including a soapstone vessel fragment, two bone pins or needles of late Anglo-Saxon or 'viking' type, and other craft waste, including bone-working (Mann *pers. comm.*). Some bone tools related to textile working were also found, including a needle, a pin-beater and a spindle-whorl, as well as an iron tooth of a wool comb. Numerous knives, hones, and possible bone scrapers were also discovered, as well as a possible flute, made from a bird bone, and a 'buzz bone', a pig metapodial with single central perforation that could be made to buzz when it was made to spin by pulling the two ends of a cord that went through the central hole (Mann *pers. comm.*).

A possible pre-Conquest cemetery has been identified between Danesgate and Grantham Street (SK 97767143) (Buckberry 2004: 374) (appendix 5.2.1).

1.2.1.15: flax45-47; flax69; f72 (Flaxengate) (fig. 3: 16-18)

Residual middle Anglo-Saxon pottery was found at flax69 and f72 (Jones *et al.* 2003: 148 fig. 8.5; 152-53). Flax45-47 produced one of the earliest stratified pottery assemblages that included evidence for mid to late ninth-century pottery production (ASH 7) (Jones *et al.* 2003: 192). In addition, there is some evidence that a third- to fourth-century Roman apsidal building remained in use until the eighth or ninth century, possibly as a church. In the ninth century, a dark brown loam was deposited over the site, but not inside the building, suggesting that the building still retained its roof at least. The HER records suggest that the building may have still been in use. From the tenth century onwards, the building stone is being robbed. The destruction layers of the building contained post-Roman finds, including seventh- to ninth-century vessel- and window-glass (Lincoln HER 70360-MLI85944; Perring 1981: 6). Two cut features from the site, a north-south gully (F60) and a large pit (F745), were initially also believed to date to before the ninth century (Perring 1981: 6). However, dating evidence consisted primarily of pottery sherds that were wrongly identified as early Islamic alkaline-glazed wares and eighth- to ninth-century Chinese stoneware (Perring 1981: 33). On further analysis, these turned out to be crucibles for glass- and metalworking (chapter 6).

A limited number of stratified coin finds were made on the site, probably representing casual losses associated with economic activity. As such, it can be assumed that at least in the Lower City itself, a monetised system was in place at this time, although the presence of different coin types, including the East Anglian St Edmund's coinage as well as an imitative Alfredian coinage, suggests that this was not a close monetised system. For a full list of all coin finds from Flaxengate, see appendix 8.2.3)

Probably around the beginning of the second half of the ninth century, a number of deposits were laid out that contained pottery similar to that of phase 1 (or the first structural phase, which was originally dated to c. 870-900); it was argued that these were levelling layers to make a flat platform for the first timber houses (Perring 1981: 6). According to Jones *et al.* (2003: 275-75), these deposits also contained evidence for actual pottery production, antler working, and non-ferrous metalworking, suggesting these activities predated the actual settlement phase on this site. Although this does not mean that there was no associated settlement nearby, beyond the edge of excavation, it is clear that these craft activities took place in Lincoln from a very early stage (also see chapter 6). The first evidence for iron smithing and bone working came from slightly later deposits (see below; Jones *et al.* 2003: 274-75).

In the last few decades of the ninth century, the surface of the street now known as Flaxengate was laid out (which did *not* follow the Roman street grid), and a number of timber-framed wattle-and-daub structures were built. Throughout the ninth and tenth centuries, these were demolished and rebuilt at regular intervals (a detailed description of these structures can be found in Perring 1981: 6-8), suggesting a degree of central organisation of this area. Associated pottery, in particular from late ninth and tenth century wasters, suggests nearby pottery production (Young and Vince 2006: 237-9). The pottery evidence will be discussed in chapter 6. There was also evidence for non-ferrous metalworking activities, including silver, in the form of a number of crucible fragments, a silver bracelet, and a silver ring (appendix 11.2.14.2) (Steane *et al.* forthcoming). Four soapstone vessel fragments, two of which belonged to the same vessel, were also found in these earliest layers (Mann 1982: 20-21, 42). It appeared to have been used as a cooking vessel, like an example from Danesgate, and it was suggested that these represent the personal possessions of the Scandinavian settlers (Mann *pers. comm.*).

The earliest coin evidence came from phase 2 (the late ninth to early tenth century), consisting of an Alfredian imitation (published by Perring (1981: 36) as a real Alfredian coin, but since revised by Blackburn in the context of the EMC; appendix 8.2.3), and a St Edmund's memorial penny (a second one was found in a residual context) (Perring 1981: 36) (appendix 8.2.3). The dating of this phase was confirmed by the archeomagnetic dating of one of the hearths (structure 3), which gave a date of 850 +/- 50 (Perring 1981: 36). To

this period also dates the first evidence for the robbing of the Roman walls at the extreme west end of the site (Perring 1981: 10). In the late tenth or early eleventh century (period IV), occupation on the site intensified. Flaxengate remained the major street frontage, but was fully developed only now, whilst the frontage of Grantham Street was now occupied for the first time (Perring 1981: 12).

In general, the late ninth- and tenth-century structures seem to have been of standardised size, measuring around 5 m in width. The earlier ones (periods 1-2) were less than 10 m in length, whilst the later ones were up to 16 m long. They were not dissimilar to the period 1 buildings at 'Goltho', or building S at Cheddar (Perring 1981: 36). The scarcity of daub and clay fragments in the site, however, was noted, and although plank buildings were not positively identified, their presence was deduced from the lack of any other plausible explanation (Perring 1981: 37).

The excavations yielded lots of evidence for glass- and metalworking, which occurred from the ninth century onwards but did not reach a significant scale until the last decades of the tenth century, contemporary with (and probably directly related to) the expansion of the site towards Grantham Street, which was first surfaced in the tenth century (Mann 1982: 1; Perring 1981: 41). Many of the finds came from a succession of pits located at the west end of the site, which could not be related directly to the building sequence. In addition, a significant part of the site was excavated in spits rather than by context, with the result that the activities could generally speaking not be related to individual structures (Perring 1981: 41). There were a few exceptions, all situated along Grantham Street. Structures 13 and 16 (period IV, or the late tenth and early eleventh centuries (Perring 1981: 12-13)) seemed to specialise in glass working. Deposits associated with both structures produced large quantities of scrap lead and crucibles with high lead residues (the glass had a high lead content), whilst structure 13 also produced a concentration of glass finger rings and beads (Perring 1981: 41). Evidence for metal casting and sheet-metal production was found near structures 13, 16, 17 and 20. Structure 20 also produced a concentration of hooked tags (chapter 5; appendix 11), as well as a stone mould and two silver objects, suggesting that silver was worked here too (Perring 1981: 41). The buildings along the Flaxengate frontage were probably mostly domestic, but there were no architectural indications that suggested a difference in function (Mann 1982: 1; Perring 1981: 41), apart from the fact that the Flaxengate structures seemed to have more substantial hearths (Perring 1981: 42). Other finds from the site included nine ingot moulds, eight of which were made of stone (Bayley 1984). The single ceramic one was similar to the one from the Collection/Danesgate site (appendix 1.2.1.14). The metalwork finds and other evidence for metalworking is summarised in appendix 11.2.14.

Two of the excavated structures were associated with a small amount of antler waste, possibly representing another small-scale industry. A separate report was published on the objects of antler, bone, stone, horn, ivory, amber and jet belonging to the building phases of the ninth to twelfth centuries (Mann 1982). The finds included bone and antler combs, antler waste, bone pins, pendants (including one unfinished example made of stone), toggles made from young pig metapodials, two bone dies, and a handful of gaming pieces made of ceramic, stone, ivory and antler (Mann 1982: 4, 11-15). A number of decorated thin strips of bone were also found. They were probably intended as casket mounts, although most were possibly rejects (Mann 1982: 18-19, 44). In addition, four bone handles were discovered, one of which was unfinished (Mann 1982: 19). Two fragments of flute made of bird bone, similar to a third from The Collection/Danesgate (appendix 1.2.1.14), and the mouthpiece of a third flute or pipe were also found, as well as three bone skates (Mann 1982: 16-18). Two fragments of bone clamps may also have been associated with bone, antler and metalworking, as was the case for similar finds found at Dublin (Mann 1982: 30-31). The evidence for jet working, including five jet finger rings, three of which were unfinished, mostly occurred in eleventh-century contexts (Mann 1982: 4, 9). An amber finger ring was also found. Jet rings were also manufactured at York, and amber ones at Dublin (Mann 1982: 11). The amber and ivory, which came from the Baltic and the arctic respectively, and the Norwegian and Rhineland querns and hones, represented the only evidence for international trade (Mann 1982: 47) since the supposed Islamic and Chinese pottery turned out to be of local manufacture (see above; chapter 6).

Cloth working seems to have begun in the tenth century (Jones *et al.* 2003: 275), although it is not certain whether this was for industrial purposes (Mann 1982: 43). A total of fifty-two spindle whorls were found, made of bone, trimmed potsherds, fired clay, and stone (Mann 1982: 22-25). Only one loom-weight was found though, in an eleventh-century context (Mann 1982: 25). This either indicates that weaving took place elsewhere, or that new weaving techniques had been introduced, possibly as a result of the Scandinavian settlement. This might imply that Scandinavian women also settled in the area. A vertical type of loom that did not involve loom-weights was for example found in the Oseberg ship burial (Mann 1982: 43). Other evidence for textile working included four pin beaters ('thread

pickers') from tenth- to eleventh-century contexts, used for weaving, which were of typical 'Anglo-Saxon' form (Mann 1982: 25), and three needles, as well as a bodkin (Mann 1982: 25-26). Two bone points were also discovered, possibly for making holes in leather (Mann 1982: 30-31).

Evidence for iron smithing also belongs to the tenth century (Steane *et al.* forthcoming), and a single coin die of Æthelred's Crux type, produced between 991-97 AD, may suggest either coin or die production at the site towards the end of the first millennium (chapter 4) (Blackburn and Mann 1995). A number of quern fragments made from Niedermendig (Mayen) lava from Rhineland, and Millstone grit from the York area were discovered as well (Mann 1982: 21-22), and more than 60 hones were also found, made of Norwegian Rag (schist), phyllite, Cola Measures sandstone, and Kentish Rag (Mann 1982: 27-30). The high number of hones is reflected in the high number of knives discovered on the site (appendix 11). Finally, the only two pieces of stone sculpture from the Lower City were also found on this site (appendix 3.2.1; the sculpture fragment from Broadgate (appendix 3.2.2) was technically speaking found in Butwerk). The two Flaxengate pieces form a fragment of a piece carved in relatively low quality stone with a remnant of geometric carving similar to the piece from Whaplode in South Lincolnshire, but this would suggest an eleventh-century date, whilst the context in which they were found was assigned a tenth to eleventh-century date (Everson and Stocker *pers. comm.*). It has not yet been published (but will be by Everson and Stocker).

In more recent years, a number of additional watching briefs have been carried out in the Flaxengate and Grantham Street area and in The Strait (1980, 1981, 2005, 2006, 2008), revealing more evidence for occupation and buildings dating to the late tenth to twelfth centuries AD (Lincoln HER 70470-MLI88431). These findings did not change the interpretations from the larger open area excavations of the 1970s.

1.2.1.16: gp81 (Granta Place) (fig. 3: 19)

Unsurprisingly, the late Anglo-Saxon archaeology on this site, adjacent to Flaxengate (f72), displayed many similarities with the discoveries from Flaxengate itself. It consisted mainly of buildings and associated surfaces and pitting, although most of the structural evidence here dated to the tenth and eleventh centuries, and it has been suggested that the earliest pottery was residual refuse from the nearby settlement site at f72 (Jones *et al.* 2003: 194). Very little daub was found on the site, which may mean that the houses here were timber-clad. The tenth- and eleventh-century finds included pottery, but also an antler tooth-fragment from a composite comb of typical eleventh-century type, and evidence for metalworking in the shape of a stone ingot mould and several crucible fragments (Steane *et al.* forthcoming). For a discussion of metal artefacts found on this site, see appendix 11.2.3.

1.2.1.17: sw82, lgs00 (Grantham Street) (fig. 3: 20)

At this site, the CLAU identified some Anglo-Saxon buildings. However, as the Anglo-Saxon archaeology was machined off in order to reach the underlying Roman deposits, they were only recorded in section. Not many associated finds were retrieved, with the exception of a cast lead disc brooch (appendix 11.2.8). The site seems to have been occupied from the mid-tenth century onwards (Steane *et al.* forthcoming).

Another archaeological evaluation on the corner of Swan Street and Grantham Place, carried out by LAS in 2000, consisted of a single test pit measuring 2 x 2 m. The site revealed evidence for a mortared surface with three possible stake holes underneath the modern overburden; however, these were left unexcavated, as they existed at a depth greater than the impact of the proposed development (*Grantham Street, Lincoln* 2000: 3). The site director decided, however, on the basis of the depth below current ground level, in comparison with other sites in the immediate vicinity, that these remains must be late Anglo-Saxon in date (*Grantham Street, Lincoln* 2000: 4). No artefacts were recovered to substantiate this claim.

1.2.1.18: The church of St Lawrence (fig. 3: 21)

This church is also believed to be of tenth-century date (Jones *et al.* 2003: 204). It is one of the few churches mentioned in *DB*, and must be a pre-Conquest foundation. It was granted to the Bishop in the period 1070-87 (Lincoln HER 70554-MLI89654).

1.2.1.19: lin73 def (Saltergate) and the churches of St Peter-at-Pleas and St Peter-at-Arches (fig. 3: 22-25)

Unfortunately most of the post-Roman layers at Saltergate (lin73 def) were excavated by machine, as the excavators' main interest in the site lay with the Roman material. As a result, the stratigraphic sequence is in most cases uncertain. A number of important discoveries have nevertheless been made (Steane *et al.* forthcoming). Residual middle Anglo-Saxon pottery was found at lin73d and lin73f (Jones *et al.* 2003: 152-53). Lin73f also

produced one of the earliest stratified pottery assemblages that included evidence for mid to late ninth-century pottery production (ASH 7) (Jones *et al.* 2003: 192).

At least five early burials have been found at Saltergate (lin73e; see appendix 5.2.2). Jones *et al.* (2003: 143, 154-56) has suggested that the burials may have been of middle Anglo-Saxon date, and were associated with an early monastic foundation linked to the double foundation of St Peter-at-Arches and St Peter-at-Pleas. The churches of St Peter-at-Arches and St Peter-at-Pleas lay wedged in the corner between High Street and Silver Street (SK 97571 71292), not far from the sites that yielded some of the earliest evidence of renewed occupation in Lincoln (Jones *et al.* 2003: 204). These two churches were jointly placed in one churchyard, and it is possible that this was a pre-viking Christian site. They seem to be referred to in *DB*, although not by their name. Their names suggest local importance, as the -Arches element refers to the Lower City's south entrance gate (now known as the Stonebow), and the alternative name for St Peter-at-Pleas is St Peter at Mootstone, which suggests that a meeting place was nearby (Lincoln HER 70559-MLI89659).

A piece of tenth-century Byzantine silk was found, its fabric so similar to that of the silk found at Coppergate, York, that both must have come from the same batch (Muthesius 1982a; 1982b). A building sequence was also identified, dating from the tenth century onwards. The buildings were similar to those from Flaxengate. However, Steane *et al.* (forthcoming) draw the attention to the lack of finds that were found associated with the buildings, and suggested that they, unlike the buildings at Flaxengate, may have been mostly domestic. However, the different excavation methods used on both sites, involving hand-excavation at Flaxengate, and machine-excavation at Saltergate, have undoubtedly affected the overall picture as well.

A large number of Stamford ware crucible fragments were found in one of the trenches (142 in total, mostly from two separate contexts). They were all used for non-ferrous metalworking, whilst some fragments of litharge may have indicated silver working. For a discussion of the metal artefacts from Saltergate, see appendix 11.2.4. In addition, a small quantity of antler-shavings was also found, as well as four unfinished tooth fragments for single-sided composite combs, and a large part of an unfinished antler comb, suggestive of small-scale bone and antler working (Steane *et al.* forthcoming). In this respect the site is similar to Flaxengate and Danesgate/The Collection. Finally, an ingot mould made from a reused soapstone vessel sherd was also found (Mann *pers. comm.*).

1.2.1.20: The church of St Swithin (fig. 3: 26)

The former church of St Swithin (SK 97674 71230) is commonly believed to be a tenth-century foundation, based on its dedication, which would fit well with a date not long after the West Saxon re-conquest of 942 AD. However, other than the dedication no other evidence was quoted to support this early date (Lincoln HER 70560-MLI89660). Jones *et al.* (2003: 204, 205 fig 9.45) place its foundation in the eleventh century, because they believe it was related to the expansion of the settlement south towards the river.

1.2.1.21: The church of St Edmund (fig. 3: 27)

Jones *et al.* (2003: 204, 206 fig. 9.46) assign an eleventh-century date to the foundation of St Edmund's Church, and place it again in the context of the expansion of the settlement south towards the river. However, due to its more northern location than the church of St Swithin, this argument is not as strong, and its dedication may equally suggest a tenth-century date, maybe contemporary with the circulation of the East Anglian St Edmund's coinage, which was found in the earliest layers at Flaxengate. During a watching brief in 2001, some disarticulated bones were found along Silver Street that may have been associated with the church of St Edmund, although they were not dated (Buckberry 2004: 380; appendix 5.2.3).

1.2.1.22: The church of the Holy Trinity (fig. 3: 28)

This church is also believed to be of tenth- or eleventh-century date, although there is no archaeological evidence to support this claim (Jones *et al.* 2003: 205 fig 9.45; Lincoln HER 70556-MLI89656).

1.2.1.23: lin73 abc (Silver Street) (fig. 3: 29-31)

The excavations at Silver Street (lin73 abc) were carried out under the same supervision and with the same methodology as those at Saltergate (lin73def). Again, the post-Roman layers were almost entirely removed by machine. The recorded late Anglo-Saxon remains included evidence for more late ninth- to eleventh-century structures. It was also established that the line of Silver Street itself, connecting the south gate to the east gate, found its origin in the late ninth century, when it replaced the old Roman road, which was now used as a construction platform for some of the buildings. In addition, three successive late Anglo-Saxon pottery kilns were found, spanning the period between the early and late tenth

centuries AD, after which pottery production seems to have ceased at this site (Miles *et al.* 1989). At this time, a large amount of wasters was left behind, and the site was levelled, and subsequently truncated by late tenth and eleventh century pitting (Steane *et al.* forthcoming). The pottery evidence has been discussed in more detail in chapter 6 and appendix 17. Other evidence for industrial activity on the site included a small number of Stamford ware crucible sherds, which had been used for copper alloys and base silver, with one example also containing traces of gold. A very small quantity of smithing and smelting slag indicated that ironworking was also carried out near the site (Steane *et al.* forthcoming). Finally, residual middle Anglo-Saxon pottery was found at lin73a and lin73c (Jones *et al.* 2003: 152-53).

1.2.1.23: gl91, glb94 (Central Library) (fig. 3: 32-33)

This site was located just inside the walls of the Lower City, north of St Swithin's Church, between Broadgate and Free School Lane. The CLAU carried out the first investigations here in 1991. Three trenches were opened, two of which revealed evidence for late Anglo-Saxon activity. In trench 1, this consisted of a tenth-century pebbled surface, cut by a pit and a gully, and sealed by a tenth-century soil deposit and an eleventh-century ash spread. In trench 3, several rubbish dumps dated to the late ninth or tenth centuries were discovered (Trimble 1991).

Further investigations at the Central Library site in 1994 revealed that during the late Anglo-Saxon period, the Roman rampart was continually raised by dumps, although it was unclear whether the raising of the rampart was the intended objective, or whether the dumps merely represented rubbish disposal. The latter option is made slightly more likely by several late Anglo-Saxon features that cut into the deposits. The pottery from both the dumps and the cut features dated to the ninth and tenth centuries, and there is therefore no evidence for a prolonged period of intentional preservation and repair of the rampart at this early stage (Jarvis 1996: 8). However, overlying the earlier dumps and pits were several dumps dated to the late tenth century, which may represent various attempts to stabilize the rampart (Jarvis 1996: 9). A metallised surface, several limestone rubble foundations representing a possible structure, a floor, and another structure made of limestone blocks held together with mortar were also encountered at the base of the rampart. There was no dating evidence from either structure, although stratigraphically they fitted well into the late Anglo-Saxon period (Jarvis 1996: 9). It is also possible that there was a north-south palisade feature, represented by a post hole and gully set back from the Roman rampart, at this period (Jarvis 1996: 26). If the buildings were not Roman, the use of stone suggests an eleventh-century, post-Conquest date (chapter 3).

The post-Roman wares from the Library sites ranged between the ninth and nineteenth centuries (Wilkinson and Young 1996: 52). The largest group of late Anglo-Saxon wares was LKT, including wasters, which may be explained by the proximity of the LKT kilns from lin73b, immediately to the north of the present site. The presence of glazed LKT sherds indicates that glazing also took place in the Silver Street potteries (Wilkinson and Young 1996: 53). Other finds included two fragments of antler waste and one piece of split animal rib, as well as a piece of perforated bone strip. These were interpreted as evidence for comb-making or casket manufacture. Some crucible sherds of tenth- to eleventh-century date, as well as slag and some fragments of plano-convex hearth bottom, all similar to material found in the tenth and eleventh-century layers at Flaxengate, were indicative of metalworking (Mann 1996: 55).

A further watching brief at the Drill Hall along Broadgate (SK 97758 71304; fig. 3, situated between 30 and 32) by APS in 2003 revealed three gullies and a single sherd of ninth- to tenth-century pottery (Lincoln HER 70385-MLI86946).

1.2.2: Extra-mural sites

1.2.2.1: wn85, wo89, wnw88, wf89 (Waterside North and Woolworth's basement) (fig. 3: 34-37)

Residual middle Anglo-Saxon pottery was found along all the waterfront sites, including the Woolworth's basement site (Jones *et al.* 2003: 148 fig. 8.5). Most of the pottery retrieved from these sites dates to the mid-tenth century and later (Jones *et al.* 2003: 194). A significant amount of wattle lining was identified, thought to represent attempts at waterfront consolidation (Jones *et al.* 2003: 237-38). Recent palaeo-environmental investigations at the former Slipper Baths site on Waterside North (SK 97718 71155) revealed that although the ground was probably soggy throughout the Roman and medieval periods, there is no reason to assume that the river posed a direct threat to the site, even if it was marginal to the occupation further removed from the river, and mostly used for refuse dumping (Lincoln HER 70502-MLI89070). A single coin of Æthelred II was also found at Woolworth's Basement (appendix 8.2.2), whilst metal dress accessories were found both as Woolworth's Basement and Waterside (appendix 11.2.10; 11.2.11).

It is not known how the river was crossed at this period, even though the former Roman road known as Ermine Street, which entered the Lower City just to the west of the Waterside sites, was clearly an important route, as it was the focal point for settlement in Wigford south of the river (see below). No evidence for a ninth- to tenth-century bridge has ever been encountered. It has therefore been suggested that a ford crossed the river at this point, but that would imply that boats could not follow the river past the city in either direction (Jones *et al.* 2003: 204). Still, the suggestion would make sense in the context of the placename *Wigford*, the suffix *-ford* generally being taken to refer to a shallow crossing in a river. Besides, even if a blockage in the river restricted navigation, if boats did not have to stop it would have been impossible to raise tax or toll on the goods they carried.

A possible small pier or mole was identified towards the eastern end of the waterfront. The pottery associated with this structure was consistently of a late ninth- to early tenth-century date, and the excavations at wo89 produced a St Edmund's penny (Jones *et al.* 2003: 238; chapter 4). This implies that the River Witham was used for transport during this period (Jones *et al.* 2003: 237), presumably out to sea as the Witham further upstream was probably not navigable (Jones *pers. comm.*), and the possible ford to the west would make continuing transport impossible anyway. An alternative route to York is provided by the Trent, but it is not certain that the Fossdyke, the canalised part of the River Till, which joins the Brayford Pool to the Trent, was in fact navigable at this early stage.

There is some tentative evidence to suggest that the direction of trade changed in the tenth century. By the eleventh century, the jetty or mole had gone out of use, and the area given over to housing development, which had their frontages facing inland, to the north, rather than south towards the river (Jones *et al.* 2003: 237-38). In addition, there is evidence that towards the end of the tenth century, 'hards' were laid out along the River Witham in Wigford. Jones *et al.* (2003: 241-42) have suggested that these were built because the Fossdyke was now navigable, opening up the route to the Trent. Jones *et al.* (2003: 237) have also suggested that at some point in the tenth century a dam and/or weir was constructed further to the east, at Stamp End (fig. 4), perhaps accompanied by a causeway that could be used to cross the river. This would have blocked the river as a transport route to sea, but would have enabled the inhabitants of Lincoln to manage the water levels better and stop the city from flooding (Jones *et al.* 2003: 237). This suggestion is supported by a group of later tenth- and eleventh-century artefacts that were retrieved from the riverbed near Stamp End lock in 1826. These included an inscribed sword and a stirrup iron, which were interpreted as votive offerings, deposited at the same time as the construction of the upright quayside at Waterside North, whose upright nature itself also suggested that the water level had been raised (Jones *et al.* 2003: 238; Stocker and Everson 2003).

Jones *et al.* (2003: 241) argue that the construction of a dam at Stamp End would not have necessarily brought an end to trade via the sea, suggesting a flash-lock or portgage (man-handling the boats past the obstruction) as viable and often-used alternatives (Jones *et al.* 2003: 241). However, it should not be forgotten that the later tenth century also witnessed renewed viking attacks. The ASC (E: 1013) may suggest that the inhabitants of Lindsey welcomed Svein Forkbeard's army with open arms, but there is a marked difference between offering a foreign ruler your political allegiance, and risking to lose your entire merchandise because there is a hostile army out at sea. In fact, the decision to submit to Svein may have been inspired by similar concerns as the decision to redirect trading activity via safer routes: minimal social and economic disruption.

1.3: Wigford and sites north of the Brayford Pool

1.3.1: Sites in Wigford (south of the River Witham)

1.3.1.1: St Benedict's Square (fig. 3: e)

Evidence for late Anglo-Saxon occupation with very good organic preservation was found at St Benedict's Square (sb85), situated between the Brayford Pool, the River Witham and Ermine Street, where a whole network of collapsed wattle fences, possibly to keep animals, was dated to the tenth century. Some primary butchery waste, consisting mainly of cattle bones, was found associated with the collapsed fencing (Dobney *et al.* 1996; Steane *et al.* 2001: 159-60). The fences were set on top of a number of late Anglo-Saxon dumps, containing pottery as well as a late Anglo-Saxon polyhedral-headed pin made of copper alloy, presumably deposited to raise the ground. Subsequent layers revealed evidence for leather working and textile working, as well as possible horn working (Steane *et al.* 2001: 160, 169). Two late Anglo-Saxon crucible sherds were also retrieved from the site (Steane *et al.* 2001: 169), but by themselves these do not constitute evidence for metalworking activities. For a discussion of the metal artefacts retrieved from this site, see appendix 11.3.3.

There is evidence of continued attempts to keep the area dry, in the form of a cut channel as well as a number of dumps to increase the ground level. These dumps contained

pottery that was mostly dated to the mid- to late-tenth century (Jones *et al.* 2003: 194; Steane *et al.* 2001: 161). Following these attempts, the site was inhabited. Some structural remains were found associated with more primary butchery waste, domestic waste, some tools, and a rib with runic inscription. (Steane *et al.* 2001: 162). The runic inscription is in the 'norwegian' short-twig version of the younger futhark. It contains three words in Old Norse, but it is uncertain whether it was carved by an inhabitant of Lincoln, which would assign a tenth-century date to the artefact, or by a later visitor, which would make any date prior to the fourteenth century plausible (Steane *et al.* 2001: 169).

1.3.1.2: ws82 (Waterside South) (fig. 3: f)

At Waterside South (ws82), investigations were limited to a watching brief. It showed deposits and peats containing a mixture of late Anglo-Saxon and medieval ceramics, none earlier than the early to mid tenth century (ASH 8 and 9), and other material, although much of the medieval material may have been intrusive (Jones *et al.* 2003: 194, 242; Steane *et al.* 2001: 174). A skeleton was also found here, associated with a single sherd of eleventh-century pottery (appendix 5.3.4).

1.3.1.3: dm72 (Dickinson's Mill) (fig. 3: g)

The earliest layers at Dickinson's Mill 1972 (dm72) produced river silts and peats containing pottery that was dated to the mid to late tenth century, as well as residual Roman pottery, but the late ninth to early tenth century LSLS wares, present on most sites in Wigford, were absent here. Overlying the earliest layers was a made-up surface, again dated to the mid- to late-tenth century, presumably connected to waterside consolidation and connected 'hard standing'. The associated pottery suggests an eleventh-century date for the surface, whilst traces of a timber building that was built on top date to the late eleventh century or later (Steane *et al.* 2001: 93-94). For a discussion of metal artefacts, see appendix 11.3.1.

1.3.1.4: hg72 (Holmes Grainwarehouse) (fig. 3: h)

The nature of the archaeology at Holmes Grainwarehouse (hg72), along the line of Ermine Street, is similar to that at Flaxengate, although here occupation did not start until the early or mid tenth century (Jones *et al.* 2003: 192). In addition to some tenth-century pitting, some tenth- and eleventh-century structural remains were identified. These were mainly domestic in character, although some textile- and metalworking may have been carried out on the site as well. Evidence for these industries includes a small number of crucible sherds, a few possible unfinished finger rings, some slag, and perhaps an ingot mould, as well as spindle whorls and a possible dye pot (Steane *et al.* 2001: 130-31). A few finds are more indicative of Scandinavian activity. These include a strap-end, a small bell typical of viking contexts, and a soapstone vessel fragment, which seems to have been used as a cooking pot (Steane *et al.* 2001: 130). For a discussion of the metal artefacts from Lincoln, see appendix 11.3.2. Three bone skates were also found at Holmes Grainwarehouse in Wigford (Mann 1982: 18).

1.3.1.5: The church of St Mary-le-Wigford (fig. 3: i)

The church of St Mary-le-Wigford may have been founded as early as the tenth century, but the earliest archaeological evidence consists of some tenth- and eleventh-century stonework (gravestones and an inscription, set into the wall of the church). The majority of this dates to the eleventh century, although *St Mary-le-Wigford 7* is of possible tenth-century date (appendix 3.3.2). It has been suggested that it may have been founded by the upcoming mercantile elite (Lincoln HER 70508-MLI89088; Stocker 2000; chapter 3). Some possibly late Anglo-Saxon burials were also identified (appendix 5.3.2).

1.3.1.6: bwe82 (Brayford Wharf East) (fig. 3: j)

In accordance with the majority of the sites that were situated along the eastern bank of the River Witham, south of the Brayford Pool, the archaeological evidence from Brayford Wharf East (bwe82) consists primarily of attempts at flood control. The site produced evidence for late Anglo-Saxon river edge consolidation, in an attempt to stop the river bank from slowly moving west. This took the shape of stakes and timber wattling, which were dated, using ¹⁴C techniques, to the late Anglo-Saxon and Saxo-Norman periods (Steane *et al.* 2001: 73). Associated with these attempts were a small number of pits and some accumulated debris, which contained late tenth and eleventh century pottery, including a small group of crucible sherds, possibly connected to some occupation along High Street, mixed with large amounts of residual Roman wares (Steane *et al.* 2001: 79). A single knife of possible Anglo-Saxon date was also found (appendix 11.3.7).

1.3.1.7: sm76 (St Mark's Church) (fig. 3: k)

The earliest post-Roman evidence from the excavations at St Mark's Church (sm76) consisted of tenth-century pitting underneath an extensive graveyard, whose tombstones dated from the mid-tenth century onwards (appendix 3.3.3) (Steane *et al.* 2001: 252-53). Prior to that, between the early fifth and early tenth centuries, the site was an open wasteland, with the remnants of Roman walls sticking up through a layer of dark earth. This layer was mostly associated with mixed redeposited Roman pottery, and may be indicative of a period of cultivation prior to the mid-tenth century (Gilmour and Stocker 1986: 14). A possible middle Anglo-Saxon ansate brooch was also found at St Mark's Church (Jones *et al.* 2003: 156). For a full discussion of all metal artefacts from St Mark's Church, see appendix 11.3.6.

The earliest burials could be assigned a possible mid-tenth century date, using ¹⁴C dating techniques (Steane *et al.* 2001: 252-53). The church itself, however, does not seem to have been constructed until the early or mid-eleventh century, when a two-cell masonry construction was erected on the site (Jones *et al.* 2003: 249). Some 90 burials were assigned to the earliest cemetery phase (phase VIII, dated to the middle of the tenth to the middle of the eleventh century). Some 60 of these were definitely stratigraphically earlier than the stone church (Gilmour and Stocker 1986: 15). This could mean that the first phase of the graveyard was unaccompanied by a church, which is not unheard of in this period (chapter 3; appendix 1.1.1.4; 2.1.8; 2.2.1; 2.3.2; 2.4.16; 2.17.33). However, an undated timber structure, built on an east-west alignment and located in the south-west corner of the site, has been identified as a possible precursor to the later stone church (Stocker and Gilmour 1986: 15). On the other hand, it is also possible that this structure was much earlier, and bore no relationship to the graveyard at all (Steane *et al.* 2001: 279). For a more detailed discussion of the burial data, see appendix 5.3.3.

A ditch with four internal postholes was interpreted as the cemetery's western boundary. This contained pre-Conquest pottery and a bone pin of ninth- to tenth-century type (Gilmour and Stocker 1986: 16). The burial evidence suggests a date at some point in the mid-tenth century for the start of this cemetery (Gilmour and Stocker 1986: 17). The earliest post-Roman pottery found on the site dated to the late ninth century, but may have been residual (Steane *et al.* 2001: 252-53).

Stocker (1986: 83) argues that the parish church of St Mark's was not founded on a site of previous religious or ritual significance, but rather that the choice of site was determined by its availability, possibly because it was previously of agricultural character. St Mark's was one of a whole number of parish churches founded between the late ninth and eleventh centuries (Stocker 1986: 83). Their general limited size suggests that people were only expecting a very limited number of people to attend (Stocker 1986: 83).

1.3.1.8: br85, z86, ze87, ze90, zea95, zeb96 (St Mark's Station) (fig. 3: l-p)

The excavations at St Mark's Station (br85 and z86) produced more evidence for flood control. This consisted of several north-south aligned ditches, which were assigned a tenth-century date on the basis of their stratigraphic position, although most of the pottery they contained was dated to the eleventh century. The first structural evidence was securely dated to the eleventh century. An associated pit produced a residual coin of King Æthelred, dated to the late 970s or 980s (Steane *et al.* 2001: 206; appendix 8.3.1). Other evidence for flood control was represented by several late Anglo-Saxon deposits at z86, which were laid out to raise the ground level, whilst a number of pits and timber buildings on both z86 and ze87 constitute further proof of the continuous occupation of this site in the tenth and eleventh centuries (Trimble 1998: 8).

The CLAU carried out further excavations at St Mark's Station, to the west of High Street, north of Firth Street and south of St Mark's Street (zea95 and zeb96), between 1995 and 1997. The main objective was to investigate the remains of the Carmelite Friary but late Anglo-Saxon material was also found, consisting of tenth-century pottery data associated with structural features such as postholes, beamslots, and successive clay floors, which were located adjacent to High Street. The site seems to have been reoccupied in the first quarter of the tenth century, and was occupied continuously throughout the tenth and eleventh centuries (Trimble 1998: 1). Although a significant layer of 'dark earth' sealed the Roman archaeology, the late Anglo-Saxon beamslots were aligned directly against the line of Roman walls, suggesting that these may have been incorporated in the Anglo-Saxon buildings (Trimble 1998: 72).

The site produced one of the few uncontaminated early tenth-century pottery groups from Wigford, establishing the date of re-occupation beyond reasonable doubt (Young 1998d: 6-7). Although the pottery had not been intergraded with the stratigraphic information at the time of the report (Young 1998d), Young (1998d: 7-8) however concluded that the assemblage was similar in terms of the variety of wares to those on other sites in Lincoln. Most of it was produced in Lincoln itself, with some additional Torksey wares, as well

as a few vessels from other local centres. The vessel forms, including jars, bowls, pitchers, and lamps, as well as the sooting patterns and residues show that most of it was used in a domestic context (Trimble 1998: 72; Young 1998d: 6). Some regional imports from East Anglia and Stamford, including glazed and decorated kitchen and table wares, as well as two Andenne-ware sherds, probably from wine pitchers, indicate long-distance trade (Young 1998d: 7; appendix 17).

There is evidence that during this period the brewing of beer may have occurred on the site, as a significant quantity of oats and barley were found (Trimble 1998: 1). In addition, one group of tenth-century pottery included an abnormally high number of vessels with internal iron-rich coatings, intended to waterproof them, and decalcified interiors, suggesting that they had contained an acidic liquor such as alcohol. The pottery assemblage also included a tenth- to eleventh-century funnel, made of TORC. These were identified as further proof for beer brewing activities (Trimble 1998: 72; Young 1998d: 6). Nearby on the lower-lying ground, a complex of ditches, filled with a charcoal-rich material, further deposits, and a clay-lined feature which may have been a hearth, indicate some form of industrial processing in the vicinity (Trimble 1998: 1). Micromorphological analysis suggested that the layers were formed through general waste processing, such as the burning of wood and dung, as well as decaying building debris (Trimble 1998: 73).

The site also yielded a number of other interesting finds, dated to the late Anglo-Saxon period. The majority of finds from the late Anglo-Saxon period concentrate along the Ermine Street frontage. There was also some evidence for craft activity, albeit not on an industrial scale. The majority of this was related to textile working. There were two spindle whorls, one of which was made of limestone, and carried incised decoration (zea95 <7>), whilst the other (zeb95 <643>) was typologically dated to the eleventh century but found in a modern context. There were two additional bone spindle whorls which may have been either late Anglo-Saxon or early medieval in date. In addition, a single-pointed bone pinbeater (zeb96 <91>), and four possible dye pot sherds were also retrieved (Mann 1998: 10). Two socketed bone points (zea95 <5>; zeb95 <432>) are typical of other examples from Flaxengate and York, and are possibly connected to leatherworking. There is also an unusually high proportion of hones, mostly found in later contexts but one of these (zeb95 <268>) is certainly of late Anglo-Saxon type (Mann 1998: 11).

Finally, this site also yielded a number of dress accessories and other typical 'viking' artefacts. One of these was zeb95 <443>, a small rectangular pendant made of amber, and another artefact was zea95 <69>, a bone comb with 'viking'-type decoration. A possible onion-shaped ivory gaming piece is represented by zeb95 <426>. This find is unique within Lincoln; a possible parallel is represented by a similar, larger gaming piece from 'Goltho' (Mann 1998: 11). Finally, two metal dress accessories also betray 'viking' influences. These are zea95 <442>, a copper-alloy disc brooch with *Jellinge*-style decoration (originally interpreted as *Borre* style), and zeb95 <443>, a copper-alloy buckle with buckle plate (Mann 1998: 11). See appendices 11.3.4 and 11.3.5 for a more detailed discussion of the metal artefacts.

Slightly further to the west, on more low-lying ground at 4.80 m OD, a number of linear features were excavated whose fills dated to the first half of the eleventh century. The features were complex and concentrated, and contained significant amounts of pottery, and the excavator suggested that this "implies domestic or industrial activity rather than just drainage of boundary demarcation" (Trimble 1998: 73), and suggested it represents some form of industrial processing on a seasonal basis, as the ground may have been too low for permanent settlement (Trimble 1998: 73). Environmental analysis of the primary fills of the features showed they were permanently waterlogged, and some indications of marine influence suggest that the effects of the tidal river were felt this far inland (Trimble 1998: 73).

To the east of Ermine Street, the excavations at St Mark's Station East (ze87 and ze90) produced some pits, which could either have been late Anglo-Saxon or Saxo-Norman, and two inhumations, stratigraphically dated to any time between the Late Roman and late Anglo-Saxon periods (Steane *et al.* 2001: 295).

1.3.1.9: Anchor Street Works, Anchor Street (fig. 3: q)

During trial trenching in 2003 at the site of the former Anchor Street works on Anchor Street (SK 9725 7055), no structural remains were found, but a large amount of late Anglo-Saxon wares, dating to the late ninth to mid-eleventh centuries, including some wasters of late Anglo-Saxon Ware fabric B, similar to those found at St Mark's Church. Wasters of Lincoln quartz tempered ware were also found. It was suggested that there was a production site not far from the church (Lincoln HER 70351-MLI85839). This may be located at 116 High Street (fig. 3: u; see below).

1.3.1.10: cs73 (Chaplin Street) (fig. 3: r)

Chaplin Street (cs73) yielded some intrusive late Anglo-Saxon pottery from the Roman layers, but no structural Anglo-Saxon remains were identified (Steane *et al.* 2001: 16).

1.3.1.11: The church of the Holy Trinity (fig. 3: s)

The site of the church of the Holy Trinity in upper Wigford, between Monsoon and Chaplin Streets, along High Street (SK 97370 70599), may also be a pre-Conquest foundation, and certainly existed by the second half of the eleventh century. Its parish stretched out across both sides of High Street, and is thought to represent one of the many small urban estates from that period (Lincoln HER 70534-MLI89573).

1.3.1.12: m82 (Monson Street) (fig. 3: t)

Some middle Anglo-Saxon pottery was found on this site (Jones *et al.* 2003: 156). In addition, evidence for late Anglo-Saxon pitting and foundation robbing was found, although this has mostly been dated to the early to late eleventh century (Steane 2001: 28). None of the pottery was earlier than the early to mid tenth century, and the total amount of post-Roman potsherds that were retrieved was extremely limited (Jones *et al.* 2003: 242). A single key of late Anglo-Saxon to medieval date was also found (appendix 11.3.8).

1.3.1.13: 116 High Street (fig. 3: u)

At 116 High Street, Wigford (SK 97251 70508), a single pit dating to the late Anglo-Saxon period was uncovered during a trial trenching investigation. Nineteen sherds of late Anglo-Saxon pottery were found, many of which were wasters, suggesting that Wigford was the location of a pottery industry as well (*Archaeological Evaluation Report* 2008; Lincoln HER 70610-MLI91620; chapter 6).

1.3.1.14: The church of St Andrew (fig. 3: v)

On the basis of its location in Upper Wigford, the church of St Andrew (SK9727770478) is believed to be an early foundation (Lincoln HER 70535-MLI89574). However, no other evidence has been identified to substantiate this claim.

1.3.1.15: smg82 (St Mary's Guildhall) (fig. 3: w)

The site, excavated between 1982 and 1986, is situated 0.8 km south of the south gate of the Lower City, along the eastern side of High Street (Stocker 1991: 3). The excavations were carried out prior to the restoration of the Guildhall. The construction of the medieval building complex in the twelfth century had destroyed much of the post-Roman occupation on the site (Stocker 1991: 15). The road was already encroached upon at an early date, possibly in the late Roman period itself, and the two successive north south slots and six associated postholes can be either late Roman or later. The same goes for a clay surface sealing the road, interpreted as a floor surface: again this could be either late Roman or later (Stocker 1991: 16). Nevertheless, Steane *et al.* (2001: 56) positively identify a single beam slot, which cut into the Roman road surface, as late Anglo-Saxon, as well as a number of postholes and pits, which were assigned a tenth- or eleventh-century date (Steane *et al.* 2001: 56). In addition, some fifteen rubbish pits dated to the tenth to twelfth centuries were identified (Stocker 1991: 16). There was also evidence for post-Roman building activity in the area between the two roads, indicated by a group of stakeholes aligned in the shape of a building, and a small number of other stakeholes and two possible walls could also be identified, all of probable late Anglo-Saxon date (Stocker 1991: 16). However, the occupation was never intense, as only eight sherds of residual Roman and late Anglo-Saxon pottery were recovered from the site (Young 1991: 66). Some residual middle Anglo-Saxon pottery was also found on this site (Jones *et al.* 2003: 156).

1.3.1.16: The church of St Peter-at-Gowts (fig. 3: x)

St Peter at Gowts (SK9732370406) is yet another early foundation, possibly dating back to the middle of the tenth century, like St Mary-le-Wigford and St Mark's. The parish was particularly prosperous between the eleventh and fourteenth centuries. The church tower incorporates some eleventh-century architectural worked stone, including belfry capitals, and an alleged decorated hood mould and impost, and a probably originally Roman carving of a seated figure is incorporated into the tower fabric (Lincoln HER 70543-MLI89639).

1.3.1.17: The church of St Botolph (fig. 3: y)

St Botolph's Church along High Street, at the south end of the Lower Wigford market (SK9724069803), was probably an eleventh-century foundation. It became one of the most important churches in Lincoln, second only to the cathedral, and was home to the tiler's guild in the fourteenth century (Lincoln HER 70541-MLI89634).

1.3.1.18: 1-8 Mill Lane (fig. 3: z)

In 2007, a trench 15 x 1.6 m was excavated prior to development at SK 9720 7029, just west of High Street, and opposite St Peter-at-Gowts Primary School, which itself is located just to the south of St Peter-at-Gowts church. The stratigraphic sequence began with fluvial materials, containing Roman as well as Anglo-Saxon pottery. A series of soils (4, 5 and 6) were deposited in the ninth century, which indicated cultivation and domestic refuse dumping. No settlement activity was recorded however, suggesting the area was away from the main settlement zone (Allen 2007: 5). Also along Mill Lane, at SK 97133 70306, a trial trenching investigation yielded evidence for several Saxo-Norman and medieval deposits, including a single Saxo-Norman posthole, and several cultivation deposits dating from the ninth century onwards. Among the finds was a bone flute of tenth- to thirteenth-century date (Lincoln HER70591-MLI91162). Context (4) contained three sherds of LFS and one sherd of SNLS; context (5) contained one sherd of EST, two sherds of SNLS and one sherd of TORK; and context (6) contained a single sherd of LSH (Boyle and Young 2007).

1.3.1.19: The church of St John the Evangelist and Cornhill Square (fig. 3: aa, bb)

The church of St John the Evangelist (SK 9751 7105) may also be of tenth-century origin (Buckberry 2004: 374). During excavations in 1999, a cemetery was discovered. Although all the skeletons were medieval, it was suggested that the graveyard was founded in the tenth century (Buckberry 2004: 374). A piece of Anglo-Saxon sculpture was reportedly also found, but subsequently lost. See appendices 3.3.1 and 5.3.1.

1.3.1.20: hs90 (170 High Street) (fig. 3: cc)

A single late Anglo-Saxon hooked tag made of cooper-alloy was found here (appendix 11.3.9).

1.3.2: Sites north of the Brayford Pool

1.3.2.1: nss97 (northern subsidiary sewer) (fig. 3: a)

Outside the city along West Parade, to the north west of Brayford Pool, and to the west of the Lower City, a large pit, possibly a pond, was encountered during a watching brief in 1997. The artefactual evidence from the pond suggested a possible tenth-century date; however, detailed analysis of the post-Roman pottery was subsequently never carried out (Wragg 1998b: 8).

1.3.2.2: 57-59 Carholme Road (fig. 3: b)

Also to the north west of the Brayford Pool, a watching brief and trial trenching at 57-59 Carholme Road (SK9689171440) produced several late Anglo-Saxon pottery sherds. However, no structural remains were uncovered (Lincoln HER 70488-MLI89047), and it seems that this area remained unoccupied for some time.

1.3.2.3: bwn75, bql03 (Brayford Wharf North) (fig. 3: c)

In 1975, the CLAU carried out an excavation at Brayford Wharf North (bwn75), north of the Brayford Pool. The investigations are believed to have produced similar material to the excavations at Brayford Wharf East, including a significant attempt at river bank consolidation, as well as accumulated silts and dumps. Unfortunately, however, all the finds from this excavation were subsequently lost (Steane *et al.* 2001: 81).

Further excavations took place at Brayford Wharf North (bql03) (SK 97210 71312) in 2003. Northamptonshire Archaeology of Northamptonshire County Council opened three trenches. Trench 1 revealed a couple of undated pits, an undated ditch and a group of stakeholes possibly representing a fence line, all of which were sealed by a dump (interpreted as a reclamation layer) which contained a single tenth- to eleventh-century pottery sherd, as well as an assemblage of Roman sherds, whilst a group of pits dated to the eleventh century were found cutting this layer (Mudd and Lewis 2004: 6). Trench 2 also revealed a post-Roman reclamation layer. Although in this case no post-Roman pottery was present, the Roman assemblage was mixed enough to be interpreted as residual (Mudd and Lewis 2004: 4). Trench 3 was similar in nature, with a pit and a ditch cutting the reclamation layer, the former two being of eleventh-century date (Mudd and Lewis 2004: 9). Despite the lack of undiagnostic features, a total of fifteen late ninth- to late eleventh-century vessels could be identified, two of which were definitely late ninth- to late tenth-century, with the remainder being either later, or undiagnostic (Mudd and Lewis 2004: 15). In addition, one of the eleventh-century pits from trench 1 produced a whittle-tang knife, two tiny beads, three fragments of possibly worked bone, an iron nail, and a tiny nodule of slag (Mudd and Lewis 2004: 18).

1.3.2.x: on36 (214-15 High Street) (fig. 3: d)

During investigations in 1986, residual middle Anglo-Saxon pottery was found on this site (Jones *et al.* 2003: 148, fig. 8.5).

1.4: Butwerk

1.4.1: Sites in Butwerk

1.4.1.1: be73 (Broadgate East) (fig. 3: i)

The activity at Broadgate East (be73), just outside the east wall of the Lower City, has been identified as the first known occupation of the suburb of Butwerk, but unfortunately depth restrictions affected three out of the six excavated trenches (Jones *et al.* 2003: 230-35). The pottery from Broadgate East appeared in a separate pottery report (Adams 1977). However, the pottery pre-dating the mid-twelfth century on this site was so limited as a result of the limited nature of excavations at this depth, that the report focused mostly on the later medieval material (Adams 1977: 1). The depth of the deposits was c. 4 m, and the area measured c. 0.4 ha, and due to time constraints only a tenth of the available archaeology could be investigated (Jones and Jones 1977: 5).

Where the late Anglo-Saxon layers were reached, the evidence consisted mainly of some tenth- and eleventh-century timber structures, similar to those at f72, with associated pottery, pits and dumps (Jones *et al.* 2003: 194, 230-35). These were indicated by the presence of earthen floors, clay hearths, and demolition deposits, cut by postholes and beam slots, but no individual complete floor plan could be identified due to the restricted size of the areas that were examined. The function of the buildings could not be determined either (Jones and Jones 1977: 5). The late Anglo-Saxon occupation was only present along the medieval street frontages; further back, only pits were found (Jones and Jones 1977: 5-6). Occupation may have begun as early as the first half of the tenth century, but increased in the late tenth century, and again in the eleventh century (Jones *et al.* 2003: 194, 230-35). It should be kept in mind, however, that seventh- to eighth-century pottery has also been found at Broadgate in Butwerk (Jones *et al.* 2003: 148, fig. 8.5). If another middle Anglo-Saxon settlement core existed in this location, the identification of Butwerk as a proper 'suburb' is debatable.

A small number of Stamford ware crucible fragments, used for non-ferrous metalworking and glass, and some slag indicate that limited industrial activities were taking place towards the end of the tenth century, whilst two undated furnaces that may have been used for iron smelting have been dated to anytime between the late Roman and early medieval periods (Steane *et al.* forthcoming). A ringed pin with polyhedral head, similar to one from f72, was also found (appendix 11.2.1), and a bone spoon with Scandinavian parallels (a similar example was found at York, but also at London and Chichester). In terms of artefact typology the spoon apparently belonged to the eleventh century, but it was found associated with tenth-century pottery (Steane *et al.* forthcoming). For a discussion of the metal artefacts from this site, see appendix 11.4.1.

Broadgate also yielded a single piece of stone sculpture, which was dated to the late ninth or tenth centuries, and revealed connections with York (appendix 3.2.2).

1.4.1.2: ses97, tc93, tac94 (Sessions House and Cathedral Street) and the church of St Rumbold (fig. 3: ii)

The excavations at Cathedral Street (tc93 and tac94; see appendix 1.4.1.3) and The Sessions House (ses97) all revealed evidence for pottery production in the form of kilns and waster dumps, dated to the early to mid tenth century and the early eleventh century (Jones *et al.* 2003: 230-31). Analysis of the tenth-century pottery revealed that two types of pottery were made here, LSH and SNLS (chapter 6; appendix 17) (Young and Vince 2005: 238-39). It was suggested that "the kiln may be an early experimental stage in the production of the latter pottery type and as such is of regional and potentially national importance" and that "the Sessions House kiln formed one of an extensive production centre which probably included associated workshops and clay preparation areas as well as other industrial or domestic buildings" (*The Sessions House* 1999: 3). The street 'Pottergate', leading from Butwerk to the east gate of the Upper City, probably dates to this period as well, as there is no evidence for more pottery production in this general area after the early eleventh century (Field and George 1998: 38-39; Jones *et al.* 2003: 231; Young and Vince 2005: 239).

A watching brief and evaluation carried out in 1997/1998 at the Sessions House (ses97), immediately south of the tc93 and tac94, revealed that the site had been levelled in the late Anglo-Saxon period (*The Sessions House* 1999: 1, 11). A bone skate was found, probably of late Anglo-Saxon or medieval date (Mann 1999a: 29). Evidence for metalworking on the site all post-dated the Anglo-Saxon period (Mann 1998a: 29). It was concluded that Anglo-Saxon occupation in this area remained sparse, despite the evidence for pottery production (Donel 1993; Jarvis 1997; Trimble 1995).

This was also the location of St Rumbold's Church, which was almost certainly an eleventh-century foundation. This dedication was traditionally thought to refer to a Flemish saint, and placed in the context of a supposed community of Flemish traders who settled in Lincoln in the eleventh century; however, it has recently been suggested that the dedication may have referred to a Mercian saint instead, in which case the church may date back to the tenth century (for an overview of the arguments, see Jones *et al.* 2003: 234). Alternatively, the dedication could have arrived in the context of the arrival of foreign moneyers and potters, who may have settled in Lincoln in the later ninth century (chapters 4 and 6).

1.4.1.3: tc93, tca94 (Cathedral Street) (fig. 3: iii – iv)

At North Lincolnshire Technical College, an evaluation by the CLAU in 1993 (Donel 1993) revealed pottery associated with burnt clay, stone and charcoal residues indicative of kiln activity. The pottery was identified as late Anglo-Saxon shell-tempered, of a date after the early to mid tenth century (Jones *et al.* (2003: 194) identify this as LSH and LKT). A high proportion consisted of wasters, which were either over- or under-fired, but the kilns could not be located (Donel 1993: 2-3). In 1995, a watching brief was carried out (Trimble 1995), revealing more late Anglo-Saxon levels, but again no kilns. Young and Vince (2005: 238-39) have questioned the identification of the pottery sherds as wasters, and stated that "those that can be re-examined are unconvincing".

1.4.1.4: lrb00 (Greestone Centre, Lincoln University, Lindum Road) (fig. 3: v)

An archaeological evaluation at the Greestone Centre, Lincoln University (lrb00) in 2000 involved the excavation of 4 trial pits just to the north of Lindum Road. Investigations revealed further evidence for late Anglo-Saxon activity. One of the test pits contained several dumps or layers containing ninth- and tenth-century pottery, mostly wasters, as well as fragments of kiln furniture. Again this was interpreted as evidence from the Sessions House kilns just to the south, or alternatively for the existence of another kiln at this very site (Wragg 2000b: 1, 5). In addition, at Greestone Mount on Lindum Road (LN2 1PS), SK 97980 71620, two sherds of late Anglo-Saxon pottery were found during trial trenching (HER70318-MLI84307).

APPENDIX 2: ARCHAEOLOGICAL INVESTIGATIONS IN LINDSEY (EXCLUDING LINCOLN) AND STAMFORD WITH EVIDENCE FOR LATE ANGLO-SAXON ACTIVITY

This appendix summarises the evidence for late Anglo-Saxon activity in Lindsey, with the exception of Lincoln itself (which has been discussed in appendix 1). Place names are taken from DB (eds Morgan and Thorne 1986 (vol. 31)), as this is the most contemporary detailed historical information that is available for tenth-century settlement patterns. Following Morgan and Thorne (1986), placenames are organised per wapentake. Information about archaeological investigations was assembled from records held in the Lincolnshire HER, the North Lincolnshire SMR and the North East Lincolnshire HER, and from published sources as referenced. For all locations mentioned in the text, see fig. 5, which is based on Morgan and Thorne's (1986) map of sites in Lincolnshire mentioned in the Domesday survey. The numbering of sites within each wapentake in this appendix corresponds to the numbers on fig. 5. The final part of the appendix also includes a brief summary of the relevant archaeological discoveries made in Torksey and Stamford.

2.1: Epworth Wapentake

The *wapentake* of Epworth is a distinct geographical entity, the only part of Lindsey that is situated to the west of the River Trent, and is also known as the Isle of Axholme. The majority of present-day villages on the Isle of Axholme and along the riverside lowlands are believed to have been in existence at the time of the *Domesday* survey, which took place in the later eleventh century (Young *et al.* 2001: 3). Less is known about the development of the area prior to the eleventh century. The Isle of Axholme has yielded very little evidence for the period between the fifth and tenth centuries, especially in contrast to the rather abundant settlement patterns for the Roman period. There are no early Anglo-Saxon cemeteries, nor any other early Anglo-Saxon structural evidence, which may be due to rising sea levels and subsequent floods (Head *et al.* 1998: 277). Environmental analysis has shown frequent attempts to bring the low-lying areas under control during the Anglo-Saxon period, confirmed by an increase in cereals accompanied by a decrease in tree pollen (Young *et al.* 2001: 3). The earliest documentary reference to the area is from the seventh-century *Tribal Hidage*, which lists Hatfield with Lindsey, suggesting a degree of occupation then (Head *et al.* 1998: 277). Interestingly, Hatfield does not get mentioned in the *Domesday* Survey. Place name evidence indicative of settlement in this period is scarce (Head *et al.* 1998: 277). The placename element *-holm* in Axholme is derived from ON *-holmr*, meaning island (Sawyer 1998: 102). At Adlingfleet, situated on the Isle of Axholme, tenth-century pottery has been found, leading to the suggestion that this may be the site of a Scandinavian invasion fleet encampment site on the Trent (Fenwick *et al.* 1998: 168; Head *et al.* 1998: 277). From the tenth century onwards, the archaeological evidence begins to increase (Head *et al.* 1998: 277). This is discussed in more detail below. The paucity of archaeological evidence prior to the tenth century is in sharp contrast with the message from *DB*, which paints a picture of prosperity, including a flourishing economy with lots of ploughland, meadows and woodland, many fisheries, and a large number of free sokeman (Head *et al.* 1998: 27-79). The possibility therefore presents itself that the area was only really settled from the later tenth or early eleventh century onwards, possibly during the second period of Scandinavian settlement (Fenwick *et al.* 1998: 168; Head *et al.* 1998: 277).

2.1.1: Garthorpe

An eleventh-century *Urnes*-style mount or fitting (NLM4773) has been found in the parish of Garthorpe and Fockerby (appendix 12.12.1.1).

2.1.2: Waterton

During the Isle of Axholme Survey, the only pottery that was found at Waterton deserted medieval village consisted of Torksey ware (*North Lincolnshire SMR records*; Head *et al.* 1998: 277). In addition, during excavations at the deserted medieval village of Waterton, prior to the construction of pylons, settlement remains dating from the eleventh and twelfth centuries were revealed in two separate trenches (Foreman 1996: 3, 12). The excavated evidence suggested that settlement here begun no more than a few decades prior to the Norman Conquest (Foreman 1996: 23).

The lowest contexts in trench one, which sealed the natural sand at the northeastern part of the trench, were thought to represent flooding deposits. One fragment of burnt daub was retrieved from these layers. They were cut by a ditch with a depth of 0.8 m and more than 2.5 m wide, which was interpreted as a boundary feature. The backfill contained one sherd of *TORK*. Elsewhere in the same trench, a gully that contained two sherds of *TORK* was identified, as well as a cluster of stakeholes. They cut straight into the natural. At the northern edge of the gully, a dog was buried. The gully, stakeholes and dog burial were sealed by a layer contained 1 sherd of *TORK* and one sherd of *EMLOC*, as well as some brick

which was interpreted as intrusive. This layer was cut by another gully, which contained 6 sherds of TORK (Didsbury 1996: 13; Foreman 1996: 6). The earliest features in trench two were three successive gullies. The fills of the first two were sterile, but the basal fill of the most recent gully contained three sherds LFS (Didsbury 1996: 13; Foreman 1996: 8).

A total of 90 fragments of burnt daub were retrieved, 62 of which came from trench one. They were identified as either from a kiln structure, or a daub wall that had been burnt. Most fragments were undiagnostic, and came from medieval or later deposits. Sixteen fragments had a smooth face, suggesting they came from a wall. One fragment was a corner piece, and seemed to have been pressed against a timber structure. Six fragments had wattle impressions (Foreman 1996: 15). On the basis of the single fragment of daub from the lowest deposits in trench one, the structure may be as early as eleventh-century in date.

2.1.3: Luddington

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.1.4: 'The marshes'

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.1.5: Amcotts

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.1.6: Crowle

At Crowle, the only tenth-century sculpture from the Isle of Axholme has been found, displaying great similarities to the Yorkshire sculpture (appendix 4.1.11), as well as a number of tenth-century pottery sherds (Head *et al.* 1998: 277). The *NLPTS* database identifies this as LFS and TORKT. In addition, the *NLPTS* database also records the presence of pottery of type ESAX at Crowle, suggesting that an earlier settlement core existed here, which would explain the choice of this parish for the erection of the sculpture. Metalwork finds include an eighth- to ninth-century pin (NLM-F30EB3) (appendix 12.1.2.1), a tenth-century strap-end (NLM-F3CD43) (appendix 12.2.1), and an eleventh-century strap-distributor (NLM-21A0C7) (appendix 12.6.2.1).

2.1.7: Althorpe

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.1.8: Belton

In 2001, during investigations prior to the construction of a gas pipeline in South Yorkshire and North Lincolnshire, archaeologists of APS uncovered a middle Anglo-Saxon settlement site at Belton (Young *et al.* 2001: 1). Two grubenhauser were revealed (A and B), as well as a possible third structure (C), which remained largely concealed, because the trenches could not be extended beyond the limits of the gas pipeline. Two bone pins, a loom weight and a spindle whorl were also retrieved (Young *et al.* 2001: 19). These are indicative of textile working on site, but do not necessarily shed light on the function of the dwelling itself, as they came from the backfilled deposits in the grubenhauser. The pins could either be of middle or late Anglo-Saxon date (*North Lincolnshire SMR records*). However, comparison to the pottery (see below) suggests that they were probably middle Anglo-Saxon. In addition, a number of pits were excavated to the east of the grubenhauser, which may be related to industrial activity. They are spatially distinct from the grubenhauser, which suggests a degree of functional zoning, also observed elsewhere, in most other settlements (*North Lincolnshire SMR records*).

Fifty-four sherds of pottery were retrieved from the grubenhauser, 44 (representing 16 vessels) from structure B, and ten (representing five vessels) from structure A. Some of the sherds from structure B were part of the same vessel as sherds from structure A (Young 2001a: 31). 78% of the pottery from the site was Northern Maxey type ware, all in a range of as yet undefined variant fabrics (defined as fabric U), so far only found on sites in North Lincolnshire (including Flixborough, Riby and St Peter's Church at Barton-on-Humber) and York (Young *et al.* 2001: 18-19; Young 2001a: 30). Interestingly, the main northern type of MAX, fabric B, was absent completely, as was Ipswich ware (*North Lincolnshire SMR records*). Other pottery types included CHARN (1 sherd); ESAXLOC (6 sherds belonging to 2 vessels); MAX (42 sherds from 11 vessels); and SST (5 sherds from 2 vessels) (Young 2001c: 29-30). On the basis of the pottery profile, the structures were assigned a late seventh- to early ninth-century date (Young 2001c: 29-30), although of course that date relates to the backfilling of the structure, and the ESAXLOC suggests that occupation on the site started earlier) (chapter 6).

Other discoveries at Belton include several adult skeletons that were found during building works and archaeological investigations in 1998 and 1999 at the site of "The

Smithy" in Green Lane, Belton, which were first considered to be Anglo-Saxon, until radiocarbon dating revealed that they were medieval (appendix 6.1.4). A single early Anglo-Saxon stamp-decorated sherd has also been found (Head *et al.* 1998: 277). Coin finds include two Northumbrian stycas and a single penny (sword type) of Eric Bloodaxe (appendix 9.1.6). Finally, the metalwork assemblage consists of three ninth-century strap-ends (NLM2763, NLM2762 and NLM-C0A3F7) (appendix 12.2.1).

2.1.9: Beltoft

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.1.10: West Butterwick

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.1.11: Epworth

The only late Anglo-Saxon discoveries made near Epworth were metal artefacts. Finds dated to the tenth century included a copper-alloy strap-end (NLM6084) (appendix 12.2.1) and a copper-alloy *Borre*-style lozenge-shaped brooch (NLM6083) (appendix 12.5.2.1). Two late Anglo-Saxon buckles were also discovered (NLM6085 and NLM-75C340) (appendix 12.3.1).

2.1.12: Low Burnham

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.1.13: High Burnham

A single copper-alloy hooked tag of possible ninth-century date (NLM-99F413) was found here, similar to examples from Lincoln (appendix 12.4.1).

2.1.14: Uppethorpe

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.1.15: Westwoodside

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.1.16: Haxey

A tenth- to eleventh-century spearhead and axe-hammer have been found near Haxey (Head *et al.* 1998: 277) (appendix 12.10). Other metalwork finds included a ninth-century copper-alloy strap-end (NLM-BACCC3) (appendix 12.2.1), a late Anglo-Saxon to medieval buckle (NLM6787) (appendix 12.3.1) and a tenth- or eleventh-century copper-alloy stirrup-terminal (NLM6790) (appendix 12.6.1.1).

2.1.17: Graizelound

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.1.18: East Lound

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.1.19: Owston Ferry

A possible tenth-century strap-end has been found at Owston Ferry (North Lincolnshire Museum OFCA1) (Head *et al.* 1998: 277) (appendix 12.2.1).

2.2: Manley Wapentake

During the Ancholme Valley Survey, no Anglo-Saxon remains other than an early Anglo-Saxon cruciform brooch and a pendant were found (Chapman *et al.* 1998: 202). In addition, two Anglo-Saxon spearheads and another pendant were reportedly found near Brigg, and a tenth century ditch was excavated near a possible moated site next to the A18 west of Brigg (Chapman *et al.* 1998: 225).

2.2.1: Whitton

The University of Sheffield is involved in an ongoing research project entitled *Cemeteries and Settlements in North Lincolnshire, c.700-1100*, consisting of a series of research and training excavations at Fillingham (2000), Whitton (2002), and West Halton (fieldwork finished in 2008). In Whitton, in the garden of Church View (SE 9035 2450), some human remains were uncovered in 1987. Subsequently a small-scale archaeological excavation took place (Hadley 2001: 59; Hadley and Davies 2001). See appendix 6.1.26. The burials turned out to be of seventh- to ninth-century date, and it was suggested that this place could be the site of the religious community founded by Ætheltryth in the seventh century; other suggestions have included West Halton (because the village church is still dedicated to her), and Flixborough

(Hadley and Davies 2001: 17). None of these claims can be proven beyond doubt; however, at Whitton an early stone-built wall was discovered, suggestive of some form of structural organisation of the cemetery. The combination of a lay cemetery with a monastic foundation is not unheard of either, and has been found at for example Monkwearmouth (Hadley and Davies 2001: 18; Cramp 1969). However, the date and function of the wall remained uncertain (Hadley 2002a: 42). As no definite evidence for an early church was uncovered, it was suggested that the burials represent a non-churchyard cemetery. The absence of a church is not an interpretative problem, as there is increasing evidence for non-churchyard burials dated to the tenth century (Buckberry 2007; Hadley and Davies 2001: 16).

Further work the following year was intended to place the cemetery in its settlement context, and to determine whether a church was associated with the cemetery (Hadley 2002a: 1). A large quantity of ninth- to twelfth-century pottery (22 sherds, as opposed to two sherds of fifth- to eighth-century pottery, and one sherd of eighth to ninth-century pottery) suggests that the cemetery had gone out of use by this time, and had become the location of a domestic settlement (Hadley 2002a: 45). Other pottery scatters were found along Church Hill, Post Office Lane and Main Street, suggesting that at this time it was a multi-focal settlement rather than a single nucleated village (Hadley 2002a: 45).

In 2000, a metal detectorist furthermore discovered a silver and gilded convex disc-brooch with abstract decoration in high relief, which was unusual for the area but has clear southern Scandinavian parallels (*Treasure* 2000: 30-31) (appendix 12.5.4.2.1). Other metal artefacts include a lead circular openwork brooch (NLM-A6CCD1) (appendix 12.5.4.3.1), a knife (NLM466) (appendix 12.10.1.1) and two pieces of horse-harness equipment (NLM881 and NLM482) (appendix 12.6.1.1 and 12.6.2.1). Finally, the *NLPTS* database also records the presence of pottery of type LSH at Whitton Church, Manley.

2.2.2: Winteringham

Old Winteringham is the site of an old Roman town. It is suggested that this was founded in the Claudian period, as a military outpost, and became a trading settlement in the third century (Whitwell 1992: 68). *DB* mentions the presence of a ferry at Winteringham as well, which provided transport across the Ancholme (Sawyer 1998: 17). The Anglo-Saxon settlement of Winteringham was not located in the same location as the Roman fortress, but is believed to be located underneath the medieval and present-day town. There is no record of any associated finds (*North Lincolnshire SMR records*).

The *NLPTS* database records the presence of pottery of type ESAX, LFS, LKT, MAX, and ST at Winteringham. In addition, the *NLPTS* database also records the presence of pottery of type LSH at Winteringham church. A number of metal dress accessories were also retrieved from the area, including a copper-alloy penannular brooch (NLM-A11E87; appendix 12.5.5.1), a copper-alloy stirrup mount (NLM1077; appendix 12.6.1.2) and an unidentified copper-alloy object (NLM-0862B6; appendix 12.12.1.1).

2.2.3: Alkborough

Between August and February 2004, Humber Archaeology carried out an evaluation at Alkborough, prior to housing development near the earthworks at Countess Close, a scheduled ancient monument, which was proven to be of twelfth-century date (Bradley *et al.* 2004: 18). Previous fieldwalking had indicated activity of Anglo-Scandinavian date within or just outside the medieval enclosure, which must relate to activity prior to the construction of the enclosure (Bradley *et al.* 2004: 5, 18). No structural remains predating the medieval period were excavated, but ¹⁴C dates were obtained for some charred plant remains that predated all other stratigraphy, which were eleventh- to thirteenth-century in date, and could indicate a kiln or corn drier on the site (Bradley *et al.* 2004: 6).

In addition, a total of 56 sherds of residual late Anglo-Saxon wares were found in later contexts, suggesting a settlement focus was relatively nearby (Bradley *et al.* 2004: 18). No Maxey type ware was found at all, suggesting settlement only occurred here from the late Anglo-Saxon period onwards (Bradley *et al.* 2004: 60; Vince and Precious 2004: 34). However, one early Anglo-Saxon sherd (ESGS) was found, of a type that also occurs at Flixborough (Vince and Precious 2004: 34), and 1 sherd of ECHAF was also found (Precious *et al.* 2004: 30). In addition, 2 sherds of LKT, 12 sherds of TORC, 5 sherds of TORKT, 4 sherds of ST, 2 possible sherds of THET and 32 sherds of (LFS) were found on and near the site, suggesting a date range of c. 850-1000 AD (Precious *et al.* 2004: 30; Vince and Precious 2004: 34).

The majority of the pottery was found inside the later earthwork. The possibility that there was a late Anglo-Saxon settlement in the same location as the Countess Close earthwork was suggested as a possibility, although it is also possible that the distribution was the result of disturbance of the construction of the earthwork, which would allow for the original settlement to only be located partially inside the later enclosure. Finally, it was interesting to note that the distribution of Romano-British pottery coincided with that of late

Anglo-Saxon pottery (*North Lincolnshire SMR records*), suggesting that the site had a longer (although not necessarily continuous) occupation history.

The *NLPTS* database also records the presence of pottery of type LSH, TORK and TORKT from a number of sites in Alkborough, including Countess Close. In addition, according to the *NLPTS* database, other sites in Alkborough produced pottery of type ESAX, LFS, LKT, LSW, NLLSG, ST, TORK and TORKT. Finally, the *PAS* lists a middle Anglo-Saxon pin (NLM502) (appendix 12.10.2.1), a croissant-shaped sword pommel, made of copper alloy (NLM4674; appendix 12.10.2.1) and a copper-alloy multi-headed strap-end in *Borre* style (NLM4596; appendix 12.2.1). In addition, the *PAS* lists an eleventh-century strap-end found in Walcot, in the parish of Alkborough (NLM651) (appendix 12.2.1).

2.2.4: Walcot

The *NLPTS* database records the presence of pottery of type ST and TORK at Walcot. Also see notes under West Halton.

2.2.5: West Halton

The village of West Halton was potentially another high-status settlement during the Anglo-Saxon period. Until the nineteenth century the parish of West Halton still incorporated lands at Gunness and Crosby, which may mean that the parish was once much larger, potentially indicative of the presence of a minster church during the seventh to ninth centuries (Blair 1988: 1-2; Hadley *et al.* 2003: 2). It has also been suggested that West Halton was the central manor in a large composite estate, including lands at Walcot, Coleby and 'Haythby' in West Halton parish, Thealby in Burton-upon-Stather parish, Crosby and Conesby in Crosby parish, and Winterton (Hadley *et al.* 2003: 2).

Although the existing village church has no remaining early fabrics, as a result of the destruction of the older church in the seventeenth century (Grenville and Parker Pearson 1983: 1), it is still today dedicated to St Ætheltryth, the daughter of King Anna of the East Angles, who married the son of King Oswiu of Northumbria in the mid-seventh century. Etheldreda soon renounced her marriage and took religious orders, and eventually left Northumbria, to return to Ely, where she founded her own religious community. According to the twelfth-century *Liber Eliensis*, she founded a monastery after her crossing of the Humber, which until today still has not been identified (Hadley *et al.* 2003: 2).

Field walking to the north of the church revealed a quantity of early, middle and late Anglo-Saxon pottery (chapter 6), as well as an Anglo-Saxon bone comb (Hadley and Davies 2001: 18; Grenville and Parker Pearson 1983: 3; Hadley *et al.* 2003: 1). Following these earliest of discoveries, an archaeological excavation in 1983, at the edge of the village green (SE 906 207), revealed an east-west aligned ditch with more Anglo-Saxon pottery (Hadley *et al.* 2003: 2). The assemblage recovered during the fieldwalking and first excavation was analysed as part of the *EMASPP*. The pottery included CHARN), ESAXLOC, ESAXX, ESGS, FE, LIM, ESGS, EST, LKT, LSAX, LSAXX, LSH, LSLOC, LSLs, TORK, TORKT, THETT, LFS, BLBURB, MAX and MSAXIMP (Hadley *et al.* 2003: 3). In the context of a watching brief during the construction of a pipeline from West Halton to Alkborough (SE 8970 2090-SE 9079 2096) in 1999, LAS uncovered some more late Anglo-Saxon pottery from the village green in West Halton (Bennet and Field 1999: 33).

In August and September 2003, the University of Sheffield held a student training excavation at the site of the village green (Hadley *et al.* 2003: 1; 2004a). During the first season, two trenches were opened. Trench one revealed one irregularly shaped sub-rectangular steep-sided cut feature, containing two sherds of early Anglo-Saxon pottery (Hadley *et al.* 2003: 7). In addition, two shallow parallel ditches, possibly representing a property or land division, were also assigned a possible Anglo-Saxon date, although no finds were recovered from the fills (Hadley *et al.* 2003: 7). Finally, a small copper-alloy penannular brooch was also found, which may have been middle Anglo-Saxon in date. It was made from twisted wire and still retained its pin (Hadley *et al.* 2003: 14).

The Anglo-Saxon pottery retrieved during the first season of excavation consisted mainly of early- to mid-Saxon wares, and late Anglo-Saxon and Saxo-Norman wares (Boyle and Young 2003: 20). The earlier wares were all very abraded, suggesting secondary deposition, but the amount is definitely indicative of activity nearby (Boyle and Young 2003: 17). There was a hiatus in the ninth century, which, it was suggested, may indicate a real hiatus in activity (Boyle and Young 2003: 20). Wares included ASQSH, CHARN, EMSAX, ESGS, FE, LIMES, SST, SSTMG, LIM, MAX, LKT, LSH, NLLSG, TORK, TORKT, ST, LFS and NLFS (Boyle and Young 2003: 16).

In July and August 2004, the University of Sheffield returned to West Halton for another season of fieldwork. Another trench was opened on the village green, to the west of the two that were opened the previous year. A pre-Conquest occupation layer was revealed, sealed by a medieval yard surface, which was assigned a domestic nature due to the charcoal rich contents and high degree of cultural materials. Two main features were cut into

this, an east-west aligned ditch with rounded terminus, which contained two fills and a high amount of Anglo-Saxon pottery, and environmental remains (Hadley *et al.* 2004: 3; Perry 2009; chapter 6). The interim report included a preliminary analysis of the pottery from the two main ditch fills, (3016) and (3017). Context (3016) contained Roman wares, prehistoric wares, TORK, LFS, CHARN, ESAX, and one sherd that could be either Iron Age or ESAX, whilst context (3017) contained Roman pottery, prehistoric wares, TORK, IPS/ESGS, SNLOC, LFS and ESAX (Hadley *et al.* 2004: 5). It was clear that the deposits were very mixed, but this should not come as a surprise as the fills represented the backfill of a ditch. This ditch, which formed part of the subject of an MA dissertation by Perry (2009), is discussed in more detail in chapter 6. Another cut feature that was investigated, tentatively identified as the corner of a sunken-featured building, likewise contained a very mixed pottery assemblage, including Roman wares, ESAX, SNLS, LFS and TORK (Hadley *et al.* 2004: 3-5).

In addition, a series of test pits were dug in the village to measure the extent of the settlement. The results suggested that originally two early to middle Anglo-Saxon settlement cores existed – one in the northeast of the present village (test pits 27, 30 and 32), and another in the area of the village green – which were gradually joined in the late Anglo-Saxon period (Hadley *et al.* 2004: 24). The majority of the test pits were dug through disturbed deposits, with medieval and post-medieval pottery occurring all the way to the bottom, but in some cases the pottery suggested that the test pit was dug through sealed deposits.

The following summarises the results of a selection of the most significant test pits:

Test Pit 17 was excavated at 21 Cross Street. This test pit was one of the few that exhibited a well-stratified ceramic sequence stretching from modern to late Anglo-Saxon. Modern and post-medieval pottery occurred in spits 1-4, whilst medieval pottery occurred in spits 1-5. Spits 6-8 yielded only late Anglo-Saxon wares, belonging to fabric types LFS and LSH, and the final spit (spit.7) was empty (Hadley *et al.* 2004: 15, 23). The absence of earlier wares is interesting, and suggests that they were no longer in circulation when occupation in this part of the site began.

Test Pit 30 was excavated at Halton Edge, Winteringham Lane. A total of seven spits were excavated. Spits 1-4 produced modern and post-medieval pottery, and medieval pottery occurred until spit 5. The only late Anglo-Saxon wares (four sherds of LKT) occurred in spits 3-5, as well as a single sherd of SST, and should be regarded as residual. Spit 6 was empty, and spit 7 produced a single sherd of MAX, and nothing else (Hadley *et al.* 2004: 18, 23). This suggests that spit 7 cut into a sealed deposit that pre-dated the circulation of the wheel-thrown LKT.

Test pit 32 was excavated at Ballyclare, Winteringham Lane. Again, seven spits were excavated. Modern pottery continued to occur down to spit 4. Spit 5 produced two sherds of MAX and nothing else, whilst spit 6 produced a single Roman sherd, and spit 7 was empty. No late Anglo-saxon pottery was found in this test pit (Hadley *et al.* 2004: 19-20). Again, the suggestion is raised that spits 5-7 were cutting into sealed deposits, and the absence of any late ninth- to tenth-century pottery may suggest that this part of the site was completely unoccupied during this period.

Finally, test pit 1 was dug to investigate some earthworks on the village green itself, near the western end. The result suggested that the pit was dug through a medieval building, which sealed an underlying late Anglo-Saxon building. All pottery was late Anglo-Saxon, including LFS, LKT, TORK, TORKT and SNLS, with residual Roman wares. However, no middle Anglo-Saxon pottery was found, suggesting that these wares were not in circulation when occupation in this area began (Hadley *et al.* 2004: 7, 22).

In July 2005, a third season of fieldwork was undertaken, during which three additional trenches were opened (4, 5 and 6), targeting geophysical and topographical anomalies (Hadley *et al.* 2005: 1). Trench 4 revealed a north-south aligned steep-sided ditch, which was too large to be structural so probably formed an enclosure of some sort (Hadley *et al.* 2005: 1-2). Pottery from this trench ranged from the early to late Anglo-Saxon periods, suggesting the site was occupied between the fifth and thirteenth centuries (Boyle and Young 2005: 9-10, 15; chapter 6). Fabric types included ASQSH, ASSHQ, CHARN, EMSAX, ERRA, ESAXLOC, ESGS, FE, LIM, RQCL, SST, SSTMG, MAX, MSAXLOC, NLLSG, LSH, LSLOC, TORK, TORKT and YW (Boyle and Young 2005: 9-10). Trench 5 did not reveal any Anglo-Saxon remains. Trench 6, just inside the line of the ditch revealed in trench 4, revealed the top of what may be another Anglo-Saxon building, but this was left unexcavated due to time restraints (Hadley *et al.* 2005: 3). YW does not occur very much in Lincolnshire at all, with only a few other examples from Flaxengate in Lincoln and St Peter's Church, Barton upon Humber (Boyle and Young 2005: 14). The majority of the contexts from trench 4 were mixed. The mixed nature of the assemblages does not indicate continued use of pottery types as the deposits were probably ditch fills, and a degree of residuality is therefore to be expected.

In July and August 2006 a fourth season of excavations took place (Hadley *et al.* 2006: 1). Trench 6 was re-opened and extended by 3 m to both the east and south, and overlying deposits were dug off to the same level as the previous year. An even soil layer (6003) was revealed, containing middle and late Anglo-Saxon pottery, animal bone, and possible ironworking slag. It was cut by two features. One of these contained medieval pottery, whilst the other contained some small pieces of iron-working slag and some burnt clay, possibly broken-up hearth lining, as well as a few pieces of late Anglo-Saxon pottery. Underneath the soil layer (6003), cutting into the bedrock, were two linears and two parallel shallow circular postholes, which were interpreted as part of a building or hall. Preliminary analysis of the associated ceramics suggests an early Anglo-Saxon date (Hadley *et al.* 2006: 3). In addition, another eight test pits were dug. No detailed analysis of the pottery from this season has yet been carried out, with the exception of the ditch deposits (Perry 2009).

Fieldwork at West Halton continued for another two seasons, but the decision was made to write no more interim reports. As the final report is still forthcoming, the following information depends entirely on Perry (2009) and spoken communication with Hadley. In sum, West Halton seems to have been a focal point during the fourth to seventh centuries. At least two Bronze Age burial mounds were identified at the village green. Close to these was a rectangular enclosure of fourth century date, tentatively identified as a pagan shrine (Hadley and Willmott *forthcoming*). Traces of early Anglo-Saxon dwellings were also found, but in the earlier seventh century a boundary ditch was cut through some of the earlier settlement remains (Perry 2009). The ditch filled up rapidly, and was practically backfilled within a few decades, before the start date of MAX, usually placed around 680 AD (Perry 2009; Young and Vince 2005). Little is known about the site during the middle Anglo-Saxon period, although finds of MAX in the test pits and later ditch fills suggest that settlement activity did continue nearby. In the late Anglo-Saxon period the ditch was recut, and another ditch was excavated that may have been part of the same enclosure (Hadley and Willmott *forthcoming*; Perry 2009). The pottery suggests that activity continued uninterrupted into the eleventh century (Hadley and Willmott *forthcoming*).

The late Anglo-Saxon metalwork assemblage from West Halton was limited, and consisted of two Northumbrian strap-ends, dated to the ninth century, as well as two tenth-century copper-alloy rings, and a single coin of Æthelred II (Hadley *pers. comm.*) (appendix 12.2.1; 12.9.1; 9.1.44).

2.2.6: Coleby

No archaeological evidence for late Anglo-Saxon activity has been found in Coleby in Lindsey (not to be confused with Coleby in Kesteven; appendix 4.2.7). See notes under West Halton.

2.2.7: Derby

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.2.8: Burton upon Stather

At Burton upon Stather some "Anglo-Saxon" sherds were retrieved from the same field as a quantity of Bronze Age metalwork and flints. The field was characterised as an "extensive prehistoric settlement site". Nearby, a Romano-British and Anglo-Saxon settlement site was found, with "Anglian" pot, a small iron knife, a riveted bone comb, and a pierced stone loom-weight. None of the finds were dated with any more precision (*North Lincolnshire SMR*). In addition, the *NLPTS* database records the presence of pottery of type AS (generic Anglo-Saxon) at Bagmoor farm and at Normanby Estate, Burton upon Stather. Bagmoor farm was also the location of finds of pottery of type ESAX (early Anglo-Saxon, 400-700). The *NLPTS* database also records the presence of pottery of type LSH (late Anglo-Saxon Shelly ware, 850-1000) at Burton-upon-Stather.

2.2.9: Normanby

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.2.10: Haythby

See notes under West Halton.

2.2.11: Thealby

See notes under West Halton.

2.2.12: Winterton

A number of metal artefacts were retrieved from the parish of Winterton. These include an eleventh-century copper-alloy strap-end in *Urnes*-style (NLM-E7A252; appendix 12.2.1), an eleventh- to twelfth-century stirrup strap mount (NLM-1809C7; appendix 12.6.1.1), and a copper-alloy 'Norse' bell (NLM-D48443; appendix 12.7.1). Also see notes under West Halton.

2.2.13: Roxby

The *NLPTS* database records the presence of pottery of type ESAX, MAX, LKT, TORK, TORKT and LFS at Roxby cum Risby. The parishes of Roxby cum Risby also produced a single halfpenny of Æthelred II (appendix 9.1.30). The *PAS* database furthermore lists the discovery of a copper-alloy stylus fragment (NLM-1F85D6; appendix 12.12.5.1); a copper-alloy hooked tag (NLM-8163D4; appendix 12.4.1); two middle Anglo-Saxon pins (NLM-B86632 and LIN-C219D3; appendix 12.1.3.1); six strap-ends (NLM-B43784, NLM-BD6BF8, NLM-B43784, NLM-AB50F3, NLM-DE9392 and NLM-704C05; appendix 12.2.1); a copper-alloy flat disc brooch decorated in *Jellinge* style (NLM-0F69C5; appendix 12.5.3.2.1); a domed disc brooch with *Jellinge*-style decoration (NLM-0F69C5; appendix 12.5.4.2.1); a flat copper-alloy disc brooch with *Borre*-style decoration (NLM6994; appendix 12.5.3.1.1); a fragment of a trefoil brooch (NLM6529; appendix 12.5.6.1); a horse-harness pendant in *Ringerike*-style (NLM-ECF7F6; appendix 12.6.3.1); a 'viking' bell (NLM-0B8F36; appendix 12.7.1); an eleventh- to twelfth-century copper-alloy scabbard chape (NLM-51CCF1; appendix 12.10.4.1); three weights (NLM6264, NLM-EBA6E3 and NLM-A27134; appendix 12.11.1); an Irish openwork mount or pendant (NLM-DA7151) and a gilt mount with silver wire inlay (NLM-C060B2) (appendix 12.12.1.1); a silver ingot (NLM-683755; appendix 12.12.3.1); an early medieval spindle whorl (NLM6515; appendix 12.12.4.1); and two copper-alloy D-shaped buckles (NLM6330 and NLM-0FB862; appendix 12.3.1), all found in the parish of Roxby cum Risby.

2.2.14: Great Conesby

Loveluck (2001: 90) has suggested that the settlement at Flixborough shifted further up the limestone escarpment in the eleventh century. He refers to the settlement as 'North Conesby', and as this is the northernmost of the two Conesbys it seems likely that he referred to this settlement. Also see notes under West Halton and Little Conesby.

2.2.15: Flixborough

Flixborough is situated on the east side of the Trent, on the slope of the Lincoln Edge, which rises sharply from the floodplain margins (Fenwick *et al.* 1998: 155; Loveluck and Atkinson 2007). At the site of the old church in Flixborough (SE 876 144), an eighth-century gilded disc was found in 1972 (Knowles 1974: 29). Archaeological remains from the Mesolithic onwards have been recovered in the area (Fenwick *et al.* 1998: 155-59; Loveluck and Atkinson 2007), but most famous perhaps are the excavations at the sand extraction site at Flixborough which started in 1989, which revealed exceptionally well-preserved remains of an Anglo-Saxon settlement dated from the mid-seventh to the tenth centuries AD (Dobney *et al.* 2007; Evans and Loveluck 2009; Loveluck 2007; Loveluck and Atkinson 2007). Prior to those, in 1988 Kevin Leahy had dug up about eleven east-west aligned unfurnished graves, some in coffins or chests with iron fittings that were typical of the seventh to ninth centuries (Geake 2007) (summarised in appendix 6.1.10). At the same time the foundations of some buildings were uncovered, which led EH to fund Humberside Archaeology to evaluate a larger area, eventually culminating in a two-year excavation programme, which took place in 1989-91. In the following four years, until 1995, further geophysical surveys and targeted evaluation trenches revealed the site was even larger (Loveluck 2001: 81; Loveluck 2007; Loveluck and Atkinson 2007). Although the whole settlement was never uncovered in the two-three year excavation period 1989-91, it has become a type site for middle Anglo-Saxon rural high-status settlement sites (Fenwick *et al.* 1998: 159).

The finds include some 30+ buildings, metalised pathways, boundaries and pits, containing lots of artefacts and animal bone (Loveluck and Atkinson 2007). Several of the main structural phases were separated by demolition and levelling dumps, which increased the quality of preservation, further aided by the chemically neutral qualities of the soil (Loveluck 2001: 82-83; Loveluck and Atkinson 2007). The coins and other artefactual evidence suggested a date range between the late seventh and the late ninth century (*Flixborough* 1991: 37). The coins, which are summarised in appendix 9.1.13, indicate contacts with Northumbria, Mercia and East Anglia as well as Frisia (Archibald 2009; Whitwell 1991: 246-47), whilst German lava querns and French pottery indicate further continental trading contacts (Loveluck 2009; Young and Vince 2009). About a quarter of the pottery is from Ipswich (Whitwell 1991: 247; Young and Vince 2009).

A number of architectural styles could be identified for the period between the seventh and tenth centuries, involving daub, timber and structural ironwork, and encompassing posthole, continuous trench and sill beam foundation construction (Fenwick *et al.* 1998: 160; Loveluck and Atkinson 2007). Phase 1 coincides with the first occurrence of Maxey-type ware, whose appearance is dated to the later seventh century, and has been dated to the late seventh and early eighth centuries (Loveluck 2001: 85; Loveluck and Atkinson 2007). This phase involves four superimposed buildings on two plots, ranging between 9 and 11 m

long by 5 to 6.5 in width (Loveluck 2001: 83; Loveluck and Atkinson 2007). In the late seventh and eighth centuries the settlement expanded, and new buildings were erected on a slightly different alignment (Loveluck 2001: 84-85; Loveluck and Atkinson 2007). One building commonly interpreted as a 'chapel' belongs to this phase as well (Loveluck 2001: 86; Loveluck and Atkinson 2007). This is a rectangular structure, and measures 13.6 x 6.2 m. It has a dry stone and cobble foundation, similar to other contemporary buildings such as the monastic buildings at Whitby, Hartlepool and Whithorn, but here the size of the buildings was smaller, and probably had a timber sill-based superstructure that was divided into two halves by an internal wall (Fenwick *et al.* 1998: 160-61; Loveluck 2007). There some graves cut into the floor of the 'chapel', with another two graves immediately to the southwest of the building. The graves were all except one juveniles aged 3-12; the exception was a woman aged 20-30 buried in close association with an infant (Geake 2007; Loveluck 2001: 86). These graves are discussed in more detail in appendix 6.1.10. The 'chapel' had a hearth in the eastern half, and a number of floor deposits throughout the building which were suggestive of domestic occupation, suggesting that either the 'chapel' was also used for domestic occupation, or that a change in function occurred at some point. The fact that some of the graves cut through the occupation deposits suggest a continued ecclesiastical use (Fenwick *et al.* 1998: 160-61). Loveluck (2001: 115-16; 2007; also see Loveluck and Atkinson 2007) has identified the buildings in this phase as typical of an aristocratic high-status centre; the church would have been part of the household.

During this first occupation phase, the settlement was supported by a mixed agricultural economy, involving sheep, cattle and pigs (Dobney *et al.* 2007; Loveluck 2001: 93). The cattle was unusually large, and may have been imported from the continent (Dobney *et al.* 2007; Loveluck 2001: 96). Iron tools and charred grains demonstrated that there was cereal growing, and lava querns were imported from Mayen in Germany (Dobney *et al.* 2007; Loveluck 2009; Ottaway 2009a; 2009c). The Trent wetlands were also exploited, and some dolphin, pilot whale and porpoise remains were found, although it is unsure whether they were beached or hunted (Dobney *et al.* 2007; Loveluck 2001: 93). There is not much evidence for craftworking and raw material production in this phase, although what there is indicates small-scale textile working, ironworking and non-ferrous metalworking, and woodworking (Loveluck 2001: 94; 2007; Loveluck and Atkinson 2009). On the other hand there is lots of evidence for regional and long-distance trade, including Low Countries or Rhenish glass, continental wheel-thrown pottery, and sceattas from Frisia, the Rhine estuary and the Low Countries (Loveluck 2001: 95; Evans and Loveluck 2009). These wide-ranging contacts are representative of the whole Humber estuary in this period; sites at Barton, Riby and Holton in Lindsey have also yielded continental pottery from in particular c. 700-800, when there was a particular active trade with the Frisians.

The next building phase was dated to the middle of the eighth to the middle of the ninth century, and yielded a number of buildings ranging between 9 and 13.5 m in length and 5.5 and 7.5 m in width, some of which seem to have had glass windows (Loveluck and Atkinson 2007). A lot of dumping occurred, containing artefacts and faunal remains (Dobney *et al.* 2007; Evans and Loveluck 2009; Loveluck 2001: 87; Loveluck and Atkinson 2007). Also in the late eighth or early ninth century, the amount and nature of regional and long distance contacts changed (Loveluck 2007). Ipswich ware began to appear, as on other sites in the Humber estuary such as Beverley and York (Young and Vince 2009). Likewise, from the mid-ninth century onwards, West Saxon pennies begin to appear, as they did at Fishergate (York), Cottam (East Yorks.), and Lindisfarne (Northumberland) (Archibald 2009; Loveluck 2001: 99). Between 800 and 850 the first *styli* and windowglass were deposited, whilst the first significant amounts of dress accessories also begin to appear (Evans and Loveluck 2009; Loveluck 2001: 100; Pestell 2009). Loveluck (2001: 116; 2007; also see Loveluck and Atkinson 2007) suggests that during this period, the site may have had a central-place function, possibly even a minster (indicated by the window glass), with a population heavily involved in craft production.

During this second phase, some major changes in animal husbandry occurred, involving an initial increase in cattle at the expense of sheep and pigs; the majority of cattle were adults or sub-adults, and it is suggested that they were provisioned through a non-local livestock, such as linked estate holdings (Dobney *et al.* 2007; Loveluck 2001: 96). Exploitation of the natural resources continued. In the early ninth century, however, cattle bones dropped to no more than 10% of the assemblage, whilst sheep climb up to some 60% (Dobney *et al.* 2007). Exploitation of the Trent wetlands also plummeted (Dobney *et al.* 2007). There is better evidence for craft working, however; with increased amounts of textile, iron and non-ferrous metalworking, as well as domestic finds (Loveluck 2001: 97; Wastling *et al.* 2009). Lead, copper and zinc is now also worked (Wastling *et al.* 2009), and more wood-, leather-, and metalworking tools are found, suggestive of an increase in specialist commodity production (Loveluck 2001: 98; 2007). The majority of the evidence is related to textile production, with over 200 loomweights, which became lighter in the course

of the ninth century, possibly because the cloth became finer (Walton Rogers 2009). Evidence for potential industrial zoning of the various stages in the process can be seen in the distribution of the weights and hackle teeth (teeth of a comb used for separating fibres) on the site itself. It seems that the increase in sheep bones may well be linked to this industry (Loveluck 2001: 99; 2007).

Between the mid- and late ninth century, another change occurred, and the organised layout of the building plots was abandoned in favour of lots of smaller buildings, less than 10 x 6 m, with post-hole foundations (Loveluck 2001: 88; Loveluck and Atkinson 2007). Between the early and mid tenth century these small buildings, ovens and possible granaries were completely demolished, and a number of really large buildings were built (Loveluck 2001: 89; Loveluck and Atkinson 2007). One of these was an exceptionally large hall at 19.7 x 6.5 m, with continuous trench foundations and regularly placed limestone post-settings, dated to the late ninth century (Loveluck 2001: 90; Loveluck and Atkinson 2007). The character of foundations and size has parallels in 'Building A' from West Cotton (Yorks.), Raunds (Northamptonshire), North Elmham (Norfolk), and Wicken Bonhunt (Essex) (Loveluck 1997: 8). Further comparison with other known middle Anglo-Saxon sites in North Lincolnshire, such as Riby and Holton le Clay, suggest that Lindsey was incredibly wealthy, probably as a result of its profitable location in relation to the Humber and the Trent trade routes (Loveluck 1997: 8; 2007).

In the late ninth or early tenth century, the nature of craft-working and trade activities changes again (Evans and Loveluck 2009; Loveluck 2007; Loveluck and Atkinson 2007). The scale of all industries reduces, especially because some of the evidence may be residual, as is some of the pottery or sceattas (Archibald 2009; Loveluck 2001: 100; Young and Vince 2009). An inscribed lead plaque with the names of seven individuals, both male and female, was also deposited, as well as more dress accessories (Brown and Okasha 2009; Loveluck 2001: 100), including an alphabet ring with the first 11 letters of the Latin alphabet (Brown and Okasha 2009).

In terms of animal husbandry, cattle was back on the increase (presumably as a result of the decrease in textile production), but sheep continued to predominate (Dobney *et al.* 2007). The exploitation of the wetlands gradually increased, especially in terms of wildfowl (Dobney *et al.* 2007). Trade with the continent also decreased significantly (again, the methods of deposition suggests that the few artefacts found could well have been residual). Likewise, the buildings had mostly become smaller and more ephemeral (Loveluck 2001: 101; Loveluck and Atkinson 2007). Overall, the focus of the site seems to shift towards the region, with late ninth-century TORK and mid-ninth century ELFS occurring in increasing quantities. It is possible that trading patterns along the coast were disrupted, which could have caused a general move of these kinds of specialist manufacturings to the 'proto-urban trading centres' (Loveluck 2001: 102; 2007). The finds, in particular the pottery, indicate contacts with Lincoln, but Flixborough had lost its high-status character at this stage (Loveluck 2001: 117; 2007).

The question when the site was abandoned has undergone a change as the result of post-excavation analysis. There was a decrease in artefactual evidence post-dating the late ninth century, and initially it was suggested that the site was abandoned by the early tenth century, either as a result of the Scandinavian settlement, or for environmental reasons, such as the site being buried under a sand storm (Loveluck 1997: 8; Whitwell 1991: 147). However, there is no evidence for Scandinavian influence, such as the presence of Scandinavian-style metalwork or coins (appendix 9.1.13; appendix 12), suggesting that at least initially the Scandinavian settlement did not affect Flixborough too much (Loveluck 2001: 119). In the light of the general absence of late Anglo-Saxon metalwork this is not surprising. The majority of minor topographic names in the direct area have been identified as being derived from Old Norse (Loveluck 2001: 120), but there is no evidence for a violent take-over either. West Saxon coins (probably from the London mint), including issues of Alfred the Great, continue to be found at Flixborough, even if imports from the continent ceased altogether (Archibald 2009). Loveluck (1997: 9) once suggested that there was a shift in the balance of power, or at least conspicuous consumption of artefacts, away from rural estates and towards the towns, as he believed that imported goods were known from both York and Lincoln. However, most of the supposedly 'imported' wares from Lincoln are now known to be local wares (Young *pers. comm.*; Young and Vince 2005): in general, international trade all but ceased at this time, possibly as a result of increased industrialisation and craft production in emerging settlements like Lincoln.

It is now argued that in the course of the tenth century, the settlement shifted eastwards, towards the limestone escarpment, the deserted medieval village of North Conesby, and the church of All Saints, as it seems that between the mid-tenth and early eleventh century the whole previously occupied area was a refuse dumping zone (Loveluck 2001: 90; Loveluck and Atkinson 2007: 97-104). These dumping layers include large quantities of animal bone and pottery, including TORK and TORKT, LFS, and LSLOC, which

are suggestive of conspicuous consumption (Loveluck 2001: 102; Young and Vince 2009). There is, however, no decorated metalwork (Evans and Loveluck 2009), but if the site was intended for garbage disposal one would not find many dress accessories, as these would usually get recycled rather than rejected (chapter 5). The sea was once more exploited too, as was the case in the seventh and eighth centuries, and small-scale textile-, wood- and ironworking also continued (Dobney *et al.* 2007; Evand and Loveluck 2009). The bones of a black rat found in a pit possibly indicate links with York, the only other recorded findspot of black rat bones in this period (Dobney *et al.* 2007; Loveluck 2001: 103). Loveluck (2001: 90; also see Loveluck and Atkinson 2007: ch. 7) argues that the driving force behind this settlement shift was the Church, as it was also during this period that the first stone churches were built in Lincolnshire (chapter 3). It is possible that an Anglo-Saxon church underlies the foundations of the current church of All Saints, and the construction in stone would have required a harder ground (limestone) than the windblown sands underlying the earlier settlement focus (Loveluck 2001: 90; Loveluck and Atkinson 2007: ch. 7).

Coin-finds from the late Anglo-Saxon period were extremely rare, with the exception of some ninth-century West Saxon coins (appendix 9.1.13). Instead, the tenth-century layers yielded many lead weights, suggesting that perhaps a bullion economy was in place (Loveluck 2001: 103; Wastling 2009), a suggestion furthermore strengthened by the discovery of a silver ingot (Rogers 2009d). The only tenth century coinage is a Edward the Martyr penny from the 970s, possibly from the Lincoln mint (Archibald 2009; Loveluck 2001: 104). Loveluck (2001: 117; 2007) interprets this phase as the emergence of an Anglo-Scandinavian manor site (Conesby, after all, means 'the King's manor'). Loveluck (2001: 117) suggests that the lack of manufacturing evidence "may reflect a change in the relationship between urban and rural centres during the tenth century" and that "towns such as Lincoln and York appear to have acted as regional central places for their rural hinterlands, in a way that middle Anglo-Saxon emporia or *wics* had not". The evidence for weights and other metal artefacts is summarised in appendices 9.5.8.1; 12.5.3.5.1; 12.2.1; 12.4.1; 12.3.1; 12.9.1; 12.12.7.1; 12.12.6.1; 12.1; 12.6.2.1; 12.10.5.1; 12.12.5.1; 12.7.1; 12.12.2.1; 12.10.1.1; 12.12.4.1; 12.12.3.1; and 12.11.1.

In addition to the excavated remains, the *NLPTS* database records the presence of pottery of type AS and ESAX at Grangebeck North, Flixborough, and MAX and TORK at the old Church, Flixborough. Finally, the *NLPTS* database also records the presence of pottery of type LKT at Flixborough. Some surface finds of coins were also made. They are summarised in appendix 9.1.13.

2.2.16: Little Conesby

The *NLPTS* database records the presence of pottery of type MAX at Little Conesby deserted medieval village. Also see notes under West Halton, Flixborough and Great Conesby.

2.2.17: Sawcliffe

The *NLPTS* database also records the presence of pottery of type LSH, TORKT, LFS and ST at Sawcliffe, Roxby cum Risby.

2.2.18: Risby

The *NLPTS* database records the presence of pottery of type LSH, EST, LKT, LFS and ST at High Risby, parish of Roxby cum Risby, Manly. The *NLPTS* database also records the presence of pottery of type LSH at Low Risby deserted medieval village. Also found in High Risby is *PAS* NLM-F3CFD5, an eighth- to ninth-century copper-alloy pin with a globular head (appendix 12.1.1.1). For additional metalwork and coin finds, see notes under Roxby (appendix 2.2.13).

2.2.19: Appleby

The *NLPTS* database records the presence of pottery of type LSLOC at Thornholme Priory, Appleby, Manly. In addition, a number of metal artefacts were found in the parish of Appleby, including a silver-gilt pin (SWYOR-72ABC5; appendix 12.1.5.1), a strap-end (SWYOR-7C4718; appendix 12.2.1) and a possible piece of hackmetal (SWYOR-8EAC71; appendix 12.12.7.1).

2.2.20: Santon

Metal detecting activities at the deserted medieval village of Low Santon have produced the following middle to late Anglo-saxon artefacts: two pins with biconical heads (SWYOR-A98A70 and SWYOR-A8C0F5; appendix 12.1.1.1); a pin with polyhedral head (SWYOR-E9DBC4; appendix 12.1.2.1); a strap-end (SWYOR-7DF7B5; appendix 12.2.1); and a copper-alloy buckle (SWYOR- AC86A7; appendix 12.3.1).

2.2.21: Crosby

The *NLPTS* database records the presence of pottery of type AS at Crosby Warren (Manley). Also see notes under West Halton.

2.2.22: Scunthorpe

A single Two Line coin of Eadwig's reign (946-55) has been found at Scunthorpe (appendix 9.1.32). Part of an annular loom weight was also found here at SE 9039 1002 in 1969, which should probably be dated to the earlier Anglo-Saxon period (Wilson 1970: 11). Metalwork finds include a ninth- to eleventh-century copper-alloy racquet-headed pin (YORYMB25; appendix 12.1.3.1) and a copper-alloy D-shaped buckle and incomplete buckle plate (YORYMB20; appendix 12.3.1).

2.2.23: Brumby

The *NLPTS* database records the presence of pottery of type MAX at Brumby, Manley.

2.2.24: Ashby

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.2.25: Yaddlethorpe

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.2.26: Bottesford

Prior to housing development at Baldwin Avenue in Bottesford, a geophysical survey was carried out, followed by the excavation of several trial trenches in 1997. A large east-west aligned ditch, measuring 5.5 x 6 m across and 1.3 m in depth, was identified as being of possible tenth-century origin but clearly re-cut in medieval times. It revealed evidence for nearby agricultural activities as well as animal husbandry and butchering, metalworking (smithing) and textile production. On the basis of the evidence for craft-working and industrial activities, it was stated that "the site was more complex than a domestic settlement" (Hale 1998: 2, 9). The pottery retrieved from its uppermost fill consisted of no more than three sherds, two of which were un-diagnostic, and the third of which was a rim-sherd of a late ninth- to tenth-century cooking pot with shell temper, similar to Thetford ware (Hale 1998: 8). The late ninth- to tenth-century rim-sherd was believed to be residual, and the site was identified as medieval (Hale 1998: 9). The lower fills yielded no datable finds (Hale 1998: 12).

Several years later, the initial dating of the site came under scrutiny when a watching brief was carried out during the actual construction works, between 1998 and 2000. A desk-based assessment in preparation for the actual watching brief concluded that the potential for Anglo-Saxon archaeology was high. In the vicinity of the present site, the thirteenth-century church of St Peter at Vincula incorporates two Anglo-Saxon sundials, and to the north of the church, Anglo-Saxon pottery had been found, as well as some Anglo-Saxon brooches, whilst cremation urns had been found elsewhere in the parish (Morris and Holmes 2002: 1; Tibbles 2001: 2). During the ground works itself, investigations by the Humber Field Archaeology unit confirmed the presence of the ditch, but assigned it a mid to late Anglo-Saxon date, and revealed the presence of three other features containing Anglo-Saxon pottery to its east (Tibbles 2001: 1).

Time restraints dictated that only one of the four features that were encountered could be excavated. It was decided to focus on the ditch. The finds recovered included pottery (ELFS and MAX), daub and lava quern, all of mid to late Anglo-Saxon date (Tibbles 2001: 6; Young 2001d). They were interpreted as evidence for the presence of structures or potentially kilns in the immediate vicinity (Tibbles 2001: 6). In addition to the pottery from the ditch, some additional sherds of ELFS, MAX and IPS were found elsewhere on the site (Young 2001d). It was furthermore suggested that the ditch represented an enclosure around the present site of the church of St Peter at Vincula, and that this ditch remained in use until at least the eighth or ninth centuries (Tibbles 2001: 7). The majority of material was either assigned a middle Anglo-Saxon date (eighth- to ninth-century), or a Norman or medieval date. There was only a very small amount of pottery dated to the late ninth and tenth centuries, consisting of one sherd of LSH (Tibbles 2001: 13-18; Young 2001d).

In January and February 2001, Pre-Construct Archaeology carried out further investigations in the area (Taylor-Wilson and Telford 2002). Seven trenches were opened. The most significant feature was the same large east-west aligned boundary ditch, which occurred in trenches 3-5, and was thought to define a settlement core around the church. The ditch contained eighth- to tenth-century pottery, possibly produced locally, as waste material suggestive of pottery production was also found in the ditch, including some abraded wasters of MAX (Taylor-Wilson and Telford 2002: 1, 23, 29; see below). Some iron objects, including a needle, were found as well, but most significantly were three lead tanks

from the ditch in trench 3, similar to the ones found at Flixborough, the highest concentration of such finds ever retrieved during a controlled excavation (Morris and Holmes 2002: 2; Taylor-Wilson and Telford 2002: 1). The ditch had three main fills. The material from the two lower ditch fills was entirely eighth-century in date. The upper fill, dated to the ninth or tenth centuries, mainly contained eighth-century MAX and IPS, and some ninth-century wares (Young 2002a: 31).

The pottery assemblage retrieved in the 2001 season was particularly interesting, because the assemblage of MAX (some 84 vessels) mostly belonged to different varieties in fabric type (fabric U, mostly found in York and North Lincolnshire, and fabric A; Young 2002a: 29), but no examples of fabric B, which is most common throughout the rest of Lincolnshire. It also included six vessels that were broken during the firing process, leading Young (2002a: 29) to tentatively suggest this may be a production site for one of the varieties of MAX, even if the pottery was all abraded, suggestive of secondary or tertiary deposition (Young 2002a: 28). In addition to IPS, some pottery described as late Anglo-Saxon shell-tempered wheel-thrown pottery was found, as well as one sherd of TORK and a single fine-shelled handmade sherd dated to the late Anglo-Saxon period (Young 2002a: 30). The majority of late Anglo-Saxon pottery came from a single context (Young 2002a: 30).

Although the 2001 investigations revealed no structural remains indicative of domestic activity, the boundary ditch was massive, and re-cut several times, which suggests it was of prolonged significance. It seems to have been cut in the eighth century, although the excavators suggested that that the site was occupied already in the Romano-British period, and continuously since, until the ditch merely formalised the settlement boundary (Taylor-Wilson and Telford 2002: 1, 23). The ditch was not abandoned until after the late ninth century at the earliest (Taylor-Wilson and Telford 2002: 23). It was suggested that the site was finally abandoned in the tenth century (Taylor-Wilson and Telford 2002: 1).

In May 2002, another archaeological evaluation was carried out along Baldwin Avenue, just to the south of the church of St Peter ad Vincula, involving the excavation of six trial trenches. Archaeologists of Northamptonshire Archaeology revealed three ditches in trench 5, all of middle to late Anglo-Saxon date. Two were parallel on an east-west alignment, and the third was a north south oriented ditch that appeared to join the northernmost of the two parallel ditches (Morris and Holmes 2002: 1; *North Lincolnshire SMR records*). The ditches varied in width between 0.65 m and 1.4 m; their depth ranged between 0.15 m and 0.28 m (*North Lincolnshire SMR records*). The majority of the pottery found during the evaluation was of Middle to late Anglo-Saxon date. The assemblage from the ditches consisted of IPS (2 sherds), MAX (2 sherds) and TORK (4 sherds) (Morris and Holmes 2002: 6-7; *North Lincolnshire SMR records*). One of the fills (41) of ditch [40] contained both MAX and TORK, as did fill (43) of ditch terminal/cut [42] (Morris and Holmes 2002: 6-7).

On the whole the site seems to have been sparsely occupied. No structural features indicative of domestic activity were identified (Morris and Holmes 2002: 11). It was suggested that this site was peripheral to the settlement nearby, its low OD level, attested by the alluvial deposits, making it unsuitable for permanent occupation itself (Morris and Holmes 2002: 11).

The evaluation phase was followed in 2002 by an open area excavation and a watching brief (Carlyle *et al.* 2003). It became clear that the main period of activity on this site was indeed the middle to late Anglo-Saxon period, mainly by the same three ditches that were discovered in trench 5 during the evaluation phase. They were interpreted as shifting field or plot boundaries, or drainage ditches (Carlyle *et al.* 2003: 1).

In addition, the *NLPTS* database records the presence of pottery of type AS, MAX, IPS, LKT, LSH, LSAX and LFS at Bottesford, as well as pottery of type ESAX, found at Templar's Bathfield.

2.2.27: Manby

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.2.28: Broughton

Two pieces of tenth- to eleventh-century funerary sculpture have been recognised at Broughton (Everson and Stocker 1999: 116-17). They are discussed in more detail in appendix 4.1.6. A tenth-century ditch and a possible late Anglo-Saxon skeleton were also found at Broughton (appendix 6.1.5). An eleventh-century copper-alloy stirrup strap mount depicting a lion (NLM-339290) was also found (appendix 12.6.1.1).

2.2.29: Castlethorpe

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.2.30: Raventhorpe

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.2.31: Holme

The *NLPTS* database records the presence of pottery of type AS at Holme, Manby. A copper-alloy strap-end (NLM-519DA5) has also been found (appendix 12.2.1)

2.2.32: Messingham

At Bellevue farm in Messingham, a quantity of pottery of type ESAX was found. In the same area, to the east of Mell's farm, a fragment of an Anglo-Saxon bone comb as well as more 'Anglian' and 'Saxon' pot were found (*North Lincolnshire SMR records; NLPTS* database). In addition, the *NLPTS* database records the presence of pottery of type AS opposite Mell's Farm at Messingham, and of FE at Messingham. The *NLPTS* database also records the presence of pottery of type LSH at Holme Lane, Messingham.

2.2.33: Scawby

The *NLPTS* database records the presence of pottery of type ELFS at Mill Lane, east of the Horse paddock, at Scawby, Manley. The *NLPTS* database also records the presence of pottery of type MAX at Scawby. Metalwork finds from Scawby parish include two strap-ends (NLM-5DFD84 and NLM-BB0FF1; appendix 12.2.1); two copper-alloy stirrup-terminals (NLM-6B5572 and NLM-E0C460; appendix 12.6.1.1); a lead coin weight (NLM5766; appendix 12.11.1); and two polyhedral-headed pins (NLM-5F1932 and NLM5767; appendix 12.1.2.1).

2.2.34: Sturton

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.2.35: Manton

Records at the North Lincolnshire SMR report that at Manton Warren, some "Anglo-Saxon" or "Anglian" pottery (including at least three stamped sherds) was found. In addition, an Anglo-Saxon annular brooch was found, which is now at Lincoln Museum (acc. no. 35/50), as well as a fragment of an Anglian loom-weight. It was suggested that the pottery was related to a nearby cremation cemetery (*North Lincolnshire SMR records*).

Fieldwalking at Middle Manton produced some "coarse grained black shell-gritted Anglo-Saxon fabrics", including a decorated fragment of a cremation urn, as well as some long-brooches, and evidence for metalworking activities (mostly iron) although the latter could not be dated. On the basis of the quantity of sherds, it was also suggested that a kiln might have operated here in the Anglo-Saxon period; however, no evidence for any wasters is quoted (Hatt undated). A more likely suggestion, presented as an alternative, is that it may have been a settlement site (Hatt 1982). The presence of Anglo-Saxon long-brooches suggests an early date.

North of the village of Manton, fieldwalking was carried out in 2000. Some 35 Anglo-Saxon sherds were found, including at least one rim-sherd identified as TORK, and one late Anglo-Saxon body sherd of unidentified fabric. However, the assemblage was not studied. East of Manton, more Anglo-Saxon pottery was found during fieldwalking in 2005; again, the North Lincolnshire SMR held no further information (*North Lincolnshire SMR records*).

The *NLPTS* database furthermore records the presence of pottery of type AS at Cleatham, Cleatham House Farm, and at Gilliattes Grave, Manton (Manby), and less specifically at Manton (Manby). Also found at Manton was pottery of type ELFS and ESAX, and at Gilliattes Grave pottery of type ESAX and ESAXIMP. The *NLPTS* database also records the presence of pottery of type MAX at Manton, Manley, as well as pottery of type NOTTS. Manton is the only site for which this ware has been recorded on the *NLPTS* database.

Metalwork finds from Manton parish include a *Borre*-style disc brooch (NLM402; appendix 12.5.3.1.1) and an eighth-century silver gilt disc-headed pin (NLM-028751; appendix 12.1.3.1). In addition, a group of seventh-century metal artefacts identified as grave goods were also found at Manton (appendix 6.1.13).

2.2.36: Hibaldstow

The *NLPTS* database records the presence of pottery of type LSH at Hibaldstow. Two coins were also found, including a penny of Burgred of Mercia and a cut halfpenny of Eadred (appendix 9.1.18). Metalwork finds include an eleventh-century lead alloy nummular brooch (NLM-874B54; appendix 12.5.3.5.1); a copper-alloy trefoil brooch (NLM-6AFAC0; appendix 12.5.6.1); an eleventh-century copper-alloy harness pendant (NLM-3CD626; appendix 12.6.3.1); a 'Norse' bell (NLM-872FA3; appendix 12.7.1); a copper-alloy scabbard for a dagger (NLM-876836; appendix 12.10.3.1); a copper-alloy weight or gaming piece (NLM-A824D0; appendix 12.11.1); a copper-alloy pin with polyhedral head (NLM-E1CB73; appendix 12.1.2.1); four strap-ends (NLM-5F3D53, NLM-5E6993, NLM-419320 and NLM-

BB49D3; appendix 12.2.1); and a D-shaped copper-alloy buckle (NLM–A47915; appendix 12.3.1).

2.2.37: Gainsthorpe

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.2.38: Redbourne

An unidentified sculpture fragment of eighth- to ninth-century date has been found in the church of St Andrew (appendix 4.1.26) (Everson and Stocker 1999: 240-41).

2.2.39: Waddingham

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.2.40: Stainton

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.3: Yarborough Wapentake

2.3.1: South Ferriby

DB mentions the presence of a ferry at South Ferriby (Sawyer 1998: 17). Finds dated to the Anglo-Saxon period from the area are mostly restricted to metalwork, including a brooch and a pin, although a number of inhumations have also been retrieved (Chapman *et al.* 1998: 236). Two coins of the York mint (946-73), and a single coin find of a former Danelaw mint (973-1000) were also found (appendix 9.1.33). An eleventh-century bird-brooch was also found (appendix 12.5.7.1). Finally, the *NLPTS* database records the presence of pottery of type ESAX in South Ferriby.

2.3.2: Barton-upon-Humber

Barton was the site of the sixth- to seventh-century Castledyke cemetery (TA 031 217), incorporation some 400 to 500 inhumations and cremations (*Archaeological Field Evaluation* 2007: 3; Drinkall and Foreman 1998). During investigations at Castledyke by Humberside Archaeology in 1990, a number of linear features were revealed that cut the burials. Their fills were practically devoid of any finds, but their stratigraphic position suggests they may date to the eighth to tenth centuries (Foreman 1990: 7). They probably represent either fencelines or planting beds for hedges, but no settlement remains associated with these boundary features has been found (Foreman 1990: 8). However, handmade Anglo-Saxon pottery has been found associated with a thread picker at TA 000 223, and early Anglo-Saxon pottery has been found at TA 025 215 (Wilson 1972: 10). The *NLPTS* database furthermore records the presence of pottery of type MAX (Northern Maxey-type ware, 680-870) at Castledyke south, Barton.

It has also been suggested that the monastery that St Chad founded *æt bearuwe* in the seventh century AD (Bede, *HE* IV: 3) was located at Barton (Leahy 1998: 16), even if this is not the only location that has been suggested, and no archaeological evidence has been discovered to substantiate this claim (see West Halton, Flixborough and Barrow upon Humber). Better evidence for middle and late Anglo-Saxon activity comes from the church of St Peter, less than one mile to the southeast, which still retains some of its tenth-century fabric, and is home to a relatively large number of sculptural fragments, including a possible figurative architectural panel tentatively identified as Christ in Majesty (*Barton-upon-Humber 1*) (Everson and Stocker 1999: 64). The surviving late Anglo-Saxon architectural fragments are discussed in full in appendix 4.1.3. The stone used for these architectural carvings is Millstone Grit, a type that was widely used in York in the Roman period, but not in the closer Roman settlements at Winteringham and Brough, and it is probable that they all represent re-used Roman masonry from York (Everson and Stocker 1999: 102-04). In architectural style, however, the church betrays more affinities with the south Midlands (Everson and Stocker 1999: 81).

The church was fully excavated in the 1980s (Bradley 2002: 6; Rodwell and Rodwell 1982; Tibbles and Steedman 1990: 3). It became clear that the earliest phase of activity at the site of St Peter's Church was represented by the remains of some rectilinear buildings with gravel floor surfaces, located underneath the church, which were dated to the sixth and seventh centuries, and were possibly domestic buildings associated with the Castledyke cemetery (*Archaeological Field Evaluation* 2007: 3; Gardner and Bunn 2006: 4-5; Rodwell 2007: 5). However, a different early Anglo-Saxon settlement core has also been postulated to the south of the present town (Rodwell 2007: 5). A settlement shift occurred in the ninth century, and the site of St Peter's Church became the focus of a new cemetery (Tibbles and Steedman 1990: 3; appendix 6.1.2). More evidence for this shift was discovered during recent investigations just to the south of St Mary's Works, at Pasture Road/Beck Hill, the New Vicarage site, and Birkett's Garage. The new settlement showed the first signs of a

regular, planned layout of properties and streets, which focused around the church (*Archaeological Field Evaluation* 2007: 4). Excavations at Soutergate also revealed well-stratified late Anglo-Saxon and Saxo-Norman deposits that were indicative of domestic activity, and at Anglo-Saxon Close, a quantity of tenth- and eleventh-century pottery was found (*Archaeological Field Evaluation* 2007: 4).

At the site of the church of St Peter, an originally Anglo-Saxon ditch, marking the western side of an enclosure, was identified (appendix 6.1.2). Excavations showed that the enclosure ditch was originally c. 5 m wide and 2.5 m deep, demarcated an area of c. 4 ha, and had a timber palisade and internal bank. Its eighth- to ninth-century date, and the possibility that the medieval Tyrwhitt Hall, located in the centre of this enclosure, was the successor to an earlier hall, has led to the suggestion that it was either the defensive ditch of an Anglo-Saxon or Scandinavian *burh*, a defended manorial site, or an early monastic foundation (Bradley 2000: 5; Gardner and Bunn 2006: 4; Rodwell 2007: 6). The interpretation of the site as a manorial centre is the most favoured one amongst local archaeologists. In that context, the existence of an associated church has been postulated as well. This church, for which there is no evidence, would have been a precursor to the church of St Peter, which was built in the tenth century just outside the enclosure, on top of the late Anglo-Saxon or early Norman graveyard, which was partially cleared for its construction (Bradley 2002: 6; Rodwell 2007: Tibbles and Steedman 1990: 3) (for a discussion of the skeletal evidence, see appendix 6.1.2). In this scenario, the church of St Peter was probably a secular aristocratic thegnal church (Bradley 2000: 28), and the enclosure the forerunner of the manorial centre and estate centre, as recorded in *DB* (Bradley 2002: 24). Excavations during the construction of the Anglo-Saxon Close housing estate revealed that there was activity from at least the eleventh and twelfth centuries within the enclosure (Bradley 2000: 5).

In the northernmost part of the site, at the Vicarage, three phases of activity were identified. They consisted mainly of slots, gullies and postholes, and were identified as the remains of Anglo-Saxon buildings. In the southern part of the site, there was a structural sequence whose earliest features were postholes, some of which were associated with early and middle Anglo-Saxon and Roman pottery (Greenhalf 1981a; 1981b). In addition, a number of parallel ditches containing ninth to tenth-century shell-gritted wares were identified. A hearth was found associated with a concentration of linear features, indicating the presence of a building. No material post-dating the eleventh century was found (Greenhalf 1981a; 1981b). Amongst the pottery found at the New Vicarage Site was CHARN. Similar pottery was also retrieved at Poor Farm, Barton Upon Humber. These are the only two sites for which the *NLPTS* database records this fabric type. The New Vicarage site also produced pottery of type ESAX. More pottery of this type was found elsewhere in Barton, including Tyrwhitt Hall, East Acridge and 33 Norman Close. Poor Farm was furthermore the site of some ESAXLOC.

More significant investigations took place in 1999, along Barrow Road (Bradley 2000: 5). In October and November 1999, prior to the erection of a single bungalow at 91 Barrow Road, which lay within the centre of the medieval town, close to St Peter's Church, two trenches were dug, and a number of tenth-century archaeological features were excavated (Bradley 2000: 4). The limited finds indicate trading links with both York and Lincoln, while fragments of imported lava quern suggest contact with the continent (Bradley 2000: 4). The remains from this site comprise the most important late Anglo-Saxon and Saxo-Norman settlement evidence excavated in Barton to date (Bradley 2000: 4, 27-28).

In the middle of trench 1 was a single posthole, sealed by a possible northwest-southeast aligned trackway, whose location coincided with that of the eastern road into the enclosure to the north, which had been partially excavated during investigations at the tenth-century church of St Peter (Bradley 2000: 4, 8, 27; see above). The fact that the trackway was sealed by contexts that contained tenth- to eleventh-century pottery suggests that this trackway and the enclosure underneath St Peter's Church were of middle Anglo-Saxon date (Bradley 2000: 27). A possible sunken-featured building was also identified, which measured 2.1 m x 1.1 m, with a depth of 0.45 m, and contained pottery of tenth- to eleventh-century date (1 sherd of TORK), as well as residual early to middle Anglo-Saxon pottery (1 sherd of SST and 1 sherd of ECHAF) (Bradley 2000: 8; Didsbury 2000: 16). The second phase from trench 1 was dated to the eleventh century, and represented a period of building construction, identified by postholes and beamslots. The thirteen sherds of pottery associated with this period were dated to the eleventh to twelfth centuries, with the exception of a single residual prehistoric sherd (Bradley 2000: 8; Didsbury 2000: 16). Fabric types included STCW, UGRIT and SHELL (Bradley 2000: 8; Didsbury 2000: 16). It was suggested that the pottery from this phase was deposited during demolition rather than construction (Bradley 2000: 9).

In trench 2, the tenth century was represented by a pit (1023), which contained no artefacts, and a substantial east-west aligned ditch (2019), which was interpreted as a

settlement boundary, possibly for the activity identified in trench 1 (Bradley 2000: 10-11). Its fill (2020) contained 2 sherds of LSH (Bradley 2000: 11). In the eleventh century, a period of building activity occurred. The settlement now seems to have expanded over the top of the boundary ditch, with at least two substantial buildings in existence, but no dating evidence was recovered from any of the features (Bradley 2000: 11-12).

In 2002, the evaluation at Barrow Road was followed by an open area excavation by Humber Archaeology, which revealed more extensive evidence of a ninth- to eleventh-century settlement, including a ninth- to tenth-century granary, as well as evidence for late tenth-century ironworking in the form of slag, hammerscale, and burnt or fired clay (Bradley 2002: 5; Gardner and Bunn 2006: 5). Several more structures could be identified, some of which contained evidence for food processing, suggestive of domestic occupation (Bradley 2002: 20). As on many sites from this period, the excavated structures revealed a variety of building techniques, including post-built, continuous foundation, post-trench and possibly sunken-featured (Bradley 2002: 22). Some possible animal pens and a pathway were also excavated (Bradley 2002: 20). Unfortunately the assignment of features to phase 1, the late ninth to tenth centuries, proved very problematic, mainly because of a lack of closely dated finds assemblages and the high frequency of residual wares (Bradley 2002: 20). However, on the basis of the alignment of the linear features, which corresponded to the entranceway into the eighth- to ninth-century enclosure that ran underneath the church of St Peter, it was suggested that they were of late Anglo-Saxon date (Bradley 2002: 20). It is possible that this particular site was one of several satellite sites that had clustered around the enclosure at St Peter's Church, which seems to have still been in use in the late ninth to early tenth centuries (Bradley 2002: 20-21). Bradley (2002: 23) has stated that there is little reason to assume that there was the same degree of internal organisation for the earlier phases of the settlement as on high-status sites, such as Flixborough. The buildings all respected the entrance way into the enclosure, but otherwise the settlement was fairly dispersed (Bradley 2002: 23).

By the mid-tenth century, the character of the site changed, and the earlier structures were replaced by a rectilinear enclosure with an internal width of c. 23m, on a different alignment to the trackway leading into the enclosure at St Peter's Church (Bradley 2002: 15, 21). It was concluded that the east-west aligned ditch (2019) from trench 2 from the 1999 evaluation was part of this enclosure as well. The ditch identified during the 2002 excavation was a north-south aligned stretch of the same enclosure, and again yielded some ninth- to tenth-century pottery. The only material that came from *inside* this enclosure, however, was a single charred barley grain. No structures were found inside, but as only a third of it was revealed this is not necessarily representative of the archaeological reality (Bradley 2002: 21), and Bradley (2002: 24) has interpreted the construction of this enclosure as an example of "authoritative planning".

By the end of the tenth century, another change occurred. The rectangular enclosure ditch was deliberately backfilled, and was cut by yet another boundary ditch on a different alignment again. Iron smithing now seems to have taken place as well, and in addition to the slag, hammerscale, and fragments of burnt or fired clay, several tuyere fragments were also retrieved from a possible beamslot that was dated to the same period (Bradley 2002: 21). In the eleventh century, the settlement seems to have shifted westwards, and become more concentrated (Bradley 2002: 21, 23).

Other sites in Barton also yielded evidence for late Anglo-Saxon activity. In 2007 an archaeological evaluation was undertaken at St Mary's Works, Marsh Lane (NGR TA 0337 2214). Thirteen trenches were excavated. In trench 5, an undated made ground surface was identified with a series of pits cutting into it, some of which contained late ninth- to tenth-century pottery (*Archaeological Field Evaluation* 2007: 10-11). Trench 4 revealed evidence of an eleventh-century stone-built wall with associated floor surface, and an eleventh-century pit (*Archaeological Field Evaluation* 2007: 8). From the site, a total of five late Anglo-Saxon sherds were found, including two sherds of the late ninth- or tenth-century fabric LSH (possibly from the same vessel), as well as one sherd of ninth- to eleventh-century TORC and 2 sherds of tenth- to twelfth-century LFS (Young 2007).

In 1982, a new culvert of c. 270 m length was installed along Pasture Road and Beck Hill, Barton upon Humber. Apparently the majority of deposits were natural, boulder clay, drift deposits and alluvial deposits. However, some archaeological features were identified too. One of the features may be an early road, containing an animal longbone with butchery marks, and a faced wall, as well as a possible occupation surface. These features all occurred on a stretch that was closest to the partially man-made mound that holds St Peter's Church, and their location may suggest an early date although no positive evidence was found to support this claim (Hatt 1982).

In 1990, Humberside Archaeology undertook an archaeological evaluation at Birkett's Garage (Tibbles and Steedman 1990). Three trenches were dug. Trench A revealed a made-up ground, to level the surface, with a number of pits and one or two shallow gullies cut into

it. The pottery broadly ranged between the sixth and twelfth centuries (Tibbles and Steedman 1990: 4). The other two trenches revealed evidence for occupation as well, but none yielded any positive dating material (Tibbles and Steedman 1990: 8). Trench B was largely machine excavated, and the earliest features were only recorded in section. No dating evidence was retrieved from them, but on the similarities of fill and profile with other ditches that did contain Anglo-Saxon pottery, discovered during other excavations in the vicinity such as those at the Vicarage site in 1981, it was suggested they could be Anglo-Saxon in date (Tibbles and Steedman 1990: 5-6). It was suggested that settlement occurred here from the late Anglo-Saxon period, albeit not very intensively (Tibbles and Steedman 1990: 8). No more detailed information was available in the report.

Finally, a geophys survey and desk-based assessment elsewhere along Barrow Road further removed from the present settlement (Gardner and Bunn 2006) suggested that this area, just to the east of the present settlement and west of Cornhill Farm, south of the road, had always been mostly agricultural in use, and is therefore low in potential archaeologically (Gardner and Bunn 2006: 1).

The *NLPTS* database also records the presence of pottery of type SSTMG, SST, MAX, LKT, LSH, LSLOC, NLLSG, TORC, TORKT, STCRUC and LFS at Barton. The *NLPTS* database also records the presence of pottery of type YW. *DB* furthermore mentions the existence of a ferry at Barton-upon-Humber (Sawyer 1998: 17). A single West Saxon *Lunette* coin and a single coin of the York mint, struck under Edgar, were also found, as well as a single Abbasid dirham (appendix 9.1.5). Other metalwork finds included two pins (YORYM1512 and NLM-E1F121) (appendix 12.1.1.1; 12.1.3.1); two strap-ends (NLM-BD5082 and NLM-027CB5; appendix 12.2.1); a buckle (NLM-9739C0; appendix 12.3.1); and a hooked tag (NLM-363911; appendix 12.4.1).

2.3.3: Barrow on Humber

Traditionally, this site was believed to be the site of Chad's monastery *æt bearuwe*, founded in 669, as referred to by Bede (IV: 3), which was supposedly destroyed during the Scandinavian raids in c. 870 and never rebuilt. This identification of the village of Barrow with the passage from Bede was reinforced by several nineteenth- and early twentieth-century reports that talked about skeletons, a stone coffin, gold rings and an iron weapon, although no date was ever assigned to these finds (*North Lincolnshire SMR records*; appendix 6.1.1). Subsequently, the excavation of the tenth-century foundations at the site known as St Chad's site revealed an apsidal-ended church with associated tenth-century burials on an east-west alignment, and confirmed that this was an ecclesiastical site during the late Anglo-Saxon period, although no evidence for the middle Anglo-Saxon period was identified (Boden and Whitwell 1979; also see Webster and Cherry 1977: 225). See appendix 6.1.1. A single West Saxon *Lunette* coin, and a single Mercian *Lunette* coin have also both been found associated with the burials (appendix 9.1.4). More recently, doubt has therefore been cast on the assumption that Chad's monastery was located at Barrow (Everson 1984; Stocker 1993). Alternatively, it has been suggested that the apsidal-ended building was a non-monastic secular parish church (Johnson 1997b: 4). No sculptural fragments have been recovered from Barrow (Everson and Stocker 1999: 71).

Other archaeological discoveries consisted mainly of unstratified finds. In 1968, a local farmer found some pottery in one of his enclosures in the West Marsh (TA 063 222), which included one Saxo-Norman grey rim (Whitwell and Wilson 1969: 111). At TA 081 199 a glass bead of Anglo-Saxon date was discovered (Wilson 1971: 11). In addition, the *NLPTS* database records the presence of pottery of type LKT and LSH. The *PAS* furthermore reports the discovery of a copper-alloy zoomorphic strap-end (YORYM1507) (appendix 12.2.1).

In 1997, YAT dug three trenches in Barton Street in Barrow prior to housing development, which yielded some tentative evidence for settlement activity. The findings included a pit of possible late Anglo-Saxon date, as well as two ditches and two slots of similar date (Johnson 1997b: 2). The wares types included 'shelly ware' of tenth- to eleventh-century date, a possible Torksey-type ware sherd, and coil-built shelly ware of tenth- to eleventh-century date (Johnson 1997b: 17). Interestingly, the linear features were on the same alignment as the modern property boundaries (Johnson 1997b: 21).

2.3.4: Goxhill

At Goxhill, on a site in the salt marshes that was ploughed for several years (TA 118 241), some late Anglo-Saxon 'gritty ware' has been found, as well as a Stamford ware rim (Whitwell and Wilson 1969: 105, 111). On another site close to the church (TA 104 211), more late Anglo-Saxon 'gritty grey ware' was found together with a quantity of medieval wares, associated with possible traces of a building (Whitwell and Wilson 1969: 116; Wilson and Hurst 1969: 278). The *NLPTS* database also records the presence of pottery of type ESAX, MAX, LKT, LSH, LSLOC, NLLSG, TORC, LFS and ST. In addition, the *NLPTS* database records the presence of pottery of type ELFS at the Quebec brickyard at Goxhill.

2.3.5: Horkstow

The *NLPTS* database records the presence of pottery of type AS and TORK at Horkstow.

2.3.6: Saxby All Saints

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.3.7: Burnham

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.3.8: Thornton Curtis

At Thornton Curtis, some "Anglo-Saxon" pottery has been found (Laughlin and Miller 1979). Excavations at the deserted medieval village revealed that the church had a tenth-century origin. An infant burial was found inside (appendix 6.1.23). Finally, the sculptural fragment *Thornton Curtis 1* may be a piece of re-used Roman masonry from York (appendix 4.1.33) (Everson and Stocker 1999: 265).

2.3.9: East Halton

In 1971, a single Anglo-Saxon rim was reportedly found in East Halton (TA 135 193) (Wilson 1972: 10). The *NLPTS* database also records the presence of pottery of type LFS, LKT), and LSAX.

2.3.10: Lobingeham

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.3.11: Killingholme

The *NLPTS* database records the presence of pottery of type ELFS, EST, LKT and MAX at North Killingholme, Yarborough. The *NLPTS* database also records the presence of pottery of type NLLSG at Holton deserted medieval village, North Killingholme, Yarborough.

2.3.12: Bonby

The parish of Bonby in North Lincolnshire yielded only surface finds. These included a fragment of a copper-alloy disc brooch (NLM-1DDC81) (appendix 12.5.3.1.1), a copper-alloy strap distributor for a horse's harness (NLM-EB0C03) (appendix 12.6.2.1), and an eighth- to tenth-century strap-end (WMID-5CD146) (appendix 12.2.1). A single specimen of the St Edmund's coinage was also found in Bonby (appendix 9.1.8).

2.3.13: Worlaby

The *NLPTS* database records the presence of pottery of type MAX and LFS at Worlaby, Yarborough, and pottery of type LKT, LSAX, and TORK at the Old Hall in Worlaby. Metalwork finds included two strap-ends (NLM631 and NLM630) (appendix 12.2.1), as well as an eighth-century gilt copper-alloy pendant with interlace-decoration (NLM632) (appendix 9.8.1), and two pins (NLM629 and NLM628) (appendix 9.1.1.1).

2.3.14: Elsham

Elsham Wold is the location of a major inhumation and cremation cemetery of the fifth to seventh centuries, excavated in the 1970s (Everson and Stocker 1999: 9). In addition, the *NLPTS* database records the presence of pottery of type ESAX, SST, MAX, IPS, TORK, TORKT and LFS. No LKT was found. The parish of Elsham furthermore produced a significant metalwork assemblage, including three hooked tags (NLM2899, which refers to two examples, and NLM18) (appendix 12.4.1); two ansate brooches (NLM-7AD765 and NLM14) (appendix 9.5.1.1); a copper-alloy lozenge-shaped brooch (NLM194) (appendix 12.5.2.1); a cloisonné brooch (NLM398) (appendix 12.5.3.4.1); two lead-alloy domed disc brooches (NLM395 and NLM396) (appendices 12.5.4.3.1 and 12.5.4.4.1); a circular pendant (NLM2720) (appendix 12.8.1); a Romanesque swivel fitting (NLM2881) and an eighth-century copper-alloy gilt circular mount (NLM21) (appendix 12.12.1.1); a pair of copper alloy tweezers with broad, splayed terminals (NLM198) (appendix 12.12.6.1); eleven pins (NLM25, NLM26, NLM2882, NLM2919, NLM4234, NLM4919, NLM2918, NLM4233, NLM4920, NLM4918 and NLM4235) (appendices 12.1.1.1 and 12.1.3.1); and four strap-ends (NLM2897; NLM197; NLM400 and NLM399) (appendix 12.2.1). Finally, some skeletons that were tentatively assigned a late Anglo-Saxon date were discovered in 1958, at TA03741314 (appendix 6.1.7).

2.3.15: Wootton

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.3.16: Ulceby

The parish of Ulceby with Fordington in East Lindsey produced a copper-alloy croissant-shaped sword pommel of tenth to eleventh-century date (SWYOR-FAF477) (appendix 12.10.2.1).

2.3.17: Habrough

The placename of Habrough is believed to derive from ON *Haborg*, meaning "the high fort", and it is recorded in *DB* as the location of two manors (Evans 1991: 4). Archaeological investigations by Humberside Archaeology, in July and August 1991, on the eastern side of the village of Habrough, prior to the construction of a pipeline, revealed tenth-century pottery underneath the platform on which a medieval moated site was built (Evans 1991: 3, 9). Excavations consisted of a 57 m long and 2 m wide machine-dug trench through the platform and enclosure ditch, an open area of 630 sq m on top of the platform, and a hand-cut section across the enclosure ditch (Evans 1991: 9). No structural evidence pre-dating the platform was found, but a single tenth-century Lincoln 'shelly ware' sherd was found beneath the platform, with more tenth-century pottery in residual contexts. It was suggested, on the basis of the absence of any evidence for ridge and furrow beneath the manor, that it was built in the former crofts of late Anglo-Saxon tenements (Evans 1991: 10). However, in the absence of any positive evidence for the presence of late Anglo-Saxon tenements, this remains pure speculation.

The *NLPTS* database also records the presence of pottery of type LKT, LSH, LSLOC, TORC, TORKT, LFS and ST. In addition, the *NLPTS* database records the presence of pottery of type NLLSG and EST at Newham Farm, Habrough. Also see notes under Aylesby (Bradley Wapentake).

2.3.18: Immingham

The *NLPTS* database records the presence of pottery of type LFS at Roxton deserted medieval village, Immingham parish, Yarborough. A D-shaped buckle with two animal heads (NLM5391) was also found in the parish of Immingham (appendix 12.3.1). Also see notes under Aylesby (Bradley Wapentake).

2.3.19: Melton Ross

The *NLPTS* database records the presence of pottery of type ESAX, MAX, LKT, NLLSG, TORC, TORKT, ST and LFS from Melton Ross. The *NLPTS* database records the presence of pottery of type ESGS from the site of the council villas at Melton Ross. Surface metalwork finds from Melton Ross parish were plentiful, and included four hooked tags (NLM449, NLM931, NLM930 and NLM929) (appendix 12.4.1); an ansate brooch (NLM924) (appendix 12.5.1.1); a possible pendant (NLM922) (appendix 12.8.1); two possible mounts (NLM1 and NLM4) (appendix 12.12.1.1); two pairs of tweezers (NCL-BE2897 and NLM6) (appendix 12.12.6.1); seven pins (NLM10, NLM925, NLM926, NLM927, NLM9, NLM928 and NCL-05BEE3) (appendices 12.1.2.1 and 12.1.3.1); and eight strap-ends (NCL-91A553, NLM3, NLM2, NLM933, NLM936, NLM935, NLM934 and NLM3) (appendix 12.2.1). However, archaeological investigations prior to quarrying activity in 2000 did not reveal any structural remains that could be dated to the late Anglo-Saxon period (Hambly 2000).

2.3.20: Croxton

No archaeological evidence for late Anglo-Saxon activity has been found here to date (see Hall 2005).

2.3.21: Kirmingham

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.3.22: Newsham

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.3.23: Brocklesby

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.3.24: Coton

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.3.25: Stallingborough

Between 11 and 22 September 2006, YAT carried out an archaeological excavation at The Old Vicarage on 48 Church Lane, followed by a watching brief on 11 October, prior and during the construction of an extension to the building. During the watching brief, two ditches were encountered that contained tenth-century pottery, including local and Torksey-

type wares. It is suggested that the evidence points to a tenth-century origin of the village, focusing on the church and perhaps the manor (Hunter-Mann 2006). In addition, the *NLPTS* database records the presence of pottery of type MAX, LSH, and LFS at Stallingborough, Yarborough. The occurrence of MAX may suggest that there was already a settlement here before the tenth century. No LKT was found.

2.3.26: Wrawby

A single coin find of the Lincoln mint (973-1000) has been found here (appendix 9.1.48). In addition, the *NLPTS* database records the presence of pottery of type ESAX in Wrawby. Two strap-ends were found in Wrawby parish as well (NLM4312 and NLM4201) (appendix 12.2.1).

2.3.27: Kettleby

The settlement of Kettleby was first mentioned in a will of c. 1066 AD. According to the *DB*, by 1086 it consisted of two separate manors. A fieldwalking project carried out in the 1970s revealed a pottery sequence ranging from early Anglo-Saxon to Late Medieval (Everson *et al.* 1991: 71). The *NLPTS* database specifically records the presence of pottery of type MAX at the deserted medieval village of Kettleby, Yarborough.

2.3.28; Kettleby Thorpe

The *NLPTS* database records the presence of pottery of type LKT, LSH, LSLOC, TORK, LFS, ST and LSW at Kettleby Thorpe.

2.3.29: Barnetby le Wold

The *NLPTS* database records the presence of pottery of type AS at Barnetby le Wold, discovered during fieldwalking, as well as pottery of type ESAX, IPS and MAX. A single coin of Eric Bloodaxe, belonging to the Sword type, has also been found (appendix 9.1.3). Two ansate brooches (NLM966 and NLM965) and two strap-ends (NLM4368 and NLM134) were also found (appendices 12.5.1.1 and 12.2.1).

2.3.30: Little Limber

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.3.31: Great Limber

The *NLPTS* database records the presence of pottery of type LKT (Lincoln Kiln-Type, 850-1000) at Great Limber.

2.3.32: Keelby

The *PAS* lists four strap-ends (LIN-892960, LIN-FC5447, LIN-79D315 and LIN-79B8A2) from the parish of Keelby (appendix 12.2.1), as well as an ansate brooch fragment (LIN-FCA6F0) (appendix 12.5.1.1); an iron knife blade and tang (LIN-B8D083) (appendix 12.10.1.1); and four pins (LIN-AC7FF0; LIN-7B0374; LIN-7B49E4 and LIN-7B2BC2) (appendix 12.1.2.1). A single Northumbrian styca was also found (appendix 9.1.20).

2.3.33: Riby

Riby Cross-Roads is one of the few excavated seventh- to eighth-century settlements in Lincolnshire (Steedman 1994). The *NLPTS* database records the presence of pottery of type MAX at Riby, Yarborough, and two West Saxon *Lunette* coins have been found here, as well as a Northumbrian styca (appendix 9.1.29). One of the nuclei of the settlement at Riby, which was divided between two holdings in 1086, was associated with a church dedicated to St Edmund, the East Anglian king who had been martyred by the vikings in 869, before they dedicated a substantial coinage to him less than a generation later (Everson *et al.* 1991: 155) (chapter 4). Excavations in 1991 revealed an early to middle Anglo-Saxon settlement (Steedman 1994). In addition to pottery, finds included a significant assemblage of ironwork (including structural fitting, dress accessories (a hooked tag, four buckles and two pins), horse fittings and weapons (a spearhead and some arrowheads). Copper-alloy dress accessories included an ansate brooch and several pins. A lead vessel, similar to the examples from Flixborough, was also found, as well as a bone comb and a glass bead (Steedman 1994). The parish of Riby also yielded three ringed pins (LIN-143411, LIN-134231 and LIN-145C85), betraying contacts with the kingdom of York (appendix 12.1.4.1). Other metalwork finds included two or three mounts (LIN-4997F4, LIN-4997F4 and possibly LIN-939104) (appendices 12.6.2.1 and 12.12.1.1) and a fragment from an unidentified object (LIN-B8AA32) (appendix 12.12.7.1). Also see notes under Aylesby (Bradley Wapentake).

2.3.34: Bigby

The *NLPTS* database records the presence of pottery of type LSLOC at Bigby, Yarborough. The *PAS* furthermore reports the discovery of an eleventh-century copper-alloy openwork mount decorated in *Urnes* style (NLM-D9AC57) (appendix 12.12.1.1).

2.3.35: Somerby

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.3.36: Searby

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.3.37: Grasby

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.3.38: Clixby

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.3.39: Cadney

The *NLPTS* database records the presence of pottery of type LFS at Cadney.

2.3.40: North Kelsey

In 1995, a possible late Anglo-Saxon inhumation cemetery was uncovered at North Kelsey (appendix 6.1.14).

2.3.41: Howsham

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.3.42: Owmbly

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.3.43: Audleby

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.3.44: Fonaby

Fonaby is the location of a major inhumation and cremation cemetery of the fifth to seventh centuries (Everson and Stocker 1999: 9). In addition, the *NLPTS* database records the presence of pottery of type AS at Fonaby.

2.3.45: Hundon

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.3.46: Caistor

Originally Caistor was a Roman fortified site, which enclosed about seven or eight acres of land (Whitwell 1992: 69). No Roman cemeteries have been found in its vicinity, but in 1972, Everson excavated a single probably female burial of Anglo-Saxon date, with a string of beads, an annular brooch at either shoulder, and a knife and iron ring at the hip in a garden in Nettleton Road (Marjoram 1973: 41). It turned out that an early Anglo-Saxon cemetery was located on the road south to Nettleton, and another one to the north at Hundon (Whitwell 1999: 70-72). Blair (2005: 150) has suggested that Caistor was a middle Anglo-Saxon minster church. This suggestion may be confirmed by the presence of an eighth- to ninth-century architectural panel from Caistor (appendix 4.1.7) (Everson and Stocker 1999: 124).

During excavations prior to the construction of the Grammar School boarding house (TA 115 013), a certain Mr J. E. Hill collected a large quantity of pottery, now in Lincoln Museum. The pottery included Saxo-Norman spouted and rouletted shelly ware, as well as a sherd of undeveloped Stamford ware. In addition, the *NLPTS* database records the presence of pottery of type ESAX, MAX and IPS, LSH and ST at Caistor. No LKT was found.

A silver sceatta of Eadberht of Northumbria (737-58) was also retrieved (North Lincolnshire SMR records). The parish of Caistor also produced a single West Saxon *Lunette* coin and number of late Anglo-Saxon coins. They are summarised in appendix 9.1.9. Caistor was also the location of one of the minor mints of Lincolnshire, active towards the end of the tenth century (chapter 4), but no coins of this mint have been found in Caistor itself. The metalwork assemblage from Caistor included an early medieval figurine (NLM-A243C8) (appendix 12.12.7.1); an ansate brooch (NLM-738826) (appendix 12.5.1.1); a bird brooch (NLM5638) (appendix 12.5.7.1); two pieces of equestrian equipment (NLM-72D577 and NLM794) (appendix 12.6.1.1); and a mount (NLM5272) (appendix 12.12.1.1).

2.3.47: Nettleton

At Nettleton Top, evidence for early Anglo-Saxon occupation has been excavated (Everson and Stocker 1999: 9). In addition, the *NLPTS* database records the presence of pottery of type AS and ST at Nettleton. The *NLPTS* database also records the presence of pottery of type LFS and LSH at Nettleton Beck. The metalwork assemblage from Nettleton included nineteen pins (NLM-D45061; NLM2793; NLM2794; NLM2795; NLM2796; NLM2797; NLM2798; NLM2799; NLM2813; NLM2802; NLM2801; NLM2800; NLM2792; NLM2791; NLM2788; NLM2789; NLM2790; NLM-D47A72; and NLM2803) (appendices 12.1.1.1; 12.1.2.1; 12.1.3.1; 12.1.5.1). In addition, there were six strap-ends (NLM-C222A7; NLM2805; NLM2806; NLM2807; NLM-D9ACC6; and NLM2820) (appendix 12.2.1); two hooked tags (NLM15 and NLM2804) (appendix 12.4.1); a bridle bit (NLM-D92414) (appendix 12.6.2.1); a pendant (NLM2810) (appendix 12.8.1); a sword pommel (NLM-D8B031) (appendix 12.10.2.1); and two mounts (NLM2825 and NLM-DA9534) (appendix 12.12.1.1).

2.3.48: Wykeham

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.4: Bradley Wapentake

2.4.1: Swallow

A single coin of the York mint (973-1000) has been found in this parish (appendix 9.1.36).

2.4.2: Irby upon Humber

Welbeck Hill at Irby (TA 217 042) is the location of a major inhumation and cremation cemetery of the fifth to seventh centuries (Everson and Stocker 1999: 9; Whitwell 1967: 41).

2.4.3: Laceby

Laceby 1 is an incomplete grave cover of Lindsey type (appendix 4.1.19) (Everson and Stocker 1999: 192-93). In addition, some pottery, identified by the local vicar as 'Anglo-Saxon', was found in the garden of a 1960s bungalow at the end of Cooper's Lane, but the pottery was not sent to the museum for proper identification (Whitwell and Wilson 1968: 30). The metalwork assemblage from the parish of Laceby included three pins (NLM7238, referring to two eighth-century copper-alloy bi-conical pins, and NLM7237) (appendices 12.1.1.1; 12.1.2.1); a strap-end (NLM7239) (appendix 12.2.1); two buckle fragments (NLM6733 and NLM7242) (appendix 12.3.1); a lead-alloy disc brooch (NLM6736) (appendix 12.5.3.3.1); a fragment of a penannular brooch (NLM639) (appendix 12.5.5.1); and an eleventh-century stirrup strap mount (NLM7227) (appendix 12.6.1.1).

2.4.4: Aylesby

Between May and July 1994, Humberside Archaeology Unit undertook a number of archaeological investigations prior to the construction of a new water main. The route of the pipeline passed through the parishes of Habrough, Aylesby, Immingham, Stallingbrough, Healing and Grimsby in Humberside, and Riby in Lincolnshire. Following a geophysical survey (fieldwalking was not possible due to crop cultivation), a number of test trenches were dug. These showed that there were archaeological remains south of the village of Aylesby (TA2041 0711). Two open area excavations (areas E and W) finished the programme (Steedman and Foreman 1994: 12). In total, four distinct phases of activity were recorded, including late Iron Age, Roman, early medieval (tenth to twelfth centuries), and medieval (Steedman and Foreman 1994: 18).

Aylesby, whose placename suggests a (re)-naming by the Scandinavian settlers (Mitson 1995: 13), is recorded in *DB*. No systematic archaeological work had been undertaken in the area prior to the 1994 excavations, although metal detectorists had discovered a variety of material including middle Anglo-Saxon and 'viking' artefacts (Steedman and Foreman 1994: 16). Other work nearby included the discovery of a large inhumation cemetery in 1934-39 in Laceby parish, dated to the sixth or seventh century; more recently, excavations during the construction of a pipeline at Riby Cross Roads revealed part of an Anglo-Saxon settlement, consisting of a set of closely adjacent sub-rectangular enclosures (Steedman 1994; Steedman and Foreman 1995: 16).

During the 1994 excavations, only area W revealed material from the early medieval activity phase. In this area, at just over 18 m OD, the earliest identifiable features comprised a number of slots and postholes identified as two rectangular buildings (buildings 4 and 5). Building 4 measured 10 x 5+ m, and had two late ninth- to eleventh-century pottery sherds associated with it. There was no dating evidence recovered from building 5, which would have been around 4 m wide (Steedman and Foreman 1995: 20). Both buildings were on a north-south alignment, which was different from the preceding Roman alignment, but set the

precedent for the medieval period. It was argued on the basis of the construction techniques, which combined sill-construction with post-construction, that the buildings should be assigned a tenth-century date (Steedman and Foreman 1995: 35). Building 4 was larger than most contemporary peasant buildings, and parallels with some of the buildings excavated at 'Goltho' were suggested, as well as the possibility that this indicated that the settlement at Aylesby may have had a fairly high status. It was suggested, on the basis of its different size and internal arrangement, that building 5 was an ancillary building; however, the destruction of associated cultural deposits as a result of the ploughing activity means that it is impossible to establish this with any certainty (Steedman and Foreman 1995: 27).

The complete late Anglo-Saxon and Saxo-Norman pottery assemblage consisted of 31 sherds, and included York 'g' ware, TORK, LKT, LSH, SNLOC, SNX, HLKT and LFS (Didsbury and Wastling 1995: 27). In particular TORK and York 'g' type indicate contact via the Humber (Didsbury and Wastling 1995: 28). A nearby trial trench at Little London also yielded two sherds of LKT, the earliest pottery retrieved in this trench (Didsbury and Wastling 1995: 29). The earliest metal artefacts were a tenth- or eleventh-century hooked tag and strap-distributor, both from area W (Watt 1995: 32) (appendix 12.6.2.1; 12.4.1).

2.4.5: Healing

The metalwork assemblage from the parish of Healing included two pins (NLM5331 and NLM5724) (appendices 12.1.2.1 and 12.1.3.1); a copper-alloy strap-end (NLM5377) (appendix 12.2.1); a copper-alloy buckle (NLM5420) (appendix 12.3.1); a triangular hooked tag with ring-and-dot and rolled decoration (PAS NLM5295) (appendix 12.4.1); a horse-harness strap fitting or cheek piece fragment (NLM5328) (appendix 12.6.2.1); and an Anglo-Saxon latch lifter, of sixth to eleventh-century date (NLM5369) (appendix 12.12.2.1). Also see notes under Aylesby (Bradley Wapentake).

2.4.6: Great Cotes

The settlement of Great Coates, now a suburb of Grimsby, is pre-Conquest in origin, and is recorded in *DB (Archaeological Excavations 1989: 21)*, as *Cotes*. Between May and August 1989, Humberside Archaeology carried out a number of archaeological investigations in advance of residential development in the village of Great Coates (*Archaeological Excavations 1989: 0*). Investigations involved a desktop, earthwork survey and geophysical survey, followed by trial trench excavation. A number of pits, ditches and gullies were dug, with pottery ranging from the late ninth and tenth centuries to the fourteenth century. The earlier wares included Torksey ware, Stamford ware and Lincoln ware (*Archaeological Excavations 1989: 57*). Unfortunately no detailed pottery report is available. No buildings were recorded.

2.4.7: South Cotes

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.4.8: Bradley

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.4.9: Great Grimsby

The *DB* mentions the existence of a ferry at Grimsby (Sawyer 1998: 17). Some coins have been found as well (appendix 9.1.16). In addition, in September 1995, LAS carried out an archaeological watching brief during ground works for a new sports Hall in Grimsby (TA 2647 0805). Some Anglo-Saxon pottery was found, including LFS, LKT, TORKT, HLKT and, unusually, some seventh- to eighth-century northern French pottery (NFSVA, or seventh- to eighth-century North French (Seine Valley) fabric A), but unfortunately this could not be associated with any structural remains (Tann 1995d: 4). However, a number of daub fragments were found, which led the field archaeologist to suggest that "flimsy buildings" may survive nearby (Tann 1995d: 9). Also see notes under Aylesby (Bradley Wapentake). The *PAS* furthermore reports a copper-alloy pin (NLM4283) from the parish of Grimsby (appendix 12.1.1.1), as well as two copper-alloy strap-ends (NLM4285 and NLM4280) (appendix 12.2.1).

2.4.10: Clee

The *NLPTS* database records the presence of pottery of type ESAX at Beacon Hill, Cleethorpes, and LFS at Cleethorpes. A single coin of Æthelred II was also found at Cleethorpes (appendix 9.1.10).

2.4.11: Itterby

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.4.12: Weelsby

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.4.13: Scartho

In Scartho near Grimsby a tenth-century sundial was found (appendix 4.1.29; Everson and Stocker in prep.).

2.4.14: Thrunscoc

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.4.15: Humberston

Humberston 1 is a partial mid-Kesteven grave cover, in two non-adjacent pieces, built into the external wall of the church of St Peter. This example is the furthest away from the quarry source, and an important indicator of riverine and coastal transport in the mid-tenth and eleventh centuries (appendix 4.1.17; Everson and Stocker 1999: 189-90). The wide-ranging contacts of Humberston were earlier attested by the discovery of a sherd of Ipswich ware on the site of Humberston Abbey (TA311 052), at that point the second sherd of that fabric ever to be recognised in Lincolnshire (Coppack 1970: 16).

2.4.16: Holton le Clay

The grave cover at *Holton le Clay 1*, with its *Jellinge*-style zoomorphic decoration, is believed to be an import from York (appendix 4.1.16; Everson and Stocker 1999: 28, 50, 81, 149-51, 179). In the early 1970s excavations took place near the church, and it was realised that the tower was a later addition to the church (Marjoram 1974: 24; Sills 1982; Sills and Heath 1976). In 1975, the excavations were extended, and the history of the site could be reconstructed. Despite an absence of any early Anglo-Saxon finds, some thirty middle and late Anglo-Saxon wares were retrieved, suggesting that the settlement here was founded in the seventh century, during the conversion period and the movement away from the 'pagan' settlements on the springline in the Wolds (Sills and Heath 1976: 58).

Most of the middle Anglo-Saxon pot from this site was unstratified, but a few sherds were found sealed by a crushed chalk surface to the north of the church tower (Sills 1982: 34). This surface had been cut by later Anglo-Saxon grave cuts. As there was no identifiable relationship between the church and this surface, it was suggested that the site had a domestic use before the church was constructed here (Sills 1982: 29, 34). The inhumation cemetery is discussed in more detail in appendix 6.1.12. No evidence for an earlier wooden church was found, but it was surmised that this lay inside the existing church building (Sills and Heath 1976: 58). However, the North Lincolnshire SMR records report that "excavations were carried out near St Peter's Church which revealed an earlier Church" (SMR FILE Holton le Clay TA 20 SE: D (TA 2865 0277)).

In 1999, Pre-Construct Archaeology undertook excavations on land adjacent to St Peter's Close. Three trenches were excavated. They revealed a ditch and a pit with small quantities of late Anglo-Saxon pottery, animal bone and shell, as well as a number of undated features (Albone 1999: 1). Trench 1 revealed an east west ditch (101) containing tenth to twelfth century pottery (CHGS, LSH), as well as a possible prehistoric or early Anglo-Saxon sherd (Albone 1999: 4). In trench 2, two sherds of late ninth to eleventh century pottery were found in pit (203) (either LS or SNLS). Trench 3 was empty (Albone 1999: 5). Some non-ferrous metal dress accessories were also found (appendix 12.1.5.1; 12.3.1; 12.2.1; 12.12.4.1). Finally, the *NLPTS* database records the presence of pottery of type LS/SNLS and LSH.

2.4.17: Tetney

A tenth-century coin hoard has been found near Tetney (appendix 9.1.39). The hoard also contained two silver 'clips', which may represent two hooked tags (appendix 12.4.1).

2.5: Haverstoe Wapentake

2.5.1: Cabourn

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.5.2: Rothwell

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.5.3: Cuxwold

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.5.4: Beelsby

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.5.5: Barnoldby le Beck

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.5.6: Waltham

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.5.7: Brigsley

Although the origins of the village are uncertain, the name Brigsley is thought to derive from OE *Brigeslai* meaning *the wood by the bridge*. It is listed in *DB*, and the tower of the present church of St Helen dates from the eleventh century (Kitch 2006: 1). No sculptural fragments have been recovered though. Between 21 and 22 June 2006, APS carried out a watching brief prior to ground works for a new dwelling at Willow Cottage, Church Lane, Brigsley (TA 2547 0172). Amongst other things, a small yet significant middle Anglo-Saxon assemblage of pot was found, indicative of a relatively high-status settlement (Kitch 2006: 1).

Archaeological features included two ditches containing IPS and MAX, cut by a pit with eleventh- to thirteenth-century Saxo-Norman wares (Kitch 2006: 3). No late ninth- to tenth-century pottery was found.

2.5.8: Hatcliffe

The *PAS* lists a number of metal dress accessories for the parish of Hatcliffe. These are two tenth-century strap-ends (NLM5373 and NLM-2CFD94) (appendix 12.2.1); a disc brooch (NLM6687) (appendix 12.5.3.5.1); and an unidentified object (NLM6686) (appendix 12.12.7.1).

2.5.9: Ravendale

In a field to the west of the deserted medieval village of Ravendale (TF 227 997), levelled some years previously, pottery ranging between the middle Anglo-Saxon and late medieval periods was found in 1971, as well as large quantities of Romano-British wares (Wilson 1972: 12). The *NLPTS* database records the presence of pottery of type type MAX and LFS at West Ravendale, Haverstoe. The *PAS* furthermore lists a copper-alloy penannular brooch (NLM-A0DEB5) (appendix 112.5.5.1).

2.5.10: Ashby

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.5.11: Waithe

St Martin's Church at Waithe (TA 28381 00692) still retains its eleventh-century tower, although the rest of the building is much later. The tall and slim shape of the tower suggests it is built on pre-Conquest foundations (LINCS HER 41234 – MLI41234).

2.5.12: Gunnerby

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.5.13: Fenby

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.5.14: Grainsby

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.5.15: Swinhope

The surviving earthworks of the deserted village at Swinhope were destroyed in 1969, and although subsequent fieldwalking revealed pottery ranging from the eleventh to fifteenth centuries, no earlier wares were retrieved (Everson *et al.* 1991: 191). However, the *NLPTS* database does record the presence of pottery of type TORKT. A sizeable metalwork assemblage has been discovered in the parish of Swinhope. Artefacts included two stirrup strap mounts (NLM-DE19D1 and NLM6651) (appendix 12.6.1.1); a double-ended strap-distributor (NLM-253044) (appendix 12.6.2.1); two weights or gaming pieces (NLM7127 and NLM6483) (appendix 12.11.1); two mounts/fittings (NLM6550 and NLM6638) (appendix 12.12.1.1); four pins (NLM7123; NLM7122; NLM-7CEF22; and NLM-78C696) (appendices 12.1.1.1; 12.1.2.1; and 12.1.3.1); some thirteen strap-ends (NLM-C07457; NLM7137; NLM7125; NLM-FB6685; NLM-D5DCF6; NLM-C81422; NLM-66E451; NLM-0A9814; NLM6413; NLM7118; NLM6540; NLM6541; and NLM-7D4337) (appendix 12.2.1); two buckles (NLM7116 and NLM-832251) (appendix 12.3.1); two hooked tags (NLM-C85265 and NLM7120) (appendix 12.4.2); and a flat disc brooch (NLM7119) (appendix 12.5.3.3.1).

Some coins were also found (appendix 9.1.37). Finally, a double burial of tenth- or eleventh-century date was found inserted into a Neolithic longbarrow (appendix 6.1.20).

2.5.16: Wold Newton

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.5.17: Hawerby

At Hawerby cum Beesby (TF 267 966) pottery from late Anglo-Saxon to eighteenth-century date was recovered (Whitwell 1967: 50).

2.5.18: North Cadeby

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.5.19: Beesby

The *NLPTS* database records the presence of pottery of type ST and LFS at Beesby East deserted medieval village. The *NLPTS* database also records the presence of pottery of type LSH and LKT at Beesby deserted medieval village.

2.5.20: Audby

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.5.21: North Thoresby

North Thoresby 1 is part of a tenth- or eleventh-century Lindsey-type grave cover, now mounted on a modern concrete rest, in the west end of the nave of the church of St Helen (appendix 4.1.24) (Everson and Stocker 1999: 239).

In March 2007, LAS undertook an archaeological evaluation on land at the Thatch, Rosegard (TF 29044 98558). Five trial trenches (trench 2-6) revealed evidence for activity spanning the prehistoric, Roman, Anglo-Saxon and medieval periods (Glover 2007: 1). Only trench 4 revealed some datable Anglo-Saxon material in the shape of a curvilinear ditch with a single sherd of fifth- to eighth-century pottery (SST), and another ditch with a small assemblage of ninth- to tenth-century wares (5 x LKT) (Glover 2007: 5). In addition, a significant quantity of undated linears and pits were found on the site (Glover 2007: 4-6). Trench 2 revealed some undated linear features and pits, as well as a large cut feature containing medieval pottery (Glover 2007: 4). Trench 3 revealed similar features, but with residual flints and Roman pottery, and no medieval wares (Glover 2007: 4-5). Trenches 5 and 6 revealed no datable material (Glover 2007: 5-6). It was suggested that this site was located on the edge of a settlement that may have found its origins in the Anglo-Saxon period (Glover 2007: 7).

The *PAS* furthermore reports five weights or gaming pieces from the parish of North Thoresby. These were NLM7252 (referring to a hoard of three weights), NLM7196 and NLM7254 (appendix 12.11.1). Other metal objects included an openwork Anglo-Scandinavian mount (LIN-0FA0A3) (appendix 12.12.1.1) and a strap-end (NLM7198) (appendix 12.2.1).

2.5.22: Fulstow

Some 4 km to the northeast of Fulstow, near Marshchapel, a site known as Marshchapel-2 was the first late Anglo-Saxon saltern site to be excavated in Lincolnshire (*Lincolnshire HER records*).

2.6: Corringham Wapentake

2.6.1: Scotterthorpe

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.6.2: Scotter

The *NLPTS* database records the presence of pottery of type TORKT and ST at Scotter, Corringham. Some human bones, which may be of late Anglo-Saxon date, were also discovered (appendix 6.1.16).

2.6.3: Cleatham

Cleatham is the location of a major inhumation and cremation cemetery of the fifth to seventh centuries (Everson and Stocker 1999: 9).

2.6.4: Kirton in Lindsey

Kirton in Lindsey 2 is another grave cover of Lindsey type, now lost (appendix 4.1.18) (Everson and Stocker 1999: 51, 302-03). During a recent archaeological evaluation at Kirton-in-Lindsey, very little evidence for the late Anglo-Saxon period was found, although a

small number of intrusive and residual artefacts hinted at occupation in the vicinity (Wragg 2006: 1). The majority of excavated features could be assigned a medieval or post-medieval date; however, in trench 1, a north-east aligned ditch was excavated, whose fill contained a single ninth- to late tenth-century potsherd (LKT) as well as two sherds of Roman pottery and some Roman tile. The single sherd of LKT was considered intrusive and the ditch was assigned a Roman date (Wragg 2006: 9; Young and Boyle 2006: 28).

In 2002, APS carried out an archaeological evaluation on land off Spa Hill, Kirton in Lindsey. A small quantity of early Anglo-Saxon pottery was retrieved from this otherwise mostly prehistoric site, indicating that there may have been an early Anglo-Saxon settlement in the vicinity (Albone 2002: 1). In addition, the *NLPTS* database records the presence of pottery of type AS at Cleatham House Farm, Kirton in Lindsey.

The metalwork assemblage from the parish of Kirton in Lindsey consists of a copper-alloy collared pin with bi-conical head (NLM-553422) (appendix 12.1.1.1); a copper-alloy hooked tag (NLM-3A5831) (appendix 12.4.1); and an incomplete copper-alloy finger-ring of ninth- to eleventh-century date (NLM-62EFB4) (appendix 12.9.1).

2.6.5: Grayingham

The *NLPTS* database records the presence of pottery of type ESAX, LSH, TORK and ST at Grayingham. The *PAS* database furthermore reports a hooked tag of eighth- to eleventh-century date (LIN-F72B77).

2.6.6: Laughton

The metalwork assemblage from the parish of Laughton consists of a copper-alloy strap fitting (NLM383) (appendix 12.6.2.1); a lead-alloy gaming piece or weight (SWYOR-4F8082); (appendix 12.11.2); and three strap-ends (SWYOR-69D346, NLM385 and NLM350) (appendix 12.2.1).

2.6.7: Scotton

The *NLPTS* database records the presence of pottery of type AS and ST at Scotton, Corringham. The parish of Scotton furthermore produced an eighth- to ninth-century copper-alloy pin (SWYOR-4B5A87) (appendix 12.1.1.1); an eighth-century copper-alloy strap-end (NLM4500) (appendix 12.2.1) and an eleventh-century copper-alloy stirrup strap mount (NLM7168) (appendix 12.6.1.1).

2.6.8: Northorpe

In the 1960s, Northorpe (SK 898 953), believed to be the moated part of the deserted medieval village of Southorpe, was levelled and ploughed, and three early shelly ware rims as well as a quantity of medieval pottery were found (Whitwell 1967: 50). During a subsequent fieldwalking project in 1977, a deserted settlement was identified some 600 m to the northwest of the settlement at Northorpe. Amongst the artefactual evidence was some Saxo-Norman and possibly late Anglo-Saxon pottery, but it has largely remained undocumented (Everson *et al.* 1991: 141-44). Finally, *Northorpe 1* is another fragment of an eleventh-century Lindsey-type cover, discovered in 1868 in the fabric of the Old Hall in Northorpe, and now in Durham Cathedral (Everson and Stocker 1999: 236-37). This fragment has not been included in appendix 4 on the basis of its late date range.

2.6.9: Southorpe

The church of the deserted medieval village of Southorpe, which survived until the sixteenth century, was dedicated to St Martin (Everson *et al.* 1991: 141). The village was first identified in the 1960s, on the basis of its surviving earthworks on the raised ground in an angle of the river at Edenham (TF 055 245) (Whitwell 1967: 47). The *NLPTS* database also records the presence of pottery of type TORK at Southorpe.

2.6.10: Blyton

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.6.11: Wharton

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.6.12: Pilham

The placename of the deserted village of Gilby, in the parish of Pilham, combining a Hiberno-Norse personal name with the Scandinavian suffix *-by*, meaning 'settlement', points to a ninth- or tenth-century origin. However, archaeological investigations have produced no evidence for this period, and the earliest documentary references to Gilby date to the twelfth century (Everson *et al.* 1999: 152; also see Fellows-Jensen 1978: 48, 265).

2.6.13: Dunstall

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.6.14: Thonock

The *PAS* lists the discovery of three strap-ends (NLM2866, NLM2844 and NLM2876) from the parish of Thonock (appendix 12.2.1), as well as a copper-alloy D-shaped buckle and triangular buckle plate (DENO-942EA1) (appendix 12.3.1) and a copper-alloy *Urnes*-style stirrup mount (*PAS* NLM2846) (appendix 12.6.1.1).

2.6.15: Aisby

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.6.16: Yawthorpe

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.6.17: Corringham

Corringham 1 is part of a grave cover of mid-Kesteven type (Everson and Stocker 1999: 134). In addition, the *NLPTS* database records the presence of pottery of type ESAX at Hardwick Hall, East Ferry, Corringham. A single eleventh-century copper-alloy stirrup strap mount (DENO-CCC688) was also found in the parish of Corringham in West Lindsey (appendix 12.6.1.1).

2.6.18: Springthorpe

At Springthorpe (SK 869 889) a possible sixth-century blue glass bead was found (Wilson 1970: 11). In addition, a metal detectorist found a tenth- to eleventh-century gold ingot fragment in 2000, now part of The Collection, Lincoln (*Treasure* 2000: 50).

2.6.19: Heapham

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.6.20: Morton

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.6.21: Gainsborough

A number of Anglo-Saxon coins have been found at Gainsborough. They are described in more detail in appendix 9.1.14. In addition, the *NLPTS* database records the presence of pottery of type LFS at Gainsborough. Some possible Anglo-Saxon burials were also found at Gainsborough (appendix 6.1.11). Finally, the metalwork assemblage from the parish of Gainsborough included a possible weight (NLM39) (appendix 12.11.1); a single unidentified object in possible *Borre* style (NLM75) (appendix 12.12.7.1); a pin (NLM29440) (appendix 12.1.1.1); two strap-ends (NLM33 and NLM4508) (appendix 12.2.1); and a domed disc-brooch in *Borre* style (NLM260) (appendix 12.4.5.1.1).

2.6.22: Somerby

The placename is originally of Scandinavian origin, incorporating the eponym Sumarled (Mynard 1969: 64). The deserted medieval village at Somerby (SK 846 897) was excavated in 1957 when it was threatened by ploughing activity. Investigations revealed settlement remains mainly dating to the later medieval period, although some eleventh-century features were discovered as well. Unfortunately not all of these were fully investigated because they were very waterlogged (Mynard 1969: 63). Activity in this first occupation phase, dated to the eleventh to fifteenth centuries, was characterised by "the digging of various gullies and pits, their silting up, the redigging and recutting of gullies and further silting up" (Mynard 1969: 67). Some of the gullies of period 1 seemed to enclose a house plot, measuring 24.4 x 9.1 m. The domestic nature of this enclosure was confirmed by the presence of a hearth (Mynard 1969: 67). Sherds of cooking pots were found associated with this phase, including two body sherds of Stamford ware, with pale yellow-green glazing, which were assigned an eleventh- to twelfth-century date, as well as seven sherds of Torksey ware (Mynard 1969: 69).

2.6.23: Lea

DB mentions the presence of a ferry over the Trent at Lea near Gainsborough (Sawyer 1998: 17). The parish of Lea produced one early medieval copper-alloy strap-end or decorative mount (SWYOR-1AA507) with possible Carolingian influences, of eighth- to ninth-century date (appendix 12.2.1).

2.7: Aslaoe Wapentake

2.7.1: Blyborough

Blyborough has produced three pieces of tenth- to eleventh-century funerary sculpture (Everson and Stocker 1999: 110-11). They are discussed in more detail in appendix 4.1.4. The *PAS* furthermore reports the discovery of a ninth- to tenth-century *Trewhiddle*-style copper-alloy strap-end (LIN-B880D3) (appendix 12.2.1), a ninth- to tenth-century copper-alloy rectangular plate-brooch (LIN-B7B0C6) (appendix 12.5.8.1), and an eleventh-century stirrup strap mount (LIN-E25BD7) (appendix 12.6.1.1), all from the parish of Blyborough.

2.7.2: Snitterby

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.7.3: Willoughton

At SK 9348 9352, an Anglo-Saxon enamelled escutcheon was found in the 1960s (Wilson 1972: 11). In addition, the *NLPTS* database records the presence of pottery of type LFS.

2.7.4: Bishop Norton

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.7.5: Hemswell

The *NLPTS* database records the presence of pottery of type LFS.

2.7.6: Harpswell

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.7.7: Glentham

Two pieces of tenth- to eleventh-century sculpture have been recognised at Glentham (Everson and Stocker 1999: 168; in prep.). They are discussed in appendix 4.1.14. The *NLPTS* database also records the presence of pottery of type LFS.

2.7.8: Caenby

At Caenby, a burial under a mound was excavated in 1949. Despite its original interpretation as 'Scandinavian', this later turned out to be of seventh-century date (see appendix 6.1.5).

2.7.9: Glentworth

Glentworth 1 is an eleventh-century Lindsey marker, now incorporated in the eleventh-century church fabric of the church of St Michael (Everson and Stocker 1999: 169). This fragment has not been included in appendix 4 on the basis of its late date. No tenth-century material has been recovered from here.

2.7.10: Normanby-by-Spital

The *NLPTS* database records the presence of pottery of type LKT and LFS.

2.7.11: Owmsby-by-Spital

A tenth- to eleventh-century Lindsey-type marker was discovered in Owmsby-by-Spital in the late 1990s (appendix 4.1.25) (Everson and Stocker in prep.).

2.7.12: Fillingham

The University of Sheffield, is involved in an ongoing research project entitled *Cemeteries and Settlements in North Lincolnshire, c.700-1100* (on-line), which involves a series of research and training excavations at Fillingham (2000), Whitton (2002), and the village of West Halton (ongoing). The excavations at Chapel Road, Fillingham (SK 859 946) focused primarily on a late Anglo-Saxon cemetery, which was found nearby an earlier Anglo-Saxon settlement. The village lies north of Lincoln, just to the west of Ermine Street. The site itself was located on a temporary parking lot on Chapel Road (*Fieldwork in Fillingham* 2000: 1). Previous work had yielded Anglo-Saxon pottery and an Anglo-Saxon square-headed brooch on the north side of the lake, whilst a watching brief near Church Farm revealed a series of ditches and a selection of later Anglo-Saxon pottery. There seemed to have been an occupation area and cemetery at the west end of the village (Hadley 2000b: 44). In this respect the events are similar to those at Holton le Clay, where a late Anglo-Saxon cemetery was also found overlying a seventh- to eighth century settlement (appendix 6.1.9).

Five trenches were dug (*Fieldwork in Fillingham* 2000: 1). Although a sequence of activity of at least 1000 years was uncovered, only the Anglo-Saxon material will be included here. The Anglo-Saxon activity could be divided in two phases, a settlement and a cemetery. The cemetery has been discussed in appendix 6.1.9. In addition, some 200 sherds of Anglo-Saxon pottery were found, mostly residual, but some in their original context, in a ditch or

elongated pit. The stratified pottery from the Anglo-Saxon layers included ASQSH, ESAXLOC, SST, R, TORKT, CHARN, ECHAF, ESAXX, and MAX (Young 2000a). In addition to seventh- and eighth-century pottery, this feature also included animal bone, a bone pin and a spindle whorl, but no human bone, and was interpreted as being more suggestive of settlement activity than of cemetery use (Jones 2000: 5). As this feature was stratigraphically early, it was suggested that there was a settlement here that predated the cemetery (Jones 2000: 6). The six graves excavated in trench 5 did not reveal any occupation debris other than some pieces of middle Anglo-Saxon pottery, possibly residual in the backfill (Jones 2000: 6). No metalwork was retrieved from secure Anglo-Saxon deposits, but some possibly medieval or earlier artefacts, including an iron knife and a lead spindlewhorl, were retrieved from residual contexts (Walster 2000: 20).

The evidence from Fillingham suggests that the settlement may have been laid out in the seventh century, and that the nucleation of settlements and the distinctive laddern pattern of townships along Ermine Street may therefore pre-date the late Anglo-Saxon period. This would contrast with other areas of Anglo-Saxon settlement, where such events are not supposed to have occurred until the tenth or eleventh century (Hadley 2000b: 45-46). Also see appendix 6.1.9. In addition, the *NLPTS* database records the presence of pottery of type ESAX, MSAX, LFS, TORK and LKT at Fillingham.

2.7.13: Saxby

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.7.14: Firsby

Firsby was a high-status manor to which later a planned settlement was added (Hadley 2006: 117). The parish of Firsby furthermore produced three copper-alloy strap-ends of ninth- to tenth-century date (LIN-977213, LIN-978DD7 and LANCUM-72C1A4) (appendix 12.2.1).

2.7.15: Spridlington

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.7.16: Cold Hanworth

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.7.17: Coates

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.7.18: Ingham

The *NLPTS* database records the presence of pottery of type LKT, LSH, TORK and LFS at Ingham, Aslaoe.

2.7.19: Cammeringham

Cammeringham 1 is an incomplete grave cover of Lindsey type, now in the church of St Michael in Cammeringham (Everson and Stocker 1999: 125-26). See appendix 4.1.8.

2.7.20: Hackthorn

The grave cover at *Hackthorn 1* is one of a pair of covers, also including *Lincoln City Broadgate 1*, whose decorative interlace elements in the form of birds are reminiscent of the decoration on *Borre*-style metalwork from Scandinavia (Everson and Stocker 1999: 25). It is possible that it formed a composite monument with *Hackthorn 2*, a Lindsey-type grave marker (appendix 4.1.15; Everson and Stocker 1999: 209).

2.8: Walshcroft Wapentake

2.8.1: South Kelsey

In the vicinity of South Kelsey, a fieldwalking exercise across a number of shallow gravel quarries revealed large quantities of Roman, Iron Age and middle Anglo-Saxon pottery, but no archaeological evidence was retrieved for the late Anglo-Saxon period (Everson *et al.* 1991: 170-73). Elsewhere in the parish, however, the *NLPTS* database has recorded the presence of pottery of type LFS, LSLOC and TORK at South Kelsey. Finally, some possibly late Anglo-Saxon burials were found (appendix 6.1.17).

2.8.2: Holton le Moor

The parish of Holton le Moor produced an incomplete copper-alloy strap-distributor (NLM-91F7D3) (appendix 12.6.1.1) and an Irish anthropomorphic mount (NLM258) (appendix 12.12.1.1).

2.8.3: Winghale

The *NLPTS* database records the presence of pottery of type ESAX, MAX, LSH, and LFS at Winghale priory, South Kelsey.

2.8.4: Thornton le Moor

Thornton le Moor 1 is a sculpture fragment of probable eleventh-century date, now built into the interior north wall of the church of All Saints (Everson and Stocker 1999: 266). It is excluded from appendix 4 on the basis of its late date. In addition, the *NLPTS* database records the presence of pottery of type ELFS, ESAX, IPS, MAX, LKT, LS/SNLS, TORKT, LFS, UNGS and LSW.

2.8.5: Owersby

The settlement at Owersby included six separate manors at the time of the *Domesday* survey, with a total of 90 households (Everson *et al.* 1991: 149). The archaeological remains here have been mostly destroyed, but reported finds include Anglo-Saxon, Saxo-Norman greyware and medieval pottery, whilst there is also some evidence for Roman settlement (Everson *et al.* 1991: 150; Whitwell and Wilson 1969: 112). A single sixth-century Anglo-Saxon cruciform brooch was also found in the 1960s at TF 0589 9492 (Whitwell and Wilson 1969: 117), and in the same field in the following year a rim sherd of a dark grey Anglo-Saxon fabric was found, as well as part of a bronze ring (Wilson 1970: 11).

The church at North Owersby is dedicated to St Martin (TF 0610 9475) (Coppack and Wilson 1970: 18). A single coin of an East Midlands mint (946-73) has also been found (appendix 9.1.27). The *NLPTS* database also records the presence of pottery of type LSH (late Anglo-Saxon Shelly ware, 850-1000) at North Owersby. The parish of Owersby furthermore produced two strap-ends (SWYOR-CC0064 and NLM-CFDC08) (appendix 12.2.1); a buckle (YORYM1514) (appendix 12.3.1); a lead-alloy brooch (SWYOR-322826) (appendix 12.5.8.1); two stirrup strap mounts (SWYOR-CC3956 and YORYMB380) (appendix 12.6.1.1); a copper-alloy horse-harness pendant (NLM-574F83) (appendix 12.6.3.1); and two weights or gaming pieces (SWYOR-CC1332 and SWYOR-CC1E24) (appendix 12.11.1).

2.8.6: Claxby

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.8.7: Normanby le Wold

This site is probably the most elevated settlement in the county, situated at about 140 m OD (Addyman and Whitwell 1970: 97-98). In 1967 a spur of old grassland on Mr. Cade's farm (TF 126 941) in Normanby le Wold was bulldozed, revealing a wide variety of finds ranging between the Neolithic and the post-medieval. Excavations were subsequently carried out under direction of J. B. Whitwell (Wilson 1970: 11). The settlement remains were dated to the late seventh and eight centuries. Noted as of particular interest was a ceramic assemblage of middle- to late Anglo-Saxon date, as well as two baked loom weights and a bone thread picker. A number of east west aligned burials were also found, as well as a number of horse bones, but all were disturbed by the bulldozer (Whitwell and Wilson 1968: 38) (appendix 6.1.13). Normanby le Wold was also one of the first find spots for shell-gritted wares of eleventh- to fourteenth-century date that were identified as being probably developed from Maxey-ware (Beresford 1975b: 56).

DB reveals that in 1086 the population of the settlement was at least 79, and the surviving earthworks may suggest that at some point in its history, Normanby le Wold consisted of three different settlement cores (Everson *et al.* 1991: 135-36). Finds of Anglo-Saxon date have been found elsewhere in Normanby le Wold as well. To the northwest of the church at TF 121948, a bronze penannular brooch was found (Wilson 1970: 11). In addition, a single Mercian *Lunette* coin was found (appendix 9.1.26). The parish of Normanby le Wold also produced a lead-alloy strap-end of tenth-century date (NLM-890976) and a copper-alloy barrel padlock key (NLM-FCC262) (appendix 12.12.2.1).

2.8.8: Otby

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.8.9: Stainton

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.8.10: Thoresway

The *NLPTS* database records the presence of pottery of type LSH at Thoresway.

2.8.11: Croxby

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.8.12: Thorganby

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.8.13: Orford

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.8.14: Binbrook

The *PAS* reports the discovery of a lozenge-shaped brooch (NLM7136) (appendix 12.5.2.1); two flat disc brooches (NLM6464 and NLM-CF5DC7) (appendix 12.5.3.3.1); a stirrup terminal (NLM-4B4AF7) (appendix 12.6.1.1); a copper-alloy collared polyhedral-headed pin with ring-and-dot decoration (NLM-F6C022) (appendix 12.1.2.1); five strap-ends (NLM-E91463, NLM6616, NLM6404, NLM-537F51 and NLM-6D36A3) (appendix 12.2.1); three buckles (NLM6727, NLM6726 and NLM6612) (appendix 12.3.1); and an ansate brooch (NLM-2063B4) (appendix 12.5.1.1), all from the parish of Binbrook. A Northumbrian styca and a cut halfpenny of Edward the Martyr were also retrieved (appendix 9.1.7).

2.8.15: Kingerby

At the time of *DB*, the manor in the centre of the former village of Kingerby was in the possession of the bishop of Lincoln. This situation remained unchanged until the late middle ages. An associated settlement apparently had a population of 33 households, but it shrunk in size during the medieval period (Everson *et al.* 1991: 146-47). Excavations in the mid-1960s only revealed medieval and Roman layers, but field walking during the 1980s yielded both late medieval and early Anglo-Saxon wares (Everson *et al.* 1991: 149).

2.8.16: Osgodby

The parish of Osgodby produced a copper-alloy disc-brooch (NLM-64E8D7) (appendix 12.5.4.4.1); a lozenge-shaped copper-alloy pinhead (NLM-DDC513) (appendix 12.1.3.1) and a copper-alloy strap-end (NLM-DD9042) (appendix 12.2.1). A single coin of Æthelred II has also been found (appendix 9.1.28).

2.8.17: Walesby

The earthworks at the deserted village of Walesby produced a limited number of Saxo-Norman or Medieval pottery sherds (Everson *et al.* 1991: 208).

2.8.18: Risby

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.8.19: West Rasen

The parish of West Rasen produced a collared copper-alloy pin with globular head (NLM-C999F4) (appendix 12.1.1.1) and a pair of copper alloy tweezers (NLM-250B52) (appendix 12.12.6.1).

2.8.20: Middle Rasen

Middle Rasen produced a copper-alloy collared globular pinhead (NLM-B25CB0) (appendix 12.1.1.1), a seventh- to ninth-century copper-alloy buckle (NLM-FD00B5) (appendix 12.3.1) and the bottom part of a copper-alloy *Ringerike*-style scabbard chape (NLM-FD16A4) (appendix 12.10.4.1).

2.8.21: Market Rasen

Two coins of the period 973-1000 were found in this parish, one struck at the York mint, and one from the Lincoln mint (appendix 9.1.25). The parish of Market Rasen also produced a silver pin with flattened bi-conical head (NLM-9E9AA6) (appendix 12.1.1.1), an Irish penannular brooch (NLM4501) (appendix 12.5.5.1) and a copper-alloy hammered ingot (DENO-63EB93) (appendix 12.12.3.1).

2.8.22: Tealby

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.8.23: Toft next Newton

Two pieces of tenth- to eleventh-century sculpture have been found here (Everson and Stocker 1999: 29; 267-69). See appendix 4.1.34 for a discussion.

2.8.24: Newton by Toft

The *NLPTS* database records the presence of pottery of type LKT, LSH, LS/SNLS, LSLOC and LFS at Newton by Toft.

2.8.25: Linwood

According to *DB*, Linwood consisted of two separate manors in 1086. Pottery found during the survey of the earthworks included Roman and middle Anglo-Saxon sherds, but no late Anglo-Saxon pottery was found (Everson *et al.* 1991: 127-29).

2.8.26: North Willingham

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.9: Ludborough Wapentake

2.9.1: Ludborough

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.9.2: Wyham

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.9.3: North Ormsby

The parish of North Ormsby produced an incomplete lead flat disc-brooch decorated in *Borre* style (NLM-743AB7) (appendix 12.5.3.1.1) and an unidentified mount depicting an open-mouthed beast (YORYM661) (appendix 12.12.1.1).

2.9.4: Fotherby

The parish of Fotherby produced two stirrup mounts (LIN-64A357 and LIN-ADE591) (appendix 12.6.1.1) and two possible cheek pieces or other bridle fittings (LIN-AE7743 and LIN-C27541) (appendix 12.6.2.1).

2.9.5: Little Grimsby

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.9.6: Covenham

In 1998, APS carried out an evaluation followed by an open area excavation at Haith's Farm on Birkett Lane, Covenham St Bartholomew, prior to proposed development. The evaluation did not reveal any material earlier than the fifteenth century, with the exception of a single small fragment or early Anglo-Saxon or Iron Age pottery (Young 1998b: 1).

The earliest deposits that were found during the open area excavation, on the other hand, consisting of two pits (157), a ring-gully (154) and a semi-circular gully (165), were thought to date to the late Anglo-Saxon or early medieval periods. Both gullies were truncated by a north-south aligned ditch (152), which was thought to be medieval. Gully (154) enclosed an area of 7 m in diameter, and truncated pit (157), which contained no dating evidence. Gully (154) itself yielded early Anglo-Saxon and late Anglo-Saxon pottery, as well as prehistoric flints, and some brick and tile, tentatively suggesting that the Anglo-Saxon wares were in fact residual. Gully (154) was truncated by gully (165), which yielded pottery of tenth- to twelfth-century date, as well as residual flints (Young 1998a: 4). A possible late Anglo-Saxon hearth bottom was also recovered from the later medieval pit fills (Young 1998a: 5-6). It was suggested that the site was peripheral to a settlement, which would explain the low artefact density and lack of structural features. The presence of hammerscale in some of the fills was believed to confirm this suggestion, as smithing usually took place at the edge of settlements. The circular gullies were suggested to represent drainage gullies for hayricks (Young 1998a: 6).

2.10: Louthesk Wapentake

2.10.1: Swine

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.10.2: Grainthorpe

In Conisholme, situated between Grainthorpe, North Somercotes and South Somercotes, a rare example of figure-carving has been discovered in the shape of a tenth- or eleventh-century partial cross-head known as *Conisholme 1*, which, together with *Great Hale 1* from Kesteven, represent a group of figurine carvings that incorporates crude, flatly carved outline figures typical of Viking Age sculpture (Everson and Stocker 1999: 26) (appendix 4.1.9).

2.10.3: Somercotes

See notes under Grainthorpe.

2.10.4: Skidbrooke

A pottery assemblage mostly consisting of Stamford ware and covering the late Anglo-Saxon period to the fifteenth century was reported in the 1960s (Whitwell 1967: 50). In addition, two copper-alloy strap-ends (LIN-E848A7 and LIN-898ED7) have been found in the parish of Skidbrooke with Saltfleet Haven (appendix 12.2.1).

2.10.5: Mare

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.10.6: Saltfleet

See notes under Skidbrooke (appendix 2.10.4).

2.10.7: Saltfleetby

A single coin of the southern mints (973-1000) was found here. The parish of Saltfleetby St Clement produced a strap-end (LIN-42F813) and a socketed hook (LIN-E30446) (appendix 12.2.1), as well as a tenth- to eleventh-century copper-alloy D-shaped buckle (LIN-85C5D2) (appendix 12.3.1). The parish of Saltfleetby all Saints also produced a socketed hook (LIN-3AD358) (appendix 12.2.1). The parish of Saltfleetby St Peter produced a stirrup strap mount (LIN-EA2E51) (appendix 12.6.1.1) and a fragment of a copper-alloy bracelet or armband (LIN-C33EE4), not unlike some of the silver bracelets and armlets from the Anglo-Saxon and viking periods from the Douglas hoard on the Isle of Man (appendix 12.12.7.1). A coin of Æthelred II was also found here (appendix 9.1.31). Also see notes under Theddlethorpe (Calcewath Wapentake)

2.10.8: Yarburgh

A single Swordless St Peter coin was found here (appendix 9.1.49).

2.10.9: Alvingham

No archaeological evidence for late Anglo-Saxon activity has been found here to date (see Johnson and Palmer-Brown 1995).

2.10.10: West Wykeham

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.10.11: East Wykeham

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.10.12: Kelstern

The parish of Calcethorpe with Kelstern in East Lindsey produced a sword pommel with *Borre*-style decoration (NLM-C3B377) (appendix 12.10.2.1).

2.10.13: Gayton le Wold

One piece of tenth- to eleventh-century sculpture has been discovered at the church of St Peter in Gayton le Wold (appendix 4.1.13) (Everson and Stocker 1999: 167).

2.10.14: South Cadeby

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.10.15: Calcethorpe

The parish of Calcethorpe with Kelstern in East Lindsey produced a sword pommel with *Borre*-style decoration (NLM-C3B377) (appendix 12.10.2.1).

2.10.16: Welton le Wold

The parish church of St Martin contained some eleventh- to twelfth-century stonework, and its cemetery may be of late Anglo-Saxon origin (appendix 6.1.25).

2.10.17: Elkington

South Elkington (TF 312 883) is the location of a major inhumation and cremation cemetery of the fifth to seventh centuries (Everson and Stocker 1999: 9). The pottery from this cemetery was analysed and compared to the pottery from the West Keal cemetery, leading to the conclusion that the work of four distinct potters could be identified. Their production was *not* specialised, but limited to a single cemetery, and thus representative of production per household or extended family unit (Everson 1972: 16).

2.10.18: Hallington

In 1997, LAS carried out a watching brief along the route of a 10 km water trunk main between Stenigot Reservoir (in Donington-on-Bain parish) and Kenwick Pumping Station, going through the parishes of Donington-on-Bain, Hallington, Louth, Raithby cum Maltby and Withcall. Four sites were excavated (Tann 1997: 8-16). All the excavated archaeology belonged to the Bronze Age and Romano-British periods (Tann 1997). Only during the watching brief phase some Anglo-Saxon pottery was found in Field 13, near Hallington. A large density of medieval (thirteenth- to fifteenth-century) as well as early and late Anglo-Saxon pottery was recovered, indicative of a settlement core nearby; however, the pipeline investigation did not allow for closer inspection (Tann 1997: 20).

2.10.19: Louth

In 1996, LAS carried out a watching brief consisting of eleven visits at the Meridian Hotel and Marquis of Granby Hotel, during redevelopment of the site for new offices (TF 3288 8744). The monitoring was severely hampered by Health and Safety restrictions, and close inspection of a number of features believed to be of archaeological interest was not possible. Nevertheless a number of pits, a ditch and a well were identified, and amongst the earliest evidence were two sherds of Anglo-Saxon pottery (Tann 1996: 5). These were identified as LKT and SNLOC (Young 1996). In addition, three coins were found here as well (appendix 9.1.23), and Louth was also the site of one of the late tenth-century minor mints (chapter 4). The *PAS* furthermore reports a copper-alloy strap-end in Urnes-style (NLM553) from the parish of Louth (appendix 12.2.1). Also see notes under Hallington.

2.10.20: Brackenborough

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.10.21: Keddington

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.10.22: Stewton

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.10.23: Cockerington

In 1994, a watching brief was carried out during groundworks for the construction of a bungalow at South View Lane (TF 3798 8893), which revealed a disturbed subsoil layer underneath the modern make-up that contained a small quantity of tenth- to fourteenth-century pottery (2x glazed ST, and six later sherds), and a single seventh-century sherd of IPS (Healey 1994: 1, 3). Also see notes under Saltfleetby.

2.10.24: Grimoldby

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.10.25: Manby

In response to a planning constraint, PCA carried out an archaeological investigation on land north of Church Lane, in Manby, in 1997 (Johnson 1997a: 2). One of the trenches (trench 3) revealed an Anglo-Saxon pit, whose fill contained a single sherd of TORKT, and three sherds of 'Lincoln Shelly ware' (Johnson 1997a: 11). In addition, two pieces of possible tenth-century sculpture have been found here, *Manby 1* and *Manby 2* (appendix 4.1.21) (Everson and Stocker 1999: 224-25).

2.10.26: Little Carlton

Little Carlton 1 is a partial Lindsey-type grave cover, and was found during demolition of the nineteenth-century church of St Edith in 1993 by archaeologists of LAS (appendix 4.1.19) (Everson and Stocker 1999: 221-22). The *PAS* also reports the discovery of a ninth-century silvered and gilt copper-alloy strap-end (LIN-E33095) from the parish of Little Carlton (appendix 12.2.1).

2.10.27: Withcall

See notes under Hallington.

2.10.28: Raithby

See notes under Hallington.

2.10.29: Maltby

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.10.30: North Reston

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.10.31: Authorpe

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.10.32: Muckton

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.10.33: Tathwell

Tathwell 1 is a partial grave cover of Lindsey type, now situated in the chancel of the church of St Vedast (appendix 4.1.31) (Everson and Stocker 1999: 263). The parish of Tathwell also produced a devolved *Winchester*-style strap-end (NLM4730) (appendix 12.2.1) and a copper-alloy stirrup mount, dated to the tenth or eleventh century (NLM4738) (appendix 12.6.1.1).

2.10.34: Farforth

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.10.35: Maidenwell

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.10.36: Haugham

In the field surrounding the church (TF 335 814), a quantity of pottery including shelly and gritty wares was found (Whitwell 1967: 50).

2.10.37: Ruckland

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.10.38: Burwell

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.11: Well Wapentake

2.11.1: Upton

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.11.2: Kexby

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.11.3: Knaith

The parish of Knaith in West Lindsey produced a pendant (DENO-61E4C6) with parallels in Birka (Sweden) and Trondheim (Norway) (appendix 12.8.1).

2.11.4: Willingham by Stow

Three coins of unknown mint and a single coin of the Lincoln mint, all dated to the period 973-1000 AD, were found in this parish (appendix 9.1.46).

2.11.5: Gate Burton

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.11.6: Normanby by Stow

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.11.7: Marton

Marton 1 is part of a tenth- or eleventh-century cross-head, and *Marton 2* is possibly its undecorated base (Everson and Stocker 1999: 226-28). *Marton 3* is an incomplete grave cover in six non-adjacent pieces, also of tenth- to eleventh-century date (appendix 4.1.22) (Everson and Stocker 1999: 228-29). At Marton (TF 087 238), some finds of undeveloped Stamford ware rims were also found in conjunction with medieval pottery (Whitwell and Wilson 1969: 117). The parish of Marton also produced three pins (LVPL1231, LVPL1230 and LVPL1224) (appendices 12.1.1.1 and 12.1.2.1) as well as a cloisonné disc brooch (LVPL1234) (appendix 12.5.3.4.1).

2.11.8: Stow St Mary

A number of coins have been found in this parish. They are summarised in appendix 9.1.35. The *NLPTS* database also records the presence of pottery of type LSW.

Excavations in 1983 at Stow revealed an eleventh-century church with a pre-Conquest predecessor and a number of associated burials underneath the present church of St Mary (appendix 6.1.18). In addition, a quantity of stone sculpture has been found at the church of St Mary (Everson and Stocker 1999: 255-58). For a discussion of the pieces, see appendix 4.1.30.

2.11.9: Sturton by Stow

The PAS reports the discovery of a copper-alloy *Borre*-style strap-end (NLM1025) from the parish of Sturton by Stow (appendix 12.2.1).

2.11.10: Bransby

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.11.11: Brampton

The parish of Brampton produced a silver droplet that was identified as metalworking waste of the late Anglo-Saxon period (YORYM-FA6027) (appendix 12.12.3.1).

2.11.12: Hardwick

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.11.13: Newton on Trent

The NLPTS database records the presence of pottery of type *TORK* at Newton on Trent.

2.12: Lawress Wapentake

2.12.1: Buslingthorpe

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.12.2: Faldingworth

The parish of Faldingworth produced a single copper-alloy strap-end (NLM-939E94) (appendix 12.2.1).

2.12.3: Friesthorpe

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.12.4: Snarford

The deserted medieval village of Snarford (TF 051 825) lies on the 50ft contour line, some eight and a half miles north east of Lincoln. The earthworks were still visible until the 1950s, but in 1954 and 1956 the fields surrounding the medieval village church, which was still standing, were bulldozed following an earthwork survey, which revealed that part of the site may have been moated (West 1968: 93). In 1957, West carried out a trial excavation of two weeks, accompanied by an assessment of surface finds, which broadly seemed to have a date range of the twelfth to thirteenth centuries (West 1968: 94). No late Anglo-Saxon features were identified, but a number of pottery fragments of 'shelly ware' were retrieved, as well as a possible early medieval bone comb plate with incised concentric ring decoration (West 1968: 96-97).

2.12.5: Brattleby

Brattleby 1 is an *in situ* example of the early tenth-century Ancaster cross-shafts, now standing in the churchyard of the church of St Cuthbert (Everson and Stocker 1999: 33). It is discussed in more detail in appendix 4.1.5.

2.12.6: Thorpe le Fallows

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.12.7: Aisthorpe

Two pieces of tenth- to eleventh-century sculpture have been recognised at Aisthorpe (Everson and Stocker 1999: 95-96). See appendix 4.1.1

2.12.8: Scampton

A possible Anglo-Saxon cemetery was excavated at Scampton in 1795 (appendix 6.1.15). In addition, there is an antiquarian reference to "a beautiful cross" decorated with interlace standing in the nave of the church of Scampton (appendix 4.1.28) (Everson and Stocker in prep.).

2.12.9: Welton

At Welton (TF 0077 7980) eleven Anglo-Saxon inhumation burials were discovered on the site of the community centre. Grave goods included annular brooches, amber beads, iron knives and two shield bosses (Wilson 1972: 11).

During a rapid walkover survey in 2003, as part of a desk-based assessment of a proposed gas-line between Wragby and Reepham, through the parishes of Barlings, Bullington, Fiskerton, Goltho, Newball, Rand, Reepham and Wragby, between Holton cum Beckering and Welton, archaeologists of LAS revealed numerous artefact scatters, including material that may indicate the presence of a middle Anglo-Saxon estate centre near Welton (Tann 2003: 1). No late Anglo-Saxon material was found in Welton.

The *NLPTS* database also records the presence of pottery of type LSW from Welton, Greetwell, Lawress. The *PAS* furthermore reports the discovery of a fragment of a penannular brooch, possibly of Irish manufacture (NLM607) (appendix 12.5.5.1), an openwork stirrup strap mount (NLM613) (appendix 12.6.1.1) and a tenth- to eleventh-century gaming piece made of copper alloy (NLM609) (appendix 12.11.1).

2.12.10: Broxholme

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.12.11: Ingleby

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.12.12: North Carlton

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.12.13: Middle Carlton

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.12.14: South Carlton

At South Carlton, a Mr Lingard found a set of Anglo-Saxon shears in his garden, just to the west of the Church at SK 951 766 (Whitwell 1966: 38). The parish of South Carlton also produced a copper-alloy flat disc-brooch with silver inlay and four evenly spaced ring-and-dot motifs on its face (LIN-E192E8) (appendix 12.5.3.5.1).

2.12.15: Dunholme

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.12.16: Scothern

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.12.17: Sudbrooke

From Sudbrooke in West Lindsey came NLM866, a D-shaped buckle of eleventh-century date (appendix 12.3.1).

2.12.18: Holme

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.12.19: Saxilby

Saxilby 1 was part of a Lindsey-type grave cover, now in the interior face of the west wall of the tower of the church of St Botolph (appendix 4.1.27) (Everson and Stocker 1999: 244).

2.12.20: Burton

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.12.21: Riseholme

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.12.22: Nettleham

At Nettleham, the site of an eleventh-century royal manor, limited excavations were carried out in the late 1950s. The earliest pottery that was found included Roman and middle Anglo-Saxon sherds, as well as a small assemblage of middle Anglo-Saxon loom weights. Unfortunately they could not be associated with any structural remains. The earliest structural remains were a number of timber and stone buildings, possibly, but not securely, associated with an assemblage of Saxo-Norman pottery (Everson *et al.* 1991: 129-31).

2.12.23: Reepham

Reepham or 'the reeve's estate' has been identified as the estate of Blaecca the reeve, who was mentioned in Bede's *Historia Ecclesiastica* (II: 16) as the first person in Lindsey to convert to Christianity (Everson and Stocker forthcoming). In addition, during a rapid walkover survey in 2003, as part of a desk-based assessment of a proposed gas-line between Wragby and Reepham (see notes under Welton; Tann 2003: 1), a Niedermendig quernstone was found at Reepham that could be of Roman, Anglo-Saxon or medieval date (Tann 2003: 3).

2.12.24: Barlings

During a rapid walkover survey in 2003, as part of a desk-based assessment of a proposed gas-line between Wragby and Reepham (see notes under Welton; Tann 2003: 1), a single vessel of early to mid-tenth-century date (18) was found together with some Roman pottery at Barlings (Tann 2003: 4).

2.12.25: Greetwell

The deserted medieval village of Greetwell had a minimum recorded population of 21 in AD 1086. It is also the site of an eleventh-century church (Everson *et al.* 1991: 103-05). The *NLPTS* database records the presence of pottery of type LSW.

2.12.26: Cherry Willingham

Fieldwalking at Cherry Willingham produced a pottery sequence ranging from the early Anglo-Saxon to early medieval periods, whilst excavations in 1980 revealed evidence for continuous occupation from the fifth to the twelfth centuries, including a sunken-floored building, associated with ninth-century pottery, and an iron-smelting furnace (Everson *et al.* 1991: 89; Everson and Stocker 1999: 9; Field 1981: 70).

2.12.27: Fiskerton

In 2003, a rapid walkover survey took place as part of a desk-based assessment of a proposed gas-line between Wragby and Reepham (see notes under Welton; Tann 2003: 1). No relevant material was recovered from the parishes of Fiskerton, Newball, Goltho, Rand and Wragby (Tann 2003: 4-5, 8-9).

Excavations were carried out at Short Ferry in the mid-1970s, which revealed a sequence of buildings commencing in the eleventh century and continuing until the late thirteenth century. The ground was artificially raised, either to elevate the site above the water level of the Witham, or to act as a quay (White 1977: 73-74).

The parish of Fiskerton produced two copper-alloy stirrup strap mounts (LIN-C9F5C3 and LIN-C95B77) (appendix 12.6.1.1). Finally, the *NLPTS* database records the presence of pottery of type LSW.

2.13: Wraggoe Wapentake

2.13.1: Kirmond le Mire

At Kirmond Le Mire, surviving earthworks were destroyed in 1975 without being recorded. Surviving pottery suggests activity in the Saxo-Norman period (Everson *et al.* 1991: 112). The *NLPTS* database also records the presence of pottery of type LSH.

2.13.2: Ludford

Ludford in East Lindsey produced two strap-ends (SWYOR-E61B80 and SWYOR-1614B6) (appendix 12.2.1), two hooked tags (NLM5725 and NLM5296) (appendix 12.4.1), a strip-brooch (NLM5583) (appendix 12.5.8.1) and a stirrup strap mount (SWYOR-162A42) (appendix 12.6.1.1).

2.13.3: Sixhills

The parish of Sixhills in East Lindsey produced two strap-ends (LIN-E09DB2 and NLM4304) (appendix 12.2.1), a cloisonné brooch (NLM2895) (appendix 12.5.3.4.1), and a domed disc brooch with *Jellinge*-style decoration (NLM4529) (appendix 12.5.4.2.1).

2.13.4: Girsby

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.13.5: Burgh on Bain

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.13.6: Bleasby

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.13.7: Legsby

PAS LIN-77C546 was a possible fragment of an eighth-century copper-alloy ansate brooch from Legsby in East Lindsey (appendix 12.5.1.1).

2.13.8: Holtham

The *NLPTS* database records the presence of pottery of type *TORK* and *LSH* at Holtham deserted medieval village, North Killingholme, Yarborough.

2.13.9: Lissington

The parish of Lissington produced one tenth-century hexagonal bell (LIN-AA80A0) (appendix 12.7.1); a coin pendant (LIN-C65986) (appendix 12.8.1); a lead coin-weight (LIN-956197) (appendix 12.11.1); and two strap-ends (NLM2744 and LIN-D17C35) (appendix 12.2.1).

2.13.10: Calcote

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.13.11: Torrington

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.13.12: Hainton

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.13.13: Biscathorpe

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.13.14: Swinthorpe

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.13.15: Wickenby

From the parish of Wickenby comes a fragment of a copper-alloy disc-brooch with *Borre*-style decoration (DENO-FB8444) (appendix 12.5.3.1.1) and an openwork stirrup strap mount (LIN-A2E242) (appendix 12.6.1.1).

2.13.16: Holton cum Beckering

In 2003, a rapid walkover survey took place as part of a desk-based assessment of a proposed gas-line between Wragby and Reepham (see notes under Welton) (Tann 2003: 1). No late Anglo-Saxon finds were mentioned for Holton cum Beckering.

2.13.17: West Torrington

A single Northumbrian styca has been found in West Torrington (appendix 9.1.45). The *PAS* furthermore reports the discovery of an incomplete copper-alloy strap-end (LIN-277D42) from the parish of West Torrington (appendix 12.2.1).

2.13.18: South Willingham

During ground works for a new office building at land north of the Old Rectory (TF 1941 8340), LAS carried out a watching brief. Although most of the building works were completed without an archaeologist present, reportedly at least one late Anglo-Saxon gully was found during the investigations. No positive evidence was found for occupation, although the reported (but unrecorded) presence of up to six wells indicates that dwellings may have been present. The earliest recorded features were a series of drainage or demarcation gullies (Tann 2002: 4). The pottery assemblage consisted entirely of post-medieval wares (Young 2002c).

2.13.19: Reasby

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.13.20: Snelland

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.13.21: Westlaby

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.13.22: Fulnetby

In 1971, a 'pagan' Anglo-Saxon loomweight was discovered at Fulnetby (TF 094 803) (Wilson 1972: 10).

2.13.23: Rand

In 2003, a rapid walkover survey took place as part of a desk-based assessment of a proposed gas-line between Wragby and Reepham (see notes under Welton; Tann 2003: 1). No relevant material was recovered from the parishes of Fiskerton, Newball, Goltho, Rand and Wragby (Tann 2003: 4-5, 8-9).

2.13.24: Beckering

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.13.25: Barkwith

The parish of East Barkwith produced three lead weights (LIN-2746A7) (appendix 12.11.1); three strap-ends (LIN-F9FED7, NLM2877 and DENO-B6F215) (appendix 12.2.1); and two stirrup-strap mounts (LIN-3E00B4 and LIN-F9AEB3 (appendix 12.6.1.1).

2.13.26: Benniworth

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.13.27: Stainton by Langworth

The PAS database lists a single copper-alloy ansate brooch (NLM203) from the parish of Stainton by Langworth. It was assigned an eighth-century date (appendix 12.5.1.1).

2.13.28: Newball

In 2003, a rapid walkover survey took place as part of a desk-based assessment of a proposed gas-line between Wragby and Reepham (see notes under Welton; Tann 2003: 1). No relevant material was recovered from the parishes of Fiskerton, Newball, Goltho, Rand and Wragby (Tann 2003: 4-5, 8-9). However, PAS LIN-A35B75 was a *Borre*-style flat disc brooch from the parish of Newball in West Lindsey (appendix 12.5.3.1.1).

2.13.29: Bullington

Bullington is the known site of a medieval priory, and is mentioned in *DB*. Beresford (1987: 6) suggested that the deserted medieval village of Bullington lay beneath the priory, beneath Bullington Hall, or in the woods to the south of the parish (Beresford 1987: 6). However, it has also been suggested (Everson 1988; 1990) that the now lost deserted medieval village of Bullington lies some 1.5 km to the northeast of the priory site, and should be identified with the excavated remains at 'Goltho' (Beresford 1975a; 1981; 1987; Everson 1988; 1990; Tann 2003: 7). The parish of Bullington is linked with that of Goltho into an ecclesiastically tithe-free parish, which is sometimes referred to as Goltho-cum-Bullington, although the date and reasons behind this amalgamation are uncertain. Still, as Goltho does not appear in the *Domesday* survey, and may not yet have existed (Everson 1988; 1990) (the earliest known record for Goltho dates to the thirteenth century (Beresford 1987: 1)), it is clear that there was only one parish in the eleventh century (Beresford 1987: 1). The remainder of this entry discusses the evidence from the site known as 'Goltho'.

There has been considerable debate over the correct interpretation of the site that has become known as 'Goltho' (Everson 1988; 1990). The deserted medieval village that was identified as 'Goltho' (TF 116 774), situated in the clay lands of Lindsey, some nine miles east of Lincoln, between the now also deserted village of Rand, and by Wragby, Kingthorp and Appleby, was already mostly destroyed in the 1970s as a result of ploughing activity (Beresford 1975b: 1; 1987: 1). Between 1970 and 1974, a series of excavations were undertaken, first investigating three separate crofts in 1970, and subsequently excavating the castle mound between 1971 and 1974 (Beresford 1981: 13). The following section will broadly summarise Beresford's (1975a; 1975b; 1987) interpretation of the site, but also provide the alternative interpretations.

Nearby finds suggest that the site was first occupied during the Roman period, and was subsequently re-settled in the late eighth or early ninth centuries, on the highest part of the village just to the southwest of the church of St George, whose sixteenth-century fabric still survives. In 1966, the northern part of the deserted medieval village (TF 113 777) was levelled and ploughed, destroying crofts 1-10. Three areas of habitation were noticed, two of which revealed Saxo-Norman pottery (including Stamford ware, Torksey ware, blue-grey continental pottery, and shelly and gritty ware). There also was a quantity of slag in one area (Beresford 1975b: 1; Whitwell 1967: 50).

In 1970, excavation began at TF 116 774, which was also due to be levelled. The earliest evidence from the area enclosed by the twelfth-century moat was a Roman phase, assigned a date range between c. 50 and 200 AD (Beresford 1987: 15-21). It seems that after this, the site was deserted for a period of time. Beresford (1987: 22) suggested that during the early Anglo-Saxon period the clay lands often were abandoned in favour of the gravel and sand geology, which also seems to have been the case at 'Goltho' (Beresford

1987: 22). The site was re-occupied some time later, when a planned settlement with large croft-like enclosures was laid out, arranged along a central trackway (Beresford 1987: 23). This earliest post-Roman occupation phase at 'Goltho' has few associated artefacts, and all of these comprise pottery sherds, the earliest group consisting of shell-tempered wares, harsh shell-tempered wares, grey wares, Torksey wares, and Maxey-type ware. On the basis of a comparison with other sites in Lincolnshire, Beresford (1987: 22) suggested that re-settlement took place around c. 800, an argument that was largely based on the size and construction techniques used for the houses, which Beresford considered similar to those in other middle Anglo-Saxon settlements, such as those excavated at Chalton, West Stow, St Neots and Maxey. However, the presence of Torksey-ware in the earliest structural deposits suggests a ninth-century date for the re-occupation of the site, even if the occurrence of Maxey-type wares suggests that activity in the immediate vicinity dated back to the middle Anglo-Saxon period (chapters 2 and 6).

Two farmsteads were excavated, both of which were partially destroyed by the later moat. The postholes that formed the second phase of the boundary structure of the housing plots were found associated with a number of pottery sherds, including shell-tempered, grey sandy, Torksey and Maxey-type wares (Beresford 1987: 24). This pottery assemblage was part of the primary packing of six of the fourteen postholes that formed the second phase of the property boundary of the settlement. It included 10 cooking pots and two bowls in shell-tempered ware, a single cooking pot and bowl in harsh shell-tempered ware, a cooking pot and bowl in grey sandy ware, a cooking pot and bowl in Torksey ware, and two bowls in Maxey-type ware as well as a single unidentified ware. It was suggested that all these sherds formed a contemporary deposit (Coppack 1987: 137). If this was true, then Beresford's preferred early ninth-century date for the reoccupation of the site cannot be sustained.

The occupation surfaces of the two farmsteads had been destroyed by later activity, but next to house 2 two large stone-lined hearths survived that were associated with a thin spread of slag, indicating that the area was used for smithing (Beresford 1987: 24-25). A spread of pottery was recovered around structure 2 as well, indicating that these buildings were of domestic function rather than outbuildings (Beresford 1987: 25). Some 68 vessels were identified as 'occupational deposits', including shell-tempered, Torksey type, grey, and Stamford wares (Coppack 1987: 137; Beresford 1987: 25, 137).

In the middle of the ninth century, it is argued, the site was then cleared for the construction of the first of a sequence of "fortified aristocratic homesteads which were to stand on the site until the middle of the twelfth century" (Beresford 1981: 16; 1987: 3, 12-14, 23). This consisted of a large hall and a number of associated outbuildings that were arranged on an east-west alignment around three sides of a courtyard (Beresford 1975a: 61; 1987: 12). The first defended house was stave-built and bow-sided, measuring 24.4 m in length, and 6.1 m wide in the centre and 5.5 m at either end. The bow-sided nature has parallels in Viking Age Scandinavia, but also in Dorestad and Warendorf in Germany in the late eighth-early ninth century, and in the middle Anglo-Saxon settlement at Catholm in England, as well as the late Anglo-Saxon buildings at Buckden, Cheddar, Sulgrave and Thetford, and is not necessarily indicative of a Scandinavian ethnic origin (Beresford 1981: 23-24). Beresford (1981: 17, 23) considered it to be particularly similar to the so-called 'royal palace' at Cheddar, Somerset. The entrance was formed by a door in the long sides, at the western end of the building, coming into a separate room. At the eastern end, the floor was raised, forming a dais with a central hearth (Beresford 1975a: 61; 1987: 29). It was divided into three rooms, the hall, an ante-chamber and a pentice (Beresford 1981: 23). Beresford (1987: 38) dates the first re-building or extensive repair of the hall to c. 900, when a second building phase made use of the same foundations. Not only the first two building phases were built on the same foundations, but so were their tenth- and eleventh-century successors, which led to some confusion during excavation (Beresford 1975a: 61; 1987: 29). The dating of the various phases in particular is open to debate, and as it is possible that the underlying farmsteads had not been constructed until the later ninth or tenth centuries, the 'fortification' of the site should probably not be placed prior to the tenth century.

The hall and ancillary buildings were arranged around three sides of a courtyard, and enclosed by a substantial earthwork enclosure (Beresford 1981: 18). The whole complex was initially surrounded by a timber palisade, which was replaced in the tenth century with an earthen bank inside the earlier boundary (Beresford 1975a: 61). The enclosed area measured roughly 48 m by 48 m (Beresford 1987: 30). The site had a domestic use, "a homestead of a man of considerable importance, and not a fortified township like Wareham, or a military fortress like Trelleborg" (Beresford 1981: 20). Nevertheless, based on a comparison between the 'Goltho' earthworks and the size of other earthworks "of known defensive origin" (basically some *burhs* and the Trelleborg-forts), Beresford (1981: 20) argues that "they were constructed for serious defence".

The majority of finds associated with this early aristocratic homestead (dated by

Beresford to c. 850-950) consisted of five groups of pottery, as well as evidence for spinning and weaving, some knives, and a bridle bit (Beresford 1987: 30). Unfortunately the pottery was studied (Coppack 1987) before the current pottery classification was developed by Young and Vince (2005), and it is not possible to reassess the dating of the wares, which are mostly described in terms of 'shell-tempered' and 'harsh shell-tempered' wares, without going back to the original finds themselves (Young *pers. comm.*). A few sherds were identified as being of eastern mediterranean origin (Coppack 1987: 141), and it is stated that further sherds of Islamic origin were found in Lincoln; however, the latter were later re-identified as partially vitrified parting vessels (chapter 6). Torksey- and Stamford-wares are identified in all occupation deposits (Coppack 1987: 141-43), however, suggesting a *terminus post quem* of the tenth century.

In the next phase (identified as tenth-century), the hall and weaving shed were still located in the same spot, around three sides of an internal courtyard, but the bower was moved closer to the hall, and both the construction and internal layout of the buildings was changed, which suggests that their social function may have changed (Beresford 1981: 17, 27; 1987: 61). The hall was now wider compared to its length than earlier, and there is no more evidence for internal divisions; the outbuildings, on the other hand, did show evidence for internal partitioning. It was suggested that the outbuildings took over domestic usage, whilst the hall became the 'public' sphere (Beresford 1981: 27). The first phase of this hall measured c. 12.6 x 6.6 m, with an aisle measuring 4.8 x 1.8 m; the second hall was around 12.6 x 8.7 m (Beresford 1987: 63). The dating of this phase is based on the pottery and confirmed by a find of a penny of Edgar on the bower floor (Beresford 1987: 61). This coin formed the basis for the dating of the associated deposits to the period before c. 973 AD, unless it was "an abnormal survival" (Coppack 1987: 143). However, this is a badly founded assumption, as excavations in Lincoln have shown that coins are in fact very common as residual finds (chapter 5).

In the next phase, dated to the early eleventh century, another building phase commenced which increased all buildings in size, and enlarged the enclosed area (Beresford 1981: 17, 27). The bower was converted to a kitchen as well in the early eleventh century (Beresford 1981: 27). These changes remained unchanged in subsequent phases, which had been taken to mean that the developments of the Norman Conquest did not affect the site in any way (Beresford 1981: 17, 27); however, based on the revised dating of the pottery, it is equally if not more likely that this phase was contemporary with or even later than the Norman Conquest.

In terms of artefactual evidence, the presence of fourteen heckle teeth, thirteen spindle whorls, one needle, one shearboard hook and six pin-beaters (or thread pickers) suggests that textile production took place on the site (Beresford 1981: 25; 1987: 55). The spindle whorls were found associated with the halls or bowers, the heckle teeth and pinbeaters in the courtyard or in the northern part of the site, indicating that the looms were in the buildings north of the hall, which led to their interpretation as weaving sheds (Beresford 1987: 55). However, no loom weights were found. Their absence compares interestingly to the absence of loom weights from Lincoln, which is usually interpreted as evidence that the Scandinavian settlement involved the introduction of a new type of horizontal loom, which did not use such weights. If this interpretation is correct, it provides a further argument in favour of the later date of 'Goltho'. Interestingly, it may also provide evidence for the presence of Scandinavian women amongst the settlers, as weaving was presumably a female activity.

The pottery assemblage was interpreted as the amount of rubbish a single high-status household would have generated (Coppack 1987: 164). Other finds included some bone pins and a couple of bone combs pre-dating the eleventh century, as well as a bone spoon and a single gaming piece (MacGregor 1987), and about eight ninth- and tenth-century spindle whorls, a whetstone (Beresford 1987: 195), and six querstones. Only a small number of ferrous and non-ferrous metal objects were retrieved (Goodall 1987; appendix 12.3.1; 12.2.1; 12.11.1; 12.12.1.1; 12.7.1; 12.12.2.1; 12.12.7.1; 12.10.1.1; 12.6.2.1). The ferrous objects were mostly tools, but the non-ferrous objects included a handful of dress accessories. These were more similar in nature to finds from late ninth- and tenth-century Lincoln than to finds from the middle Anglo-Saxon settlement at Flixborough. As such, they confirm the suggested late Anglo-Saxon date for 'Goltho'.

In addition to the moated site, Beresford also discovered an almost complete building sequence of mud and stud houses from the Saxo-Norman period to the first half of the fifteenth century (Beresford 1975b: 1-2; Wilson 1971: 11). Excavations revealed a sequence of post-construction buildings, but no sunken-featured buildings (Beresford 1975b: 19-20). All the pottery that was found at 'Goltho' during the excavation of the crofts was wheel-thrown, comparable to the pottery from Flaxengate in Lincoln and Somerby (Lincs.) (Beresford 1975b: 55).

Beresford's interpretation of the site was criticised by Stocker (1989: 627), who regarded it as being "very much one man's view", and accused the author of exaggerating things to fit his ideas best, and to not be very detailed in his discussion of the actual archaeology, which means that a re-interpretation from the record was made extremely difficult. In particular, Stocker (1989: 627) questioned the comparison with other high-status sites such as Cheddar and Yeavinger, stressing the small nature of Goltho in comparison with these other sites. On the basis of the pottery assemblage, Stocker suggested to move the date range of the site back by 50 years or so, placing its re-occupation around c. 900 AD (Stocker 1989: 628; also see Symonds 2003a: 51). Young (*pers. comm.*) believes that the ceramic sequence at 'Goltho' did not begin until the early to mid tenth century.

Other evidence from the modern parish of Goltho is sparse. A single coin of an East Midlands mint (946-73) was found (appendix 9.1.15). In addition, the parish of Bullington produced a lead weight (LIN-424F33) (appendix 12.11.1) and a lead spindle whorl (LIN-423CF5) (appendix 12.12.4.1).

2.13.30: Wragby

In 2003, a rapid walkover survey took place as part of a desk-based assessment of a proposed gas-line between Wragby and Reepham (see notes under Welton; Tann 2003: 1). No relevant material was recovered from the parishes of Fiskerton, Newball, Goltho, Rand and Wragby (Tann 2003: 4-5, 8-9). However, the PAS reports two eighth- to ninth-century copper-alloy pins (SWYOR-3DEE70 and YORYM-E0A2A6) from the parish of Wragby (appendix 12.1.1.1).

2.13.31: Langton by Wragby

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.13.32: Strubby

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.13.33: Hardwick

The parish of Hardwick in East Lindsey produced a single piece of equestrian equipment (NLM-CBA861) (appendix 12.6.2.1).

2.13.34: Panton

Panton in the parish of East Barkwith produced a tenth-century hexagonal bell (DENO-1D57D7) (appendix 12.7.1) and an unidentified object in *Ringerike* style (DENO-1D6161) (appendix 12.12.7.1).

2.13.35: Sotby

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.13.36: Apley

The parish of Apley produced an ansate brooch (LIN-7B6462) (appendix 12.5.1.1).

2.13.37: Kingthorpe

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.13.38: Hatton

The parish of Hatton produced three brooches (LIN-FA4AF2, YORYM-7F0EB4 and YORYM-7F5A40) (appendices 12.5.3.1.1, 12.5.3.5.1 and 12.5.8.1); four stirrup-strap mounts (LIN-11D642, LIN-E7BE50, YORYM-814EC7 and YORYM-815280) (appendix 12.6.1.1); a pendant (YORYM-814631) (appendix 12.8.1); three weights (YORYM-7DEDD3, LIN-7D8F62 and LIN-0F0337) (appendix 12.11.1); a copper-alloy stylus (LIN-2561C7) (appendix 12.12.5.1); seven pins (YORYM-7DD6B0; LIN-125224; LIN-3D8382; LIN-FD8DB2; LIN-FDACA3; LIN-23AA51; BUC-A5C873) (appendices 12.1.1.1 and 12.1.2.1); and an eighth- to ninth-century copper-alloy strap-end (LIN-101236) (appendix 12.2.1).

2.13.39: Osgodby

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.13.40: Stainfield

This was originally a Roman town, situated half a mile from the present road between Bourne to Sleaford (Whitwell 1992: 68).

2.13.41: Butyate

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.13.42: Bardney

One coin of King Athelstan, struck at the York mint, has been found in this parish (appendix 9.1.2). A late ninth-century silver strap-end of the so-called *Trewhiddle*-style was also found in 2003 (*Treasure* 2003) (appendix 12.2.1), as well as a gilt copper-alloy disc-shaped pinhead (LIN-08B6B4) (appendix 12.1.3.1), a copper-alloy dagger guard with *Ringerike*-style decoration (LIN-7FE604) (appendix 12.10.3.1) and a tongue-shaped mount (NLM6040) (appendix 12.12.1.1). In addition, two Anglo-Saxon sculpture fragments were recovered (appendix 4.1.2) (Everson and Stocker 1999: 27, 97-98).

2.13.43: Southrey

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.14: Gartree Wapentake

2.14.1: Donington on Bain

In 1968, a quantity of Saxo-Norman pottery was found at TF 198 356 (Whitwell and Wilson 1969: 116). In July 1998, the CLAU undertook an archaeological evaluation on Main Road and Station Road, prior to residential development. The site was located c. 10 km to the southeast of Louth, and less than 20 km north of Horncastle. The village church retains some eleventh-century features, and there is a significant amount of medieval earthworks in a nearby field (Wragg 1998a: 2-3). During the evaluation, four trenches were dug to establish the nature of the archaeology. Most of the archaeology turned out to be medieval, but some late Anglo-Saxon activity was encountered as well in trenches 1, 3 and 4; unfortunately the limited surface area covered by the trenches rendered an interpretation of the features difficult (Wragg 1998a: 1).

Trench 1 revealed a ditch with a single tenth- to eleventh-century HLKT sherd in its fill (Wragg 1998a: 5). Trench 3 contained another ditch that occupied the same stratigraphic position as the ditch from trench 1, in the sense that they both cut the same underlying occupation layer. This ditch contained lots of spherical hammerscale (Wragg 1998a: 6). Trench 4 revealed a curvilinear cut feature with another single tenth- to eleventh-century HLKT potsherd in its fill (Wragg 1998a: 8). In addition to the excavations, a geophysical survey was carried out, which indicated domestic or small-scale industrial metalworking activity (Wragg 1998a: 18), but the date of this activity could not be ascertained (Wragg 1998a: 20). The hammerscale from trench 3 may suggest a late Anglo-Saxon date for this activity, but the 1907 OS map also showed that a smithy was situated immediately west of the site in the early twentieth century (Wragg 1998a: 1).

Between July and August 1998, the evaluation was followed by an open area excavation, and subsequent watching brief during the actual construction works. At least one east-west aligned timber structure was revealed (structure 1), measuring 12 x 5 m, with a stone-lined hearth at its western end. It was dated to the tenth- and/or eleventh centuries (Wragg 2001: 2). Environmental sampling revealed a small amount of slag, indicative of non-ferrous metalworking, of which the majority could be dated to the tenth and eleventh centuries. The slag was identified on the basis of similarities with contemporary slag from the sites of St Paul-in-the-Bail and Flaxengate at Lincoln. The amount of material recovered was too small to suggest any industrial activity, and it was concluded that this was a domestic dwelling (Wragg 2001: 2). To the north of this building, another, simpler and open-ended structure was excavated, built on the same east-west alignment. It was suggested that this was an auxiliary building, such as a barn, although no dating evidence was found. Both structures seem to have been thatched. Some postholes situated to the north of the smaller building may have formed part of a contemporary enclosure (Wragg 2001: 2). Also see notes under Hallington.

2.14.2: Stenigot

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.14.3: Market Stainton

LAS carried out an Archaeological evaluation in 1998. Twelve out of thirteen pieces of pot retrieved dated to the tenth to eleventh centuries. This site showed little structural remains, but there must have been some nearby (Rayner 1998: 1). The features containing the pot were partially natural, or inconclusive in terms of function – all were very irregular in shape (Rayner 1998: 4). In addition, the parish of Market Stainton produced a ninth-century copper-alloy strap-end (NLM-FFBBB8) (appendix 12.2.1), an eleventh-century stirrup-terminal (NLM-E73595) (appendix 12.6.1.1) and a copper-alloy finger ring decorated with rows of punched dots (NLM-E71AB3) (appendix 12.9.1).

2.14.4: Goulceby

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.14.5: Cawkwell

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.14.6: Ranby

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.14.7: Asterby

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.14.8: Scamblesby

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.14.9: Sudtone

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.14.10: Great Sturton

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.14.11: Hemingby

The *NLPTS* database records the presence of pottery of type ESAX, MAX, LKT, LSH and LSLOC at Hemingby, Gartree. The parish of Hemingby also produced an eleventh-century *Urnes*-style stirrup mount (*PAS* NLM2761) (appendix 12.6.1.1).

2.14.12: Belchford

A possible Anglo-Saxon burial, accompanied by an iron knife blade, was found in a chalk pit next to Bluestone Heath Road (Whitwell 1967: 42). See appendix 6.1.3.

2.14.13: Thorley

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.14.14: Little Minting

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.14.15: Minting

In 1998 the CLAU carried out an earthwork survey and a watching brief during excavation of a culvert trench (TF 1873 7339), which was intended to alleviate flooding in the settlement at Minting. The earthwork survey did not reveal any Anglo-Saxon material (Wragg and Trimble 2000: 3-4). The watching brief took place in three separate areas. Most areas only revealed geological features, but beneath the modern road at the Church Street crossing the remains of earlier road surfaces were found (Wragg and Trimble 2000: 6). Only two pottery sherds pre-dating the thirteenth century were found, consisting of a single sherd of HLKT, and a residual sherd of WEMS from a medieval context (Young 2000e).

Subsequently in 2005, PCA carried out an archaeological watching brief prior to groundworks associated with the construction of a swimming pool at the Horse Close, behind an existing building (TF 18432 73745) at Chapel Lane. Investigations revealed a single phase of activity that was dated to the period between the late ninth and late tenth centuries AD. This consisted of a pit and an undated cobbled surface (Daley 2005: 1). The upper fill of the pit (105) contained 5 sherds of late ninth- to late tenth-century pottery (including four sherds of 'Lincoln Shelly Ware', and the overfired or burnt base of a LKT pot). The finds were unabraded, and it is possible that this is an instance of primary waste-disposal. No finds were found associated with the cobbled surface. The animal bone assemblage suggests that sheep were kept for wool production as well, and the presence of mussel and oyster shells at this site, 45 km inland, suggests that there were quite good trade networks in place. The remaining finds were of post-medieval date (Daley 2005: 4).

2.14.16: Burreth

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.14.17: Bucknall

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.14.18: Horsington

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.14.19: Stixwould

At Stixwood, a quantity of middle Anglo-Saxon stamped pottery sherds were found near the River Witham (Whitwell 1966: 38). A single Reform Portrait coin of Edgar was furthermore found in the parish of Stixwould and Woodhall (appendix 9.1.34), as was an eleventh-century stirrup-strap mount (LIN-9EA0F5) (appendix 12.6.1.1).

2.15: Horncastle Wapentake

2.15.1: Little Sturton

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.15.2: Baumber

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.15.3: West Ashby

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.15.4: Waddingworth

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.15.5: Wispington

The parish of Edlington with Wispington produced one hooked tag (LIN-2B63A4) (appendix 12.4.1), a flat lead disc-bröoch (NLM193) (appendix 12.5.3.3.1) and two strap-ends (LIN-CA70F2 and LIN-2BACE4) (appendix 12.2.1).

2.15.6: Edlington

One coin of the York mint from the period 973-1000 has been found at Edlington (appendix 9.1.12). For other metalwork finds, see Wispington (appendix 2.15.5).

2.15.7: Thimbleby

One coin of unknown mint dated to the period 973-1000 has been found at Thimbleby (appendix 9.1.40). In addition, the parish of Thimbleby produced four pins (YORYM-E85898; YORYM-C18DE6; NLM4767; and NLM-E7D732) (appendices 12.1.1.1 and 12.1.2.1); five strap-ends (YORYM-E88227; NLM4699; YORYM-C1FA41; NLM-E7FDC3 and YORYM-C1E0C2) (appendix 12.2.1); three hooked tags (NLM4716; NLM4715 and NLM-E7A805) (appendix 12.4.1); two brooches (NLM4701 and NLM4700) (appendix 12.5.3.3.1); and four stirrup-strap mounts (NLM1039; NLM1035; NLM1036; and LIN-F6D795) (appendix 12.6.1.1).

2.15.8: Toynton

The parish of High Toynton in Lindsey produced one iron sword blade (WMID2970) (appendix 12.10.2.1) and several fragments of a middle Anglo-Saxon hanging bowl (WMID2966, WMID2967, WMID2968 and WMID2969) (appendix 12.12.7.1).

2.15.9: Langton

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.15.10: Horncastle

Horncastle was originally a Roman settlement. The town wall, which was still visible in the nineteenth century, enclosed an area of c. 6 acres, but not many finds have been made in the area inside the walls (Whitwell 1992: 74). In 1980 an early Anglo-Saxon burial was excavated, which indicated limited occupation within the walled area in the sixth century (White 1981: 71-72). Some significant excavations were carried out in the 1960s, 1970s and early 1980s. During excavations at 27 High Street in 1978, significant evidence for Anglo-Saxon activity was found. However, as the emphasis during these excavations lay wholly with the Roman period, the Anglo-Saxon and later medieval finds were not recorded in any detail (Field and Hurst 1983). Two ninth-century dress accessories were retrieved (appendix 12.2.1; 12.1.5.1)

A ninth- to tenth-century silver ingot has been found in the Horncastle area (*Treasure* 2000: 49; Lincs HER find spot 44497). Two coins from the period 973-1000 have also been found, as well as single Carolingian coin was also found (appendix 9.1.19). The *PAS* furthermore reports the discovery of three pins (NLM885, NLM-477932 and NLM3400) (appendices 12.1.1.1 and 12.1.5.1); three strap-ends (NLM-47F7B8, NLM3377 and NLM-BB2EF1) (appendix 12.2.1); two buckles (NLM3404 and NLM-BAFF81) (appendix 12.3.1); a hooked tag (NLM3406) (appendix 12.4.1); a cloisonné disc brooch (NLM6212)

(appendix 12.5.3.4.1); four pieces of equestrian equipment (NLM-475B45, NLM6159, NLM-BB5F70 and DENO-903C41) (appendices 12.6.1.1 and 12.6.2.1); a twisted copper-alloy penannular finger- or earring ring (NLM3403) (appendix 12.9.1); and two mounts (NLM6156 and NLM-BAB507) (appendix 12.12.1.1). Horncastle was also the location of one of Lindsey's minor mints (chapter 4).

In September 2000, LAS carried out an archaeological evaluation at land north of Conging Street in Horncastle (TF 2599 6977). The site was situated c. 80 m to the northeast of the Roman walls (*Land to the North of Conging Street* 2000; Tann 2000: 3). The evaluation revealed no prehistoric remains, whilst Roman activity was very limited as well (Farr 2000: 11). The majority of evidence consisted of so-called 'garden deposits', probably indicative of agricultural activity, containing late Anglo-Saxon pottery types LSLOC and LSX, as well as a single ditch with similar pottery, through which a 2 m slot was dug (Farr 2000: 12). Eleven sherds were recovered in total, ranging from the late Anglo-Saxon to early modern period. Seven different fabrics could be identified, including LSLOC and LSX, both of which were certainly of late Anglo-Saxon date (Young 2000b).

APS carried out a watching brief in 2005, prior to residential development at 7-13 Bridge Street (TF 25797 69624), which revealed medieval and undated deposits. Some undated layers were stratigraphically situated between the natural and the post-medieval layers, and included two floor surfaces, a dump, and a demolition layer (Cope-Faulkner 2005: 1). They contained mortar (Cope-Faulkner 2005: 3), rendering an Anglo-Saxon date somewhat unlikely.

In May 1990, the Heritage Trust of Lincolnshire undertook an Auger Survey in the yard to the rear of 9-17 Bridge Street (TF 2578 6963). No Roman pottery was recovered, but a single late Anglo-Saxon sherd may point to the existence of a late Anglo-Saxon settlement in the area (*Auger Survey* 1990).

2.15.11: Thornton

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.15.12: Torp

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.15.13: Martin

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.15.14: Scrivelsby

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.15.15: Mareham on the Hill

The parish of Mareham on the Hill produced a single ninth- to tenth-century strap-end (LIN-434DB5) (appendix 12.2.1).

2.15.16: Roughton

LIN-0D6E31 was an eighth-century collared copper-alloy pin with an undecorated bulbous head (appendix 12.1.1.1), and LIN-A0A7F4 was an eleventh-century zoomorphic copper-alloy terminal for a strap distributor (appendix 12.6.1.1).

2.15.17: Haltham

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.15.18: Wood Enderby

In 2003, APS carried out a watching brief at Back Lane, Enderby, during the construction of three dwellings and two garages (TF 27600 64000). A north-south aligned and irregularly shaped ditch, containing tenth- to twelfth-century pottery, and a pit containing eleventh- to twelfth-century pottery were identified in plot 3. The feature that was identified as a pit was only very partially revealed, but was sub-rectangular in shape, and measured at least 2.5 x 0.6 m, and reached a depth of 0.35 m (Bradley-Lovekin 2003: 3). In addition, three medieval features were identified in plot 1, which all contained residual tenth- to twelfth-century pottery. This suggests that the activity on this part of the site dates back to the same period as that identified in plot 3 (Bradley-Lovekin 2003: 5). A number of undated features were identified in all plots, although comparably few in plot 2 (Bradley-Lovekin 2003: 1, 5). The parish of Wood Enderby furthermore produced one Samanid *dirham* (appendix 9.1.47), as well as a copper-alloy gilt sleeve clasp (NCL-844EC1) (appendix 12.12.7.1) and two strap-ends (NCL-435820 and LVPL-061084) (appendix 12.2.1).

2.15.19: Moorby

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.15.20: Kirkby on Bain

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.15.21: Wilksby

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.15.22: Tattershall Thorpe

The Lincolnshire HER reports that an archaeologist of Archeo-Survey was contacted by the owner of Monks Elder Cottage on Abbey Lane, Kirkstead, Woodhall Spa, some 4 km to the northwest of Tattershall Thorpe, and just to the northeast of the River Witham, after buildings works had been conducted and finished. A search of the spoil heap revealed mostly post-medieval material, as well as a single late Anglo-Saxon to Saxo-Norman pottery sherd (Monument 46719; Find Spot 46719). A middle Anglo-Saxon grave identified as that of a smith was also found on a Neolithic site near Tattershall Thorpe (Hinton 2000; 2003) (appendix 6.1.21), whilst two strap-ends (NLM-466BD0 and NLM-463C08) (appendix 12.2.1) were retrieved from elsewhere in the parish.

2.15.23: Fulsby

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.15.24: Mareham le Fen

The PAS reports the discovery of an unidentified object, possibly a handle, in the shape of an animal's head, from the parish of Mareham le Fen in East Lindsey (NLM579) (appendix 12.12.7.1).

2.15.25: Tumbly

During the excavation of three palaeochannels at Tumbly (TF 2361 6040) by LAS, some Anglo-Saxon and Roman pottery was uncovered in the third palaeochannel (Field and MacDaid 2000: 11). However, as the dig focused mainly on Neolithic remains this material was not fully evaluated in the report.

2.15.26: Tattershall

As part of the Fenland Survey, the parishes of Billingham, Dogdyke, Hart's Ground and Pelham's land just south of the Witham, across the river from Tattershall (aka The South-Eastern Witham Fens), were surveyed in 1983-84, as well as the parishes of West Fen, East Kirkby, Hagnaby, West Keal, East Keal, Toynton All Saints, Toynton St Peter, Stickford, Stickney, Midville and Sibsey to the north (aka the Northern Fen-Edge) (Lane 1993: 3). No material dating to the Romano-British, Anglo-Saxon and Medieval periods was found in the southeastern Witham fens, which suggests that the area was too wet for habitation during these periods. It was pointed out that more fieldwork was needed to ascertain this. What was concluded, however, was that the Witham had changed its course by the early medieval period, as compared to the prehistoric period (Lane and Hayes 1993: 23). Surface finds from Tattershall parish include a single coin of Athelstan (appendix 9.1.38), and five pins (NLM5409; NLM5408; NLM5406; NLM5407; and NLM5405) (appendix 12.1.1.1); two strap-ends (NLM6355 and NLM2680) (appendix 12.2.1); four buckles (NLM5394; NLM5396; NLM5418 and NLM5419) (appendix 12.3.1); and a copper-alloy strap fitting for a belt or a horse harness (NLM6281) (appendix 12.6.2.1).

2.15.27: Coningsby

No archaeological evidence for late Anglo-Saxon activity has been found here to date, although it has been suggested that the smith's burial from Tattershall Thorpe was that of a travelling craftsman who had died during a visit to a royal manor at Coningsby (Hinton 2000).

2.16: Hill Wapentake

2.16.1: Walmsgate

At Walmsgate, a ninth-century coin hoard has been found (chapter 4).

2.16.2: Worlaby

In 1965, a number of human bones were ploughed up in a field to the east of the village at Worlaby (TA 017 143), which proved to form part of an Anglian cemetery overlying a Romano-British building. In total, some six burials were excavated. The cemetery was assigned a sixth-century date on the basis of its grave goods (Whitwell 1967: 37). In

addition, a single Anglo-Saxon glass bead has been found in Worlaby, which is now held by Scunthorpe Museum (Whitwell 1967: 42). The parish of Worlaby also yielded two eighth- to ninth-century copper-alloy pins (NLM629 and NLM628) (appendix 12.1.1.1), two ninth-century strap-ends (NLM631 and NLM630) (appendix 12.2.1) and a gilt copper-alloy pendant with interlace decoration (NLM632) (appendix 12.8.1).

2.16.3: Oxcombe

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.16.4: Ketsby

The parish of South Ormsby cum Ketsby produced one pin (LIN-5610F4) (appendix 12.1.1.1); one strap-end (LIN-2740A6) (appendix 12.2.1); one hooked tag (LIN-167E53) (appendix 12.4.1); and one mount (LIN-5580D0) (appendix 12.12.1.1).

2.16.5: Tetford

Tetford is the site of an Anglo-Saxon inhumation cemetery (monument 42611) (appendix 6.1.22). In addition, an unidentified copper-alloy object (LIN-99CD50) was found in this parish (appendix 12.12.7.1).

2.16.6: South Ormsby

In 1995, LAS carried out a watching brief during the construction of 37 holes for electricity cables in the parishes of Driby, Calceby and South Ormsby. All three these parishes were in the South Riding, but lay near the periphery of three Scandinavian *wapentake* divisions (Tann 1995c). The site of the medieval village of South Ormsby is not listed by the RCHM (Tann 1995c: 7). In this parish, 16 holes were excavated. Test hole 31 revealed a single sherd of Saxo-Norman pottery (Tann 1995c: 14). Also see notes under Calceby and Driby, and Ketsby (appendix 2.16.4).

2.16.7: Fulletby

The parish of Fulletby produced two strap-ends (NLM-158FF3 and NLM-00A141) (appendix 12.2.1); a D-shaped buckle (NLM-00CD52) (appendix 12.3.1); an ansate brooch (NLM-2816C0) (appendix 12.5.1.1); a lead-alloy disc brooch (DENO-6C04E1) (appendix 12.5.3.3.1); two stirrup-strap mounts (NLM-2698E1 and NLM-265802) (appendix 12.6.1.1); and a pair of tweezers (NLM-167C02) (appendix 12.12.6.1).

2.16.8: Salmonby

In 1972, Everson and Taylor excavated a seventh-century sunken featured hut in Salmonby (Everson and Stocker 1999: 9; Marjoram 1973: 41; Whitwell and Wilson 1969: 108). The site was located at TF 3175 7357, some 750 m west of the present village and 1500 m west of the known Anglo-Saxon settlement site at Sandy Knobbs/New England (Everson 1973: 62). Because of time constraints only a small area measuring 5 x 4.5 m was opened, encompassing an entire sunken-featured building with two fills (Everson 1973: 61-62). Both fills contained animal bones, unbaked clay loomweights and pottery. The structure was backfilled before the beginning of the middle Anglo-Saxon period (Everson 1973: 62). The placename suggests it was renamed or refounded in the period of Scandinavian settlement (Everson 1973: 65-67).

2.16.9: Somersby

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.16.10: Brinkhill

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.16.11: Greetham

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.16.12: Ashby Puerorum

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.16.13: Bag Enderby

An early twentieth-century report mentioned that a "Saxon stone" was found in Bag Enderby (Everson and Stocker *pers. comm.*). Due to the vague nature of the reference, this has not been included in appendix 4; for more information, see Everson and Stocker *forthcoming*.

2.16.14: Langton

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.16.15: Hagworthingham

In 2000, Pre-Construct Archaeology carried out a watching brief at Manor Road in Hagworthingham (TF 3442 6916) during groundworks for a dwelling and a garage. A small number of features were found that were assigned a medieval or post-medieval date (Rylatt 2000b: 1). The artefacts contained within these features, however, covered the ninth to nineteenth centuries (Rylatt 2000b: 5). The oldest sherd was Saxo-Norman, of fabric type SNLOC, and was assigned an eleventh-century date (Rylatt 2000b: 6).

2.16.16: Winceby

A single St Peter's Sword/Cross-type coin of the York mint has been found in the parish of Lusby with Winceby (appendix 9.1.24). The parish of Lusby with Winceby also produced an eleventh-century copper-alloy strap-distributor for a horse's harness (NLM-C681E7) (appendix 12.6.2.1) and a copper-alloy zoomorphic object, probably a knife terminal (DENO-B9C5E6) (appendix 12.10.1.1).

2.16.17: Hameringham

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.16.18: Claxby Pluckacre

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.17: Calcewath Wapentake

2.17.1: Theddlethorpe

During an archaeological watching brief for the construction of a pipeline from Howdales, South Cockerington (TF 415 909) to Theddlethorpe (TF 487 872), archaeologists of LAS discovered two sites (areas A and B) near the village of Theddlethorpe All Saints, in the very flat and low-lying Lincolnshire Outmarsh, less than 5 km from the modern coastline, and less than 2 m above sea level (Allen and Tann 2000: 7). During subsequent excavation of the two sites, lying some 150 m apart, evidence for possible tenth-century activity was discovered.

In area A, a strip of land measuring 22 x 7 m, a large amount of wattle-impressed fired clay was found, as well as three potsherds, which were given a date range between the late ninth and twelfth centuries. Environmental sampling furthermore revealed a large amount of charred cereal remains. These deposits were found overlying and partially filling a well, whose waterlogged fills ensured good preservation of the charred seeds (Allen and Tann 2000: 8-9).

In area B, a strip measuring 15.5 x 11.5 m, two contemporary ditches were discovered at right angles to each other, in a T shape. Their fills contained a significant amount of burnt material and charcoal. One of the sections also contained a fragment of a whetstone of possibly Scandinavian origin, of a type usually only found in Britain after the late ninth century (Allen and Tann 2000: 10-11). A small number of potsherds was also retrieved from the fills, and dated to the period between the late ninth and twelfth centuries (Allen and Tann 2000: 11; Young 2000d). Two postholes were found associated with one of the ditches (Allen and Tann 2000: 12). The backfilling sequence of the ditches has three phases. During the first phase, not long after the initial construction of the ditches, straw or chaff was burnt and deposited. During the second phase, clay was deliberately deposited into the ditch. During the third and final phase, the ditches were backfilled. The fills belonging to this phase contained more fragments of fired clay with wattle impressions, as well as a significant number of corner pieces, representing the demolition material of a wattle-and-daub building (Allen and Tann 2000: 11).

The fired clay fragments from both sites were analysed by Vince (2000), who determined that they were burnt from the inside, at a very high temperature in excess of 1000 degrees Celsius, possibly as a result of high winds at the time of the fire. Vince furthermore concluded that the wattle impressions were atypical of usual construction methods employed in domestic houses in the region, and suggested that it may have been a barn, a suggestion that is supported by the high quantity of charred seed remains (Allen and Tann 2000: 13). The corner pieces would suggest a square or rectangular shape, but nothing more could be said about the possible appearance of the building. Its dating is uncertain, but it forms part of the earliest phase of activity as yet uncovered in the village (Allen and Tann 2000: 13).

During the same investigations by LAS, in field 8, between Theddlethorpe and Theddlethorpe All Saints, three to four sherds of tenth- to twelfth- century pottery (LSLOC and MISC) were retrieved. No structural features were identified, but it was suggested that there was a nearby late Anglo-Saxon dwelling (Allen and Tann 2000: 3). The remaining fields that were investigated did not reveal any late Anglo-Saxon pottery.

Finally, *Theddlethorpe St Helen 1* is part of a grave cover of the Lindsey grave cover group, re-used as a tread in the staircase in the west tower of the church of St Helen (appendix 4.1.32) (Everson and Stocker 1999: 264).

2.17.2: Mablethorpe

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.17.3: Trusthorpe

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.17.4: Withern

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.17.5: Tothill

A single coin of Æthelred II has been found in Tothill (appendix 9.1.42).

2.17.6: Woodthorpe

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.17.7: Strubby

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.17.8: Maltby le Marsh

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.17.9: Swaby

The Lincolnshire HER reports that this is the site of a possible Anglo-Saxon cemetery (Monument 42837; appendix 6.1.19).

2.17.10: Belleau

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.17.11: Aby

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.17.12: Claythorpe

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.17.13: Saleby

An eleventh-century stirrup-strap mount (LIN-B40686) has been found here (appendix 12.6.1.1).

2.17.14: Beesby

An eleventh-century stirrup-strap mount (LIN-B40686) has been found in the parish of Beesby with Saleby in East Lindsey (appendix 12.6.1.1).

2.17.15: Sutton le Marsh

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.17.16: Calceby

In 1995, LAS carried out a watching brief during the construction of 37 holes for electricity cables in the parishes of Driby, Calceby and South Ormsby. The earthworks of the deserted village of Calceby were found in good condition (Tann 1995c: 6). In this area, 17 holes were dug. Test hole 13 revealed a single Saxo-Norman and a medieval sherd. Test hole 14 revealed 4 Saxo-Norman sherds (as well as 5 medieval sherds and 4 postmedieval sherds) (Tann 1995c: 10). Also see notes under Driby and South Ormsby.

2.17.17: South Thoresby

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.17.18: Haugh

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.17.19: Ailby

The parish of Rigsby with Ailby in East Lindsey produced an eleventh-century stirrup-strap mount (LIN-B1ADB3) (appendix 12.6.1.1) and a polyhedral-headed pin (LIN-2916F8) (appendix 12.1.2.1).

2.17.20: Tothby

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.17.21: Thoresthorpe

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.17.22: Markby

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.17.23: Rigsby

See notes under Ailby (appendix 2.17.19).

2.17.24: Alford

Alford produced a single coin of Edward the Elder, and a single coin of the York mint from the period 973-1000 (appendix 9.1.1). The PAS furthermore reports the discovery of a copper-alloy openwork strap-end in *Urnes* style (NLM4292) (appendix 12.2.1) and a complete copper-alloy trefoil brooch in *Borre*-style decoration (NLM5243) (appendix 12.5.6.1), both from Alford. Also, a watching brief by LAS in 1995 at the New Sports Hall of the John Spendluffe School (TF 4574 7571) in Alford revealed two possibly Anglo-Saxon sherds, fabric type UNGS (Tann 1995a). No structural features were found that could be dated to this period, and the sherd must have been residual (Tann 1995a).

2.17.25: Bilsby

Bilsby produced one stirrup (LIN-E4D022) (appendix 12.6.1.1) and a copper-alloy bell (LIN-E37D15) (appendix 12.7.1).

2.17.26: Thurlby

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.17.27: Huttoft

During the excavation of five trenches at Alford Road in Huttoft in 1995, LAS revealed a sequence from the early Anglo-Saxon period to the eighteenth century (Field and McDaid 1995: 1; Irving 1995). The remains of a north-south aligned late Anglo-Saxon ditch (28), measuring 1.24 m across, were found in trench 2, which contained two sherds of late ninth- to tenth-century pottery. None of the other features in this trench, consisting of two pits and a shallow gully, contained any artefactual data (Field and McDaid 1995: 5). In trench 3, the earliest deposit was a layer of brown soil (34), which contained 8 sherds of early Anglo-Saxon pottery as well as animal bone, and a single piece of metalworking slag (copper alloy). In the pit (36), further pieces of slag were found that might be associated with non-ferrous metalworking. No other dating evidence came from this feature. In addition, a number of medieval features and an undated ditch were also recorded (Field and McDaid 1995: 5). In trench 4, a ditch terminal (18) containing two pottery fragments dated to the late ninth to mid eleventh century was found sealed underneath an undated cobbled surface. The ditch terminal cut an earlier pit that contained no finds, and to the north lay two more undated features (Field and McDaid 1995: 6). Trenches 1 and 5 did not yield any positive evidence for Anglo-Saxon activity.

Despite more watching briefs during construction of houses along Alford Lane and Church Lane, other Anglo-Saxon material was only recovered on land at Church Road, prior to construction of a road (Rayner 2002: 1). A number of undated ditches and pits were found underneath medieval subsoil, which contained some fragments of handmade brick or burnt clay (Rayner 2002: 4). Anglo-Saxon pottery of fifth- to seventh-century date was found in the modern features cutting the subsoil, suggesting that there was some form of occupation throughout these periods (Rayner 2002: 1). The absence of any pottery dating between the eighth and twelfth centuries suggests that this part of the settlement was uninhabited during that time (Rayner 2002: 4).

During a watching brief at Huttoft Primary School on Church Lane in 2000 (TF 51236 76434), APS discovered an Anglo-Saxon ditch, dated to the fifth to seventh centuries, as well as a number of undated gullies. In the context of previous investigations to the west of this site, it was suggested that the discoveries made here were part of the Anglo-Saxon settlement that had been identified at Huttoft (Thompson and Snee 2001: 1). The ditch (002) was oriented north south, and measured 1.33 m in width and 0.55 m in depth. Its fill

(001) contained two sherds of fifth- to seventh-century early Anglo-Saxon Charnwood Forest Ware pottery (Thompson and Snee 2001: 3). The five undated features all lay to the east of this ditch, and the stratigraphical relationship could not be determined. They were constructed on two different alignments, one north-south and east-west (3 features), and the other at a 45 degree angle (2 features), which suggests they belonged to at least 2 different phases (Thompson and Snee 2001: 4). One of the north-south aligned ditches cut one of the diagonal ditches, suggesting that the north-south ones were later. However, one of the northwest-southeast aligned features contained a piece of possibly post-medieval slag, suggesting that all the ditches may have been postmedieval (unless the slag is intrusive) (Thompson and Snee 2001: 4).

2.17.28: Ulceby

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.17.29: Tatebi

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.17.30: Well

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.17.31: Willoughby

The parish of Willoughby with Sloothby produced one mount (NLM-02AE88) (appendix 12.12.1.1); three keys (NLM-5B60B5, NLM-5B9193 and NLM-5B9D31) (appendix 12.12.2.1); five pins (LIN-60E3D6, LIN-60DF43, LIN-60D854, LIN-60CCC3 and LIN-60BCF5) (appendix 12.1.1.1); six strap-ends (LIN-85ED37, NLM-03C536, NLM-0449D3, NLM-03CF96, NLM-03D576 and NLM-5AFCE4) (appendix 12.2.1); a buckle (LIN-516825) (appendix 12.3.1); two hooked tags (NLM-6EFB28 and NLM-02DF43) (appendix 12.4.1); two stirrup-strap mounts (LIN-60B697 and LIN-60A955) (appendix 12.6.1.1) and a strap-distributor (NLM-045158) (appendix 12.6.2.1).

2.17.32: Bonthorpe

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.17.33: Cumberworth

Cumberworth 1 is a part of a grave cover of Lindsey type, which was incorporated into the fabric of the church of St Helen (appendix 4.1.12) (Everson and Stocker 1999: 152-53). During subsequent excavations by Hampshire Archaeology at the church of St Helen's in 1992, no new sculptural material was uncovered. However, the excavators identified six distinct phases of activity, ranging from the seventh to the twelfth centuries. The earliest activity on the site consisted of a sunken-floored building (125) and (127), and possibly posthole (128), at the west end of the nave, with associated pottery broadly dated to the fifth to ninth centuries. This phase of activity was identified as belonging to the middle Anglo-Saxon period, roughly between the seventh and ninth centuries (Green 1997: 3-4). An unidentified iron object was also found associated with the sunken-floored building (Green 1997: 20-21).

The second phase of activity, between the eighth and ninth centuries, saw the deposition of a thick layer of soil (045), which sealed the earlier building. It was argued that this layer represented a natural development of topsoil as a result of domestic refuse dumping. It did not produce any ceramic evidence (Green 1997: 4). However, an intrusive lead plaque was found in context (045), bearing a Latin inscription in English Carolingian miniscule, which dated it to the tenth or eleventh century. It measured 104 mm x 55 mm. The text was transliterated as follows:

+ XPI EX HOCSIGGNO
 [...]O[...]TAS[...]
 [TEX.]O [...] EXPIATUM
 [P.] COREXIGUUMSQUALO
 REM M[...]OLUTUMQU[...]
 INUIRT[UT...R]UCISMUNDUM
 DEMORTERED[EM]IT TA[R]
 TARA DISRUPIT AUTCELES
 TIA PAN DIT

It was translated as: "Through the sign of Christ [-] the small foulness (accusative) [-] he who by the power of the cross redeemed the world from death, shattered hell or threw open heaven" (Green 1997: 18-19).

In the third phase, during the ninth and tenth centuries, the site was used as a burial ground (appendix 6.1.6). The archaeologists discovered 26 inter-cutting inhumations that were interred over the course of a whole century, some of which were buried in coffins. Their intercutting nature led to the suggestion that most of these would not have been marked above ground, or only been marked by timber markers that soon rotted away (Green 1997: 4-5). Grave (119) contained a slightly darker fill than most others, and as this was overlying the earlier structure it was suggested that it may well contain some earlier material in its fill (Green 1997: 4). One of the most interesting aspects of these burials is the fact that it could be shown that the outside of the planks that made the coffins were charred (Green 1997: 5). The late Anglo-Saxon skeletons were also discussed in a separate report (Ensor 1997), which modified the overall report by stating there were only 20 discreet individuals, five of which were juveniles (O'Neill 1997: 10-11).

From one of the late Anglo-Saxon graves, a pair of copper alloy tweezers was found, although due to the high amount of disturbance caused by the intercutting of the graves, it is uncertain whether they were in their original context. The tweezers are 50mm long, and the blade's end is 13 mm wide, with a triangular taper towards the shaft/handle. Both triangular areas of the blade are decorated with punched ring-and-dot decoration. The handle has oblique slash or rope decoration along almost its entire length (Green 1997: 21). They have been conserved by the EH laboratory at Salisbury, and been dated to the ninth century. They are not common in rural contexts, and are usually associated with major ecclesiastical centres, as it is believed they may have been used to turn the pages of manuscripts (Green 1997: 22).

In the fourth phase, the tenth to eleventh centuries, a number of deposits (065) and (012) were deliberately laid out to construct a flat surface for the construction of a church, sealing the burials. No contemporary or near-contemporary burials were found cutting this layer, the only other burials being assigned a thirteenth-century date (Green 1997: 5). No pottery was recorded from this level. During the fifth phase, also assigned a tenth- to eleventh-century date, a timber church was built in this location, as is indicated by two postholes (142) and (138) for posts measuring c. 22 mm square. The stratigraphic relationship with the platform of phase 4 was truncated away (Green 1997: 5). No dating evidence was retrieved. Finally, during the sixth phase, between the late tenth and late eleventh to early twelfth centuries, the first stone church was built. The rubble foundations (053) contained re-used stone fragments from a variety of sources and periods, including Mayen/Niedermendig lava, millstone grit and Pennant sandstone (Green 1997: 5). They also revealed all sorts of evidence for activity in the immediate vicinity, including iron smelting and pottery production in the shape of some fragments of kiln fabric, and pottery fragments with a date range between the fifth and tenth centuries, which must represent earlier activities on the site (Green 1997: 6). Phase seven was a series of floor surfaces dated to the eleventh and twelfth centuries, but no dating material was retrieved from this phase (Green 1997: 6).

2.17.34: Mumby

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.17.35: Claxby

The parish of Claxby in East Lindsey produced an eleventh-century copper-alloy stirrup-strap mount (NLM-9E4EE4) (appendix 12.6.1.1), a copper-alloy pin with polyhedral head (NLM-98CEF4) (appendix 12.1.2.1) and a copper-alloy strap-end decorated with ring and dot (NLM-B3E021) (appendix 12.2.1).

2.17.36: Hanby

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.17.37: Sloothby

See the entry for Willoughby (appendix 2.17.31).

2.17.38: Hasthorpe

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.17.39: Legbourne

About 1 km to the southwest of Legbourne, in the village of Little Cawthorpe, APS carried out a watching brief during the construction of a house at Back Lane (TF 3579 8383) in 2000. No previous evidence for Anglo-Saxon activity was recorded in the vicinity, but the present investigations revealed a quantity of tenth- to twelfth-century pottery, including Stamford ware (Cope-Faulkner 2000: 2). A possible pit (007) measuring 0.8 m across and c. 0.2 m deep, and a northwest-southeast aligned linear (013), 0.4 m wide and 0.3 m deep, were cut

into the natural clay. The fill of the gully (012) contained tenth- to twelfth-century pottery (Cope-Faulkner 2000: 2). Another pit (015) contained no dating evidence, but all three features were sealed by subsoil (004) that contained a single sherd of tenth- to twelfth-century pottery (Cope-Faulkner 2000: 3). The gully demarcated the northern extent of known ridge and furrow in the area, and was interpreted as a boundary or drainage feature (Cope-Faulkner 2000: 3).

2.18: Bolingbroke Wapentake

2.18.1: Lusby

A single St Peter's Sword/Cross-type coin of the York mint has been found in the parish of Lusby with Winceby (appendix 9.1.24). Also see notes under Winceby (appendix 2.16.16).

2.18.2: Raithby

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.18.3: Asgarby

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.18.4: Mavis Enderby

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.18.5: Hundleby

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.18.6: Spilsby

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.18.7: Hareby

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.18.8: Bolingbroke

During a watching brief in 2005, prior to ground works at Anglian Water Sewerage Pipe (TF 35134 64879), Old Bolingbroke, LAS found a pottery sequence dating from the eleventh to the twentieth centuries (Pullen 2005: 1). No structures or features could be identified, but this was probably the result of the nature of the investigations. The earliest pottery identified was LFS (Young 2005b).

2.18.9: Eresby

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.18.10: Halton Holegate

In 2001, the Birmingham University Field Archaeology Unit carried out an archaeological excavation at High Farm in Halton Holegate (TF 41300 65600) (Ramsey 2001). The Lincolnshire SMR reports that an early to middle Anglo-Saxon settlement was discovered, consisting of at least one sunken-floored building, postholes, and various other cut features. Finds included clay loom weights, beads, iron-working slag, and large quantities of animal bone and pottery. All were assigned a date between c. 600 and 899 AD. In addition, a small amount of Romano-British pottery and tile was recovered.

2.18.11: Miningsby

Some pieces of late Anglo-Saxon sculpture were found at Miningsby (appendix 4.1.23) (Everson and Stocker 1999: 233-34).

2.18.12: Hagnaby

As part of the Fenland Survey, the parishes of Billingham, Dogdyke, Hart's Ground and Pelham's land just south of the Humber (the South-Eastern Witham Fens) were surveyed in 1983-84, as well as the parishes of West Fen, East Kirkby, Hagnaby, West Keal, East Keal, Toynton All Saints, Toynton St Peter, Stickford, Stickney, Midville and Sibsey to the north (the Northern Fen-Edge). In 1988, the parish of Wrangle on the Lindsey coast was also surveyed as part of the same Survey (Lane 1993: 3). No late Anglo-Saxon material was retrieved from Hagnaby.

2.18.13: West Keal

West Keal is the site of an early Anglo-Saxon cremation cemetery, comprising at least 21 urns, dating to the fifth and sixth centuries AD (Lane 1993: 59). Also see notes for South Elkington (appendix 2.10.17). It has been suggested that the West Keal cemetery related to

the Roman town of Horncastle, although it may be more plausible that this site was related to a more localised settlement, for example the SKD10 settlement that is within sight, or WKE13, a broadly contemporary early Anglo-Saxon settlement behind West Keal Church (Lane 1993: 59). WKE13 produced 72 early Anglo-Saxon sherds (Healey 1993: 107). At TF 356 640, the third sherd of Ipswich ware from Lincolnshire that was ever recognised was found (Coppack 1970: 17). No evidence for Scandinavian settlement was found in the Northern Fen-Edge Survey, although the placenames of East Kirkby, Hagnaby and the Keals were clearly Scandinavian in origin (Lane 1993: 59). A number of old enclosures with moats and earthworks on the east side of West Keal (WKE1) were levelled in 1959 without being recorded (Lane 1993: 59). During the Fenland Survey, Keal Cotes on the east side of West Keal yielded late Anglo-Saxon and early medieval wares, as did Toynton St Peter (Healey 1993: 108). The parish of West Keal in East Lindsey also produced a strap-end (NLM2739) (appendix 12.2.1) and a horse-harness fitting (LIN-AB7480) (appendix 12.6.2.1).

2.18.14: East Keal

East Keal Roman settlement continued into the middle Anglo-Saxon period, as sherds of early Anglo-Saxon pottery and MAX (20 sherds) show (Healey 1993: 107; Lane 1993: 59). Both IPS and late Anglo-Saxon pottery were absent, suggesting this site subsequently went out of use (Healey 1993: 107). No evidence for Scandinavian settlement was found Lane 1993: 59). See notes under West Keal (appendix 2.18.13).

2.18.15: East Kirkby

A coin of St Edmund (appendix 9.1.11) was also found here, as well as two disc-brooches (NCL-76F167 and NCL-771FB5) (appendix 12.5.3.5.1); two stirrup mounts (NCL-82FF81 and NCL-76AEA7) (appendix 12.6.1.1); two pins (NCL-834072 and NCL-BB4EB4) (appendix 12.1.1.1); a strap-end (NCL-A10477) (appendix 12.2.1); and an ansate brooch (NCL-8459B4) (appendix 12.5.1.1). See notes under West Keal (appendix 2.18.13).

2.18.16: Toynton All Saints

As part of the Fenland Survey, the parishes of Billingham, Dogdyke, Hart's Ground and Pelham's land just south of the Humber (the South-Eastern Witham Fens) were surveyed in 1983-84, as well as the parishes of West Fen, East Kirkby, Hagnaby, West Keal, East Keal, Toynton All Saints, Toynton St Peter, Stickford, Stickney, Midville and Sibsey to the north (the Northern Fen-Edge). In 1988, the parish of Wrangle on the Lindsey coast was also surveyed as part of the same survey (Lane 1993: 3). No material dating to the late Anglo-Saxon period was found in Toynton All Saints.

2.18.17: Toynton Saint Peter

During the Fenland Survey, Toynton St Peter yielded chiefly late Anglo-Saxon to early medieval wares, as did Keal Cotes (Healey 1993: 108).

2.18.18: Little Steeping

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.18.19: Revesby

The parish of Revesby produced a lead pyramid-shaped gaming piece (NLM-FC6F80) (appendix 12.11.1); an eighth- to ninth-century Anglo-Scandinavian mount (NCL-0EDE41) (appendix 12.12.1.1); a copper-alloy pin of eighth- to ninth-century date (NCL-A998D7) (appendix 12.1.2.1); an eighth-to eleventh-century strap-end (NCL-FAE043) (appendix 12.2.1); a hooked tag (NCL-FDD822) (appendix 12.4.1); a disc-brooch (NLM4191) (appendix 12.5.4.1.1); an eleventh-century undecorated stirrup mount (NCL-112393) (appendix 12.6.1.1); and a ninth- to eleventh-century copper-alloy strap-junction (NCL-AC4ED5) (appendix 12.6.1.1).

2.18.20: Stickford

As part of the Fenland Survey, the parishes of Billingham, Dogdyke, Hart's Ground and Pelham's land just south of the Humber (the South-Eastern Witham Fens) were surveyed in 1983-84, as well as the parishes of West Fen, East Kirkby, Hagnaby, West Keal, East Keal, Toynton All Saints, Toynton St Peter, Stickford, Stickney, Midville and Sibsey to the north (the Northern Fen-Edge). In 1988, the parish of Wrangle on the Lindsey coast was also surveyed as part of the same survey (Lane 1993: 3). No late Anglo-Saxon material was retrieved from Stickford during this survey. However, the parish of Stickford produced an Anglo-Saxon die or matrix for the manufacture of decorative foil (NLM1063) (appendix 12.12.3.1) and a lead spindle whorl (NLM2743) (appendix 12.12.4.1).

2.18.21: Thorpe Saint Peter

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.18.22: Stickney

The survey of the Northern Fen-edge revealed a site at Stickney (west side), known as SKD10, which yielded 346 early sherds, as well as MAX (40 sherds) and IPS. In the late Anglo-Saxon/Saxo-Norman periods the settlement shifted to the east (Healey 1993: 107; Lane 1993: 58). SKD10 was an important frontier site, on the border of the Kingdom of Lindsey, and controlling access in and out of the Fenland (Lane 1993: 59). It was also one of seventeen sites in the Northern Fen Edge to yield late Anglo-Saxon wares, and included Stamford Ware, Thetford Type ware and tenth-century imported Blau-grau ware (Healey 1993: 108).

2.18.23: Sibsey

As part of the Fenland Survey, the parishes of Billingham, Dogdyke, Hart's Ground and Pelham's land just south of the Humber (the South-Eastern Witham Fens) were surveyed in 1983-84, as well as the parishes of West Fen, East Kirkby, Hagnaby, West Keal, East Keal, Toynton All Saints, Toynton St Peter, Stickford, Stickney, Midville and Sibsey to the north (the Northern Fen-Edge). In 1988, the parish of Wrangle on the Lindsey coast was also surveyed as part of the same Survey (Lane 1993: 3). Sibsey did not reveal any data belonging to the late Anglo-Saxon period. However, the PAS lists a strap-end (LIN-E69AF3) (appendix 12.2.1); a late ninth-century *Borre*-style flat disc brooch (LIN-57B041) (appendix 12.5.3.1.1); a flat gilded copper alloy disc-brooch (LIN-01DE95) (appendix 12.5.3.5.1); and two mounts (LIN-028CC7 and LIN-01DE95) (appendix 12.12.1.1).

2.19: Candleshoe Wapentake

2.19.1: Driby

In 1999, the CLAU carried out a watching brief prior to the construction of a new octagonal building at TF 3885 7440. An early graveyard was identified, as well as some elements that were associated with an earlier church. The graves remained unexcavated, as they were not affected by the building work. In addition, a single charnel pit was found that contained a small piece of TORK, but it remains unclear whether this is actually reliable dating evidence (Wragg 2000a: 1).

In 1995, LAS carried out a watching brief during the construction of 37 holes for electricity cables in the parishes of Driby, Calceby and South Ormsby. All three these parishes were in the South Riding, but lay near the periphery of three Scandinavian *wapentake* divisions (Tann 1995c). The deserted medieval village of Driby is damaged by later quarrying, but some earthworks are still visible (Tann 1995c: 5). The four holes tested here did not reveal any Anglo-Saxon material (Tann 1995c: 8). Also see notes under Calceby and South Ormsby.

2.19.2: Sutterby

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.19.3: Dexthorpe

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.19.4: Fordington

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.19.5: Dalby

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.19.6: Skendleby

The parish of Skendleby produced a strap-end (LIN-531374) (appendix 12.2.1); a copper-alloy buckle plate (LIN-7936B6) (appendix 12.3.1); a stirrup-strap mount (LIN-528217) (appendix 12.6.1.1); and three horse-harness fittings (LIN-DD4333, LIN-52DD63 and LIN-52BF53) (appendix 12.6.2.1).

2.19.7: Partney

The area around Partney was occupied from at least 600 AD, as is evidenced by a barrow in the vicinity containing the remains of at least two adults and two children, as well as an inhumation cemetery. In the seventh century, an abbey was founded in Partney, which seems to have gone out of use in the late ninth century (Atkins 2005: 9-10). It has been suggested that the village at Partney pre-dates the period of village nucleation that was instigated by the viking settlement (Atkins 2005: 10). In 2003 and 2004 the Archaeological

Field Unit of Cambridgeshire County Council carried out a number of excavations and a watching brief along the new road that bypassed the village of Partney. In addition to a wealth of prehistoric, Roman, and medieval material, only one late Anglo-Saxon feature was recovered (Atkins 2005). PTN7 03 revealed a single north south ditch, running roughly parallel to the medieval road, less than 10 m further west. Three early eleventh-century sherds were retrieved from its fill (Atkins 2005: 96).

2.19.8: Scremby

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.19.9: Grebby

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.19.10: Welton le Marsh

A single coin of Æthelred II has been found in Welton le Marsh (appendix 9.1.43).

2.19.11: Boothby

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.19.12: Addlethorpe

In 1993 LAS carried out a Watching Brief along the route of Burgh-le-Marsh - Ingoldmells rising main. The majority of sites discovered were Romano-British saltern sites (Tann 1995b: 7). It became clear that the area was an important salt-making region during the Iron Age as well (Tann 1995b: 10). Apart from some pottery sherds in residual or unstratified contexts, not much evidence for Anglo-Saxon activity was found.

As part of the watching brief, an excavation was carried out in fields 27-28, in Addlethorpe Marsh, at the extreme west end of the Addlethorpe parish boundary, not far from the Teapot Hall road junction. This yielded medieval and some tenth-century pottery sherds, and was thought to be an occupation site (Tann 1995b: 19). The pottery turned out to be from the upper fill of a substantial ditch, however (context 3), and the only habitation feature was a small isolated hearth (context 8). Most of the pottery was late medieval, suggesting a fifteenth- or sixteenth-century date for the backfilling. The ditch was identified as a drainage feature (Tann 1995b: 17). The earliest sherd was a non-local Saxo-Norman grey ware, but all medieval pottery was identified as residual material from post-medieval contexts (Wilkinson and Young 1995a). Finally, some 3 km to the north of Addlethorpe, in Hogsthorpe (TF5371), a heavily corroded cast copper-alloy object that was identified as a ninth-century zoomorphic strap-end was found (LIN-BABA25).

2.19.13: Ingoldmells

See notes under Addlethorpe.

2.19.14: Ashby by Partney

The *NLPTS* database records the presence of pottery of type ESAX, MAX, LKT, LSH and ST from Ashby by Partney deserted medieval village, in the present-day parish of Ashby with Scremby.

2.19.15: Candlesby

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.19.16: Gunby

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.19.17: Orby

Between 10 and 18 April 1998, PCA carried out an archaeological evaluation prior to residential development at the Green, Orby (TF 4911 6728) (Rylatt 2000a: 1-2), following an earlier geophysical investigation by Pre-Construct geophysics (Bunn and Hardwick 2000). The village of Orby, a derivation of the twelfth-century placename *Orreby*, or the 'by' of Orre (Orre being a Scandinavian personal name meaning 'black cock') is situated 7 km to the northwest of Skegness, and 26 km east of Horncastle, in the low-lying Lindsey Marshes (Rylatt 2000a: 2-3). The first written reference to Orby is from *DB*, and refers to the village of *Heresbi*. The settlement was then mentioned as a spatial reference to locate the holdings of the Bishop of Durham in the neighbouring parish of Addlethorpe, and *not* to list its own holdings. The site was located close to a moated site and manor farm. A total of five trenches were excavated (Rylatt 2000a: 3).

In trench 1, below the subsoil (101), a number of inter-cutting gullies and ditches were found at right angles to each other, which contained two sherds of tenth-century

'Lincoln Shelly ware'. Three of these ditches may have formed part of one structure. A possible elongated pit in trench 1 also contained some tenth or eleventh-century pot (Rylatt 2000a: 7). None of the other trenches revealed anything of pre-Conquest date. On the basis of the site's proximity to the manor farm, the archaeologist suggested that this might be the location of a pre-Conquest precursor to the manor itself, perhaps comparable to the site at Goltho Manor (Rylatt 2000a: 10). Also see notes under Addlethorpe.

2.19.18: Burgh le Marsh

Burgh le Marsh is believed to be the site of a substantial Romano-British settlement, and also the site of an Anglo-Saxon *burgh* (Snee 2000: 1). In 2000, APS carried out an archaeological evaluation at Hall Lane in Burgh-le-Marsh prior to residential development (TF 500 648). Most of the evidence encountered was Roman, although a piece of hearth bottom and some ironworking slags were found that could be either Anglo-Saxon or Roman (Malone 2001: 4-7). In addition, a number of post-Roman features were excavated. The only potential late Anglo-Saxon context was the fill of an east-west aligned ditch (107), c. 0.9 m wide and 0.8 m deep. This contained a rotary quernstone, a jet object, and six early Anglo-Saxon Charnwood fabric sherds, two of which link, as well as a single other early Anglo-Saxon sherd, a piece of burnt clay (possible hearth lining), and one sherd of Saxo-Norman coarse sandy ware (Cowgill *et al.* 2001). In addition there was a relatively large quantity of residual early and late Anglo-Saxon pottery from the site (Cowgill *et al.* 2001; Malone 2001: 5).

In addition, a watching brief was carried out during the construction of the access road for the above development. An annular early Anglo-Saxon loom weight fragment of fifth- to seventh-century date was found in the backfill of a medieval ditch (Cowgill *et al.* 2000; Snee 2000: 6). From the surface of an unexcavated ditch (024) on a northeast-southwest alignment, four sherds of late Anglo-Saxon shelly ware, another Anglo-Saxon to medieval sherd, and a fragment of fired clay were retrieved. In addition, a few residual early and late Anglo-Saxon sherds were found in medieval contexts (Cowgill *et al.* 2000). No middle Anglo-Saxon pottery was found on the site. Also see notes under Addlethorpe.

2.19.19: Great Steaping

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.19.20: Bratoft

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.19.21: Croft

No archaeological evidence for late Anglo-Saxon activity has been found here to date.

2.19.22: Wainfleet

At TF 493 592, not far from Wainfleet All Saints, a scatter of Saxo-Norman and later pottery was reportedly found in a ploughed field (Whitwell and Wilson 1969: 117). At Wainfleet St Mary, at TF 470 5584, a large quantity of pottery was found in a pasture field after ploughing, mostly Saxo-Norman to medieval in date, including developed and undeveloped Stamford wares, Torksey wares, Thetford wares and shelly wares (Whitwell and Wilson 1969: 118). At Friskney, Wrangle and Wainfleet, saltmaking industries were in place by the time of *DB*, which could be identified by saltern-mounds (Lane 1993: 80, 85).

2.19.23: Friskney

At Friskney Tofts (TF 484 562), a quantity of pottery was found that included one thumbled sagging base as well as some undeveloped Stamford ware (Whitwell and Wilson 1969: 111). Also see notes under Wainfleet (appendix 2.19.22). Further south, in Wrangle, the Fenland Survey identified no post-Roman evidence predating the late ninth or tenth centuries (Lane 1993: 75). The deserted settlement of Wolmersty was almost certainly located on the east side of Wrangle, near Greenfield farm, where aerial photography has identified a moated site, and fieldworking produced some late Anglo-Saxon pottery, including EST, but nothing earlier. More sherds of similar date were found scattered around the village of Wrangle itself (Lane 1993: 75).

2.20: Torksey

Torksey is situated 3 km to the south of the village of Marton, through which the Roman road, now Till Bridge Lane, passes before crossing the Trent at Littleborough, and continuing in a north-westerly direction to York (Brown 2006: 3). Although no direct structural evidence for Roman activity has been found in Torksey, there have been numerous unstratified finds of Roman or Romano-British date (Barley 1964; 1981; Brown 2006: 3-5). What is more, the settlement is located on the junction between the Fosdyke and the Trent, and the Fosdyke

is potentially a Roman canal, which would suggest that Torksey was the site of some importance during the Roman period too.

Torksey is mentioned in the ASC as the location for a viking winter camp in the winter of 872-73. It has been suggested that middle Anglo-Saxon Torksey became the site of the viking camp because of its previous significance as a relatively high-status settlement (Brown 2006: 13-17; Jones *et al.* 2003: 143). Torksey is also the third and last 'town' that is mentioned in the Lincolnshire DB (after Lincoln and Stamford). It had 213 burgesses prior to 1066, which made it about half the size of Stamford. DB provides us with a hint at a special relationship that existed between Torksey and Lincoln, as it states that

They [the inhabitants of Torksey] all had the same customary dues as the men of Lincoln, and so much more, since whoever of them had a residence in this town (*villa*) did not pay toll on entering or leaving nor a customary due. However, this was their (duty): if the King's officers should come there the men of this small town should conduct them with their ships and other equipment for navigation as far as York, and the Sheriff should find supplies for the officers and sailors out of his revenue. But if any of the burgesses wished to go away anywhere and sell (his) house which was in this town, he could do it, if he wished, without the knowledge and permission of the reeve (LDB: 337a).

It seems, however, that Torksey was subjugated to Lincoln:

Before 1066 Torksey and Hardwick [a manor just outside Torksey, held by Queen Edith previously] paid in Lincoln the fifth penny from the City's tax (*de geldo civitatis*). Towards this fifth part Torksey paid two pennies and Hardwick the third (LDB: 337a).

Torksey's location as a landing place on the tidal Trent, at its junction with the Fossdyke, presents the possibility that Torksey may have functioned as a *wic* for Lincoln (Sawyer 1998: 197).

Between 1960 and 1968 an archaeological investigation was carried out as part of an educational programme instigated by the University of Nottingham. The aim was "to study by excavation the character of an urban settlement in the early middle ages". (Barley 1964: 165). The earlier part of the investigations, carried out between 1960-62, consisted of three seasons of excavation, each lasting only two weeks, and focused on the land to the south of the modern village and west of the A156. In subsequent years, a geophysical survey was carried out, followed by the excavation of a series of small trenches and test pits on land opposite Castle Farm, in the corner of Main Street and Common Lane (SK837 786), and to the south of Common Lane (SK837 785). The aim of these later investigations was to establish whether the modern village occupied the same site as the medieval settlement, which would indicate that the area of settlement had shrunk rather than shifted (Brown 2006: 9). These investigations yielded no evidence for the presence of defensive structures, leading to the conclusion that Torksey was an undefended trading settlement like Hamwic, Dorestad and Birka (Barley 1981: 264; Brown 2006: 9-10).

More positive results included the discovery of the location of a pottery industry in Torksey, which could be dated to the mid-ninth to twelfth centuries (Barley 1964, 172; Brown 2006: 10). In more recent years, more kilns have been excavated in the vicinity (SK836 787). Twelve kilns have now been discovered, and the strong possibility exists that this is not even all (FCFT01; Main Street 2002: 7). Of these twelve kilns, at least one was used between the mid ninth and tenth centuries; five others seem to have mainly been used during the late tenth century (FCFT01; Palmer-Brown 1995; Wilkinson and Young 1995b). Consequently, archaeological studies concerned with the later Anglo-Saxon occupation of Torksey have largely focused on the pottery production (Barley 1964; 1981; Symonds 2003a). Sawyer (1998: 197) has directly attributed the establishment of the pottery industry to the viking settlement. The work by Symonds (2003a) on pottery distribution patterns in Lincolnshire as a whole has shown that the Fossdyke was almost certainly navigable in the tenth century, despite the relatively high maintenance it would have required to stop it from silting up (Brown 2006: 4). The relatively low quantity of Torksey ware at Lincoln, which Sawyer (1998: 197) attributed to the silting up of the Fossdyke, may instead be directly related to the existence of an adequate pottery industry at Lincoln itself, even if this was in decline from the mid-tenth century onwards.

Barley (1964, 172; also see Brown 2006: 10) also discovered an extensive cemetery. More graves have been discovered since, both along Main Street and during the Castle Farm investigations (Palmer-Brown 1995) (see appendix 6.1.24). From the church of St Margaret's in the nearby village at Marton, a significant number of stone sculpture fragments have been retrieved (chapter 3). Stocker (2000, 189-191) has argued that these represent evidence

that Marton was the parochial centre in the area, and that Torksey itself never had a parochial church until the later tenth century. Brown (2006: 28) has pointed out that the burials excavated at Castle Farm may shed new light on this; on the other hand, there is evidence for graveyards in this period that do not seem to be associated with any church.

In more recent years, the bulk of the additional evidence for Torksey is represented by the finds made by metal detectorists, which recently have been extensively catalogued as part of an MA conducted at the University of York (Brown 2006). These finds, including dress accessories, hack-metal and coins, are usually considered to be part of a dispersed ninth-century viking hoard, associated with the overwintering of the viking great army (see above), although the material also includes finds of tenth- and eleventh-century date and is therefore representative of prolonged activity over a longer period of time. The relevant coins are summarised in appendix 9.1.41. Some of the numismatic material and the assemblage of polyhedral weights have previously been published by Blackburn (2002). Torksey was also the location of a minor mint in the late tenth century (Brown 2006: 28) (chapter 4).

2.21: Stamford

Stamford, which is described in *LDB* both as a *burgis regis* (or royal borough) and *villa*, is situated on the River Welland, which connects to the Wash, and the Roman road from London to York, and is surrounded by fenland to the east, rich agricultural land to the west, Rockingham forest to the southwest, and the Lincolnshire heathlands to the north (Mahany *et al.* 1982: 2). It is mostly built in a valley cut into Lower Lincolnshire Limestone, some 3 miles to the northwest of the Barnack quarries (Mahany *et al.* 1982: 1). Mahaney *et al.* (1982: 2-3) state that "there is little evidence for prehistoric settlement within the later town", although there may have been a prehistoric trackway and river crossing in the same location, and settlement on the river gravels south of the river. In the Roman period, Ermine Street crossed the river half a mile to the west of Stamford. There was never a Roman fort or urban settlement at Stamford, although a string of rural villages occupied both riverbanks (Mahany *et al.* 1982: 3).

The ASC suggests that Stamford may have been a 'viking' settlement, as the 'northern burh' was there already when Edward ordered the 'southern burh' to be build in AD 918 (Kilmurry 1980: 146; Mahany *et al.* 1982: 3). The location of Edward's southern burh, however, has never been archaeologically proven (Mahany *et al.* 1982: 10). To the north, fresh consideration of the evidence in the 1980s led to the suggestion that the planned and defended burh, albeit still pre-dating the Conquest, may have been a secondary or even tertiary settlement in this location (Mahany *et al.* 1982: 9).

There may have been a Roman settlement nearby, as indicated by Roman finds from the Stamford castle site, but the nearest Roman 'town' for which there is any archaeological and historical evidence is Great Casterton, along Ermine Street. In the early Anglo-Saxon period, there may have been some limited occupation nearby too, but again, no structural remains have been found. Within Stamford itself, the earliest evidence for occupation has been recognised at Stamford Castle and St George's street. Evidence consisted of a ringwork, which may have had a military/defensive function, and evidence for pottery and ironworking (Kilmurry 1980: 145). Around the same time, a planned layout was imposed onto the settlement. By the time of Edgar's reign, Stamford was the fifth most productive mint in England, ranking only behind London, Lincoln, York and Winchester. Ironworking continued, but stone quarrying did not begin until the eleventh century (Kilmurry 1980: 146). Pre-Conquest textile working, in particular weaving, seems to have taken place as well, but it is unclear at what scale. The increased variety of pottery types and fabrics in the course of the tenth and eleventh centuries suggests an increase of production sites. Both ironworking and pottery production have been identified outside the proposed line of the town walls, and Kilmurry (1980: 148) has suggested that "the late Anglo-Saxon enclosure need not have led to a tight clustering of occupation and since ironworking [also] continued within the defences, the distinction between intra- and extra-mural occupation need not have been great". What is more, Kilmurry (1980: 148) has drawn attention to the fact that "Stamford pottery production of the eleventh century is poorly represented, but the growing dichotomy apparent between cooking and table wares suggests a trend to specialisation among the potters". Both the River Welland and Ermine Street would have contributed to its usefulness as a trading site, and according to the ASC E entry for 963 AD, there was a market at Stamford in the reign of King Edgar (Kilmurry 1980: 148).

By the end of the tenth century, Stamford had a blossoming and extensive ironworking industry (Burchard 1982). After the Norman Conquest, the ironworking industry made way to the quarrying of stone (Mahany *et al.* 1982: 4). Several layers containing evidence for ironworking on a site between High St, Maiden Lane and St George's Street, supposedly inside the Scandinavian *burh*, were found *underneath* the street surface of High Street, suggesting that the industry began prior to the organised layout of the defended town

(Burchard 1982; Mahany 1982: 15, 24), although ironworking did continue afterwards (Mahany *et al.* 1982: 10). It has been suggested, therefore, that initially the town was an industrial centre with little evidence for deliberate layout or planning (Mahany *et al.* 1982: 10), although it is also possible that the industrial activity related to a defended site. In the latter case, a concentric ditch system containing an Alfredian coin found underneath Stamford Castle may be significant (Mahany *et al.* 1982: 10).

The report by Mahany *et al.* (1982) discusses the evidence of three kilns that have been excavated. It is argued that the 'revival' of an organised pottery industry in the East Midlands was the result of continental Rhenish and northern French industries, in particular in terms of the single-flue kiln and the 'urban' location of the industries (Musty 1982: 10-11). The earliest of the kilns discussed in Mahany *et al.* (1982) was found underneath Stamford Castle. A ninth- to tenth-century date has been suggested for this kiln (Musty 1982: 11). Its products were sometimes red-painted, betraying links with the Beauvais-area in northern France (Beauvais) (Musty 1982: 11).

An eleventh-century kiln, excavated in 1969, was situated off Wharf Road, underneath the medieval town defences, probably just outside the Saxo-Norman *burh* to the east (Mahany *et al.* 1982: 9). Its location is thus comparable to the extra-mural pottery kilns from Butwerk in Lincoln. The Wharf Road kiln produced white or buff hard sandy ware, made on a fast wheel, with occasional splash glazing, rouletting or finger strip impression, but no other types of decoration. Most were cooking pots, and all bases were knife-trimmed on the outside (Mahany 1982: 90-96). By the thirteenth century, the kilns were still located in the same area, but as the town had expanded they were located *inside* the walled area again (Mahany *et al.* 1982: 9, fig. 7).

Kilmurry (1980) has drawn attention to the fact that most of the early industries in Stamford relied on the natural resources of the immediate area and more distant surrounding countryside. A good example of this symbiotic relationship between Stamford and the surrounding countryside is the medieval cloth industry, which relied on wool from the countryside, and workers from the town. Other industries that contributed to the prosperity of Stamford, made possible through the availability of raw materials, was construction stone, ironstone and clay (Kilmurry 1980: 144). According to Kilmurry (1980: 144), the pottery industry was organised into a number of small independent workshops, each with their own internal standardisation (Kilmurry 1980: 144).

APPENDIX 3: SCULPTURE FROM LINCOLN

This appendix summarises the late Anglo-Saxon sculptural material from Lincoln, as catalogued by Everson and Stocker (1999; in prep.). The sculptural material from the rest of Lindsey has been summarised in appendix 4. Sculptural fragments whose production definitely post-dates the tenth century have been excluded, which is why not all consecutive numbers from Everson and Stocker's (1999) corpus, which also includes the eleventh century, have been included.

3.1: The Upper City

3.1.1: *St Paul-in-the-Bail*

Lincoln St Paul-in-the-Bail 1 is a grave cover or marker, decorated with a simple cross with splayed terminals, and a superimposed ring (Everson and Stocker 1999: 217). In 1999 it was held in the stone store of the City of Lincoln Archaeological Unit, destined for the City and County Museum, but it has since been transferred to The Collection, the successor to the City and County Museum. It was found during excavations of the fourteenth-century church of *St Paul-in-the-Bail* in 1977, where it was re-used as a foundation stone. The stone type is Lower Lincolnshire Limestone of Lincoln vicinity (Everson and Stocker 1999: 217). Its dating is problematic, and this piece is generally assigned a later tenth- to twelfth-century date on the basis of the use of the site as a burial ground during this period (appendices 1 and 5). Possible parallels on art-historical grounds can be identified in the typical wedge-shaped terminals of eighth- and ninth-century crosses and incised rings on early Irish grave slabs. However, whereas these are usually of accurate layout and fine execution, the stone at *Lincoln St Paul-in-the-Bail 1* is a poor comparison, and it is also possible that parallels are provided by the eleventh- or twelfth-century slabs from England, many of which display a preference for hybridisation of forms (such as this cross does too, in its combination of the splayed terminals and incised ring), and a lack of interlace. If this is the case, a possible parallel is *Lincoln St Mark 14* (see below), itself of later tenth or eleventh century date, although parallels in York have also been suggested (Everson and Stocker 1999: 218).

Lincoln St Paul-in-the-Bail 3 is a small sculptural fragment (Everson and Stocker 1999: 219). In 1999 it was held in the stone store of the City of Lincoln Archaeological Unit, destined for the City and County Museum, but it has since been transferred to The Collection, the successor to the City and County Museum. It was found during the 1977 excavations, as part of the grave fill of an adult inhumation. It was made of Upper Lincolnshire Limestone, possibly Ancaster freestone, and the decoration was finely cut, of very high quality (Everson and Stocker 1999: 219). Its interpretation has remained problematic because the fragment is so small, but the high quality suggests it was a high-status object. It is a little on the thin side to be a grave cover, and more likely to be either a coffin, or another piece of ecclesiastical furniture, such as an altar, screen, chest or chair (Everson and Stocker 1999: 219). There are many pre-viking examples of stone sarcophagi being used both on the British Isles and in Merovingian France, but the seemingly geometrical decoration does not fit in such an early context (Everson and Stocker 1999: 220). Jones *et al.* (2003: 151) nevertheless assign an early date to this piece. An alternative date is suggested by decorative parallels from grave covers from Barnack, Whaplode, and the Peterborough area, which were all dated to the eleventh and twelfth centuries (Everson and Stocker 1999: 220). Everson and Stocker (1999: 220) argue that in this case the sculpture fragment may be interpreted in the context of the transformation of the site from a stone *cella* into a parish church, because the foundation of parish churches often went accompanied by the erection of grave covers or markers for the founder of the parish (chapter 3). This later date would also fit better with the known period of activity of the Ancaster quarries, which were certainly in operation by the tenth century.

3.1.2: *Cathedral sites*

Lincoln Cathedral 2 is a complete grave marker of the Lindsey group, dated to the mid tenth or eleventh centuries. It was found as part of the floor of the chapel at the northwestern end of the nave during restoration in 1894. It was carved out of a large block of re-used Roman masonry of Upper Lincolnshire Limestone (but not Ancaster or Barnack types). It is decorated with a cable-moulded border, whilst one of the flat sides is decorated with two incised crosses, one within the other (Everson and Stocker 1999: 196). The closest parallels to *Lincoln Cathedral 2* are, from Lincoln itself, *Lincoln St Mark 16* (see below) and the eleventh-century *Lincoln St Mary-le-Wigford 4* (Everson and Stocker 1999: 213-14). Parallels outside Lincoln include *Gayton le Wold 1* (appendix 4.1.13), the eleventh-century *Glentworth 1* (Everson and Stocker 1999: 169) and *Hackthorn 2* (appendix 4.1.15) (Everson and Stocker 1999: 196).

3.2: The Lower City and Butwerk

3.2.1: Flaxengate

Flaxengate has yielded two fragments of the same piece of stone sculpture. They were found in a tenth- to eleventh-century context (Mann *pers. comm.*). They were carved from relatively low quality stone, and displayed a remnant of geometric carving similar to an eleventh-century piece from Whaplode in South Lincolnshire (Everson and Stocker 1999: 271-72; *pers. comm.*), and also to *Lincoln St Paul-in-the-Bail 3*. The piece will be published by Everson and Stocker in a forthcoming addendum to their 1999 corpus (Everson and Stocker in prep.).

3.2.2: Lincoln City Broadgate 1

A tenth-century grave cover decorated in *Borre* style was found in 1794 by workmen. It was probably in a secondary location, as it is unclear which church or graveyard it may have originated from (Everson and Stocker 1999: 197). It has now been lost, but an eighteenth-century drawing survives. It was almost flat, rectangular or slightly tapering, and its decorated surface was badly worn. The illustration suggests that it was similar to *Hackthorn 1* (appendix 4.1.15). The decoration consists of a cable moulding around the edge, and a square cross extending to the borders. Above the cross-arms, the panels were filled with stylised bird figures, identical to those at *Hackthorn 1*, and below the cross-arms are some interlace motifs including a triquetra (Everson and Stocker 1999: 197). The use of the triquetra is also found on Yorkshire and Cumberland hogback tombstones, and on Yorkshire cross-shafts, whilst similar motifs recur on tenth-century metalwork and coinage (Everson and Stocker 1999: 203). It is possible that this stone was a piece of re-used Roman masonry, as indicated by a reference to two holes in which irons were fixed (Everson and Stocker 1999: 197). On the basis of the similarities between *Lincoln City Broadgate 1* and *Hackthorn 1*, Everson and Stocker (1999: 197-98) suggest that they are two surviving near-identical examples of a typological group that may have been produced at or near Lincoln, suggesting that already by the tenth century, stone sculpture production was highly organised (Everson and Stocker 1999: 197-98). Lincoln has been identified as their production centre because of the stone type used for the example from Hackthorn, which was made of Lower Lincolnshire Limestone of the Lincoln vicinity (Everson and Stocker 1999: 172). The overt Scandinavian *Borre* style is absent from the rest of the county (Everson and Stocker 1999: 198).

3.3: Wigford

3.3.1: The church of St John the Evangelist

An "Anglo-Saxon gravemarker" was apparently found during a watching brief carried out by the Lincoln City and County Museum at St John Cornhill Church in Wigford. The stone itself is lost, however, and no one seems to remember anything about it (Everson and Stocker *pers. comm.*). It will be published in Everson and Stocker (in prep.).

3.3.2: Lincoln St Mary-le-Wigford

Lincoln St Mary-le-Wigford 1 is a fragment of a cross-shaft with a ring- or disc-shaped head, produced in South Kesteven with stone from the Barnack quarries. The monument type is difficult to identify due to its fragmentary state, but its re-use in the eleventh-century church fabric provides a clear *terminus ante quem* for its use, assigning it securely to the later tenth or eleventh centuries (Everson and Stocker 1999: 209-10).

Lincoln St Mary-le-Wigford 2 is an incomplete mid-Kesteven grave cover of tenth- to eleventh-century date, made of Ancaster freestone, in two non-adjacent pieces, now incorporated into the church fabric. It came to light during the 1870 restorations, as part of the eleventh- to twelfth-century stonework (Everson and Stocker 1999: 212-13).

Lincoln St Mary-le-Wigford 3 is a fragment of a Lindsey-type grave cover of tenth- to eleventh-century date, quite badly weathered as a result of its re-use as a building stone in the external wall of the church (Everson and Stocker 1999: 213).

Lincoln St Mary-le-Wigford 4 is a Lindsey-type grave marker of later tenth- to eleventh-century date. It was re-used as a building stone over the south doorway into the south aisle. It is possible that this formed a composite monument with *Lincoln St Mary-le-Wigford 3* (Everson and Stocker 1999: 213-14).

Lincoln St Mary-le-Wigford 5 is another fragment of a tenth- to eleventh-century grave marker of Lindsey type. Only a small fragment, measuring 17 x 13 cm, survives, and it is possible that it was part of the same grave marker as *Lincoln St Mary-le-Wigford 4* (Everson and Syocker 1999: 214).

Lincoln St Mary-le-Wigford 7 is an unidentifiable fragment, possibly of a Kesteven-type grave cover, although it could also represent something similar to the *Brattleby 1* cross-shaft (appendix 4.1.5). It is currently built into the eleventh-century fabric of the church, and is whitewashed too hard to identify what kind of stone it is made of. Its incorporation into the

church fabric suggests that the sculptural fragment itself was of tenth- or early eleventh-century date (Everson and Stocker 1999: 216-17).

3.3.3: Lincoln St Mark

Lincoln St Mark 1 is a small fragment of an Ancaster-type cross-head and -shaft, measuring 22.5 x 14 cm, and between 16 and 14.5 cm thick. It was dated to the late tenth or early eleventh centuries. It was found during the 1976 excavations of the church of St Mark, re-used as a foundation stone in the north aisle of the medieval church. It is believed to have originated in the graveyard immediately to the north of the early stone church, which was cleared when the medieval church was built (Everson and Stocker 1999: 198). The stone type is Ancaster freestone from the Upper Lincolnshire Limestone. Because of its small size, it is believed to have functioned as an individual grave marker rather than a major standing cross (Everson and Stocker 1999: 198). Its simple interlace decoration has parallels in Little Shelford (Cambs.) and *Colsterworth 1* from Kesteven (Everson and Stocker 1999: 130-31; 198) (appendix 4.2.8). On the basis of their decorative similarities, Everson and Stocker (1999: 199) have suggested that *Lincoln St Mark 1* and *Colsterworth 1* came from the same workshop.

Lincoln St Mark 2 is a grave cover of the mid-Kesteven type, dated to the mid tenth to early eleventh centuries. It measures 28 x 37 cm, and is c. 17 cm thick. Like *St Mark 1* (see above) and *St Mark 14* (see below) it is made of Ancaster freestone from the Upper Lincolnshire Limestone. It was re-used as a piece of masonry on the inner face of the north wall of the church of St Mark as part of a decorative blind arch, where it was inserted during the construction of the Victorian church in 1871/2. At this time, reference was made to a number of architectural fragments that were incorporated into the walls of the older church. It displayed one of the ends of the central motif of a double-ended cross with interlace infilling typical of mid-Kesteven covers, but was extensively re-worked for its secondary usage (Everson and Stocker 1999: 199). Parallels in terms of its decoration can be found at Aisthorpe in Lindsey (appendix 4.1.1), and Burton Pedwardine, Eagle and West Allington in Kesteven (Everson and Stocker 1999), and in various locations in Nottinghamshire, whilst its cabling recurs in Peterborough, and on other examples within the mid-Kesteven group, such as the eleventh-century *Lincoln St Mary-le-Wigford 2* (Everson and Stocker 1999: 212-13), *Corringham 1* (appendix 4.1.10) and *Colsterworth 3* in Kesteven (Everson and Stocker 1999: 199).

Lincoln St Mark 3 is an incomplete late tenth- or eleventh-century Lindsey cover, now in two pieces, one measuring 34 x 35 cm and less than 18 cm thick, and the other measuring 48 x 20 cm and of similar depth (Everson and Stocker 1999: 199-200). Like *Lincoln St Mark 2*, it was formerly mounted on the inner face of the north wall, as part of a decorative blind arch, and had previously possibly been part of the church fabric (Everson and Stocker 1999: 199). The stone type was Upper Lincolnshire Limestone (but not Ancaster or Barnack types). The border was defined by a single cable moulding, surrounding a simple repetitive interlace pattern (Everson and Stocker 1999: 200).

Lincoln St Mark 4 is another fragmented late tenth- to eleventh-century Lindsey-type grave cover, now (after assembly) measuring 66 x 50 x 12 cm. It was made of Lower Lincolnshire Limestone from the vicinity of Lincoln. It was discovered during the 1976 excavations as part of the medieval foundations of the north-aisle. This particular one belonged to subgroup a, characterised by a double herring-bone border (Everson and Stocker 1999: 200-01). It betrays stylistic similarities to *Blyborough 1* (appendix 4.1.4).

Lincoln St Mark 6 is a late tenth-century incomplete grave cover in derived *Borre* style, now in two pieces, measuring 67 x 60 x 17 cm, and 69 x 57.5/53 x 17 cm (Everson and Stocker 1999: 202-03). It was found during the 1976 excavations as a piece of the foundations in the south wall of the nave. The stone was probably Lower Lincolnshire Limestone from the vicinity of Lincoln (Everson and Stocker 1999: 202). Its decoration is similar to that of *Lincoln City Broadgate 1* (see above) and *Hackthorn 1* (appendix 4.1.15), but the decoration filling the panels between the cross-arms, including a triquetra, does not fit so well (Everson and Stocker 1999: 203).

Lincoln St Mark 7 is an incomplete grave cover of later tenth or eleventh-century date. The stone is Lower Lincolnshire Limestone from the Lincoln vicinity. It was discovered during the 1976 excavations, re-used as part of the church foundations (Everson and Stocker 1999: 203). Its simple incised decoration based on a double incised cross, known as type A1, is typical of the Lincoln-based production, and is represented on other examples from St Mark's Church, such as *Lincoln St Mark 11* and *Lincoln St Mark 17*, although *Lincoln St Mark 17* is made of a different stone type (see below). This particular example depicts two smaller crosses on either side as well. The three crosses have been interpreted as being explicitly Christian as they seem to refer to the three crosses on Golgotha (Everson and Stocker 1999: 203). The motif is very common on Merovingian and earlier insular sculpture, and can be found locally on *Hackthorn 1* (appendix 4.1.15) and *Lincoln City Broadgate 1* (see above:

3.2.2), which may belong to the first half of the tenth century (Everson and Stocker 1999: 188-89). It is suggested that *Lincoln St Mark 7* may have formed a composite monument with *Lincoln St Mark 17* (Everson and Stocker 1999: 203).

Lincoln St Mark 9 is a later tenth- or eleventh-century fragment of a grave cover, measuring 61 x 55 cm and with a depth of 12 cm. It was found during the 1976 excavations, reused as part of the church foundations. Its stone type is Lower Lincolnshire Limestone of the Lincoln vicinity, and its decoration consists of a simple cross of type A1. The proportions of the cross are very similar to *St Mark 6*, but its undecorated nature is more similar to *Brauncewell 1* (appendix 4.2.5) and the eleventh- or twelfth-century *Carlby 1* (Everson and Stocker 1999: 126-27, 204).

Lincoln St Mark 10 a-c are three non-adjacent pieces of a single grave cover, measuring 72 x 68-66 cm (depth 17 cm), 33 x 23 cm (depth 17 cm), and 32 x 48 cm (depth 17 cm) respectively. They are made of Lower Lincolnshire Limestone of the Lincoln vicinity. Although the stone is greatly abraded, the decoration seems to consist of two incised crosses, one within the other. It is similar to *St Mark 9* (see above) as well as the eleventh-century *Castle Bytham 1* (Everson and Stocker 1999: 128), *Brauncewell 1* (appendix 4.2.5) or the eleventh- to twelfth-century *Carlby 1* (Everson and Stocker 1999: 126-27), whilst further afield parallels can be found in Cambridge and York. It was dated to the mid-tenth to eleventh century (Everson and Stocker 1999: 205).

Lincoln St Mark 11 is another fragment of a late tenth- to eleventh-century grave cover or marker, measuring 20.5 x 26.5 x 7 cm (Everson and Stocker 1999: 205-06). It was found during the archaeological excavations at the church in 1976. It has strong similarities to other pieces from St Mark's Church, both in stone type (Lower Lincolnshire Limestone of Lincoln vicinity) and decoration (an incised cross of type A1). Its closest parallels in terms of decoration are *Lincoln St Mark 7* (see above) and *Lincoln St Mark 17* (see below; Everson and Stocker 1999: 205).

Lincoln St Mark 12 is a tenth- or eleventh-century fragment of a grave cover, made of Upper Lincolnshire Limestone from the Ancaster quarries. It is similar to the eleventh-century *Lincoln St Mark 8* (Everson and Stocker 1999: 203-04). It is a corner fragment with some deeply incised lines, representing a border of some sort. Although not enough survives to be certain about its best parallels, its form and execution are reminiscent of *Gayton le Wold 1* (appendix 4.1.13), the eleventh-century *Glentworth 1* (Everson and Stocker 1999: 169), *Hackthorn 2* (appendix 4.1.15; Everson and Stocker 1999: 175), *Lincoln Cathedral 2* (see above: 3.1.2), *Lincoln St Mark 16* (see below) and *Lincoln St Mary le Wigford 4* (see above: 3.3.2) (Everson and Stocker 1999: 206, 213-14).

Lincoln St Mark 14 is another later tenth or eleventh century fragment of a grave cover or marker made of Ancaster freestone. It measures 25.5 x 20.5 x 12.5 cm (Everson and Stocker 1999: 207). Decoration occurs to one side, and consists of a wedge-armed cross of type B6 with traces of two circular lines possibly indicating a ring-head. Most of the parallels for its cross type are later in date, ranging between the eleventh and twelfth centuries, which is based to a significant degree on its ring-head (Everson and Stocker 1999: 207). A possible parallel is *Lincoln St Paul-in-the-Bail 1* (see above).

Lincoln St Mark 16 is another tenth- or eleventh-century Lindsey-type grave marker, measuring 70 x 55/51 x 17 cm. It came to light during the construction of the Victorian church in 1871-2, and was then incorporated into the Victorian church fabric (Everson and Stocker 1999: 208). It is made of Upper Lincolnshire Limestone (but not Ancaster or Barnack), and is dated to the mid-tenth to eleventh century (Everson and Stocker 1999: 208-09). The stone may have originally been a piece of Roman masonry that was reused, like *Lincoln Cathedral 2* (see above), which is also its closest parallel in terms of decoration. The flat face, whose decoration survives (one of the flat faces was redressed, as was one of the narrow faces) contains a cable border surrounding a double incised cross of type A1. The wide space between the two outlines is mirrored on *Lincoln Cathedral 2* (see above: 3.1.2) but also on *Lincoln St Mary-le-Wigford 4* (see above: 3.3.2). Other examples usually place the two outlines closer together, thus more suggestive of a single cross with a double outline rather than of one cross inside another. The narrow faces are filled with additional cabling, which sets this stone apart from all the others in the group (Everson and Stocker 1999: 208).

Lincoln St Mark 17 is another late tenth or eleventh century grave marker, measuring 78.5 x 59-58 x 17 cm. Its stone type is Lower Lincolnshire Limestone of the Lincoln vicinity. Its decoration consists of a double incised cross of type A1, with two smaller incised crosses in the upper quadrants. Apart from its lack of a cable moulded border, this stone displays close similarities with the Lindsey markers, especially those from *Gayton le Wold 1* (appendix 4.1.13), the eleventh-century *Glentworth 1* (Everson and Stocker 1999: 169) and *Hackthorn 2* (appendix 4.1.15; Everson and Stocker 1999: 175). Its closest parallel, however, is the grave cover *Lincoln St Mark 7* (see above), which also displays three incised crosses, and the possibility is suggested that they formed a composite monument. Other examples where the

two pieces may have formed a set are *Hackthorn 1* and *Hackthorn 2* (appendix 4.1.5; Everson and Stocker 1999: 209).

Lincoln St Mark 19 is a tenth- to eleventh-century grave marker decorated with a simple outlined cross. The surviving fragment measured 40 x 21.5 x 11 cm. It was made of Lower Lincolnshire Limestone of the Lincoln vicinity (Everson and Stocker 1999: 210).

Lincoln St Mark 21 belongs to a group of Lincolnshire covers that are decorated only with an incised cross composed of two lines and arms of roughly equal length. These are very hard to date on art-historical grounds. However, the two examples from *Lincoln St Mark 21* and *22* were dated stratigraphically to the very late tenth to late twelfth centuries (Everson and Stocker 1999: 58).

Lincoln St Mark 22 was another grave cover with simple decoration that could not be dated any closer than between the later tenth and mid-thirteenth centuries (Everson and Stocker 1999: 283-84).

Lincoln St Mark 28 was found during the 1976 excavations, but was left unrecorded and could not be located during the survey carried out by Everson and Stocker (1999). However, a written reference to its cable-moulded border suggests that it may belong to the later tenth or eleventh centuries (Everson and Stocker 1999: 303).

3.4: Lincoln (general)

Two thirteenth-century documentary references, included in the LARA database published as a CDROM with *The City by the Pool* (Jones *et al.* 2003), speak of two "ancient crosses in the city". One of these was apparently already broken in the thirteenth century. If these were pre-Conquest standing crosses, they represent the only monuments of their sort from Lincoln itself (Everson and Stocker *pers. comm.*). These potential monuments will be discussed in more detail in Everson and Stocker in prep.

APPENDIX 4: SCULPTURE FROM LINDSEY, KESTEVEN AND HOLLAND

This appendix summarises the late Anglo-Saxon sculptural material from Lindsey, Kesteven and Holland, as catalogued by Everson and Stocker (1999; in prep.). Some additional pieces that can be linked to the Lincoln-based production that were found outside Lincolnshire have also been included. The sculptural material from Lincoln has been summarised in appendix 4. Sculptural fragments whose production definitely post-dates the tenth century have been excluded, as have monuments whose date range precedes the eighth century, which is why not all consecutive numbers from Everson and Stocker's (1999) corpus, which also includes the eleventh century, have been included. Sites are organised alphabetically.

4.1: Lindsey

4.1.1: Aisthorpe

Aisthorpe 1 is a grave cover of mid-Kesteven type, now in three pieces, and built into the interior east wall of the church tower of the church of St Peter, where it was discovered during nineteenth-century renovations. It was made of Ancaster freestone, and dated to the mid tenth to early eleventh centuries. Its closest parallels in terms of decoration can be found in Kesteven and Nottinghamshire (Everson and Stocker 1999: 95-96).

Aisthorpe 2 is an incomplete grave cover of mid-Kesteven type, also made of Ancaster freestone, and dated to the mid tenth to early eleventh centuries. It was built into the same wall as *Aisthorpe 1*. Decorative parallels can be found in Kesteven and at Humberton (Everson and Stocker 1999: 96).

4.1.2: Bardney

Bardney 1 is a very abraded part of a cross-head of the Ancaster type. It is currently held by The Collection in Lincoln. It was rediscovered in 1972 in the church of St Lawrence in Bardney, in a chest also containing some other architectural fragments. It was believed to have first been found during the excavations of 1909-13 at Bardney Abbey. It was made of Lincolnshire Limestone (not Barnack type), probably from the Ancaster quarries (Everson and Stocker 1999: 97-98). Its dating is somewhat uncertain. Crosses of this type are mostly tenth-century in date. However, this cross-head is believed to have come from Bardney Abbey, which was supposed to have been made inoperative by the viking raids. If this were true, a date before the mid-ninth century would seem more appropriate (Everson and Stocker 1999: 98), not in the least because it bears some similarities to pre-viking crosses from Bath (Everson and Stocker 1999: 97-98). At the same time, stylistic similarities to a tenth- or eleventh-century cross-head from Rowsley (Derbyshire) could also suggest a tenth- or eleventh-century date; besides, Bardney Abbey does seem to have retained a degree of ecclesiastical importance throughout the period of Scandinavian settlement (Everson and Stocker 1999: 98). It is one of only three graveyard crosses of major dimensions from Lindsey, the other examples being *Crowle 1* and *Brattleby 1* (see below; Everson and Stocker 1999: 114).

Bardney 2 is a socket for a standing cross, found at the abbey of St Peter, St Paul and St Oswald in the early nineteenth century, but since relocated to the church of St Lawrence. It was intended to hold a standing cross, and may have belonged to a pre-Conquest type cross of any age (Everson and Stocker 1999: 27). On the basis of the toolmarks, which suggest either a Roman date or a survival of techniques that were current in the Roman period, Everson and Stocker (1999: 99-100) tentatively date it to the seventh century, and associate it with the earlier phases of Bardney Abbey during the period of the Mercian Supremacy. However, they (1999: 100) also acknowledge the evidence for the re-use of Roman masonry on some of the tenth-century Lincoln sculpture, including *Lincoln Cathedral 2* (appendix 3.1.2), and it could also be argued that this was the socket for *Bardney 1*. No other pre-Conquest sculpture survives at Bardney, and if Stocker's (2000) argument that the number of surviving sculptural pieces is fairly representative of the actual number of sculptural pieces that existed in Lindsey during the Anglo-Saxon period holds true, the latter suggestion seems likely (see chapter 2.4.3).

4.1.3: Barton upon Humber

The late tenth-century church of St Peter still retains some of its tenth-century fabric, and is home to a number of architectural carvings, suggesting the church was of relatively high status (Everson and Stocker 1999: 64). The church was fully excavated in the 1980s (Bradley 2002: 6; Tibbles and Steedman 1990: 3), but no funerary sculptures were found.

Barton upon Humber 1 is an *in situ* architectural panel with remnants of figure carving. The only decoration that survives (and perhaps the only decoration there ever was) is a frontal egg-shaped head. It has been suggested this was originally a crucifixion scene, with the rest of the image executed in low relief or in paint, which has now disappeared. This is not impossible, although it would imply that the head was given special emphasis, not only

because it is sculpted so deeply, but also because within the space of the panel it was disproportionately large compared to the rest of the body (Everson and Stocker 1999: 101). An alternative explanation could be that it was a Christ in Majesty, or St Peter, the patron saint of the church. It is made of Yorkshire Millstone Grit, and is thus indicative of contacts between Barton and York either in the Roman period, or in the late Anglo-Saxon period (Everson and Stocker 1999: 101-02).

The same church also has a couple of *in situ* label stops, again made of Yorkshire Millstone Grit. One of these (*Barton-upon-Humber 8a*) is carved in the shape of a human head. The other (*Barton upon Humber 8b*) is unfortunately so badly corroded that it is impossible to ascertain whether it may have been carved into a similar shape as well. It is possible that they are re-used Roman fragments, but it is also possible that they are contemporary with the late tenth-century church fabric (Everson and Stocker 104-05).

Finally, five late tenth-century mid-wall shafts of baluster form (*Barton-upon-Humber 2-7*) still survive *in situ* as well. Again, they are made of Yorkshire Millstone Grit, and it is probable that they are all made of pieces of re-used Roman masonry (Everson and Stocker 1999: 102-04). They were probably brought in from York, either in the Roman period or in the late Anglo-Saxon period, as this type of stone is not known from the closer Roman settlements at Winteringham and Brough (Everson and Stocker 1999: 81). However, the construction of the church is supposed to have taken place in the late tenth century, after contacts between Lincolnshire and York had significantly diminished as a result of the Anglo-Saxon Conquest of the area, and in architectural style the church betrays more affinities with the south Midlands than with contemporary churches north of the Humber (Everson and Stocker 1999: 81).

4.1.4: Blyborough

Blyborough 1 is part of a Lindsey-type grave cover. It is now in the church of St Alkmund, where it was found during repairs in 1877. It is made of Lincolnshire Limestone (not Ancaster or Barnack types), and has clear stylistic similarities to *Lincoln St Mark 4* (appendix 3.3.3) (Everson and Stocker 1999: 110).

Blyborough 2 is part of a probable mid-Kesteven type grave cover, now built into the nave of the church of St Alkmund, made of Ancaster freestone. One of its closest parallels is the eleventh-century *Lincoln St Mary-le-Wigford 2* (Everson and Stocker 1999: 212-13), and *Burton Pedwardine 3* in Kesteven (see below: 4.2.6) (Everson and Stocker 1999: 110-11, 120-21). It was assigned a mid tenth- to early eleventh-century date (Everson and Stocker 1999: 111).

The nave of the church of St Alkmund in Blyborough is also the location of *Blyborough 3*, another fragment of late tenth- or eleventh century date, of which only the cable moulding survives as an identifiable fragment, and which cannot be classified (Everson and Stocker 1999: 111). It has not been included in any distribution plans.

4.1.5: Brattleby

Brattleby 1 is an *in situ* example of the early tenth-century Ancaster cross-shafts. It is incomplete, now in two non-adjacent pieces, and stands in the churchyard of the church of St Cuthbert, probably in its original position. One part is set into a non-decorated angular base which may be original, and the other piece is lying flat against it. It is made of Ancaster freestone (Everson and Stocker 1999: 113). *Brattleby 1* is situated close to the centre of the graveyard, and although it may have also had burials associated with it, its size suggests that it was a focal point for the graveyard rather than an individual grave marker. It may also have demarcated a boundary, possibly to distinguish between burials of the clergy and the parishioners (Everson and Stocker 1999: 70). *Brattleby 1* was one of three standing crosses of major dimensions in Lindsey, the other examples being *Bardney 1* and *Crowle 1*; however, *Brattleby 1* lacks the figure sculpture that characterises most other major pre-Conquest crosses in the country (Everson and Stocker 1999: 33; 114).

4.1.6: Broughton

Broughton 1 is a late tenth- to early eleventh-century Lindsey-type grave cover, and belongs to subgroup c. It is incomplete, and the three surviving pieces are joined together, and set in concrete in the northeast chapel of the church of St Mary in Broughton. They were all discovered as part of the church fabric in the nineteenth century. The stone type is probably of the Lincoln vicinity (Everson and Stocker 1999: 116-17).

The tenth- or eleventh century *Broughton 2* is related to the eleventh-century fenland grave cover group, with a simple cross on the flat surface, and the panels between the arms infilled with strands of interlace, but it is made of local stone, probably of the Lincoln vicinity (Everson and Stocker 1999: 49). It is now incorporated in the fabric of the church of St Mary. Decoration consists of a simple cross with interlace filling in the four panels thus created. This type of decoration is more commonly found in Lincoln (*Lincoln Cathedral 1*,

Lincoln City Broadgate 1, *Lincoln St Mark 6* and the eleventh-century *Lincoln St Mark 8*) and in the south of the county. The only comparable example from Lindsey is *Hackthorn 1*. There are analogies in the products of the city of York too (Everson and Stocker 1999: 117-18). The implication is that covers like *Broughton 2*, produced in or near Lincoln, formed the inspiration for the later fenland group.

4.1.7: Caistor

Caistor 1 is part of an eighth- or ninth-century architectural panel, found at Castle Hill in the eighteenth century, bearing a Latin inscription in insular capitals, recording a donation by a certain Ecgberht (Everson and Stocker 1999: 122-23). Its presence suggests there may have been an early monastery here (Everson and Stocker 1999: 124), which confirms Blair's (2005: 150) suggestion that Caistor may have been the site of an early minster. Its stone type was not recorded (Everson and Stocker 1999: 123).

4.1.8: Cammeringham

Cammeringham 1 is an incomplete grave cover of Lindsey type, now in the church of St Michael in Cammeringham. It is made of Upper Lincolnshire Limestone, and is in relatively poor condition due to a period of re-use as a threshold (Everson and Stocker 1999: 125-26).

4.1.9: Conisholme

A rare example of figure-carving has been discovered on the tenth- or eleventh-century partial ring-headed cross-head of *Conisholme 1*, situated between Grainthorpe, North Somercotes and South Somercotes, which, together with *Great Hale 1* from south Lincolnshire, represent a group of figurine carving that incorporates crude, flatly carved outline figures, typical of Viking Age sculpture (Everson and Stocker 1999: 26). The example from *Conisholme 1* is now in the church of St Peter, where it was discovered in 1925 in the churchyard. It is made of limestone of the Lincoln vicinity, and retains a Christ in Crucifixion on one of the faces. It has parallels in Yorkshire as well as the eleventh-century *Lincoln St Mark 8*. Its ring-head clearly points to Anglo-Scandinavian influences (Everson and Stocker 1999: 132-33). *Conisholme 1* is one of only two cross-shafts produced with stone from the Lincoln quarries, the other one being *Marton 1*, a relatively small number compared to the quantity of covers and markers from these quarries (Everson and Stocker 1999: 28).

4.1.10: Corringham

Corringham 1 is part of a grave cover of mid-Kesteven type, now re-used as a sub-base for a pier in the north nave arcade, made of Ancaster freestone. One of its closest parallels in terms of decoration is the eleventh-century *Lincoln St Mary le Wigford 2* (Everson and Stocker 1999: 134). It was dated to the period between the mid tenth and early eleventh centuries (Everson and Stocker 1999: 134).

4.1.11: Crowle

Crowle is the only site with sculpture on the Isle of Axholme. The early tenth-century cross-shaft *Crowle 1* is decorated with interlace, secular figural carvings and a runic inscription in Old English within a curved banner, as well as *Jellinge*-derived zoomorphic elements and bird figures. It clearly fits in with the style of the Hiberno-Norse sculpture of Yorkshire and Cumbria (Everson and Stocker 1999: 25; ill. 146, 148). It constitutes the only *secular* figural carving from Lincolnshire, and the only example of a monumental runic inscription from Lindsey. It is made of reddened Millstone Grit like *Holton le Clay 1* (see below). This stone was probably imported from York, where it was widely used as a building stone in the Roman period, although it is not clear whether this happened in the tenth century, or earlier, already during the Roman period (Everson and Stocker 1999: 28).

4.1.12: Cumberworth

Cumberworth 1 is a part of a grave cover of Lindsey type, incorporated into the fabric of the church of St Helen. It is made of Lincolnshire Limestone (but not of not Ancaster or Barnack type) (Everson and Stocker 1999: 152-53). During excavations at the church of St Helen's in 1992, no new sculptural material was uncovered, despite the fact that the church was fully excavated (Green 1997: 3-4).

4.1.13: Gayton le Wold

Gayton le Wold 1 is an incomplete grave marker of Lindsey type, now in two pieces, held in the church of St Peter. It is made of Lincolnshire Limestone (not of the Ancaster or Barnack types). It is stylistically one of the best-produced markers in this group (Everson and Stocker 1999: 167).

4.1.14: Glentham

Glentham 1 is another fragment of a Lindsey cover, now held by The Collection in Lincoln. It was discovered in 1989 as part of the fabric of the church of St Peter and Paul in Glentham, and was severely damaged during removal (Everson and Stocker 1999: 168). More recently, another piece of the same cover was found retained in the church fabric (Everson and Stocker *pers. comm.*).

4.1.15: Hackthorn

The grave cover at *Hackthorn 1* is one of a pair of covers, also including *Lincoln City Broadgate 1* (appendix 3.2.2) whose decorative interlace elements in the form of birds are reminiscent of the decoration on *Borre*-style metalwork from Scandinavia (Everson and Stocker 1999: 25). Although the Lincoln stone is lost and the Hackthorn one now so weathered that the decoration is no longer visible, antiquarian drawings suggest that they were very similar, and it is suggested that their production was Lincoln-based, and more organised than is sometimes thought (Everson and Stocker 1999: 51). The example at *Hackthorn 1*, now in the church of St Michael, where it was discovered in 1844 during building works, has similarities to the later tenth- to eleventh-century Lindsey covers in terms of the cable moulding (Everson and Stocker 1999: 172). The outline of the simple cross decorating its surface is also executed in cable moulding, slightly finer than the edge, and the squares above it are filled in with bird-shaped stylised creatures. The lower panels bear triquetra-shaped interlace patterns. It is made of Lower Lincolnshire Limestone of the Lincoln vicinity (Everson and Stocker 1999: 172).

Hackthorn 2 is a tenth-century Lindsey type grave marker, now in the churchyard of St Michael's Church. It is of the same stone type as Hackthorn 1, and the cabling is of the same fine quality, which has led Everson and Stocker (1999: 175) to suggest a similar early date. The possibility exists that the two pieces, *Hackthorn 1* and *Hackthorn 2*, once formed a composite monument (Everson and Stocker 1999: 209).

4.1.16: Holton le Clay

The grave cover at *Holton le Clay 1*, with its *Jellinge*-style zoomorphic decoration that places it in the first half or middle of the tenth century, is a product of the York Metropolitan School. It is made of reddened Millstone Grit, which was widely used in York during the Roman period. This type of cover is believed to have been virtually mass-produced (Everson and Stocker 1999: 28, 50, 81, 149-51, 179).

4.1.17: Humberston

Humberston 1 is a partial mid-Kesteven grave cover, in two non-adjacent pieces, built into the external wall of the church of St Peter. It is made of Ancaster freestone, and has decorative parallels in *Bassingham* and *Burton Pedwardine* in Kesteven, and *Aisthorpe* in Lindsey (see above). This example is furthest removed from the quarry source, and an important indicator of riverine and coastal transport in the mid-tenth and eleventh centuries (Everson and Stocker 1999: 189-90).

4.1.18: Kirton in Lindsey

Kirton in Lindsey 2 is another grave cover of Lindsey type, dated to the tenth or eleventh centuries (Everson and Stocker 1999: 51, 302-03). It was discovered in the nineteenth century, but is currently lost. No illustrations survive either, but the description indicated that it was similar but smaller than *Northorpe 1*, which is a Lindsey-type grave cover (Everson and Stocker 1999: 302).

4.1.19: Laceby

Laceby 1 is a grave cover of Lindsey type. It is made of Lincolnshire Limestone (not Ancaster or Barnack types), and survives in three non-adjacent pieces. It is incorporated into the fabric of the church of St Margaret (Everson and Stocker 1999: 192-93).

4.1.20: Little Carlton

Little Carlton 1 is a partial grave cover in the Lindsey style, made of Lower Lincolnshire Limestone of the Lincoln vicinity. It was found during demolition of the nineteenth-century church of St Edith in 1993 by archaeologists of LAS, and is now held by The Collection. It belongs to subgroup a, characterised by a double cable border (Everson and Stocker 1999: 221-22).

4.1.21: Manby

Manby 1 is a Lindsey-type grave cover made of Lincolnshire Limestone (not Ancaster/Barnack), built into the fabric of the Victorian church of St Mark (Everson and Stocker 1999: 224).

Manby 2 is a Lindsey marker, now also part of the fabric of the church of St Mark. It is made of Lincolnshire Limestone (not Ancaster/Barnack), and it is possible that it formed a composite monument with *Manby 1* (Everson and Stocker 1999: 224-25).

4.1.22: Marton

Marton 1 is part of a tenth- or eleventh century cross-head, now built into the exterior west wall of the south aisle of the church of St Margaret. It is made of Lower Lincolnshire Limestone (Lincoln vicinity) (Everson and Stocker 1999: 226). Its interpretation is problematic, but it is possible that this is part of a wheel-headed cross of massive dimensions, such as the pre-viking cross at Lastingham (Yorks.). In that case it would have parallels in Cumbria, Lancashire and Cheshire. Major wheel-headed crosses of this type were first brought over the Pennines by the Hiberno-Norse settlers in the first half of the tenth century (Everson and Stocker 1999: 81). Alternatively, it may have been part of a smaller ring-headed cross, in which case analogies in York and East Yorkshire can be suggested, in particular the products of the Ryedale and York workshops, which gained a limited distribution in East Yorkshire in the second quarter of the tenth century (Everson and Stocker 1999: 81). Given the location of Marton on the Trent, near an important crossing, where the road to Doncaster crosses the river, the second prototype seems the more likely source (Everson and Stocker 1999: 28). It was made of stone from the Lincoln vicinity (Everson and Stocker 1999: 227). *Marton 1* and *Conisholme 1* are the only two cross-shafts produced with stone from the Lincoln quarries, which contrasts sharply to the sheer quantity of covers and markers from these quarries (Everson and Stocker 1999: 28). The possibility that *Marton 1* was a free-standing cross is strengthened by *Marton 2*, which is possibly the undecorated base of *Marton 1*, now built into the exterior fabric of the same church (Everson and Stocker 1999: 228).

Marton 3 is an incomplete grave cover in six non-adjacent pieces, now built into the exterior west wall of the south aisle of the church of St Margaret. Although initially it was believed to be a cross-shaft, it is more likely to be a flat-topped chest-like grave cover (Everson and Stocker 1999: 228-29). As such, *Marton 3* is the only tenth-century grave cover from Lindsey whose form, like that of the Kesteven grave cover group, is reminiscent of the Trent Valley hogbacks. However, its decoration places it with the Lindsey group, and its stone seems to have been quarried from the Lincoln vicinity (Everson and Stocker 1999: 50). It was decorated with spaced units of figure-of-eight interlace, separated by a plain border from a rounded rib decorated with chevron. Its closest parallels in terms of asymmetrical decoration and suggested form are with the grave covers of mid-Kesteven type, but the repetitive figure-of-eight patterning is clearly reminiscent of the Lindsey type covers. A later tenth- or early eleventh-century date is suggested, and their association with *Marton 1* and *2* in secondary use may suggest an association in their primary function as well (Everson and Stocker 1999: 228-29).

4.1.23: Miningsby

Miningsby 1 is an incomplete grave cover of Lindsey type, now held by The Collection in Lincoln. It was discovered in 1851 as a threshold in the church of St Andrew, from where it was eventually removed when the church was demolished in 1980. It was made of Lower Lincolnshire Limestone of the Lincoln vicinity. It is the most complete example of subgroup a (characterised by a herringbone border) (Everson and Stocker 1999: 233-34).

Miningsby 2 is part of another Lindsey cover. It is now lost, and its existence is only attested by a nineteenth-century drawing, which depicted it standing loose in the church together with *Miningsby 1*. However, the detail of this drawing is clearly inaccurate, as it represents *Miningsby 1* to have had four, rather than five strands of interlace (Everson and Stocker 1999: 233-34). Everson and Stocker (1999: 234-44) suggest that *Miningsby 2* could be the missing lower part of *Miningsby 1*. However, this would make the monument untypically large, and therefore it might also have formed part of a separate monument.

4.1.24: North Thoresby

North Thoresby 1 is part of a Lindsey-type grave cover, now mounted on a modern concrete rest, in the west end of the nave of the church of St Helen. It is made of Upper Lincolnshire Limestone (not Ancaster or Barnack), and belongs to subgroup a, characterised by its herringbone border, and should be assigned a later tenth- or eleventh-century date (Everson and Stocker 1999: 239).

4.1.25: Owmbly-by-Spital

In Owmbly-by-Spital, a Lindsey-type marker was found in the tower of the village church during restoration in the late 1990s (Everson and Stocker *pers. comm.*). This stone will be published by Everson and Stocker (in prep.).

4.1.26: Redbourne

Redbourne 1 is an unidentified fragment of eighth- or ninth-century date, made of Lincolnshire Limestone, but not from the Ancaster or Barnack quarries. It is now built into the wall of the church of St Andrew (Everson and Stocker 1999: 240-41). The stone type was Lincolnshire limestone but not from the Ancaster or Barnack quarries. It is now thickly covered in limewash (Everson and Stocker 1999: 240).

4.1.27: Saxilby

Saxilby 1 was part of a Lindsey-type grave cover of subgroup a, now in the interior face of the west wall of the tower of the church of St Botolph. It is made of Lincolnshire Limestone (not Ancaster or Barnack type), and is one of the bigger examples, together with *North Thoresby 1* and *Blyborough 1* (Everson and Stocker 1999: 244).

4.1.28 Scampton

An antiquarian reference and illustration claim that a stone cross with interlace decoration was found standing in the nave of the village church (Everson and Stocker in prep.). As currently no more information is available with regards to its exact provenance and/or typology, it has not been included in any distribution plans.

4.1.29 Scartho

In Scartho near Grimsby a tenth-century sundial was found, re-used as a window-frame, and still *in situ* in the eleventh-century window of the church of St Giles (Everson and Stocker in prep.).

4.1.30: Stow St Mary

Stow 1 is a late tenth- or eleventh-century Lindsey cover of subgroup b, decorated with a single cable border. It is now on display in the church of St Mary. It is made of Lincolnshire Limestone (not Ancaster or Barnack type), and is relatively small in size (Everson and Stocker 1999: 255).

Stow 2 is a now lost Lindsey type grave cover of late tenth- to eleventh-century date, recorded in a nineteenth-century engraving, and may have been part of *Stow 1*, although this would make the monument unusually large (Everson and Stocker 1999: 255-56).

Stow 3 is another lost Lindsey type grave cover, likewise recorded in a nineteenth-century engraving, although it is possible that this was another record of *Stow 2*. It was apparently found *in situ* on the churchyard, covering the upper part of a skeleton in a stone-lined grave (Everson and Stocker 1999: 256-57).

Stow 5 is a late tenth- to eleventh-century Lindsey-type marker, now built into the Romanesque nave of the church of St Mary. Although the stone is inaccessible, the stone type seems to be Lincolnshire Limestone (not Ancaster or Barnack type) (Everson and Stocker 1999: 257-58).

4.1.31: Tathwell

Tathwell 1 is a partial grave cover of Lindsey type, subgroup b. It is now standing loose in the chancel of the church of St Vedast. The stone type is Lower Lincolnshire Limestone, probably of the Lincoln vicinity (Everson and Stocker 1999: 263).

4.1.32: Theddlethorpe

Theddlethorpe St Helen 1 is part of a grave cover of the Lindsey grave cover group, re-used as a tread in the staircase in the west tower of the church of St Helen, and badly worn as a result of its re-use. It is made of Lincolnshire Limestone (not Ancaster or Barnack) (Everson and Stocker 1999: 264).

4.1.33: Thornton Curtis

The unidentified sculpture fragment *Thornton Curtis 1*, now built into the exterior fabric of the church of St Lawrence, is the third example of a piece of sculpture made of the same reddened Millstone Grit that was used for *Crowle 1* and *Holton le Clay 1*, and probably represents re-used Roman masonry from York (Everson and Stocker 1999: 265).

4.1.34: Toft next Newton

Toft next Newton 1 is the only definite example of one of the tenth- or eleventh century South Kesteven cross-shafts from Lindsey. It is made of Upper Lincolnshire Limestone, possibly Barnack rag type, the same stone type as the eleventh-century *Thornton le Moor 1* (Everson and Stocker 1999: 266). It is now incorporated into a twentieth-century churchyard memorial at the church of St Peter and Paul, together with *Toft next Newton 2* (Everson and Stocker 1999: 29; 267-68).

Toft next Newton 2 are two fragments of the same grave cover of mid-Kesteven type, now incorporated into the same early twentieth-century churchyard memorial as *Toft next Newton 1*. It is made of Ancaster freestone, and should be assigned a mid-tenth to eleventh-century date (Everson and Stocker 1999: 268-69). The southern provenance of the two surviving fragments at *Toft next Newton* provides further evidence for riverine and coastal trade via the Humber estuary.

4.2: Kesteven

4.2.1: Ancaster

Ancaster 1 is part of a late tenth- to eleventh-century grave marker with incised geometric decoration, classed by Everson and Stocker (1999: 97) amongst a group of 'gridded markers', which were produced at Ancaster and Barnack. It was made of Ancaster freestone (Everson and Stocker 1999: 97).

4.2.2: Barrowby

Barrowby 1 is a mid tenth- to eleventh-century grave cover of the mid-Kesteven type (or a variant of the type), made of Ancaster freestone (Everson and Stocker 1999: 100).

4.2.3: Bassingham

Bassingham 1 is a mid tenth- to early eleventh-century grave cover of mid-Kesteven type, made of Ancaster freestone (Everson and Stocker 1999: 105).

Bassingham 2 is a mid tenth- to early eleventh-century grave cover, made of Ancaster freestone (Everson and Stocker 1999: 106).

4.2.4: Bracebridge

Bracebridge 1 is a late tenth- or early eleventh-century fragment of a cross-shaft or grave cover of unknown stone type from the church of All Saints (Everson and Stocker 1999: 112).

4.2.4: Brant Broughton

Brant Broughton 1 is a fragment of a mid tenth- to early eleventh-century grave cover of the mid-Kesteven group, made of Ancaster freestone, now in the church of St Helen (Everson and Stocker 1999: 112-13).

4.2.5: Brauncewell

Brauncewell 1, from the church of All Saints, is a fragment of a late tenth- to twelfth-century grave marker or grave cover, possibly made of Ancaster freestone (Everson and Stocker 1999: 115-26).

4.2.6: Burton Pedwardine

Burton Pedwardine 1 is a possible fragment of a late tenth-century cross-shaft, now in the church of St Andrew, made of Ancaster freestone (Everson and Stocker 1999: 119). It may once have formed a composite monument with *Burton Pedwardine 2* or *Burton Pedwardine 3* (Everson and Stocker 1999: 44).

Burton Pedwardine 2 is an incomplete grave cover of mid-Kesteven type in three non-adjacent pieces, dated to the mid tenth to eleventh centuries. It is made of Ancaster freestone (Everson and Stocker 1999: 119-20).

Burton Pedwardine 3 is an incomplete grave cover of mid-Kesteven type, now in two fragments, dated to the mid tenth to eleventh centuries. It is made of Ancaster freestone (Everson and Stocker 1999: 120-21).

4.2.7: Coleby

Coleby 1 is a mid tenth- to eleventh-century partial grave cover of the mid-Kesteven group, made of Ancaster freestone (Everson and Stocker 1999: 128-29).

4.2.8: Colsterworth

Colsterworth 1 is part of a late tenth-century cross-shaft of the South Kesteven group, made of Barnack rag type (Everson and Stocker 1999: 130).

Colsterworth 2 is part of a mid tenth- to eleventh-century ringed cross-head, made of Ancaster freestone. It belonged to the rather common type of small graveyard markers that were introduced into England from the Irish Sea region in the course of the tenth century AD, and has parallels in *Lincoln St Mark 1* (appendix 3.3.3), the late tenth- to eleventh-century *Lincoln St Mary-le-Wigford 1* (appendix 3.3.2), and the eleventh-century *Bicker 1* from Holland (Everson and Stocker 1999: 131).

Colsterworth 3 is part of a mid tenth- to early eleventh-century variant on the mid-Kesteven grave cover group, and is made of Ancaster freestone (Everson and Stocker 1999: 107, 132).

4.2.9: Cranwell

Cranwell 1, now in the church of St Andrew, is part of a mid tenth-century cross shaft, made of Ancaster freestone. It betrays clear Scandinavian stylistic influences, and may have formed a composite monument with *Cranwell 2* (Everson and Stocker 1999: 44, 134-35).

Cranwell 2, also held in the church of St Andrew, is part of a mid tenth-century grave cover of a type that was related to the northern hogback-tombstones, and was made of Ancaster freestone. It may have formed a composite monument with *Cranwell 1* (Everson and Stocker 1999: 136-39).

4.2.10: Creeton

Creeton 1 is part of a late tenth-century cross-shaft, now in the churchyard of the church of St Peter, and made of Upper Lincolnshire Limestone of Barnack Rag type. It probably represents an early example of the South Kesteven cross-shafts (Everson and Stocker 1999: 139-40).

Creeton 3 is a fragment of a late tenth- or eleventh-century fragment of a cross-shaft, also made of Upper Lincolnshire Limestone of Barnack Rag type, possibly belonging to the South Kesteven cross-shaft group (Everson and Stocker 1999: 141).

Creeton 4 is a late tenth- or eleventh-century partial cross-shaft made of Ancaster freestone, similar to *Brattleby 1* (see above) (Everson and Stocker 1999: 141-42).

Creeton 5 is a late tenth- or eleventh-century partial cross-shaft of Upper Lincolnshire Limestone, probably Barnack Rag type. It belongs to the group of South Kesteven cross-shafts (Everson and Stocker 1999: 142).

Creeton 6 is yet another tenth- or eleventh-century cross-shaft, this time made of Ancaster freestone, but in such a fragmentary state that not much more can be said about it (Everson and Stocker 1999: 142).

Creeton 7 is a mid-tenth- to early eleventh-century grave cover made of Ancaster freestone, belonging to the mid-Kesteven cover group, subsequently re-cut in the twelfth century to be re-used as a grave cover again (Everson and Stocker 1999: 142-43).

Creeton 8 is a mid tenth- to early eleventh-century grave cover of the mid-Kesteven group, made of Ancaster freestone (Everson and Stocker 1999: 144).

Creeton 9 is part of a mid tenth- to early eleventh-century grave cover, probably of the mid-Kesteven type, made of Ancaster freestone (Everson and Stocker 1999: 144-45).

Creeton 10 is a mid-tenth- to eleventh-century grave cover, now in four non-adjacent pieces. It was probably originally a cover of mid-Kesteven type, and is made of Ancaster freestone (Everson and Stocker 1999: 145).

4.2.11: Dowsby

Dowsby 1 is part of a late tenth- to eleventh-century cross-shaft made of Upper Lincolnshire Limestone, but the quarry source was not specified. It is now incorporated into the fabric of the church of St Andrew. It was probably originally a shaft of the South Kesteven group (Everson and Stocker 1999: 153-54).

Dowsby 2 is a possible fragment of a cross-shaft of unknown type, but displaying certain similarities to the mid-Kesteven group. It was assigned a late tenth- to early eleventh-century date. The stone type was the same as *Dowsby 1* (Everson and Stocker 1999: 154).

4.2.12: Eagle

Eagle 1 is a grave cover of mid-tenth- to early eleventh-century date, in two non-adjacent pieces. It is made of Ancaster freestone, and belongs to the mid-Kesteven group of covers (Everson and Stocker 1999: 155-57).

4.2.13: Edenham

Edenham 1 is a mid-ninth-century cross-shaft, now loose in the church of St Michael, made of Ancaster freestone. It bears some weathered figurative carvings, and belongs to the tradition of large standing crosses with frontal figures that had its origins in seventh-century Northumbria, and continued into the eleventh century (Everson and Stocker 1999: 157-60).

Edenham 2 refers to two architectural roundels, both of mid-ninth-century date, apparently still in their original position in the church of St Michael (Everson and Stocker 1999: 160-62). The stone was inaccessible, and could not be identified.

4.2.14: Ewerby

Ewerby 1 is a late tenth- or eleventh-century grave cover made of Ancaster freestone, and has been interpreted as a transitional monument between the mid-Kesteven covers from the Ancaster quarries, and the Fenland group that was produced at or near Barnack (Everson and Stocker 1999: 165).

4.2.15: Fulbeck

Fulbeck 1 is a fragment of a mid tenth- to eleventh-century grave cover of mid-Kesteven type, made of Ancaster freestone (Everson and Stocker 1999: 166).

4.2.16: Hough-on-the-Hill

Hough-on-the-Hill 1 is part of an impost, broken into four pieces, now loose in the church of All Saints. It was dated to the mid or late tenth century, and made of Ancaster freestone (Everson and Stocker 1999: 180-82).

4.2.17: Hougham

Hougham 1 is a late tenth-century grave cover made of Ancaster freestone, and belonging to the mid-Kesteven group, currently re-used as a lintel over the door of the church of All Saints (Everson and Stocker 1999: 186-87).

4.2.18: Kirkby Green

Kirkby Green 1 is a partial grave cover of mid Kesteven type, assigned a tenth- to eleventh-century date. It was made of Ancaster freestone (Everson and Stocker 1999: 190-91).

4.2.19: Kirkby Laythorpe

Kirkby Laythorpe 1 is a partial grave cover of mid Kesteven type, made of Ancaster freestone. It was assigned a mid tenth- to eleventh-century date (Everson and Stocker 1999: 191).

4.2.20: Kirkby Underwood

Kirkby Underwood 1 is a mid-Kesteven type grave cover, in two non-adjacent pieces, of mid tenth- to eleventh-century date. It was made of Ancaster freestone (Everson and Stocker 1999: 192).

4.2.21: Leasingham

Two fragments of stone sculpture have been recovered from the bellringing chamber in the village church. One was a mid-Kesteven cover, and the other was either another mid-Kesteven cover or a Kesteven-type shaft (Everson and Stocker in prep.). In the latter case, it is possible that the two formed a composite monument.

4.2.22: Little Ponton

Little Ponton 1 is a partial grave cover, possibly representing a fragment of a mid-Kesteven cover of mid tenth- to early eleventh-century date (Everson and Stocker 1999: 222).

4.2.23: Long Sutton

A small slab of Anglo-Saxon stonework was found, built into the butress of the village church (Everson and Stocker *pers. comm.*). As no more details were currently available, this fragment has not been included into a distribution plan.

4.2.24: Market Deeping

Market Deeping 1 is a later tenth- or eleventh-century fragmentary cross-shaft, now held in the church of St Guthlac. It is made of Barnack Rag stone, but it is too fragmentary to be identified with any more precision (Everson and Stocker 1999: 225).

4.2.25: Normanton on Cliff

Normanton on Cliff 1 represents two fragments of the same mid tenth- to eleventh-century monument, probably a cross-shaft or a mid-Kesteven type grave cover, made of Ancaster freestone (Everson and Stocker 1999: 235-36).

Normanton on Cliff 2 is a tenth- or eleventh-century unidentified fragment made of Ancaster freestone (Everson and Stocker 1999: 236).

4.2.26: North Rauceby

North Rauceby 1 is a late tenth- or eleventh-century fragment, possibly of a cross-shaft. The quarry source was not identified (Everson and Stocker 1999: 237). However, it is likely that it came from one of the Kesteven quarries (either Branack or Ancaster).

North Rauceby 2 represents two fragments of mid-tenth- to eleventh-century date that possibly belonged to the same mid-Kesteven type grave cover. Both were made of Ancaster freestone (Everson and Stocker 1999: 237-38).

4.2.27: North Witham

North Witham 1 was a late tenth- or eleventh-century partial cross-shaft of Barnack Rag stone, belonging to the South Kesteven group of cross-shafts (Everson and Stocker 1999: 240).

4.2.28: Ropsley

Ropsley 1 is a late tenth- or eleventh-century grave marker or grave cover, made of Ancaster freestone (Everson and Stocker 1999: 241).

Ropsley 2 is a tenth- or eleventh-century quoin stone depicting a crucifixion scene, also made of Ancaster freestone. It was tentatively suggested that this represented a re-used fragment of an earlier cross-shaft (Everson and Stocker 1999: 241-42).

4.2.29: Rowston

Rowston 1 is a mid tenth- to early eleventh-century grave cover in three non-adjacent pieces, made from Ancaster freestone. It probably belonged to the mid-Kesteven group of grave covers (Everson and Stocker 1999: 242-43).

4.2.30: Ruskington

Ruskington 1 is a late tenth or eleventh-century fragment, possibly belonging to a cross-shaft similar to *Brattleby 1* (see above). It was made of Ancaster freestone (Everson and Stocker 1999: 243-44).

4.2.31: Scott Willoughby

Scott Willoughby 1 is a mid tenth- to eleventh-century partial grave cover of mid-Kesteven type, made of Ancaster freestone (Everson and Stocker 1999: 245).

4.2.32: Sempringham

Sempringham 1 is part of a mid tenth- to early eleventh-century grave cover of mid-Kesteven type, made of Ancaster freestone (Everson and Stocker 1999: 245-46).

4.2.33: Sleaford

Sleaford 1 is a mid tenth- to eleventh-century partial grave cover of mid-Kesteven type. It was made of Ancaster freestone. It is now held at the Sleaford High School, but it is uncertain from where it originated (Everson and Stocker 1999: 246-47).

Sleaford 2 is another mid tenth- to eleventh-century grave cover of mid-Kesteven type, also made of Ancaster Freestone. It was found during excavations at the church of St Giles (Everson and Stocker 1999: 247-48).

More pieces of the grave cover from St Giles's Church, *Sleaford 2*, came to light during excavations in the 1960s, but these were not known to Everson and Stocker until publication of the excavation report in the early 21st century (Everson and Stocker *pers. comm.*). They will be included in their addendum to the *Corpus* (Everson and Stocker in prep.).

4.2.34: South Kyme

South Kyme 1 is a late eighth- to early ninth-century architectural panel, now re-used in the fabric of the church of St Mary and All Saints. It probably represented either a low screen or a shrine, and may be taken as evidence that South Kyme was an early monastic site of some importance, located on an island in the fens, not dissimilar perhaps to Crowland or Ely (Everson and Stocker 1999: 248-51). The stone was identified as possibly coming from the Ancaster quarries (Everson and Stocker 1999: 248).

4.2.35: Swarby

Swarby 1 is a late tenth- or early eleventh-century 'gridded marker' made of Ancaster freestone (Everson and Stocker 1999: 259-60).

4.2.36: Syston

Syston 1 is a late tenth- to eleventh-century fragment of a cross-shaft made of Ancaster freestone, but bears decorative similarities to the group of South Kesteven cross-shafts, which were usually made of Barnack Rag stone (Everson and Stocker 1999: 260).

Syston 2 represents three fragments of a mid tenth- to eleventh-century grave cover of probable mid-Kesteven type, made of Ancaster freestone (Everson and Stocker 1999: 260-61).

Syston 3 represents two fragments of a single grave cover made of Ancaster freestone, decorated with low relief interlace (Everson and Stocker 1999: 261).

Syston 4 represents three fragments of an unidentified monument made of Ancaster freestone (Everson and Stocker 1999: 261-62).

4.2.37: Thurlby

Thurlby 1 is a mid tenth- to eleventh-century grave cover of mid-Kesteven group, made of Ancaster freestone (Everson and Stocker 1999: 266-67).

4.2.37: Toft by Lound

According to a manuscript reference, the church at Toft by Lound had a threshold made of a piece of re-used "very ancient stone cross" (Everson and Stocker in prep.). As nothing is currently known about the provenance of typology of the stone, it has not been included in any distribution plans.

4.2.38: West Allington

West Allington 1 is a mid tenth- to eleventh-century mid-Kesteven type grave cover in two non-adjacent pieces, now loose in the church of the Holy Trinity. It was made of Ancaster freestone (Everson and Stocker 1999: 269-70).

4.2.39: Westborough

Westborough near Newark also apparently holds another piece of Anglo-Saxon Stone sculpture (Everson and Stocker in prep.), but as nothing is currently known about the provenance of typology of the stone, it has not been included in any distribution plans.

4.2.40: Wilsford

Wilsford 1 is a partial grave cover of late tenth to twelfth-century date, made of Ancaster freestone. It is decorated with a simple shaft, probably representing part of a cross, on one face (Everson and Stocker 1999: 272-73).

Wilsford 2 is a grave marker made of Ancaster freestone that shows decorative similarities to the 'gridded markers', but may have had three crosses on one side, in which case it was also similar to *Lincoln St Mark 7* and *Lincoln St Mark 17* (appendix 3.3.3) (Everson and Stocker 1999: 273).

4.3: Holland

4.3.1: Bicker

Bicker 2 is a fragment of a cross-shaft made of Ancaster freestone, dated to the late tenth or eleventh centuries (Everson and Stocker 1999: 107-08).

Bicker 3 is a cross-shaft or grave cover in three non-adjacent pieces, made of Ancaster freestone, dated to the mid tenth to eleventh century (Everson and Stocker 1999: 108-09).

Bicker 4 is a late tenth- to eleventh-century gridded marker of Upper Lincolnshire Limestone of the Barnack Rag type (Everson and Stocker 1999: 109).

4.3.2: The Elloe Stone, Moulton

The Elloe Stone is a late tenth- or eleventh-century partial cross-shaft and -head. It is made of Barnack Rag, and belongs to the South Kesteven cross-shafts. It is still roughly in its original position at the centre of Elloe wapentake, and is believed to mark the site of the central meeting place, as well as the boundary between the parishes of Elloe and Whaplode, and the deaneries of East and West Elloe (Everson and Stocker 1999: 162-64).

4.3.3: Gosberton

Gosberton 1 is part of a late tenth or eleventh-century grave marker, now in the church of St Peter and Paul, made of Barnack Rag stone. It belongs to the group of so-called 'gridded markers' (Everson and Stocker 1999: 170).

4.4: Sculpture produced in Lincoln, but found outside Lindsey

4.4.1: Norwich, Norfolk

A piece of a Lindsey marker has been found in the footings of the church of St Martin at Norwich. This is the only Lindsey marker that has been found outside Lindsey to date. Everson and Stocker (*pers. comm.*) suggest that it was probably imported via the Witham and coastal trade routes as a grave marker, and not as rubble, possibly by a merchant who tried to establish his identity as a Lindsey person in a foreign region. This suggestion is strengthened by the dedication of the church, as the only early tenth-century independent Lincoln-based coinage was dedicated to St Martin as well (chapter 4). Everson and Stocker (*pers. comm.*) compare this piece to the few earlier sculpture products from York that have been found in North Lincolnshire, in particular the piece from Thornton Curtis, and suggest that this may have belonged to a tradesman from York who had been buried on the southern bank of the Humber estuary, even if he (or his family) wished to maintain his identity as a York-person. However, whereas the few pieces of stone sculpture from York seem to have inspired the local Lincoln-based sculpture production, a similar process of emulation did not occur in Norfolk, although this may be related more to the absence of suitable stone sources

in Norfolk than to any other reason (Everson and Stocker in prep.). This is not to say that stone sculpture was entirely absent from Norfolk: a few examples of the eleventh-century fenland group, and one or two south Kesteven shafts have been found in the area as well. These may have been exported via the Welland (Everson and Stocker in prep.). Not much systematic research has been carried out in the area to date though, and it is possible that more pieces will come to light if this changes.

Also from the church of St Martin in Norwich is a second sculpture fragment, which has a cable moulding reminiscent of the Lindsey-type covers and markers, and a few incised lines which are reminiscent of the splayed bases of some of the crosses on the sculpture from Lincoln St Mark's (Everson and Stocker in prep.) (including *Lincoln St Mark 13* and *Lincoln St Mark 6*). Both pieces from Norwich will be published by Everson and Stocker (in prep.).

4.4.2: Coates, Nottinghamshire

A partial Lindsey cover in two pieces has been found in Coates near Littleborough in Nottinghamshire, just on the other side of the Trent opposite Marton. The pieces were found in the rubble make-up of a farmyard in the early twentieth century, when they were photographed and published by the landowner. Since then, the stones have been lost (Everson and Stocker in prep.). As Coates itself never had a church, Everson and Stocker (*pers. comm.*) suggest that the stones had arrived as rubble, taken across the Trent by one of the ferries that were operative at that point.

APPENDIX 5: BURIAL DATA FROM LINCOLN

The following appendix summarises all possible late Anglo-Saxon burial evidence from Lincoln. Evidence is taken from Buckberry (2004). Since then, no new late Anglo-Saxon skeletal material has been discovered in Lincoln.

5.1: The Upper City

5.1.1: St Paul-in-the-Bail

Buckberry (2004: 378-79) subdivided the cemetery from St Paul-in-the-Bail, which has been discussed in appendix 1.1.1.4, into 4 chronological phases. Phase 1 consisted of fourteen graves, and stratigraphically predated structure 5, the twelfth-century parish church (appendix 1.1.1.4). They have been discussed in appendix 1.1.1.4. Phase 2 predated the fourteenth-century church rebuild, although some of the burials belonging to this phase were contemporary with or even earlier than structure 5 (Buckberry 2004: 378). The subsequent two phases, which will not be considered here, post-dated the fourteenth-century church (Buckberry 2004: 378-79). The cemetery was in continuous use from the late Roman through the late Anglo-Saxon periods (Buckberry 2004: 380).

Phase 2 burials were significantly more numerous than phase 1 burials. Some 242 of these were assigned a date between the late Roman and middle to late Anglo-Saxon periods (Buckberry 2004: 379). A relatively wide variety of burial types occurred in phase 2. These included coffin burials, identified by the presence of nails and coffin stains; chest burials, identified by the presence of strap-bindings, straps and staples; stone lined graves, which were more common than confined burials; and other graves with stones deposited in them. However, the original report did not state where these stones were located, and it is possible that they represented pillow stones, small stones placed over the eyes and mouth as occurred at Fillingham, or white quartz stones that were thrown into the grave fill, as recorded at Whitby and in the west, at Llandough and Whithorn (Buckberry 2004: 297, 380).

5.1.2: Cathedral sites

These sites have been discussed in appendix 1.1.1.6. No details were available for the burials allegedly associated with the church of St Mary's, the precursor to the present cathedral. The cathedral sites have therefore not been included in any figures.

5.1.3: The church of All Saints-in-the-Bail

The cemetery of the church of All Saints-in-the-Bail was located at Eastgate (SK 96 70), behind the Black Horse Inn west of James Street. In AD 1163, housing development began to encroach upon the cemetery, and the last requested burial, for which a record has survived, dated to 1290. The church itself was demolished in the seventeenth century (Buckberry 2004: 375). Jones *et al.* (2003: 196) suggest, on the basis of archaeological excavations (Wragg 1997) and documentary study (Jones *et al.* 1990; 1996) that the cemetery extended all the way from Bailgate to Eastgate.

5.1.3: Elvin's Cottages

At Elvin's Cottages (SK 9765 7274), some 20 stone-lined graves on an east-west alignment were uncovered in the 1930s. The skeletons remained undated (Buckberry 2004: 375; Whitwell 1966: 52). This site is located to the north of the Upper City, outside the area depicted on figure 1. It has not been included in any location plans, nor has it been discussed in appendix 1.

5.2: The Lower City

5.2.1: Danesgate/Grantham Street

Between Danesgate and Grantham Street (SK 97767143) a number of undated bones were found during service works in 1969, as well as a medieval stone coffin with a cut-out for the head. It is possible that this cemetery, which may be associated with the church of St George (Jones *et al.* 2003: 206, fig. 9.46), pre-dated the Norman Conquest (Buckberry 2004: 374). No archaeological evidence has been retrieved to confirm this suggestion.

5.2.2: Saltergate

During excavations along Saltergate (SK 976 712) in 1973-74, four graves were found, dug into the rubble of a collapsed Roman building, and sealed by tenth-century occupation layers (Buckberry 2004: 376). Three were females, one of which was buried in a supine-flexed position, which was common in the seventh-century phase at Barton-upon-Humber (Jones *et al.* 2003: 154). A fourth was too fragmentary to sex or age. In addition, some disarticulated human bone (including some infant bone, but this may have been Roman) was also found (Jones *et al.* 2003: 154). On the basis of a ¹⁴C date obtained for one of the burials (AD780 +/- 90, uncalibrated) it was suggested they were of early or middle Anglo-Saxon date (Jones

et al. 2003: 154) (appendix 1.2.1.18). However, Buckberry (2004: 376) gives a ¹⁴C date of 660-1020 AD, and suggests that they were of middle to late Anglo-Saxon date, and states that the sample was contaminated with animal bone. Stratigraphically, they could belong anywhere between the late Roman and late Anglo-Saxon periods. The graves were associated with late Anglo-Saxon pottery, and part of an undated iron knife blade. One of the graves was partially stone-lined, with stone slabs laid out around the upper body of the skeleton (Buckberry 2004: 376; Geake 1997: 169) (appendix 1.2.1.18).

5.2.3: The church of St Edmund

During a watching brief in 2001, some disarticulated and undated human bones were found along Silver Street (SK9770 7130). They were thought to have come from the churchyard of St Edmund, which went out of date in the sixteenth century, and as such are either medieval or earlier in date (Buckberry 2004: 380).

5.3: Wigford

5.3.1: The church of St John the Evangelist

During extension of the tourist information centre on Cornhill Square (SK 9751 7105) in 1999, some evidence for medieval occupation was encountered, as well as a cemetery. The cemetery probably belonged to the church of St John the Evangelist, which was founded in the tenth century, and dissolved in AD 1552. Previously, in 1848, a stone coffin had been found in the square, which was probably also part of this cemetery. The excavated burials all belonged to the medieval period, but the graveyard itself may have been founded in the late Anglo-Saxon period, contemporary with the church (Buckberry 2004: 374).

5.3.2: The church of St Mary-le-Wigford

During the construction of the Great Northern Station (SK 9758 7090) in 1848, several rows of stone coffins were found, which were probably part of the churchyard of St Mary-le-Wigford, and were either late Anglo-Saxon or medieval in date (Buckberry 2004: 375).

5.3.3: The church of St Mark

St Mark's Churchyard (SK 9737 7081) was excavated between 1976 and 1977. The investigations revealed a number of burials spanning the period between the tenth and nineteenth centuries. The first stone church was built in the eleventh century, and clearly post-dated the first cemetery phase. No evidence for a timber precursor has ever been found (Buckberry 2004: 377). See appendix 1.3.1.7.

The burials from phases VIII-IX were all believed to be of mid-tenth to mid-twelfth-century date (Gilmour and Stocker 1986). Buckberry's (2004) analysis followed Gilmour and Stocker's (1986) phasing (Buckberry 2004: 29). She analysed 127 burials, and commented on the fact that the variety of burial practices was similar to the burials from Barrow, including some evidence for the use of coffins (although the nails were all found in the grave fills and none *in situ*, and may therefore represent residual Roman nails) and stone-lined graves (Buckberry 2004: 186). Other burial practices included charcoal burials and one *in situ* stone grave marker (Buckberry 2004: 377).

Analysis of the layout of St Mark's cemetery revealed no clear patterns, except from the fact that charcoal burials and grave markers seem to have occurred primarily in areas of dense burial (Buckberry 2004: 232). In terms of demography, St Mark's cemetery showed a small bias towards male burial, as well as towards younger adults, but Buckberry (2004: 200) suggests that the ageing techniques used to age the skeletons caused this.

5.3.4: Waterside South

At Lincoln Waterside South (SK9789 7106), a human skeleton was found in a drainage trench in 1977. It was associated with a single sherd of eleventh-century shelly ware, but the skeleton itself was never dated (Buckberry 2004: 381).

APPENDIX 6: BURIAL DATA FROM LINDSEY AND KESTEVEN

This appendix summarises the late Anglo-Saxon burial evidence for Lindsey and Kesteven, as catalogued by Buckberry (2004). No late Anglo-Saxon burials have been identified in Holland to date. No new discoveries have come to light since Buckberry's (2004) thesis, although more detailed analysis has since been published for Barton-upon-Humber (Waldron 2007) and Flixborough (Geake 2007). Information from these sources is included under the relevant entries. Burial data from Lincoln itself has been summarised in appendix 5. Sites are organised alphabetically.

6.1: Lindsey

6.1.1: Barrow

At the site of the former Gas House (TA 0736 2169) White (1856: 687) reported the discovery of a stone coffin, a gold ring and an iron object. The records of the North Lincolnshire SMR records further discoveries of a number of east-west aligned inhumations as well as several gold rings, found here in the 1880s. Traditionally this site was believed to be the monastery *aet baruwe*, and the burials discovered in the nineteenth century may have been monastic, although they were not available for osteological study (Buckberry 2004: 342-43). However, excavations in 1977 showed no trace of the seventh-century monastery (appendix 2.3.3).

At St Chad's site (TA 074 217), archaeological excavations took place in 1977 and 1978. They revealed 75 partial and complete skeletons, many of which were stratigraphically earlier than an eleventh- to twelfth-century apsidal church. ¹⁴C dating suggested a tenth- to twelfth-century date for the burials. Their late Anglo-Saxon date suggests that the site was certainly *not* St Chad's monastery, but the site is often still referred to as such. A number of different burial rites were identified, including two coffin burials, identified by the presence of nails in one grave, and coffin fittings in a second. Five other graves were stone-lined. Two coins of c. 870 were found as well (Buckberry 2004: 343-44) (appendix 9.1.4). There was no organic preservation at this site, and the possibility exists that many other graves may have been in coffins that were constructed without the use of iron nails (for example with wooden pegs) (Buckberry 2004: 185-86). In terms of demography, the cemetery showed a slight emphasis towards younger males (Buckberry 2004: 199). However, not the entire cemetery was excavated, and Buckberry (2004: 200) has suggested that perhaps not the whole but part of the cemetery was considered more suitable for male burial. She suggested no possible reasons for this. There was no correlation between burial practice and age or sex (Buckberry 2004: 208).

6.1.2: Barton-upon-Humber

During excavations at St Peter's Church (TA 0347 2194) in 1978 and 1985, a late Anglo-Saxon cemetery was found overlying earlier settlement remains (appendix 2.3.2). The cemetery predated the earliest excavated church. A total of 620 burials were excavated. The most recent osteological analysis (Waldron 2007) dated the earliest burial phase (Phase E, Anglo-Saxon and Norman) at St Peter's Church to c. 950-1150. Waldron (2007: 29) states that the chronology was based partially on the dendrochronological dating of a group of 31 coffins from eleventh- to early twelfth-century burials in the north-eastern part of the site, augmented by radiocarbon dating of three additional coffins and 75 skeletons. The results will be published in Volume 1 in the series Barton upon Humber series (forthcoming), but Waldron (2007: 29) could already state with certainty that "the conclusions pointed to the origins of both the Anglo-Saxon church and cemetery being later than was previously supposed."

Diversity of burial practices was high, although this was partially the result of the high levels of organic preservation that allowed for the identification of different burial practices. Waldron's (2007: 29) analysis of the earliest cemetery phase (950-1150) states that the earliest cemetery phase was established to the west of the middle Anglo-Saxon enclosure. The cemetery was arranged in a fairly organised manner, partially in rows. The earliest phases did not use any coffins or other grave deposits or containers. Soon after, coffins and timber linings were used side-by-side with uncoffined burials, and eventually, by the end of the tenth century, coffin burial was the norm. A significant number of the burials were deposited in coffins built with a clinker construction more commonly used for boats, whilst other burials merely contained nails and/or roves (small metal plate or ring for a rivet to pass through and be clenched over, used for boat building), again indicating the presence of coffins. Others were buried with single planks, and some included wooden 'wands' (Buckberry 2004: 345-46).

Before the church was built, the graves that would be cut by the foundations were excavated and presumably re-buried (Buckberry 2004: 31; Rodwell 2007). Many of the graves that were contemporary with the early church were found in preserved coffins, and

many others were found with pillow stones behind or on either side of the skull (Buckberry 2004: 31; Waldron 2007). Less than half the skeletons were found in plain earthen graves. One was found in a partially lined stone grave (Buckberry 2004: 185; Waldron 2007).

In terms of demography, the cemetery at Barton-upon-Humber represented a normal cross-section of a secular community (Buckberry 2004: 199; Waldron 2007). The choice of burial rite was not dependent on sex, although it was clear that the majority of coffined or plank burial were restricted to older members of the community (Buckberry 2004: 204, 208). At Barton, equal numbers of people were buried in coffins as in plain graves, suggesting that simple coffins were not much higher in terms of status. The coffins built with clinker-construction were also used for all ages and sexes, although the total number of these burials was much lower, suggesting that the fashion was short-lived, or restricted to certain families (Buckberry 2004: 204-05).

Analysis of the cemetery's layout revealed that some areas had more coffins or clinker built coffins, although it was suggested that this was the result of wood preservation across the site. No clear variety was visible on different sides of the church, or at different distances to the church. 'Wands' were mostly found in the northeast of the excavated area. Pillow stones were not concentrated in any significant way. Male and female burials were evenly distributed, although this was not always the case in late Anglo-Saxon England. For example, at Raunds Furnells organisation according to sex seems to have been the norm (Buckberry 2004: 227). The only clear pattern was age-related, with the majority of infants and young children clustered together close to the church building. This is a recurring pattern in many other Anglo-Saxon cemeteries, including Flixborough (Buckberry 2004: 228).

Stable isotope analysis has been carried out on the burials from Barton-upon-Humber (Budd *et al.* 2004; MacPherson 2006). The results suggested that the individuals that were studied had originally come from western Britain. This has led Hadley (2008a: 176) to suggest that "they were second-generation 'Scandinavians' born in Ireland who subsequently settled in England."

Nearby, next to the new vicarage (TA 0342 2190), some undated bones were recorded in 1981. The west end of the trench revealed a north-south aligned ditch (appendix 2.3.2), a predecessor to the present boundary wall. At the very bottom of the ditch an adult human skeleton was found. Unfortunately neither the stratigraphic relationship between the ditch and the skeleton, nor the date of the skeleton itself, could be determined (Buckberry 2004: 344-45).

6.1.3: Belchford

A skeleton and an iron knife were found in a chalk pit next to Blue Stone Heath Road in 1966 (TF 309 763). Kevin Leahy identified it as being of possible Anglo-Saxon date (Buckberry 2004: 347). See appendix 2.14.12.

6.1.4: Belton

During building works in 1998, several adult skeletons were found at the site of "The Smithy" in Green Lane, Belton. They were not recorded due to the absence of archaeologists on the site (Chamberlain *et al.* 1999: 1). In 1999, a research excavation, consisting of three trial trenches, was carried out to establish the nature of the site (Chamberlain *et al.* 1999: 2). No date could be established for the skeletons, but on the basis of similarities to other sites it was suggested that they were part of a short-lived, non-churchyard cemetery of a type that can be dated to the eighth to eleventh centuries (Chamberlain *et al.* 1999: 1). However, more recent radiocarbon dating revealed that the skeletons were fourteenth-century in date (Hadley *pers. comm.*).

6.1.5: Broughton

At SE 990 070, a badly preserved fragmentary skeleton was found closely associated with a north south boundary ditch, which was dated to the tenth century. Their relationship could not be established, and although a contemporary date is possible, there was also some prehistoric activity on the site, which may instead suggest a prehistoric date for the skeleton (Buckberry 2004: 351). The presence of tenth-century funerary sculpture at Broughton suggests that burial activity did take place here (appendix 2.2.28).

6.1.6: Caenby

At Caenby crossroads (SK 9703 8896), a middle Anglo-Saxon burial underneath a barrow was excavated in 1849. It had a circumference of 340 ft, and was 8 ft high at the time it was excavated. Inside was a single burial with grave goods (a bronze buckle, sword and shield with silver mounts, as well as possible helmet fragments), and some horse bones. Despite its original interpretation as 'Scandinavian', it is now recognised as seventh-century. The skeleton was buried in 'sitting position' (probably meaning crouched) (Buckberry 2004: 353; Geake 1997: 167).

6.1.7: Cumberworth

In 1992 excavations at the medieval church of St Helen (appendix 2.17.33) revealed a sunken-featured building, dated to the eighth or ninth centuries. After it went out of use, a layer of soil was allowed to build up, after which the site was used as a cemetery. Some 26 inter-cutting graves were identified, cutting into the built-up soil. Twenty individuals (including 5 sub-adults) could be identified. A range of burial practices was identified, including the use of plank-built wooden coffins. Several coffins were preserved. Other graves contained iron coffin nails. One burial contained a pair of ninth-century copper-alloy tweezers, although these may have been redeposited. A tenth- to eleventh-century lead plaque was found too, bearing an inscription (appendix 2.17.33). A fragment of a tenth- to eleventh-century grave cover is built into the fabric of the current church as well (Buckberry 2004: 357-58) (appendix 4).

6.1.8: Elsham

Elsham Wold is the location of a fifth- to seventh-century inhumation and cremation cemetery (Everson and Stocker 1999: 9). At TA 0374 1314, some additional human bones were found in 1958. They were assigned a late Anglo-Saxon date (Buckberry 2004). No other information is available about these later burials.

6.1.9: Fillingham

On Chapel Road (SK 9452 8592), in the garden of Lakeside cottage, c. 250 m west of the village church, a stone-lined grave was discovered in 1953. In 1982, the North Lincolnshire Archaeology Unit excavated two further stone-lined graves and a charnel pit just to the south of Lakeside Cottage. The excavators identified another ten graves as well, but did not excavate them. In 2000, a team from the University of Sheffield returned to the site, and excavated six of the ten graves. They were arranged in two rows. Five of these were stone-lined, and four had additional pillow stones around the head (Buckberry 2004: 360-61; Jones 2000: 5). These types of 'ear muffs' are typical of a late Anglo-Saxon burial date (Hadley 2000b: 46). Unusually, two of the skeletons had stones in their mouths, and one had flat stones over its eyes. This also occurred at St Nicholas Shambles in London, where four adults with stones in their mouths were recorded, and at Raunds, where a sickly adult who had poliomyelitis and tuberculosis was buried with a stone in his mouth (Buckberry 2004: 298). Other stones were sometimes placed over the chest or the head, or the body may be placed on top of stones (Buckberry 2004: 298).

A seventh- to eighth-century ditch was also identified, and it was suggested that the cemetery was located on top of an earlier, seventh- to eighth century settlement, similar to the situation at Holton le Clay (see below: 6.1.12). Finally, a post-medieval quarry pit was excavated, which contained over 1700 fragments of disarticulated bone. Several of the graves themselves also contained fragments of disarticulated bone. Two of the excavated graves were intercutting, indicating that the cemetery had been used for a prolonged period of time. Three burials were dated using ¹⁴C techniques, which gave a date range between the seventh and eleventh centuries (Buckberry 2004: 360-61). The one grave that was not stone-lined was dated to the seventh or eighth century (Buckberry 2004: 188). The cemetery was interpreted as the remains of a lay cemetery rather than a monastic one (Hadley 2000b: 43). Also see appendix 2.7.12.

6.1.10: Flixborough

At SE 886 139 a total of eleven inhumations were discovered in 1988 (the 'southern' group; Geake 2007), together with an eighth-century sceat. The burials were all supine and extended, and west-east aligned. Preservation was poor, and no stratigraphic relationships could be established; nevertheless, it seems they were not intercutting (Geake 2007: 113). They included both males and females, but most other detail was lost due to the preservation (Geake 2007: 113). Two of the graves contained coffin fittings (Geake 2007: 113-14; Ottaway 2007). The cemetery must have been much larger but much of it was quarried before more extensive investigations could take place.

Excavations that took place in an adjacent area between 1989 and 1991 revealed a mid to late Anglo-Saxon settlement (Loveluck 2007; Loveluck and Atkinson 2007) (appendix 2.2.15). One of the excavated buildings (structure 1) may have been a church or mortuary chapel, as it contained the burials of three children, an infant and a young woman inside, and a fifth burial, also of a child, was found just outside it (the 'northern' group; Geake 2007: 114). In this area, preservation was good. With the exception of the infant burial, with lay southwest to northeast, the graves were all laid out on the same west-east alignment as the building itself (Geake 2007: 114). None contained any grave goods and/or coffin fittings. Four of the burials were extended and supine, and one was crouched (Buckberry 2004: 361).

The relationship between the two areas of burial cannot be established, but as all were roughly contemporary it is possible that they were all part of one larger area. In either case, Geake (2007: 115-17) that there was a degree of zoning of different burials within Flixborough, with the children and a young woman (who may have died in childbirth, or have been classed amongst the children for a different reason) buried inside the building, whilst adults were buried elsewhere.

6.1.11: Gainsborough

In 1875, three skeletons were found at SK8189, apparently lying in a 'grooved stone' that was supported by four smaller stones, and was covered by another 'ungrooved' stone. It was suggested that these were Anglo-Saxon burials (Buckberry 2004) (appendix 2.6.21).

6.1.12: Holton le Clay

Excavations in the 1970s at St Peter's Church revealed an eleventh-century rectangular stone church with a tower at the western end, as well as fifteen late Anglo-Saxon inhumations just to the north of the tower. Two of these were cut by the tower foundations. Another four graves (including one double grave) were found north of the chancel, one of which was also cut by the eleventh-century foundations. Additional late Anglo-Saxon and medieval burials were found south of the tower. None of the late Anglo-Saxon ones were intercutting, suggesting the presence of grave markers. A tenth-century grave marker was incorporated into the tower fabric. Other finds included three copper-alloy pins of ninth-to eleventh-century date, a buckle dated to c. 900 AD, a needle dated to c. 900 AD, and a strap-end, also dated to c. 900 AD (appendix 12). These finds may have been associated with the graves, although the church probably overlay a middle Anglo-Saxon settlement site, as was indicated by c. 30 sherds of middle Anglo-Saxon pottery and a chalk surface (appendix 2.4.16; Buckberry 2004: 368-69).

6.1.13: Normanby le Wold

Some human bones and unidentified metal objects, possibly coffin fittings, were discovered in 1967 during agricultural work at TF12609410. Excavations followed in 1967 and 1968, which established that the burials had been east-west aligned. Apparently some horse bones were also present. Maxey-type ware was found nearby. The burials were assigned to the middle to late Anglo-Saxon period (Buckberry 2004: 387).

6.1.14: North Kelsey

In 1995, building works and subsequent excavations by LAS at Churchview (TA 0438 0159) revealed some 30 human skeletons, including adults and subadults. They were all east-west aligned, and arranged in rows. Three phases of activity could be identified on the basis of intercutting graves. One grave contained nails, and another wood fragments, indicating that some of the burials were coffined. The excavator identified them as medieval, but Buckberry (2004: 387-88) prefers a late Anglo-Saxon date because Anglo-Saxon pottery was found nearby. All the skeletons were reburied, which means that ¹⁴C dating was not possible (Buckberry 2004: 387-88).

6.1.15: Scampton

During excavations of Scampton Roman villa in 1795 (SK95497851), a number of east-west aligned skeletons were found. Eleven of these were drawn onto a plan, but the excavators recorded that 22 burials were present in total. Several of these were found overlying the foundations of the villa. Some were in stone-lined graves, and one had a bronze ring, supposedly Roman, on one of its fingers. Although the burials were identified as medieval, it is also possible that they were late Anglo-Saxon. In 1973, further excavations revealed the burial of a child (Buckberry 2004).

6.1.16: Scotter

Human bones of possible Anglo-Saxon date have been found in two different locations in Scotter. On South Street, near the green, and about 200 yards from the village church (SE 8861 0085), some human and animal bones were found in a sewer trench, which was excavated by mechanical digger. No record was made. This could be an Anglo-Saxon cemetery (Buckberry 2004: 392). More bones had been found previously, in the nineteenth century, on the east side of the village green (SE 8860 0090). They were reportedly found in 'unusual positions' (Buckberry 2004: 393).

6.1.17: South Kelsey

At Winghale Priory Farm (TF 029 971), some human skeletons were found buried in a gravel pit, whilst middle Anglo-Saxon pottery, and late Anglo-Saxon metalwork and coins, were found on the site as well. *DB* refers to land held by the 'ecclesia of Wingeham', suggesting

that this was a pre-Conquest foundation, and the burials may therefore be pre-Conquest as well (Buckberry 2004: 397).

6.1.18: Stow

In 1983, excavations at SK 8819 8200 revealed the foundations of an eleventh-century church underneath the church of St Mary, as well as the remains of the porticus of a pre-Conquest church (Youngs *et al.* 1984). Human burials were also found, seventeen of which were cut by the eleventh-century post-Conquest foundations. A spread of charcoal and burnt daub may represent the presence of an earlier timber church on the site. An earlier burial was found underneath a rubble path with pieces of re-used Roman tile, itself located underneath the burnt daub and charcoal layer. This site had thus been in use for a long time (Buckberry 2004: 400).

6.1.19: Swaby

In 1991 four graves were discovered, recorded and left *in situ* at the site of a car park in Swaby (TF 3880 7760). From the same site came several sherds of eleventh- to thirteenth-century pottery, as well as a fragment of a bone comb that may have been of Anglo-Saxon date. The burials were situated on different alignments. Three pointed approximately south southwest to north northeast, and the fourth was buried on a west-east alignment. Earlier discoveries in the 1960s in the area had uncovered more burials in the garden next door, which had been attributed to the graveyard of the medieval St Margaret's Church. However, on the basis of their irregular orientation it has also been suggested that these burials were pre-Christian (Buckberry 2004: 401).

6.1.20: Swinhope

At Ash Hill Long Barrow (TF 2089 9611), a double burial of an adult female and an adolescent was inserted into the barrow's northwest end. The adult female was dated using ¹⁴C techniques to the tenth or eleventh centuries (Buckberry 2004: 402; Philips 1985: 72-73; 1989).

6.1.21: Tattershall Thorpe

An isolated burial was found during the excavation of a Neolithic settlement site. The skeleton was accompanied by metalworking tools, a box with scrap metal, and was identified as a smith's burial of the seventh century or later (Buckberry 2004: 403; Hinton 2000; 2003).

6.1.22: Tetford

At TF 3332 7609, an inhumation cemetery was discovered in 1958. The excavations revealed between eight and eleven graves, all on a west-east alignment. They were probably part of a much larger cemetery. Six of the skeletons were excavated. They were poorly preserved, but some had grave goods, most noticeably iron knives (Buckberry 2004: 403). The finds led Geake (1997: 168) to suggest a middle Anglo-Saxon date.

6.1.23: Thornton Curtis

In the 1970s excavations took place at the deserted medieval village of Thornton Curtis (TA 057 170). The village church appeared to have had five phases. The earliest timber phase could be dated to the tenth century. Towards the end of the tenth century a two-celled stone church was built. An infant burial was found buried inside the timber church, along the east wall (Buckberry 2004: 404).

6.1.24: Torksey

Excavations by Barley (1964: 172; also see Brown 2006: 10) in the 1960s revealed an extensive cemetery. Although it was not dated using scientific methods, its boundary respected that of the plot containing the kilns, and the stratigraphic position of at least some of the graves suggested a date prior to the early to mid-tenth century (Palmer-Brown 1995: 22, app. 2, app. 5; Brown 2006: 10, 19). Some graves were also uncovered during the Castle Farm excavations. Only two of the graves contained any pottery, (094) and (174). The sherds from (094) were similar to products from kiln 157 (late tenth to early eleventh century), and the sherds from (174) included an early rim type and may date to the early to mid-tenth century (Wilkinson and Young 1995b: 5). A pit containing a hoard of eleventh-century short cross pennies cut one of the graves. It was suggested that these burials were part of the lost parish church of All Saints (Buckberry 2004: 405; Field 1990). More excavations followed in 1994, which revealed an additional six burials and several 'grave-like' features, as well as a possible boundary ditch for the south boundary of the cemetery (Buckberry 2004: 405-06). Six more pottery kilns were also excavated (Palmer-Brown 1995). Although it was not dated using scientific methods, its boundary respected that of the

plot containing the kilns, suggesting that the graves and kilns were roughly contemporary, and the stratigraphic position of at least some of the graves suggested a date prior to the early to mid-tenth century (Palmer-Brown 1995: 22); Brown 2006: 19). Finally, some twelve additional east-west aligned graves, including adults, children and an infant, were excavated at Main Street (SK 8337 7890) (*Main Street* 2002). Four of the skeletons were buried in stone-lined cists. They may have been part of a churchyard associated with the parish church of St Mary's, which no longer exists (Brown 2006: 19).

6.1.25: Welton le Wold

At St Martin's Church, a watching brief carried out in 2001 revealed eleven skeletons as well as six tenth- to eleventh-century potsherds. The pottery prompted Buckberry (2004: 409) to suggest that the cemetery may have late Anglo-Saxon origins. The dedication of the church to St Martin would fit well with this, as it was to this saint that Lincoln's only independent early tenth-century coinage was dedicated. Some eleventh- to twelfth-century stonework was also recorded (Buckberry 2004: 409).

6.1.26: Whitton

At a distance of some 50 meter from the church, eleven west-east aligned intercutting burials were found in 1987. The University of Sheffield investigated the burials (appendix 2.2.1). An area measuring c. 2 x 2.5 m was opened, revealing eleven skeletons. They were all believed to be of late Anglo-Saxon date, because they were buried on an east-west alignment, and there were no grave goods associated with them. In 2001, a combined training and research excavation by the University of Sheffield indicated that this was the site of a cemetery that had been in use for some time. Some fifty graves were identified. It was identified as a lay cemetery, because it included juveniles as well as adults, including some individuals of relatively high status, whose presence was indicated by the evidence of coffin fittings (Hadley 2001: 59; Hadley and Davies 2001). Two graves for sub-adults contained iron fittings, and one had a latch similar to latches from chest burials in York Minster. Other iron fittings, reminiscent of chests and coffin fittings, were also retrieved. Other skeletons were found in tightly contained positions, suggesting shroud burial. No pins were found though. One burial was on its side with flexed legs, and was probably not contained in anything. Three graves were dated using ¹⁴C techniques to 560-780 AD, 620-780 AD and 680-960 AD (Buckberry 2004: 411). The cemetery was subsequently reassigned to the middle to late Anglo-Saxon period (Hadley and Davies 2001: 15). The cemetery seems to have gone out of use at some point in the ninth century, when it became the location of a domestic settlement (Hadley 2002a: 45).

6.2: Kesteven

6.2.1: Grantham

In New Somerby near Grantham (SK 921 354), some possibly Anglo-Saxon inhumation burials and pottery sherds were found before 1937 (Buckberry 2004: 364).

6.2.2: Great Hale

At TF 1494 4288, some 70 m east of the parish church, eight west-east aligned burials were excavated in 1981. An undated iron buckle and unidentified bronze object were also recorded. One of the four burials was later dated using ¹⁴C techniques to 660-865 AD (Buckberry 2004: 366).

6.2.3: Little Bytham

In a pipe trench south of Sheep Wash Farm (TF 0133 1792), two skeletons were excavated in 1992. They consisted of a possibly female adult aligned west-east, and a child aligned east-west lying at her feet. It was suggested these were of late Anglo-Saxon date, but this was never confirmed by further research (Buckberry 2004: 381).

6.2.4: Navenby

At SK 9917 5757, a watching brief revealed ongoing ceremonial and funerary activity that could be dated from the Bronze Age to the middle Anglo-Saxon period. The middle Anglo-Saxon burials consisted of five closely packed intercutting inhumation burials. Grave goods included a penannular brooch, a seventh-century narrow necked beaker, an iron knife and a couple of possible coffin nails. The excavators suggested that the small area of burial was possibly originally marked with a barrow (Buckberry 2004: 385-86).

6.2.5: Sleaford

At St Giles' Avenue (TF 0760 4590), excavations in a water pipe next to the medieval church in 1996 revealed the foundations of an Anglo-Saxon church, as well as several inhumations that may have been late Anglo-Saxon in date, although the majority could also have been

medieval. Two were stone-lined graves. Ninth-century pottery was found nearby, and a tenth- to eleventh-century grave cover was also retrieved from the churchyard (Buckberry 2004: 395-96).

6.2.6: Threkingham

At TF 0943 3669, a number of charnel pits contained human bones, as well as fragment of iron representing possible coffin fittings, and a single sherd of TORC were recovered during a watching brief. All the bones belonged to adults, including males and females, and there were at least eight individuals present (Buckberry 2004: 405).

6.2.7: Waddington¹

In 1999, three graves and two terminals of other grave cuts were found at SK 9770 6396 during a watching brief over a water mains trench. They were west-east aligned. Two nails were found, possibly of coffins, and one of the skeletons showed copper staining near the left wrist, although no copper-alloy object was recovered. They were dated to the seventh century on the basis of the nails and copper staining. Nearby, in 1947, another eleven sixth-century burials were found (Buckberry 2004: 407).

¹ Waddington lies in the district of Lincoln, and Buckberry (2004) therefore classed it as part of Lindsey; however, it was located several miles south of Wigford, and this thesis regards it as part of Kesteven.

APPENDIX 7: COIN PRODUCTION IN LINCOLN C. 880-1000

The following information is based on Blackburn 2004: 326; Blackburn 2005; Blackburn 2006; Blunt et al. 1989; the EMC, including the on-line version of the SCBI; and Mossop 1970.

	YORK	LINCOLN	EAST ANGLIA
Date:			
Late 870s – early 880s	<i>Imitative 'Alfredian' coinages?</i>	-	'Regal' coinage of Æthelred and Oswald, showing 'viking' influences
880s	<i>Imitative 'Alfredian' coinages?</i>	Lincoln Monogram coinage (based on 'Alfredian' London-monogram)	Regal coinage of 'Athelstan' (=Guthrum)
890s	Regal coinage of Sigferth	<i>Lincoln Monogram coinage continues?</i> <i>Other imitative 'Alfredian' issues?</i>	St Edmund's memorial coinage
Early 900s	Regal coinages of Aethelwold and Cnut	<i>Imitative 'Alfredian' issues (Canterbury, Oxford, Two-Line)?</i>	St Edmund's memorial coinage continues
Late 900s	Swordless St Peter's coinage	<i>Imitative 'Edwardian' issues (Two-Line)?</i>	Imitative 'Edwardian' issues (Two-Line)
910s	Swordless St Peter's coinage continues	<i>Imitative 'Edwardian' issues (Two-Line) continue?</i>	Imitative 'Edwardian' issues (Two-Line)
920s (<i>York-rulers control Lincoln?</i>)	Regal coinage of Ragnald AND Sword St Peter's coinage	St Martin's coinage (based on Sword St Peter coinage/regal coinage Sihtric Caech); <i>Regal coinage Sihtric Caech??</i>	Imitative 'Edwardian' issues (Two-Line)
Late 920s and 930s (<i>Period of 'English' control</i>)	Church-, Circumscription- and Bust Crowned types of Anglo-Saxon king Athelstan	Horizontal type of King Athelstan	Imitative issues of Athelstan AND real Athelstan issues (Bust Crowned)?
Early 940s (<i>York-rulers control Lincoln</i>)	Independent 'Norse' coinages of Olaf Guthfrithsson, Olaf Sihtricsson, Sihtric and Ragnald Guthfrithsson	<i>Raven type and York-version of Horizontal type, struck for Olaf Guthfrithsson/ Sihtricsson??</i>	Bust Crowned type of King Edmund
Mid-940s (<i>Period of 'English' control</i>)	Horizontal types of Anglo-Saxon kings Edmund and Eadred (until 947)	Horizontal- (and Bust Crowned-?) types of King Edmund and King Eadred	Bust Crowned types of King Edmund and King Eadred
c. 947-48 (<i>Period of 'Scandinavian' control over York</i>)	Horizontal types of Eric Bloodaxe (<i>and 'Eltangerth'?</i>)	Horizontal- and Bust Crowned- types of King Eadred (Lincoln mint signature reappears)	Bust Crowned type of King Eadred

c. 948-50 (<i>'English'</i> <i>control</i>)	Horizontal type of King Eadred	As above	As above
Early 950s (<i>Period of</i> <i>'Scandinavian'</i> <i>control over</i> <i>York</i>)	Circumscription and Flower types of Olaf Sihtricsson; Sword type of Eric Bloodaxe	As above	As above
Late 950s (<i>Final</i> <i>unification of</i> <i>England</i>)	Horizontal (<i>and</i> <i>Bust Crowned-?</i>) types of Anglo- Saxon King Eadwig	Horizontal and Bust Crowned types of Anglo-Saxon King Eadwig	Period of relative inactivity (limited production of circumscription-cross type of King Eadwig)
959-73	Circumscription Cross- type,	As above?	Period of relative inactivity (limited production of bust Crowned type of King Edgar)
973-75 (<i>Edgar's coin</i> <i>reforms:</i> <i>'national'</i> <i>coinage</i>)	Reform type of King Edgar	Reform type of King Edgar (inclusion of mint signature now standard practice)	Reform type of King Edgar
975-79	National coinage of King Edward the Martyr (Small Cross)	National coinage of King Edward the Martyr (Small Cross)	National coinage of King Edward the Martyr (Small Cross)
979-1000	National Coinages of King Æthelred (First Small Cross, First Hand, Crux, Long Cross, but no Second Hand or Benediction Hand).	National Coinages of King Æthelred (First Small Cross, First Hand, Crux, Long Cross, but no Second Hand or Benediction Hand).	National Coinages of King Æthelred (First Small Cross, First Hand, Second Hand, Benediction Hand, Crux, Long Cross)

APPENDIX 8: GAZETTEER OF COIN FINDS FROM LINCOLN

The following appendix summarises single coin finds from Lincoln, dated to the period 850-1000. They are assembled from the EMC, whose search function includes the collection of the on-line version of the SCBI; Blackburn et al. 1983; and information held in the archive of The Collection, Lincoln. The latter are referenced by their finds record number, as assigned to them by the CLAU.

8.1: The Upper City

8.1.2: *sp72 (St Paul-in-the-Bail)*

EMC 1983.9944 (=EMC 2000.0298)

State: Wessex, Ruler: Æthelred (865-871)

Type: Lunette (866-871)

Mint: Canterbury, moneyer: Dud(d)(a).

Weight: 0.5g. Die axis: 180. Preservation: fragment.

Findspot: Late or post-medieval burial in south aisle.

Inscriptions: Obv. + EÐ[E]

Rev. []DD[]

EMC 1983.9945

State: Wessex, Ruler: Æthelred (865-871)

Type: Lunette (866-871)

Mint: Canterbury, moneyer uncertain (---RCE---).

Weight: 0.4g. Die axis: 270. Preservation: fragment.

Findspot: Late or post-medieval charnel pit in eleventh-century chancel)

Inscriptions: Obv. + A[R]EX

Rev. []RCE[]

EMC 1983.9949 (=EMC 2000.0300)

State: Wessex or Mercia, Ruler: uncertain (Alfred, Æthelred, or Burgred) (843-875)

Type: Lunette (863-875)

Mint and moneyer unknown..

Weight: 0.05g. Die axis: 270. Preservation: small fragment.

Findspot: Northwestern area of graveyard, pre-1301 phase.

Inscriptions illegible.

EMC 1983.9946 (=EMC 2000.0299; = CLAU record <c34>)

State: Wessex, Ruler: Alfred (the Great) (871-899)

Type: Lunette (broken in centre) (871-875)

Mint: Canterbury, moneyer: Wine (Vvine).

Weight: 0.76g. Die axis: 90. Preservation: chipped.

Findspot: Late Anglo-Saxon graveyard in the twelfth-century extension of the nave.

Inscriptions: Obv. + AELBRED / REX

Rev. VVINE / MON / ETA

EMC 1983.9941

State: Danelaw (York), Ruler: anon. (St Peter) (905-927)

Type: St Peter, Phase II, Two-Line (Horizontal) (910-919)

Mint: York (BORACE), moneyer uncertain.

Weight: 0.84g. Die axis: 225.

Findspot: South footings of thirteenth-century widening of chancel.

Inscriptions: Obv. [] / TI[]

Rev. + BORACE

EMC 1980.0047

State: Anglo-Saxon England, Ruler: Æthelred II (the Unready) (978-1016)

Type: First Hand (979-985)

Mint and moneyer unknown.

Weight: 0.31g. Die axis: 90. Preservation: cut farthing.

Findspot: Thirteenth-century cist burial in eastern area of graveyard

Inscriptions illegible.

EMC 1983.9951

State: Anglo-Saxon England, Ruler: Æthelred II (the Unready) (978-1016)

Type: First Hand (979-985)

Mint: Lincoln?, moneyer: Kolgrimr ([]grim).

Weight: 0.25g. Die axis: 270. Preservation: cut farthing.
Findspot: Intrusive in early or middle Anglo-Saxon burial outside the southeastern corner of the single-celled church.
Inscriptions: Obv. + []EX
Rev. [G]RIM[]

EMC 1983.9952

State: Anglo-Saxon England, Ruler: Æthelred II (the Unready) (978-1016)
Type: Crux (991-997)
Mint: Lincoln (LINC), moneyer uncertain (?).
Weight: 0.29g. Die axis: 180. Preservation: cut farthing.
Findspot: Late Anglo-Saxon grave in southwestern area of the graveyard
Inscriptions: Obv. []REX A[]
Rev. [L]INC

EMC 1983.9954 = CLAU record <c38>

State: Anglo-Saxon England, Ruler: Æthelred II (the Unready) (978-1016)
Type: Long Cross (997-1003)
Mint: Lincoln (LINC), moneyer: Ælfsige (Elfsige).
Weight: 1.03g. Die axis: 270.
Findspot: Southeastern end of the nave of the late medieval church, associated with medieval and post-medieval pottery.
Inscriptions: Obv. + EDELRED REX ANG
Rev. + ELF / SIG / E M'O / LINC (NC ligatured)

8.2: The Lower City

8.2.1: dt74 (Danes Terrace)

EMC 1983.9953 = CLAU record <c17>

State: Anglo-Saxon England, Ruler: Æthelred II (the Unready) (978-1016)
Type: Crux (991-997)
Mint: Stamford (STA--), moneyer uncertain (GOD[]).
Weight: 0.64g. Die axis: 180. Preservation: fragment.
Findspot: Post-medieval context.
Inscriptions: Obv. (illegible)
Rev. + GOD[]STA

8.2.2: wo89 (Woolworth's Basement)

CLAU record <415>

State: Danelaw (East Anglia), Ruler: anon. (St Edmund) (895-910)
Type: St Edmund (895-918)
Mint: East Anglian (uncertain), moneyer unknown.
Weight and die axis not recorded.
Findspot: Late Anglo-Saxon dump (middle of tenth century).
Inscriptions not recorded.

8.2.3: f72 (Flaxengate)

EMC 1983.9947 = CLAU record <c218>

Viking imitation of a Two-Line coin of Alfred of Wessex (880-924).
Mint: uncertain, moneyer: Ludig (Lvdiig).
Weight 0.93g, die axis not recorded.
Find spot: Late Anglo-Saxon levelling layer between structures 2 and 6.
Inscriptions: Obv. + EL / FR / ED / [RE]
Rev. LVDIIG MON.

EMC 1983.9942 (=CLAU record <c127>)

State: Danelaw (East Anglia), Ruler: anon. (St Edmund) (895-910)
Type: St Edmund (895-918)
Mint: East Anglian (uncertain), moneyer: Icai (Ica[ii]).
Weight: 1.37g. Die axis: 180.
Findspot: Late Anglo-Saxon pit dated to the late ninth or early tenth centuries.
Inscriptions: Obv. + SC[E E..D REX]
Rev. + ICA[II]

EMC 1983.9943

State: Danelaw (East Anglia), Ruler: anon. (St Edmund) (895-910)
Type: N 483 (St Edmund) (895-918)

Mint: East Anglian (uncertain), moneyer uncertain (---OCIM--).
Weight: 0.26g. Die axis: 0. Preservation: fragment.
Findspot: Backfill of pit F671, dated to c. 1000/10-1040.
Inscriptions: Obv. + SC[]
Rev. []OCIM[]

EMC 1983.9940

State: Danelaw (York), Ruler: Anlaf Sihtricsson (1st reign) (941-944)
Type: Cross Moline (942-943)
Mint: York, moneyer: Radulf/Raulf/Raul (R[]).
Weight: 0.44g. Die axis: 0. Preservation: fragment.
Findspot: Dump associated with tenth- or eleventh-century pitting at west end of site.
Inscriptions: Obv. + AN[]NC
Rev. + R[]ONEF.

EMC 1983.9950

State: Anglo-Saxon England, Ruler: [Æthelstan to Edgar] (924-975)
Type: Tenth-century fragment (899-975)
Mint and moneyer unknown.
Weight: 0.33g. Die axis: 0. Preservation: fragment.
Findspot: Dump to west of structure 6., dated to c. 900-930/40.
Inscriptions: Obv. illegible
Rev. [ÆELFV]

EMC 1983.9948

State: Anglo-Saxon England, Ruler: Edgar (959-975)
Type: Two-Line (H) (959-972)
Mint uncertain, moneyer: Ingolfr (Ingolf).
Weight: 1.13g. Die axis: 90.
Findspot: Dump associated with pitting at west end of site, dated to c. 900-1060/70).
Inscriptions: Obv. + EADGAR REX
Rev. INGO / LF MO

8.3: Wigford

8.3.1: br85 and z86 (St Mark's Station)

Steane (2001: 193) reports another penny of Æthelred found at St Mark's Station 1986 in Wigford (this is the same coin as is mentioned by Vince (2006: 535), reportedly found at the Magistrates Court site (Mann *pers. comm.*)). The coin was heavily degraded, and identified as belonging to either the First Small Cross (978-79) or the First Hand (979-85) type.

8.4: Unknown site (antiquarian discovery)

EMC 1980.0043

State: Anglo-Saxon England, Ruler: Æthelred II (the Unready) (978-1016)
Type: Long Cross (997-1003)
Mint: Lincoln (LINC), moneyer: Dreng (DRENG).
Weight and die axis not recorded.
Findspot: Lincoln
Inscriptions: Obv. + ÆDELRED REX ANGL (NG ligatured)
Rev. + DR / ENG / M-O / LINC (NC ligatured)

APPENDIX 9: GAZETTEER OF COIN FINDS FROM LINDSEY, KESTEVEN AND HOLLAND

The following appendix summarises single coin finds and coin hoards from Lindsey, Kesteven and Holland, dated to the period 850-1000. They are assembled from the EMC, whose search function includes the collection of the on-line version of the SCBI; the PAS (only those coins whose reference number is preceded by the abbreviation 'PAS'); Brown 2006 (for Torksey); Blackburn 2002 (for Torksey); Blackburn and Atherton 2007 (for Torksey); Blackburn et al. 1983; Archibald 2009 (for Flixborough); Pirie 2009 (for Flixborough).

9.1: Lindsey

9.1.1: Alford

2001.1019

State: Anglo-Saxon England, Ruler: Edward the Elder (899-924)

Type: Edward the Elder (no further details) (899-924)

Mint uncertain, moneyer: Æthelræd.

Weight not recorded. Preservation: the reverse appears peck-marked.

Findspot: Alford, near, Lincolnshire, England (TF 4576)

Obv. +EA'DX.VEAEADR

Rev. ÆDER+++EDMO+

1985.0002

State: Anglo-Saxon England, Ruler: Æthelred II (the Unready) (978-1016)

Type: First Small Cross (978-979)

Mint: York (EF), moneyer: Asketill (ASCETEL).

Weight: 1.29g. Die axis: 90.

Findspot: Alford, near, Lincolnshire, England (TF 4576)

Obv. + ÆDEL RÆD REX ANGLO

Rev. + ASCETEL M- EF

9.1.2: Bardney

2000.0343

State: Anglo-Saxon England, Ruler: Æthelstan (924-939)

Type: Circumscription Cross, with mint (927-939)

Mint: York, moneyer uncertain.

Weight not recorded.

Findspot: Bardney parish, Lincolnshire, England (TF 1169)

9.1.3: Barnetby

2001.0857

State: Danelaw (York), Ruler: Eric Bloodaxe (2nd reign) (952-954)

Type: Sword (952-954)

Mint: York, moneyer: Ingalger (INGELGAR).

Findspot: Barnetby, North Lincolnshire, England (TA 0509)

9.1.4: Barrow upon Humber

1983.0009

State: Mercia, Ruler: Burgred (852-874)

Type: Lunette (852-874)

Mint: London, moneyer: Husa.

Weight: 0.36g. Preservation: corroded.

Findspot: St Chad's, Barrow-on-Humber, North Lincolnshire, England (TA 0720)

1983.0010

State: Wessex, Ruler: Alfred (the Great) (871-899)

Type: Lunette (broken at angles) (871-875)

Mint: Canterbury, moneyer: Dudwine.

Weight: 0.83g. Die axis: 0. Preservation: corroded.

Findspot: St Chad's, Barrow-on-Humber, North Lincolnshire, England (TA 0720)

9.1.5: Barton-upon-Humber

2000.0344

State: Wessex, Ruler: Alfred (the Great) (871-899) or viking imitation?

Type: Lunette (871-875)

Mint: London?, moneyer: Beagstan (BEAGLTA).

Weight not recorded.

Findspot: Barton-on-Humber, North Lincolnshire, England (TA 0322,
Obv. ELFRED REX
Rev. MON BEAGLTA ETA

2008.0229

State: Arab (Abbasid) (745-1269).
Type: Arab: Abbasid dirham (745-1269)
Mint and moneyer unknown.
Weight: 2.54g. Die axis: 240. Preservation: traces of two mounts, indicative of re-use.
Findspot: Barton-on-Humber, North Lincolnshire, England (TA 0322)
Comments: Found in archaeological excavation of St Peter's Church.

2005.0004

State: Anglo-Saxon England, Ruler: Edgar (959-73)
Type: Two-Line type (pre-reform)
Mint: York, Moneyer: Osmund
Weight not recorded.
Findspot: Barton upon Humber

9.1.6: Belton

2001.0909

State: Northumbria, Ruler: anon. (Northumbrian, illegible)
Type: Styca (unidentifiable) (820-870)
Mint: York?, moneyer uncertain.
Weight: 0.8g.
Findspot: Belton, Lincolnshire, England (SK 9239)

2001.0911

State: Northumbria, Ruler: anon. (Northumbrian, illegible)
Type: Styca (unidentifiable) (820-870)
Mint: York?, moneyer uncertain.
Weight: 0.61g.
Findspot: Belton, Lincolnshire, England (SK 9239)

2001.0912

State: Danelaw (York), Ruler: Eric Bloodaxe (2nd reign) (952-954)
Type: Sword (952-954)
Mint: York, moneyer: Ingalger (INGELGAR).
Weight not recorded.
Findspot: Belton, Lincolnshire, England (SK 9239)
Obv. ERIC REX
Rev. + INGELGAR IO

9.1.7: Binbrook

1999.0053

State: Northumbria, Ruler: anon. (Northumbrian, illegible)
Type: Styca (unidentifiable) (820-870)
Mint: York?, moneyer uncertain.
Weight: 1.05g.
Findspot: Binbrook, Lincolnshire, England (TF 2193)
Rev. + OV[]VAV

PAS NLM6391 is a cut halfpenny of Edward the Martyr (975-78 AD), weighing 0.35 g. It is made of silver, and depicts a diademed bust facing left with the inscription *EA* on the obverse, and a small cross pattée and the inscription *MIO* on the reverse.

9.1.8: Bonby

PAS WMID-ED3FC2

State: Danelaw (East Anglia),
Ruler: anon. (St Edmund's coinage) (c. 895-c. 910),
Weight: 1.0g.
Obv. +O(T)()BVICE
Rev. +OE(T)B(V)[]JA(S)

9.1.9: Caistor

PAS NLM30

Ruler: Wigmund, Archbishop of York (837-854)

Type: styca

Mint: York, moneyer: Coenred

Obv. VIGMUND IPEP

Rev. COENRED

Weight: 0.91 grams

2001.0453

Ruler: Wulfhere, Archbishop of York (854-900)

Type: styca

Mint: York, moneyer: Wulfræd.

Weight not recorded.

2001.0451

State: Northumbria, Ruler: anon. (850-867)

Type: Irregular Northumbrian 'styca' (850-867)

Mint: York, moneyer uncertain.

Weight not recorded.

2001.0452

State: Northumbria (600-867), Ruler: anon. (850-867)

Type: Irregular Northumbrian 'styca' (850-867)

Mint: York, moneyer uncertain.

Weight not recorded.

Findspot: Caistor-on-the-Wolds, near, Lincolnshire, England (TA 1101)

2001.1100

State: Wessex, Ruler: Alfred (the Great) (871-899)

Type: Lunette (871-875)

Mint: Canterbury, moneyer: Osweard (OSFEAR).

Weight not recorded. Die axis: 90.

Findspot: Caistor-on-the-Wolds, near, Lincolnshire, England (TA 1101)

Obv. + AELBRED. REX

Rev. DMO.OSFEAR.NTA

2001.0856

State: Anglo-Saxon England, Ruler: Eadred (946-955)

Type: Two-Line (946-955)

Mint uncertain, moneyer: Theodmar (ÐEODM[]ER).

Weight not recorded. Preservation: fragment.

Findspot: Caistor, Lincolnshire, England (TA 1101)

Obv. EADRED[]

Rev. ÐEODM+++[]ERM[]

2001.1035

State: Anglo-Saxon England, Ruler: Eadred (946-955)

Type: Two-Line, NE series (946-955)

Mint and moneyer unknown.

Weight not recorded. Preservation: Large fragment.

Findspot: Caistor, Lincolnshire, England (TA 1101)

Obv. +E AD RED []X

Rev. ÐEODM+++[]ERM

1996.5003

State: Anglo-Saxon England, Ruler: Edgar (959-975)

Type: Circumscription Cross, with mint (959-972)

Mint: Lincoln, moneyer: Æthelferth (Æðelverð).

Weight: 1.34g. Die axis: 0. Preservation: edge chipped.

Findspot: Caistor parish, Lincolnshire, England (TA 1101)

Obv. + EADGAR REX ANGL'O

Rev. + ÆDELVERÐ ' MON LIN

1986.0084

State: Anglo-Saxon England, Ruler: Æthelred II (the Unready) (978-1016)
Type: Long Cross (997-1003)
Mint: Lincoln, moneyer: Ragnald / Reinald (Reinald).
Weight: 1.18g. Die axis: 270.
Findspot: Caistor-on-the-Wolds (TA 1101)
Obv. + ÆDEL RÆD REX ANGL'
Rev. + REI / NAL: / D MO / LINC

9.1.10: Cleethorpes

1986.0086 is a penny of Æthelred, of unknown mint, found at Cleethorpes just south of Grimsby.

9.1.11: East Kirkby

1983.0012

State: Danelaw (East Anglia), Ruler: anon. (St Edmund) (895-910)
Type: St Edmund (895-918)
Mint and moneyer unknown.
Weight not recorded.
Findspot: East Kirkby, Lincolnshire, England (TF 3362)
Rev. BOLETI MO

9.1.12: Edlington

2001.0913

State: Anglo-Saxon England, Ruler: Æthelred II (the Unready) (978-1016)
Type: First Hand (979-985)
Mint: York (EFO), moneyer: Hwætman (HPATEMAN).
Weight: 1.47g.
Findspot: Edlington, Lincolnshire, England (TF 2371)
Obv. +EDELRED REX ANGI
Rev. + HPATEMAN M-O EFO

9.1.13: Flixborough

The *EMC* (incorporating the on-line *SCBI*) lists the following 23 illegible mid-ninth-century stycas (dated to c. 820-70) from Flixborough: 2000.0265; 2000.0266; 2000.0267; 2000.0268; 2000.0269; 2000.0270; 2000.0271; 2000.0272; 2000.0273; 2000.0274; 2000.0275; 2000.0276; 2000.0277; 2000.0278; 2000.0279; 2000.0280; 2000.0281; 2000.0282; 2000.0283; 2000.0284; 2000.0285; 2000.0286; and 2000.0287. In addition to these 23 stycas, Pirie (2009: 415-17) lists another 18 irregular Northumbrian stycas struck from 'nonsense' dies dated to the period c. 843 and later from Flixborough. No attempt has been made to check whether these are partially the same coins as the ones from the *EMC* listed above. In addition, the excavations at Flixborough yielded the following mid to late ninth-century stycas:

Pirie 2009 no 3243:

Irregular styca (837-55)
Obv. illegible
Rev. [+MER]PINI
weight 0.66 g.

Pirie 2009 no 3244:

Irregular styca (837-55)
Obv. +HL'IDIAR
Rev. +NEVHIA
Weight: 1.01 g.

Pirie 2009 no 3245

Irregular styca (837-55)
Obv. +EI[]LEVI
Rev. +EVDLII
Weight: 0.81 g.

Note: Pirie (2009) mentions that this is an unstratified detector find (may be duplicated with one of the coins from the *EMC* listed above).

The following pennies are listed on the *EMC*, some of which were retrieved during the excavations (relevant reference to Archibald 2009 included):

2000.0259 = Archibald 2009 no 3271

State: Mercia, Ruler: Berhtwulf (840-852)
Type: Berhtwulf of Mercia (no further details) (840-852)
Mint uncertain, moneyer: Oswulf.
Obv. [+]BERHT[VLFREX]
Rev. [+]OSVLF[MONETA]
Weight 0.23 g.

2000.0260 = Archibald 2009 no 3272

State: Wessex (710-871), Ruler: Æthelwulf (839-858)
Type: N 618 (Æthelwulf, Inscribed Cross) (852-858)
Obv. +AE[DEL]VVLFRE
Rev. +MANI/NC/MO/N/E/T/A
Weight: 1.21 g.

2000.0261 = Archibald 2009 no 3273 or 3274

State: Wessex (710-871), Ruler: Æthelberht (858-865)
Type: N 620 (Inscribed Cross) (858-862)
Mint: Canterbury, moneyer Heaberht or Hunbearht
Findspot: Flixborough, North Lincolnshire, England (SE 8715)

2000.0262 = Archibald 2009 no 3273 or 3274

State: Wessex (710-871), Ruler: Æthelberht (858-865)
Type: N 620 (Inscribed Cross) (858-862)
Mint: Canterbury, moneyer Heaberht or Hunbearht
Findspot: Flixborough, North Lincolnshire, England (SE 8715)

2000.0263

State: Anglo-Saxon England, Ruler: Alfred (the Great) (871-899)
Type: Alfred, Lunette (First Coinage, N 625-628) (871-875)
Mint: Canterbury, moneyer: Eadmund.
Obv. +A[ELBRED]REX
Rev. [E]ADMVN/DMON/ETA
Weight 1.04 g.

In addition, the excavations at Flixborough yielded the following silver pennies *not* listed on the *EMC*:

Archibald 2009 no 3275

Penny of Alfred of Wessex (871-99)
Type: Lunette.
Mint: Canterbury, moneyer Herebald
Obv. +AELBRED/REX
Rev. +HEREBAL/DMO/NETA
Weight: 1.04 g

Archibald 2009 no 3276

Penny of Alfred of Wessex (871-99)
Type: Lunette.
Mint: somewhere in Mercia, moneyer Eadmund
Obv. +A[ELBRED]REX
Rev. [E]ADMVN/DMON/ETA
Weight: 1.26 g

Archibald 2009 no 3277

Penny of Alfred of Wessex (871-99)
Type: Lunette.
Mint: Mercian, unknown, moneyer: Diarulf.
Obv: +AELBRED/REX
Rev: DIARV[LF]/MON/[ETA]

Archibald 2009 no 3278

Penny of King Edward the Martyr (975-78)
Mint: Lincoln?
Inscriptions illegible; weight not recorded.

9.1.14: Gainsborough

1995.0127

State: Carolingian Francia (768-885), Ruler: Louis the Pious (814-840),
Type: English/Frisian copy of a gold solidus of Louis the Pious (814-840)
Mint and moneyer unknown.

Weight: 4.06g.

Findspot: Gainsborough/Lincoln area, Lincolnshire, England (SK 8980)

Obv. + (weidge) OVVIIIIII / IIVIII (second V inverted)

Rev. IIVIIYZDIVIVINV

Comments: Gilt bronze forgery of a Frisian copy of a gold solidus of Louis the Pious

1996.0143

State: Northumbria, Ruler: anon. (Northumbrian, mid-9c)

Type: Derivative 'stycas' of the mid-ninth century (850-867)

Mint: York, moneyer uncertain.

Weight: 0.72g.

Findspot: Gainsborough, near, Lincolnshire, England (SK 8189)

Obv. []R[] (R retrograde)

Rev. []VR[] (R retrograde)

2001.0456

State: Northumbria, Ruler: anon. (Northumbrian, mid-9c)

Type: Irregular Northumbrian 'styca'; mid ninth century (850-867)

Mint: York, moneyer uncertain.

Weight not recorded.

Findspot: Gainsborough/Lincoln area, Lincolnshire, England (SK 8980)

2001.0457

State: Northumbria, Ruler: anon. (Northumbrian, mid-9c)

Type: Irregular Northumbrian 'styca'; mid ninth century (850-867)

Mint: York, moneyer uncertain.

Weight not recorded.

2001.0458

State: Northumbria, Ruler: anon. (Northumbrian, mid-9c)

Type: Irregular Northumbrian 'styca'; mid ninth century (850-867)

Mint: York, moneyer uncertain.

Weight not recorded.

Findspot: Gainsborough/Lincoln area, Lincolnshire, England (SK 8980)

2000.0289

State: Wessex, Ruler: Æthelred (865-871)

Type: Lunette (866-871)

Mint uncertain, moneyer: Æthelgar.

Weight not recorded.

Findspot: Gainsborough, near, Lincolnshire, England (SK 8189)

1996.0213

State: Anglo-Saxon England, Ruler: [Æthelstan to Edgar] (924-975)

Type: Unidentified Horizontal Trefoil fragment (924-975)

Mint and moneyer unknown.

Weight: 0.28g. Preservation: corroded fragment.

Findspot: Gainsborough, near, Lincolnshire, England (SK 8189)

Obv. +[]

Rev. [](E?)N / []

1999.0124

State: Anglo-Saxon England, Ruler: Æthelstan (924-939)

Type: Circumscription Cross, with mint (927-939)

Mint: York (EFORPIC), moneyer: Ragnald (REGNALD).

Weight: 1.47g.

Findspot: Gainsborough, near, Lincolnshire, England (SK 8189)

Obv. + EDELSTAN REX TO BRIT

Rev. + REGNALD MO-- EFORPIC

1996.0217

State: Anglo-Saxon England, Ruler: Æthelred II (the Unready) (978-1016)
Type: First Small Cross (978-979)
Mint: Lincoln, moneyer: Grind ([]).
Weight: 0.28g. Preservation: cut farthing.
Findspot: Gainsborough, near, Lincolnshire, England (SK 8189)
Obv. + Æ[DELRED RE+ AN]GL
Rev. [+ GRIND N-O] LINE[C]

1997.0019

State: Anglo-Saxon England, Ruler: Æthelred II (the Unready) (978-1016)
Type: Long Cross (997-1003)
Mint and moneyer unknown.
Weight: 0.33g. Preservation: cut farthing.
Findspot: Gainsborough, near, Lincolnshire, England (SK 8189)
Obv. + Æ[]
Rev. []FSTA[]

1997.0020

State: Anglo-Saxon England, Ruler: Æthelred II (the Unready) (978-1016)
Type: Long Cross (997-1003)
Mint: York (EOFR), moneyer uncertain.
Weight: 0.34g. Preservation: cut farthing.
Findspot: Gainsborough, near, Lincolnshire, England (SK 8189)
Obv. + EDE[]
Rev. []EOFR (pellet in the O)

1998.0139

State: Anglo-Saxon England, Ruler: Æthelred II (the Unready) (978-1016)
Type: Long Cross (997-1003)
Mint and moneyer unknown.
Weight: 0.33g. Preservation: cut farthing.
Findspot: Gainsborough, near, Lincolnshire, England (SK 8189)
Obv. + Æ[]
Rev. []FSTA[]

9.1.15: 'Goltho'

1983.0014

State: Anglo-Saxon England, Ruler: Edgar (959-975)
Type: Two-Line (959-972)
Mint uncertain, moneyer: Asfrithr (ASFERÐ).
Weight: 0.38g. Die axis: 90. Preservation: fragment.
Findspot: Goltho Hall, Lincolnshire, England (TF 1176)
Obv. + EADGAR RE
Rev. [A]SFER / Ð NON

9.1.16: Grimsby

1997.0098

State: Northumbria, Ruler: anon. (Northumbrian, mid-9c)
Type: Irregular Northumbrian 'styca'; mid ninth century (850-867)
Mint: York, moneyer uncertain.
Weight: 1.28g.
Findspot: Grimsby, near, North East Lincolnshire, England (TA 2709)

2008.0295

State: Northumbria, Ruler: anon. (Northumbrian, mid-9c)
Type: Irregular Northumbrian 'styca'; mid ninth century (850-867)
Mint and moneyer unknown.
Weight: 0.6g.
Findspot: Grimsby, near, North East Lincolnshire, England (TA 2709)
Obv. +EAD[E?]VVE [retrograde]
Rev. +[E?]EDVVF[] [retrograde]

1984.00095

State: Northumbria, Ruler: anon. (Northumbrian, mid-9c)
Type: Derivative 'stycas' of the mid-ninth century (850-867)

Mint: York, moneyer: Tidwulf (TIDP[]LE).
Weight not recorded.

1984.0010

State: Anglo-Saxon England. Ruler: Æthelred II (the Unready) (978-1016).
Type: First Small Cross (978-979).
Mint: York.
Moneyer uncertain (Vine).
Findspot: Grimsby, near, North East Lincolnshire, England (TA 2709).
Obverse inscription: + Æ[]ANGLOR'
Reverse inscription: + VINE[]EFEP

1986.0105

State: Anglo-Saxon England. Ruler: Æthelred II (the Unready) (978-1016).
Type: First Hand (979-985)
Mint: York.
Moneyer uncertain ([]nung).
Weight: 1.35g. Preservation: fragment missing from edge.
Obverse inscription: []ÐELRÆD REX ANGLO
Reverse inscription: + []NVNG M-O EFER (the preceding letter an A or R)

9.1.17: Hatton

PAS YORYM-952170

Ruler: Wigmund, Archbishop of York (837-854)
Type: styca
Obverse Description: Uncertain.
Obverse Inscription: WIGMUND

PAS YORYM-12C302 is an unidentified styca from the metal detecting rally held at Wragby and taken from a list of finds seen, compiled by the organisers. There are no images.

PAS LIN-FF43E7 is a silver penny of Æthelred II (978-1016), Crux type (c,991-997), of the Lincoln mint.

9.1.18: Hibaldstow

PAS NLM-7DF3F7

A pierced Early Medieval Penny of Burgred of Mercia, c. 852-874.
Type: Lunette, unbroken.
Ruler: Burgred of Mercia (Early Medieval: 852-874)
Moneyer: Cenred
Obverse Description: Diademed bust right
Obverse Inscription: URGRED REX
Reverse Inscription: MON / CENR.../ ETA

2004.0134 = NLM-C86164 is a cut silver penny of Eadred, king of all England 946-955. The moneyer is Aculf.

9.1.19: Horncastle

1980.0040

State: Anglo-Saxon England, Ruler: Æthelred II (the Unready) (978-1016)
Type: First Hand (979-985)
Mint: Lincoln (LIND), moneyer: Theodgeld ([]D).
Weight: 0.65g. Preservation: cut halfpenny.
Findspot: Horncastle, near, Lincolnshire, England (TF 2669)
Obv. []D REX ANGL[]
Rev. []D M-I LIND (ND ligatured)

1980.0041

State: Anglo-Saxon England, Ruler: Æthelred II (the Unready) (978-1016)
Type: Long Cross (997-1003)
Mint: Rochester (ROFE), moneyer: Eadweard (EADPERD).
Weight: 1.51g.
Findspot: Horncastle, near, Lincolnshire, England (TF 2669)
Obv. + ÆDEL RÆD REX ANGLO (NG ligatured)
Rev. + EAD / PERD / M-O / ROFE

PAS DENO-FB62F5

Hammered silver temple type denier, probably a ninth-century imitative issue of Carolingian kings Louis the Pious or Charles the Bald. Diameter 22.55mm, thickness 0.9mm, weight 1.58g.

Obverse Inscription: XPISTIANARELIGIO

9.1.20: Keelby

1991.5012

State: Northumbria, Ruler: anon. (Northumbrian, mid-9c)

Type: Irregular Northumbrian 'styca'; mid ninth century (850-867)

Mint: York, moneyer uncertain.

Weight: 0.86g. Die axis: 320.

Findspot: Keelby, near, Lincolnshire, England (TA 1610)

Obv. + IVVD[]HX (D retrograde)

Rev. + IA[]VV

9.1.21: Lincoln area

1989.5001

State: Mercia, Ruler: Burgred (852-874)

Type: Lunette (852-874)

Mint: London, moneyer: Tata (Tata).

Weight not recorded.

Findspot: Lincoln, northwest of, Lincolnshire, England (SK 9771)

1983.0011

State: Danelaw, Ruler: anon.

Type: Viking imitations of Alfred: Two-Line (880-899)

Mint uncertain, moneyer: Ida (IDA).

Weight: 1.3g. Die axis: 70.

Findspot: Lincoln, near, Lincolnshire, England (SK 9771)

Obv. + AID ID D RE

Rev. IDA / IIOIE

2000.0054

State: Anglo-Saxon England, Ruler: Edgar (959-975)

Type: Reform portrait (973-975)

Mint: London (LVN), moneyer: Æthelweald (ÆDELPAŁD).

Weight: 1.55g.

Findspot: Lincoln, near, Lincolnshire, England (SK 9771)

Obv. + EADGAR REX ANGLOX

Rev. + ÆDELPAŁD M-O LVN

2003.0127

State: Anglo-Saxon England, Ruler: Æthelred II (the Unready) (978-1016)

Type: First Hand (979-985)

Mint: Thetford (ÐEOTIFO), moneyer: Osferth (OSFERÐ).

Weight: 1.51g. Die axis: 90.

Findspot: Lincoln, near, Lincolnshire, England (SK 9771)

Obv. + ÆDELRED REX ANGLOX [N and G ligated]

Rev. + OSFERÐ M-O ÐEOTIFO

2004.0224

State: Anglo-Saxon England, Ruler: Æthelred II (the Unready) (978-1016)

Type: Crux (991-997)

Mint: Winchester ([]INT), moneyer uncertain.

Weight: 0.48g. Preservation: cut halfpenny (fragment).

Findspot: Lincoln, near, Lincolnshire, England (SK 9771)

Obv. + ÆDEL[]

Rev. + []INT

9.1.22: Kirmington

1996.0144

State: Northumbria, Ruler: anon. (Northumbrian, mid-9c)

Type: Irregular Northumbrian 'styca'; mid ninth century (850-867)

Mint: York, moneyer: Monne (M[?]nne).

Weight not recorded.

Findspot: Kirmington, near, North Lincolnshire, England (TA 1011)
Obv. []N(or V)AETVA
Rev. + M[?]NNE (retrograde)

1987.0104

State: Diocese of Canterbury, Ruler: Archbishop Ceolnoth (833-870)
Type: Lunette (866-870)
Mint: Canterbury, moneyer: Hebeca (Hebeca).
Weight: 1.07g. Die axis: 270.
Findspot: Kirmington, near, North Lincolnshire, England (TA 1011)
Obv. + CEOLNOÐ / ARCHIEP'
Rev. MON / HEBECA / ETA

9.1.23: Louth

1997.0101

State: Carolingian Francia, Ruler: Louis the Pious (814-840)
Mint and moneyer unknown.
Weight: 1.16g. Die axis: 0. Preservation: cut quarter.
Findspot: Louth, near, Lincolnshire, England (TF 3387)
Obv. DNHL[V]
Rev. NVM

Comments: Blackburn states: "In his die-study of the solidi of Louis the Pious and their imitations, Grierson traced some thirteen official solidi and more than 70 imitations (P. Grierson, 'The gold solidus of Louis the Pious and its imitations', JMP 38 (1951), 1-41; reprinted with comments and additions in P. Grierson, Dark Age Numismatics (London, 1979), art. XXII). Since then the number of imitations has grown considerably, but few if any official solidi have come to light. Although the present find is not from any of the four known pairs of dies, it has all the hallmarks of an official coin. Such of the legend as is on the cut quarter is entirely literate in well formed letters, but the bust appears to be in a refined style with a neatly tied diadem, and the ribbon on the wreath which is just visible curls as on the official coins. These stylistic judgements are supported by the fineness, 87% gold, which is comarable to other official solidi that have been analysed, while imitations tend to range in fineness down from c. 75% gold. The regular die-axis also points in the same direction. While in the case of a cut quarter it is difficult to be certain that this is an official piece rather than a refined imitation, the evidence points in that direction, in which case this is the first official solidus to have been recorded as a find from Britain. 'The added interest of this Lincolnshire find is the very fact that it has been cleanly cut with a chisel into as exact a quarter as one could hope to achieve. The solidus was struck to a standard of c. 4.4g, so that a quarter would weigh 1.1g which compares with this piece's weight of 1.16g. It was intended then for economic rather than ornamental use, and probably not n erely as a weight of gold, but as a quarter mancus (7.5d). In England we are familiar with cut halfpennies and farthings, but these came into use only in the late tenth century. The present coin was minted in the first quarter of the ninth century and shows no signs of wear, but even if it remained as a store of wealth for decades, are we really to think that it was more than 150 years old when cut to this size, or does it indicate a much earlier practice of quartering such exceptional coins?"

1996.0199

State: Anglo-Saxon England, Ruler: Alfred (the Great) (871-899)
Type: Lunette (unbroken) (871-875)
Mint: Canterbury, moneyer: Heremod (Heremod).
Weight: 1.04g. Die axis: 270.
Findspot: Louth, near, Lincolnshire, England (TF 3387)
Obv. + AELBRED / REX
Rev. HEREMO / D MO / NETA (HE ligatured)

1986.0113

State: Danelaw (York) (870-927), Ruler: anon. (St Peter) (905-927)
Type: St Peter, Sword/Cross (921-927)
Mint: York, moneyer uncertain.
Weight: 0.56g. Die axis: 190. Preservation: fragment.
Findspot: Louth, near, Lincolnshire, England (TF 3387)
Obv. [] / TRI MO
Rev. + E[]CEI

Comments: "It has been broken, rather than cut, along the line of the sword and was probably not intended to serve as a halfpenny. There is a small peck mark on the obverse

below the M made while testing the quality of the silver. This is the latest peck-marked coin that we know of from the English Danelaw”.

1986.5025

State: Anglo-Saxon England, Ruler: Edgar (959-975)
Type: Two-Line (H) (959-972)
Mint: York, moneyer: Heriger (Heriger).
Weight not recorded.
Findspot: Louth, near, Lincolnshire, England (TF 3387)
Obv. + EADGAR REX (inverted T symbol between G and A)
Rev. HERIG / ER HO (HE ligatured)
Source: unpublished

9.1.24: Lusby with Winceby

PAS LIN-E8F617

State: Danelaw (York) (870-927), Ruler: anon. (St Peter) (905-927)
Type: St Peter, Sword/Cross)
Mint Name: York (Early Medieval)
Obverse Inscription: SCI PETRIMO
Reverse Inscription: EBORACEI

9.1.25: Market Rasen

2001.0040

State: Anglo-Saxon England, Ruler: Æthelred II (the Unready) (978-1016)
Type: First Hand (979-985)
Mint: York (EOF), moneyer: Ælfstan (ALFSTAN).
Weight: 1.5g.
Findspot: Market Rasen, Lincolnshire, England (TF 1089)
Obv. +ÆDELRED REX
Rev. +ALFSTAN MO EOF

9.1.26: Normanby le Wold

1983.9624

State: Mercia, Ruler: Burgred (852-874)
Type: Lunette, unbroken (852-874)
Mint: London, moneyer: Eadwulf (Eadulf).
Weight: 1.15g. Die axis: 90.
Findspot: Normanby-le-Wold, Lincolnshire, England (TF 1295)
Obv. + BVRGRED REX
Rev. EADVLF / MON / ETA

9.1.27: North Owersby

1994.0198

State: Anglo-Saxon England, Ruler: Edgar (959-975)
Type: Two-Line (H), NE series V (959-972)
Mint uncertain, moneyer: Winemær (Pin[]).
Weight: 0.2g. Die axis: 0. Preservation: fragment.
Findspot: North Owersby, Lincolnshire, England (TF 0694)
Obv. XE[]+:
Rev. PIN[]

Comments: "Moneyer probably Winemær. MASB/MJB: "[Found] on the same field as and within twenty yards of the fused group of four coins of Eadgar that came to light in January 1988 (Blackburn and Bonser, Spink NC, October 1989, p. 255). Although the new fragment does not show signs of having been subject to similar extreme heat, and its condition suggests that it has been loose in the soil for a considerable time, it is of exactly the same period as the group of coins and may therefore be in some way associated with them. 'The coin is of Eadgar's NE V style, indicated by the form of the lettering and in particular by the X in REX appearing as a cross. Winemær (usually spelled WINEMR) is the only moneyer of this style with the first element Wine-".

See above (comments under 1994.0198): a group of four coins, fused together as a result of heat, were also found in North Owersby.

9.1.28: Osgodby

PAS NLM6312

Ruler: Æthelred II (the Unready) (978-1016)

Mint Name: Lincoln
Obverse Inscription: AEFE-RED REX A--
Weight: 1.56 grams

9.1.29: Riby

1998.0091

State: Northumbria, Ruler: anon. (Northumbrian, illegible)
Type: Styca (unidentifiable) (820-870)
Mint: York?, moneyer uncertain.
Weight not recorded.
Findspot: Riby, Lincolnshire, England (TA 1807)

1998.0093

State: Wessex, Ruler: Alfred (the Great) (871-899)
Type: Lunette (broken at angles) (871-875)
Mint: Canterbury, moneyer: Ælfhere (ELBERE).
Weight not recorded.
Findspot: Riby, Lincolnshire, England (TA 1807)

1998.0092

State: Wessex, Ruler: Alfred (the Great) (871-899)
Type: Lunette (871-875)
Mint: Canterbury, moneyer: Deora (DIARA).
Weight not recorded.
Findspot: Riby, Lincolnshire, England (TA 1807)

9.1.30: Roxby cum Risby

PAS NLM-87D661

State: Anglo-Saxon England, Ruler: Æthelred II
Type: Long cross half penny (997-1003)
Weight: 0.64 grams
Obv. illegible
Rev. illegible

9.1.31: Saltfleetby St Clement

PAS LIN-3A0D22

State: Anglo-Saxon England, Ruler: Æthelred II (978-1016)
Type: Long Cross (997-1003)
Mint: Wallingford
Moneyer: AELFRIC
Obv. Inscription: ÆDELRAED REX ANGLOX
Rev. Inscription: +AELFRIC M/[ON P]/ELIG

9.1.32: Scunthorpe

1991.5023

State: Anglo-Saxon England, Ruler: Eadwig (946-55).
Type: Two Line
Mint and moneyer unknown.

9.1.33: South Ferriby

2000.0345

State: Anglo-Saxon England, Ruler: Eadwig (955-959)
Type: Two-Line (H): HT 1 (955-959)
Mint: York, moneyer uncertain.
Weight not recorded.

1997.8918

State: Anglo-Saxon England, Ruler: Eadwig (955-959).
Type: Two-Line (H): HT 1 (955-959)
Mint: York.
Moneyer: Heriger ([]erig[]).
Weight: 0.64g. Preservation: fragment. Secondary Treatment: no pecks.
Obverse inscription: []DPIG R[]
Reverse inscription: []ERIG / []

2001.1042

State: Anglo-Saxon England, Ruler: Æthelred II (the Unready) (978-1016).
Type: Æthelred II (978-1016), no further details.
Mint: Stamford (STA[]).
Moneyer uncertain.
Weight: 0.48g. Preservation: cut half, piece missing.
Obverse inscription: []+ÆDEL []
Reverse inscription: []OSTA []

9.1.34: Stixwold and Woodhall

PAS LIN-A0BF53

State: Anglo-Saxon England; Ruler: Edgar (959-975)
Type: Reform portrait
Mint: Lincoln
Moneyer: EANVLF
Obv.: EADGAR REX ANGLO
Rev.: EANVLF M[]O LINDLO

9.1.35: Stow

2000.0324

State: Northumbria, Ruler: anon. (Northumbrian, illegible)
Type: Styca (unidentifiable) (820-870)
Mint: York?, moneyer uncertain.
Weight not recorded.
Findspot: Stow (Site A), Lincolnshire, England (SK 8881)

2001.0860

State: Anglo-Saxon England, Ruler: Æthelstan (924-939)
Type: Two-Line (H) (925-939)
Mint uncertain, moneyer: Abenel ([]BO[]).
Weight not recorded. Preservation: large broken fragment.
Findspot: Stow, Lincolnshire, England (SK 8881)
Obv. []ÆDELSTI[]
Rev. []BO []++ []

2001.0932

State: Anglo-Saxon England, Ruler: Edmund (939-946)
Type: Two-Line (939-946)
Mint uncertain, moneyer: Ragnald (RÆGENOLD).
Weight: 1.3g. Die axis: 180.
Findspot: Stow, Lincolnshire, England (SK 8881)

2001.1144

State: Anglo-Saxon England, Ruler: Æthelred II (the Unready) (978-1016)
Type: First Small Cross (978-979)
Mint: York (EF), moneyer: Thorsteinn (ÐORSTAN).
Weight: 1.27g. Die axis: 180.
Findspot: Stow, Lincolnshire, England (SK 8881)
Obv. + ÆDELRED REX ANGL
Rev. + ÐORSTAN M OEF

2001.1142

State: Anglo-Saxon England, Ruler: Æthelred II (the Unready) (978-1016)
Type: First Hand (979-985)
Mint and moneyer unknown.
Weight: 0.68g. Preservation: chipped cut half.
Findspot: Stow, Lincolnshire, England (SK 8881)
Obv. + ÆDEL [] O
Rev. + MA[]NA

2001.1146

State: Anglo-Saxon England, Ruler: Æthelred II (the Unready) (978-1016)
Type: Crux (991-997)
Mint: Lincoln (LIN), moneyer: Kolgrimr (COLGRIM).
Weight not recorded.
Findspot: Stow, Lincolnshire, England (SK 8881)

Obv. + ÆDELRED REX ANGLOR
Rev. + COLGRIM MO LIN

9.1.36: Swallow

2001.1169

State: Anglo-Saxon England, Ruler: Æthelred II (the Unready) (978-1016)

Type: Long Cross (997-1003)

Mint: York (EOFR), moneyer: Sumarlithi (SVMERLIDA).

Weight not recorded.

Findspot: Swallow, Lincolnshire, England (TA 1703)

Obv. + ÆDELRED REX ANGLO

Rev. + SVM/ERLID/A'M'O/EOFR

9.1.37: Swinhope

PAS NLM-8E52D1

A viking copy in lead alloy of a contemporary coin of Alfred, pre-900.

Diameter: 14.4 mm

Weight: 1.59 grams

Obv.: A cross within a circular border with EIR---REX around the inside.

Rev.: L'ED/-AIE

PAS NLM-C75C44

State: Anglo-saxon England. Ruler: Edgar (959-975)

Type: Two Line

Obv.: E-----G.A.RREX

Rev.: MAN/ANNO

9.1.38: Tattershall

PAS NLM6218

State: Anglo-Saxon England; Ruler: Aethelstan (924-939)

Type: Church/Building

Mint: York

Obv.: AETHELSTAN REX

Rev.: REGNA MON

Weight: 1.22 grams

9.1.39: Tetney

1034.1265

State: Danelaw, Ruler: anon.

Type: Viking imitation of Alfred (880-899)

Mint uncertain, moneyer: Ragnhard / Reinard (RERNART).

Weight: 1g. Die axis: 0. Preservation: chipped.

Findspot: Tetney, Lincolnshire, England (TA 3101)

Obv. ELTANGERHT

At Tetney, a hoard was found hidden within a hollow chalk stone container, which included the issues of several subsequent Anglo-Saxon and viking rulers. Amongst these were coins of the Anglo-Saxon kings Eadred (946-55; 45 coins, 25 of which are listed on the on-line *SCBI*), Eadwig (955-59; 77 coins, 53 of which are listed on the on-line *SCBI*), and Edgar (959-75; 292 coins, 91 of which are listed on the on-line *SCBI*), all of the Two Line type, and the viking rulers Erik (c. 948; 1 coin (1034.1261)), and Olaf Sihtricsson (948-52; 1 coin (1034.1273)), as well as four blundered Two Line coins (Walker 1945: 83), which could be viking imitations. The majority of the Two Line coins belonged to the NE series that centred on the East Midlands, whilst some of the moneyers could be positively attributed to Lincoln itself (Walker 1945: 83). This suggests that these coins were retrieved and assembled locally, and did not, for example, represent the assembled booty of a viking in the course of his raiding career. The hoard was dispersed following discovery. Also see Gunstone 1981.

The following two pre-reform coins of Edgar do not belong to the Two Line type, and are therefore not part of the hoard (see above):

1034.1129

State: Anglo-Saxon England, Ruler: Edgar (959-975)

Type: Circumscription Cross, without mint (959-972)

Mint uncertain, moneyer: Fastulfr (FASTOLFES).

Findspot: Tetney, Lincolnshire, England (TA 3101)

1048.0950

State: Anglo-Saxon England, Ruler: Edgar (959-975)
Type: Circumscription Cross, without mint (959-972)
Mint uncertain, moneyer: Durand (DVRANDES).
Findspot: Tetney, Lincolnshire, England (TA 3101)

9.1.40: Thimbleby

PAS LIN-27E9B1

State: Anglo-Saxon England; Ruler: Æthelred II (the Unready) (978-1016)
Type: Hand?
Obv. Inscription: AETHELRED REX ANG LOX
Rev.: Hand of providence issuing from clouds, curves at sides of sleeves.
Rev. Inscription: A W

9.1.41 Torksey

Amongst the earliest coins from Torksey are seven continental silver sceattas that were dated to the early eighth century (Brown 2006: 65), as well as two silver coins of King Offa of Mercia from the 790s, a silver coin of King Coenwulf of Mercia, dated to c. 796-805, and two silver coins of Cuthred from the first decade of the ninth century (Brown 2006: 65). The remaining 56 early ninth-century coins listed by Brown (2006: 65-71) are Northumbrian stycas. None of the coins listed above are included in any of the figures.

Brown (2006: 70-71) lists four mid ninth-century stycas minted in Osberht's name (c. 849-67): PAS-DENO-FFF5968 (moneyer Eanwulf); TR2; PAS-DENO-03ACC2 (moneyer Winiberht; and PAS-DENO-03C334 (moneyer Winiberht).

The following stycas have also been recorded:

2000.0335 = PAS-DENO-04EB51 (Brown 2006: 71)?

State: Diocese of York, Ruler: Archbishop Wigmund (837-854)
Type: styca
Mint: York, moneyer: Hunlaf.
Weight not recorded.
Findspot: Torksey or Torksey region, Lincolnshire, England (SK 8378)

2000.0428

State: Diocese of York, Ruler: Archbishop Wigmund (837-854)
Type: styca
Mint: York, moneyer uncertain.
Weight not recorded.
Findspot: Torksey, Lincolnshire, England (SK 8378)

2000.0427

State: Diocese of York, Ruler: Archbishop Wigmund (837-854)
Type: styca
Mint: York, moneyer uncertain.
Weight not recorded.
Findspot: Torksey, Lincolnshire, England (SK 8378)

Brown (2006: 71) lists two more stycas minted under Wigmund in the middle of the ninth century (PAS-DENO-0495C1, moneyer Ethelweard; and PAS-DENO-029F02, moneyer Coenred), although they may correspond to 2000.0428 and 2000.0427 listed above.

Brown (2006: 72-73) lists 17 stycas as "Northumbrian or Archbishops of York", all ninth-century, with blundered legends (PAS-DENO-EFC008; PAS-DENO-EFD712; PAS-DENO-EFFD07; PAS-DENO-F02408; PAS-DENO-F06756; PAS-DENO-FF30A5; PAS-DENO-FF6DD6; PAS-DENO-029003; PAS-DENO-02AAD6; PAS-DENO-02E035; PAS-DENO-02ED85; PAS-DENO-02F586; PAS-DENO-033015; PAS-DENO-036017; PAS-DENO-042E84; PAS-DENO-0453D3; PAS-DENO-EF4544). Another anonymous styca (Brown 2006: 72) is PAS-DENO-045EE2, struck by Monne, dated to c. 810-67. The *EMC* (incorporating the on-line *SCBI*) lists 1970.1707 as a styca dated to 820-70, also struck by Monne, and 2004.0139 as a styca dated to 850-67, struck by Hwætræd (also see Brown 2006: 71). In addition, the following 11 mid ninth-century irregular stycas from Torksey, dated to c. 850-67, are listed on the *EMC* (including the on-line version of the *SCBI*): 1970.1703; 1994.0169; 2000.0338; 2000.0339; 2000.0340; 2000.0433; 2000.0434; 2000.0435; 2000.0436; 2000.0437; and 2003.0029. Some overlap is possible. PAS-DENO-0300B2 (Brown 2006: 71) is a styca of

Wulfhere, struck by the moneyer Eardwulf in the second half of the ninth century. Finally, Brown (2006: 72) also mentions a derivative issue of the Northumbrian kings of uncertain mint, struck on a square shaped flan, with a blundered version of the king's name on the obverse and a central cross, and the moneyer's name blundered on the reverse, also with a central cross, dated to c. 835-55 (PAS-LVPL355).

The following silver coins are recorded for Torksey:

2000.0410

State: Mercia, Ruler: Burgred (852-874)
Type: Penny of Burgred (no further details)
Mint: London, moneyer: Beagstan.
Weight not recorded.
Findspot: Torksey, Lincolnshire, England (SK 8378)

1995.0139

State: Mercia, Ruler: Burgred (852-874)
Type: Lunette (852-874)
Mint: London, moneyer: Beagstan (Beagstan).
Weight: 0.69g. Die axis: 180. Preservation: chipped.
Findspot: Torksey, Lincolnshire, England (SK 8378)
Obv. + BVRGRED REX
Rev. BEAGSTA / N MON / ETA (NM ligatured)

2009.0203

State: Mercia, Ruler: Burgred (852-874)
Type: Lunette (852-874)
Mint: London, moneyer: Wulfheard (VVLFE[]RD).
Weight not recorded. Die axis: 180. Preservation: fragment.
Findspot: Torksey, Lincolnshire, England (SK 8378)
Obv. BVR[]
Rev.]RD MO[] / VVLFE[] / []

2009.0204

State: Anglo-Saxon England, Ruler: Alfred (the Great) (871-899)
Type: Lunette (871-875)
Mint: London, moneyer: Æthelræd (EÐERED).
Findspot: Torksey, Lincolnshire, England (SK 8378)

2001.0695

State: East Anglia, Ruler: Eadmund (855-869)
Type: Edmund coinage (855-869)
Mint: Ipswich?, moneyer: Æthelwulf (EÐL.AVL.F).
Weight: 1.21g. Die axis: 180. Preservation: bent double and broken in half, repaired.
Findspot: Torksey or Torksey region, Lincolnshire, England (SK 8378)
Obv. EADMVND REX AN
Rev. +EÐL.AVL.F MOHE.

1994.0192

State: Wessex, Ruler: Æthelberht (858-865)
Type: Floriated Cross (862-865)
Mint: Canterbury, moneyer: Dud(d)(a) ([D]ud[d]a).
Weight: 0.81g. Die axis: 0. Preservation: fragment.
Findspot: Torksey, Lincolnshire, England (SK 8378)
Obv. + [Æ]ÐEL[BEA]RHT REX (HT ligatured)
Rev. [+ D]VD[D]A MONETA

2001.0693

State: Wessex; Ruler: Alfred (the Great) (871-899)
Type: Lunette (unbroken) (871-875)
Mint: Canterbury, moneyer: Beornwulf (BIARNVLF).
Weight: 0.8g. Die axis: 270.
Findspot: Torksey or Torksey region, Lincolnshire, England (SK 8378)
Obv. AEL.BRED:/RE
Rev. .LF MO./BIARNV /.NETA.

2001.0935

State: Wessex; Ruler: Alfred (the Great) (871-899)
Type: Lunette (unbroken) (871-875)
Mint: Canterbury, moneyer: Hebeca.
Weight: 0.3g. Die axis: 30. Preservation: fragment.
Findspot: Torksey, Lincolnshire, England (SK 8378)
Rev. MON/ []BECA/ []

2001.1151

State: Wessex; Ruler: Alfred (the Great) (871-899)
Type: Alfred, Lunette (First Coinage, N 625-628) (871-875)
Mint: Canterbury, moneyer uncertain.
Weight not recorded.
Findspot: Torksey, Lincolnshire, England (SK 8378)

1970.1728

State: Wessex; Ruler: Alfred (the Great) (871-899)
Type: Lunette (broken at angles))(871-875)
Mint: Canterbury, moneyer: Sigferth (Sigfred).
Weight: 0.78g. Preservation: fragment.
Findspot: Torksey, Lincolnshire, England (SK 8378)
Obv. []ELBRED[]
Rev. SIGEFRE / Ð MO

1987.0122

State: Wessex; Ruler: Alfred (the Great) (871-899)
Type: Lunette (871-875)
Mint: Canterbury, moneyer: Beornræd (Biarnred).
Weight not recorded.
Findspot: Torksey, Lincolnshire, England (SK 8378)
Obv. AELBRED / REX
Rev. D MO / BIARN RE / ETA

2006.0018 = PAS DENO-86C806

State: Arab (Abbasid) (745-1269)
Type: Arab: Abbasid dirham (745-1269)
Mint and moneyer unknown.
Weight: 0.49g. Preservation: cut fragment.
Findspot: Torksey, Lincolnshire, England (SK 8378)

2007.0174

State: Arab (Samanid) (809-1005)
Type: Arab: Samanid dirham (809-1005)
Mint and moneyer unknown.
Weight not recorded. Preservation: cut fragment.
Findspot: Torksey, Lincolnshire, England (SK 8378)

2001.0720

State: Arab (Samanid), Ruler: Ahmad II Ismail (809-833)
Type: Arab: Samanid dirham
Mint: al-Shash, moneyer uncertain.
Weight: 0.36g. Preservation: fragment, pierced.
Findspot: Torksey, Lincolnshire, England (SK 8378)

Brown (2006: 75-81) lists an additional 74 Islamic dirhem fragments from Torksey, ranging between the mid-eighth and early tenth century in date (1970.1708; 2001.0719; 2001.0722; 2001.0744; 2001.0721; 2001.1150; 2001.1; 2001.1149; Blackburn 2002: 39, 40, 41, 42, 43, 44, 45, 46, 47, 48; PAS-DENO-072A22; PAS-DENO-A01022; P0AS-DENO-A052C6; PAS-DENO-A060B5; PAS-DENO-A09842; PAS-DENO-A0B346; PAS-DENO-A0D035; PAS-DENO-A10F10; PAS-DENO-A11CB1; PAS-DENO-A12833; PAS-DENO-A27E73; PAS-DENO-A292E5; PAS-DENO-A29B16; PAS-DENO-A314F1; PAS-DENO-A31EA2; PAS-DENO-A334A3; PAS-DENO-A342D3; PAS-DENO-A34EF7; PAS-DENO-A44634; PAS-DENO-A453A1; PAS-DENO-A4A157; PAS-DENO-A4AB95; PAS-DENO-A4B206; PAS-DENO-A4B495; PAS-DENO-A4B744; PAS-DENO-A4B9F4; PAS-DENO-A4BCA4; PAS-DENO-A4BF53; PAS-DENO-A4C613; PAS-DENO-A4CB83; PAS-DENO-A4CEB4; PAS-DENO-A4D401; PAS-DENO-A4D857; PAS-DENO-065544; PAS-DENO-066391; PAS-DENO-066D32; PAS-DENO-067644; PAS-

DENO-068062; PAS-DENO-068BA1; PAS-DENO-069458; PAS-DENO-069E43; PAS-DENO-06A836; PAS-DENO-06B507; PAS-DENO-06BD21; PAS-DENO-06CBA2; PAS-DENO-06DAF3; PAS-DENO-06E314; PAS-DENO-06ED21; PAS-DENO-06FB26; PAS-DENO-070863; PAS-DENO-0714F8; PAS-DENO-0720E4; PAS-DENO 0735F4; PAS-DENO-073F98; PAS-DENO-074BD6; PAS-DENO-A0BFD2).

2001.0999 (Brown 2006: 82) is a penny of Æthelred II, minted at Chichester by Eadnoth, of the Long Cross type, c. 997-1003.

1994.0236 (Brown 2006: 82)

Anonymous halfpenny of the helmet type from Dublin, struck c. 995-1020.

Mint: Dublin, moneyer uncertain.

Weight: 0.58g. Die axis: 150. Preservation: cut halfpenny, chipped.

Findspot: Torksey, Lincolnshire, England (SK 8378)

Obv. + ÆÐE[LRÆD RE+ AN]GL

Rev. + LEO / [FPIM / EINO] / MORI

Comments: 'This is the first recorded find of a Hiberno-Norse coin in England.'

2001.0290 (also see Brown 2006)

State: Carolingian Francia (768-885), Ruler: Louis the Pious (814-840)

Type: English/Frisian copy of a gold solidus of Louis the Pious (814-840)

Mint and moneyer unknown.

Weight: 22.64g.

Findspot: Torksey, Lincolnshire, England (SK 8378)

Obv. DVHIVID / OVL[]

Rev. NbMVNN[]VM

Comments: Lead trial piece for solidus of Louis the Pius.

Dimensions: 4.6 x 4.6 cm. (max). Thickness: 0.2 cm.

PAS SWYOR-2D8B67

In early 2009, a half coin of the Christiana Religio issue of one of the Carolingian rulers coin was reported. It is 20mm long, 10.6mm wide, and 1.15mm thick. It weighs 0.72gm.

Weight: 0.72 grams

Obverse Inscription: [...](RISTA)[...]

Reverse Description: Cross pattee with pallet in each angle. Beaded inner circle.

Reverse Inscription: [...]

9.1.42: Tothill

2001.1270

State: Anglo-Saxon England, Ruler: Æthelred II (the Unready) (978-1016)

Type: First Small Cross (978-979)

Mint uncertain (N(?)), moneyer: Osferth (OS[]Ð).

Weight not recorded. Preservation: broken.

Findspot: Tothill, nr Authorpe, Lincolnshire, England (TF 4181)

Obv. EDELRED REX A []

Rev. +OS []ÐMONETAN

9.1.43: Welton le Marsh

PAS LIN-9AB3B4

Cut halfpenny of Æthelred II, Lincoln mint, moneyer Farthein.

Type: Long Cross

Mint Name: Lincoln

Obv.: +AE[]

Rev.: FAERDEN[]

9.1.44: West Halton

Hadley (*pers. comm.*) reports the discovery of a single coin of Æthelred II, found during excavations by the University of Sheffield.

9.1.45: West Torrington

PAS LIN-C69FB7

State: Northumbria; Ruler: Wigmund, Archbishop of York (837-854).

Type: styca

Obv.: LOEHPED

Rev.: VIGMVND

9.1.46: Willingham

2000.0358

State: Anglo-Saxon England, Ruler: Æthelred II (the Unready) (978-1016)

Type: Æthelred II (978-1016), no further details (978-1016)

Mint and moneyer unknown.

Weight not recorded.

Findspot: Willingham, near, Lincolnshire, England (SK 8781)

2000.0359

State: Anglo-Saxon England, Ruler: Æthelred II (the Unready) (978-1016)

Type: Æthelred II (978-1016), no further details (978-1016)

Mint and moneyer unknown.

Weight not recorded.

Findspot: Willingham, near, Lincolnshire, England (SK 8781)

2000.0360

State: Anglo-Saxon England, Ruler: Æthelred II (the Unready) (978-1016)

Type: Æthelred II (978-1016), no further details (978-1016)

Mint and moneyer unknown.

Weight not recorded.

Findspot: Willingham, near, Lincolnshire, England (SK 8781)

1988.0169

State: Anglo-Saxon England, Ruler: Æthelred II (the Unready) (978-1016)

Type: First Small Cross (978-979)

Mint: Lincoln, moneyer: Rodbert (Rodbert).

Weight: 1.17g. Die axis: 0. Preservation: broken in three pieces.

Findspot: Willingham, near, Lincolnshire, England (SK 8781)

Obv. + ÆDELRED REX REX ANG (N retrograde)

Rev. + RODBERT N--O LIN (Ns retrograde)

9.1.47: Wood Enderby

2004.0236 = PAS WMID1405

State: Arab (Samanid) (809-1005)

Type: Arab: Samanid dirham

Mint and moneyer unknown.

Weight: 0.43g. Preservation: cut fragment.

Findspot: Wood Enderby, Lincolnshire, England (TF 2763)

9.1.48: Wrawby

2001.0861

State: Anglo-Saxon England, Ruler: Æthelred II (the Unready) (978-1016).

Type: Crux (991-997)

Mint: Lincoln (LIICO).

Moneyer: Steinbitr ([]BIT).

Weight not recorded. Preservation: large piece missing.

Findspot: Wrawby, North Lincolnshire, England (TA 0208)

Obv. []EREDREX ANGLO []

Rev. []BIT M-O LIICO

9.1.49: Yarburgh

2005.0040

State: Danelaw (York), Ruler: anon. (St Peter)

Type: St Peter, Phase I, Two-Line (Horizontal) (905-910)

Mint: York, moneyer uncertain.

Weight not recorded.

Findspot: Yarburgh, near, Lincolnshire, England (TF 3593)

Obv. SCIIE / TIIIIO (S on its side, bar of contraction over IE)

Rev. +EBORACE CIV

9.1.50: Lindsey, uncertain findspot (not included in any figures)

2001.1111

State: Anglo-Saxon England, Ruler: Æthelstan (924-939)

Type: Æthelstan (no further details) (924-939)

Mint: York (EFO), moneyer: Ragnald ([]LD).

Weight not recorded. Preservation: cut half.

Findspot: 'Humber, south of', Lincolnshire, England
Obv. []ANE+TOBRI
Rev. []LDMOEF0

9.2: Kesteven

9.2.1: Grantham

2001.0939

State: Wessex, Ruler: Æthelred (865-871)
Type: Lunette (866-871)
Mint: Canterbury, moneyer: Man (MANN).
Weight: 1.26g. Die axis: 50.
Findspot: Grantham area, Lincolnshire, England (SK 9136)
Obv. +ÆDELRED/REX
Rev. .MON . MANN .ETA.

2001.0940

State: Wessex, Ruler: Æthelred (865-871)
Type: Lunette (866-871)
Mint: Canterbury, moneyer: Wulfheard (VVLFEARD).
Weight: 1.13g. Die axis: 0.
Findspot: Grantham area, Lincolnshire, England (SK 9136)
Obv. +ÆDELRED/ REX
Rev. DMO /VVLFEAR/ NETA

9.2.2: Heckington

2000.0075

State: Mercia, Ruler: Burgred (852-874)
Type: Penny of Burgred (no further details) (852-874)
Mint and moneyer unknown.
Weight: 0.62g. Die axis: 180. Preservation: fragment.
Findspot: Heckington, Lincolnshire, England (TF 1444)
Obv. []D / REX[]
Rev. LV[] / MON / []

PAS LIN-4E3E27

State: Wessex; Ruler: Alfred (the Great) (871-899)
Type: Two Line
Obv.: AEL/FRE/DRE
Reverse Description: Legend on three lines, pellet above and below.
Rev.: WVLF/***/RED

9.2.3: Lenton, Keisby and Osgodby

PAS LIN-44D006

State: Wessex; Ruler: Aethelwulf (839-858)
Mint: Canterbury
Moneyer: OSMVND
Obv.:]ELVV[
Rev.: +OSM[]

9.2.4: Norton Disney

PAS LIN-4137A1

State: Northumbria; Ruler: Osberht (848-67).
Type: styca
Moneyer: Eanwulf.
Obv.: OSBERHT
Rev.: EAN[]F

9.2.5: Sleaford

2001.0460

State: Northumbria, Ruler: anon.
Type: Irregular Northumbrian styca (850-867)
Mint: York, moneyer uncertain.
Weight not recorded. Preservation: worn.
Findspot: Sleaford, Lincolnshire, England (TF 0645)

2001.1254

State: Anglo-Saxon England, Ruler: Æthelred II (the Unready) (978-1016)
Type: First Hand (979-985)
Mint: York (EF[]RV), moneyer: Hundulfr (HVNDVLF).
Weight not recorded.
Findspot: Sleaford, near, Lincolnshire, England (TF 0645)
Rev. +HVNDVLF M-O EF [] RV

9.2.6: South Kyme

2000.0640

State: Carolingian Francia, Ruler: Louis II or III (877-882)
Type: Monogram
Mint: Tours (TV[RO]NES), moneyer uncertain.
Weight: 0.72g.
Findspot: South Kyme, Lincolnshire, England (TF 1749)
Obv. + M[ISERI]CORDIA RE[X]
Rev. + TV[RO]NES CIVITAS

9.2.7: Stamford

The *Checklist of Coin Hoards from the British Isles* (85) reports the discovery of a coin hoard here, deposited c. 890 AD (see also Grierson 1957). The following coins may be part of it:

1009.0275

State: Wessex; Ruler: Alfred (the Great) (871-899)
Type: Halfpenny, Two-Line, Alpha-Omega (880-899)
Mint uncertain, moneyer: Tilwine (TILVVN).
Weight: 0.46g. Die axis: 180. Preservation: chipped.
Findspot: Stamford, Lincolnshire, England (TF 0207)
Obv. EL / FR / ED / RE
Rev. TIL / VVN

1983.96251

State: Danelaw, Ruler: anon.
Type: Alfred Imitations of the Two-Line type (880-899)
Mint uncertain, moneyer: Ludig (LVDIG).
Weight: 1.15g. Die axis: 315. Preservation: chipped.
Findspot: Stamford, Lincolnshire, England (TF 0207)
Obv. + EL FR ED RE
Rev. LVDIG / MON

9.2.8: Stoke Rochford

1794.0001

State: Anglo-Saxon England, Ruler: Æthelred II (the Unready) (978-1016)
Type: First Hand (979-985)
Mint: Torksey (TVRC), moneyer: Thorketill (ÐVRCETEL).
Weight: 1.69g.
Findspot: Stoke Rochford, Lincolnshire, England (SK 9127)
Obv. + ÆDELRAED REX ANGLO (NG ligatured)
Rev. + ÐVRCETEL M-O TVRC

9.2.9: Threkingham

1983.0013

State: Danelaw (York), Ruler: Sihtric I (921-927)
Type: Sihtric Caoch, Sword/Hammer) (921-927)
Mint: Five Boroughs (uncertain), moneyer uncertain.
Weight not recorded.
Findspot: Threkingham, Lincolnshire, England (TF 0836)
Obv. SITR / IC REX (R upside-down)
Rev. + INEIAIIOINI (Ns backwards)

9.2.10: Waddington

2004.0247

State: Anglo-Saxon England, Ruler: Edward the Martyr (975-978)
Type: Small Cross (975-978)
Mint: Lincoln (LNDLOIG), moneyer: Leofwig (LEVIG).
Weight not recorded. Die axis: 90.
Findspot: Waddington, near, Lincolnshire, England (SK 9864)

Obv. +EADVWARD RE+ IIGL (L inverted)
Rev. +LEVIG N-O LNDLOIG (Ns reversed)

9.2.11: Welbourn

The coins that were found at Welbourn may form a dispersed hoard containing some twenty coins of Æthelred (Blackburn 1986b). The following coin may form part of it:

2006.0039

State: Anglo-Saxon England, Ruler: Æthelred II (the Unready) (978-1016)

Type: Long Cross (997-1003)

Mint: Lincoln (LINC), moneyer: Kolgrimr (COLGRIM).

Weight not recorded.

Findspot: Welbourn, Lincolnshire, England (SK 9654)

Obv. +EDELRED REX ANGL

Rev. +COLGRIM MO LINC

Comments: The coin has been pierced in front of the forehead and may have been used as a pendant in later times.

9.3: Holland

9.3.1: Long Sutton

1983.8056

State: Anglo-Saxon England, Ruler: Æthelred II (the Unready) (978-1016)

Type: Crux (991-997)

Mint: Lincoln (LINC), moneyer: Steinbitr (Stignbit).

Weight: 1.51g. Die axis: 90. Preservation: cracked.

Findspot: Long Sutton, Lincolnshire, England (TF 4322)

Obv. + ÆDELRAED REX ANGLORX (NG ligatured)

Rev. + STIGNBIT M--O LINC

9.4: 'Lincolnshire' (not included on any plans)

2009.0232

State: Mercia, Ruler: Burgred (852-874)

Type: Lunette (852-874)

Mint: London, moneyer: Beagstan ([]EAG[]).

Findspot: 'Lincolnshire', Lincolnshire, England

2001.0708

State: Wessex; Ruler: Alfred (the Great) (871-899)

Type: Lunette (unbroken) (871-875)

Mint: Canterbury, moneyer uncertain ([]EAR[]).

Weight not recorded. Preservation: fragment.

Findspot: 'Lincolnshire (south)', Lincolnshire, England

Obv. []RE[]

Rev. []EAR[]MO

2009.0307

State: Danelaw, Ruler: anon.

Type: Alfred Imitations: Two-Line (880-899)

Mint uncertain, moneyer: Sihtric (SIHVN).

Weight: 1.3g.

Findspot: Lincolnshire, Lincolnshire, England

Obv. X ELFRED RE

Rev. SIHVN NE FEC

2009.0308

State: Danelaw; Ruler: anon.

Type: Alfred Imitations: Two-Line (880-899)

Mint uncertain, moneyer: Wilbeorht (VVIBEARHT).

Weight: 1.4g. Die axis: 180. Preservation: chipped.

Findspot: Lincolnshire, Lincolnshire, England

Obv. +ELFRED RE

Rev. VVIBEARHT O

2009.0309

State: Danelaw; Ruler: anon.

Type: Alfred Imitations: Two-Line (880-899)

Mint uncertain, moneyer: Ecgwulf (ECPMLF).

Weight: 1g. Die axis: 270. Preservation: chipped.
Findspot: Lincolnshire, Lincolnshire, England
Obv. AEL[]L[]EX
Rev. ECP / MLF

2005.0170

State: Danelaw (East Anglia), Ruler: anon.
Type: St Edmund (895-918)
Mint: East Anglian (uncertain), moneyer: Adrad (ADRADVS).
Weight: 1.11g.
Findspot: Lincolnshire, Lincolnshire, England
Obv. +SC EAINVMD RE (S on its side)
Rev. +ADRADVS VVONE (N and E ligated)

2007.0238

State: Danelaw (East Anglia), Ruler: anon.
Type: St Edmund, Halfpenny (895-918)
Mint and moneyer unknown.
Weight not recorded. Die axis: 180. Preservation: fragment.
Findspot: Lincolnshire, Lincolnshire, England
Rev. []S[]

2002.0298

State: Danelaw (York), Ruler: Ragnall (919-921)
Type: Hand (919-921)
Mint: York (EIORACII), moneyer uncertain.
Weight not recorded.
Findspot: Lincolnshire, Lincolnshire, England
Obv. +RACIITI (or L?)
Rev. +EIORACII

1996.0194

State: Danelaw (York), Ruler: Anlaf Guthfrithsson (939-941)
Type: Raven/Small Cross (939-941)
Mint: York, moneyer: Æthelferth (Aðelferð).
Weight not recorded. Preservation: broken and incomplete.
Findspot: 'Lincolnshire', Lincolnshire, England
Obv. + ANLAF CVN[]S
Rev. []AÐELFERÐ MINET[]

2007.0059

State: Danelaw (York), Ruler: Eric Bloodaxe (2nd reign) (952-954)
Type: Sword (952-954)
Mint: York, moneyer: Radulf/Raulf/Raul ([]ADVLF).
Weight: 0.95g. Die axis: 240. Preservation: large fragment.
Findspot: 'Lincolnshire', Lincolnshire, England
Obv. ERIC / RE[]
Rev. []ADVLF MON[]

2001.0697

State: Anglo-Saxon England, Ruler: Eadred (946-955)
Type: Bust crowned, without mint (946-955)
Mint: Norwich?, moneyer: Man (MAN).
Weight: 0.73g. Preservation: large fragment.
Findspot: 'Lincolnshire', Lincolnshire, England
Obv. []EADREDR[]
Rev. []MANMON[]

1993.0214

State: Anglo-Saxon England, Ruler: Æthelred II (the Unready) (978-1016)
Type: Crux (991-997)
Mint: Lincoln, moneyer: Ubeinn (Unbein).
Weight not recorded.
Findspot: 'Lincolnshire', Lincolnshire, England
Obv. + ÆDELRAED REX ANGLOX (NG ligatured)
Rev. + VNBEIN M--O LINC

PAS SUR-116201

State: Anglo-Saxon England; Ruler: Æthelred II (the Unready) (978-1016)

Type: cut halfpenny

Mint Name: Winchester

Obverse Inscription: +AEDEL(....

Reverse Inscription: +(....)INT(....

APPENDIX 10: COIN FINDS OF DEFINITE LINCOLN-MINTED COINS, C. 850-1000

The following list is compiled from the EMC, whose search function includes the on-line version of the SCBI, Mossop 1970, and the collection of the British Museum. Only definite Lincoln-minted coins are included.

10.1: Early 'imitative' coins (ninth century)

Mossop 1970: I 1

Lincoln Monogram coin
Moneyer: Erifer ('Herbert')
Mint: LINCOLLA

BMC 82

Lincoln Monogram coin
Moneyer: Ercener
Mint: LINCOLLA

SCBI 1027.0002

Lincoln Monogram coin
Moneyer: Ercener
Mint: LINCOLLA

Mossop 1970: I 6 = SCBI 1027.0004

Halfpenny: imitation of London Monogram
Moneyer: Erifer ('Herbert')
Mint: LINCOLA

Mossop 1970: I 5 = SCBI 1027.0003

Imitation (fragment)
Moneyer: Heribert?
Mint: LINIC

BMC 83 = Mossop 1970: I 4

Imitation.
Moneyer: Herebere ('Herbert')
Mint: LIIII COLLA

BMA 443

Imitation.
Moneyer: Herebere ('Herbert')
Mint: LIII COIIA

10.2: St Martin's coinage

Five St Martin's coins, one of which was of known provenance, from a hoard in Terslev on Zealand, Denmark, found in 1911. The other four coins were acquired on the antiques market between the 17th and early 19th centuries (Blackburn 2006: 222-23; Mossop 1970: II 7-11; Stewart 1967: 52). A sixth St Martin's coin was found in the Dunmore Cave hoard in Ireland in 1973, as part of, and a seventh was bought on the antiques market in 1978, and is now held by the University of Oslo's Coin Cabinet (Blackburn 2006: 222-23). In January 2007, The final, eighth known St Martin's coin was found in the Vale of York hoard (Williams *pers. comm.*).

10.3: Eadred (946-55)

1034.0686

State: Anglo-Saxon England, Ruler: Eadred (946-955)
Type: Bust Crowned, with mint (946-955)
Mint: Lincoln (LCOIAIIV), moneyer: Ari (ARE).
Findspot: Dalkey, Co. Dublin, Ireland

1997.0016

State: Anglo-Saxon England, Ruler: Eadred (946-955)
Type: Bust Crowned, with mint (946-955)
Mint: Lincoln (IINCOIA CIVIT), moneyer: Ari (ARE).
Findspot: Suffolk, west, near Newmarket, Suffolk, England (TL 6463)

10.4: Edgar (959-75)

1996.5003

State: Anglo-Saxon England, Ruler: Edgar (959-975)
Type: Circumscription Cross, with mint (959-972)
Mint: Lincoln, moneyer: Æthelferth (Æðelverð).
Findspot: Caistor parish, Lincolnshire, England (TA 1101)

10.5: Edward the Martyr (975-78)

1997.0130

State: Anglo-Saxon England, Ruler: Edward the Martyr (975-978)
Type: Small Cross (975-978)
Mint: Lincoln (LINDL), moneyer: Goding (GODING).
Findspot: 'Suffolk', Suffolk, England

2001.0571

State: Anglo-Saxon England, Ruler: Edward the Martyr (975-978)
Type: Small Cross (975-978)
Mint: Lincoln (LINDL), moneyer: Farthein (FARÐEGIN).
Findspot: Saffron Walden, near, Essex, England (TL 5438)

2004.0247

State: Anglo-Saxon England, Ruler: Edward the Martyr (975-978)
Type: Small Cross (975-978)
Mint: Lincoln (LNDLOIG), moneyer: Leofwig (LEVIG).
Findspot: Waddington, near, Lincolnshire, England (SK 9864)

10.6: Æthelred (978-1016; only includes coins issued before c. 1000 AD)

1991.0271

State: Anglo-Saxon England, Ruler: Æthelred II (the Unready) (978-1016)
Type: Æthelred II (978-1016), no further details (978-1016)
Mint: Lincoln, moneyer: Æthelnoth.
Findspot: London (London Bridge), City of London, England (TQ 3280)

1980.0060

State: Anglo-Saxon England, Ruler: Æthelred II (the Unready) (978-1016)
Type: First Small Cross (978-979)
Mint: Lincoln, moneyer uncertain.
Findspot: Much Marcle, Herefordshire, England (SO 6532)

1988.0169

State: Anglo-Saxon England (871-1066), Ruler: Æthelred II (the Unready) (978-1016)
Type: First Small Cross (978-979)
Mint: Lincoln, moneyer: Rodbert (Rodbert).
Findspot: Willingham, near, Lincolnshire, England (SK 8781)

1996.0217

State: Anglo-Saxon England Ruler: Æthelred II (the Unready) (978-1016)
Type: First Small Cross (978-979)
Mint: Lincoln, moneyer: Grind ([]).
Findspot: Gainsborough, near, Lincolnshire, England (SK 8189)

1999.0187

State: Anglo-Saxon England, Ruler: Æthelred II (the Unready) (978-1016)
Type: First Small Cross (978-979)
Mint: Lincoln (LHPC), moneyer: Grind (GRIND).
Findspot: Oswestry, near, Shropshire, England (SJ 2929)

1980.0040

State: Anglo-Saxon England, Ruler: Æthelred II (the Unready) (978-1016)
Type: First Hand (979-985)
Mint: Lincoln (LIND), moneyer: Theodgeld ([]D).
Findspot: Horncastle, near, Lincolnshire, England (TF 2669)

2005.0145

State: Anglo-Saxon England, Ruler: Æthelred II (the Unready) (978-1016)
Type: First Hand (979-985)

Mint: Lincoln (LINC), moneyer: Farthein (FÆRÐEN).
Findspot: Llancarfan, Vale of Glamorgan, Wales (ST 0570)

1017.0187

State: Anglo-Saxon England, Ruler: Æthelred II (the Unready) (978-1016)
Type: First Hand (979-985)
Mint: Lincoln?, moneyer: Ubeinn (UNBEGN).
Findspot: Worcester, Worcestershire, England (SO 8555)

1983.9951

State: Anglo-Saxon England, Ruler: Æthelred II (the Unready) (978-1016)
Type: First Hand (979-985)
Mint: Lincoln?, moneyer: Kolgrimr ([]grim).
Findspot: Lincoln, Lincolnshire, England (SK 9771)

2008.0252

State: Anglo-Saxon England, Ruler: Æthelred II (the Unready) (978-1016)
Type: Crux (991-997)
Mint: Lincoln (LIN), moneyer: Geirfinnr (GARFIN).
Findspot: Beccles, near, Suffolk, England (TM 4290)

1976.0007

State: Anglo-Saxon England, Ruler: Æthelred II (the Unready) (978-1016)
Type: Crux (991-997)
Mint: Lincoln (LINC), moneyer: Leofman (LEOFMAN).
Findspot: Caerwent, Monmouthshire, England (ST 4690)

1980.0032

State: Anglo-Saxon England, Ruler: Æthelred II (the Unready) (978-1016)
Type: Crux (991-997)
Mint: Lincoln, moneyer: Steinbitr.
Findspot: Thetford, Norfolk, England (TL 8783)

1983.8056

State: Anglo-Saxon England, Ruler: Æthelred II (the Unready) (978-1016)
Type: Crux (991-997)
Mint: Lincoln (LINC), moneyer: Steinbitr (Stignbit).
Findspot: Long Sutton, Lincolnshire, England (TF 4322)

1983.9952

State: Anglo-Saxon England, Ruler: Æthelred II (the Unready) (978-1016)
Type: Crux (991-997)
Mint: Lincoln (LINC), moneyer uncertain (?).
Findspot: Lincoln, Lincolnshire, England (SK 9771)

1990.0203

State: Anglo-Saxon England, Ruler: Æthelred II (the Unready) (978-1016)
Type: Crux (991-997)
Mint: Lincoln, moneyer: Steinbitr (Stiegnbit).
Findspot: Ipswich, near, Suffolk, England (TM 1644)

1993.0214

State: Anglo-Saxon England, Ruler: Æthelred II (the Unready) (978-1016)
Type: Crux (991-997)
Mint: Lincoln, moneyer: Ubeinn (Unbein).
Findspot: 'Lincolnshire', Lincolnshire, England

1994.0203

State: Anglo-Saxon England, Ruler: Æthelred II (the Unready) (978-1016)
Type: Crux (991-997)
Mint: Lincoln, moneyer: Ubeinn ([]begn).
Findspot: Bury St Edmunds, near, productive site, Suffolk, England (TL 8564)

1996.0221

State: Anglo-Saxon England, Ruler: Æthelred II (the Unready) (978-1016)
Type: Crux (991-997)

Mint: Lincoln, moneyer: Æthelnoth (Æðel[]oð).
Findspot: Thetford area, Norfolk, England (TL 8783)

2000.0130

State: Anglo-Saxon England, Ruler: Æthelred II (the Unready) (978-1016)
Type: Crux (991-997)

Mint: Lincoln, moneyer: Geirfinnr.
Findspot: Thetford (Church Trench 2), Norfolk, England (TL 8783)

2001.0861

State: Anglo-Saxon England, Ruler: Æthelred II (the Unready) (978-1016)
Type: Crux (991-997)

Mint: Lincoln (LIICO), moneyer: Steinbitr ([]BIT).
Findspot: Wrawby, North Lincolnshire, England (TA 0208)

2001.1146

State: Anglo-Saxon England, Ruler: Æthelred II (the Unready) (978-1016)
Type: Crux (991-997)

Mint: Lincoln (LIN), moneyer: Kolgrimr (COLGRIM).
Findspot: Stow, Lincolnshire, England (SK 8881)

1985.0011

State: Anglo-Saxon England, Ruler: Æthelred II (the Unready) (978-1016)
Type: Long Cross (997-1003)

Mint: Lincoln (LINC), moneyer: Kolgrimr (COLGRIM).
Findspot: Blyth (Nott), site 1, Nottinghamshire, England (SK 6287)

1980.0008

State: Anglo-Saxon England, Ruler: Æthelred II (the Unready) (978-1016)
Type: Long Cross (997-1003)

Mint: Lincoln, moneyer: Sumarlithi.
Findspot: Mildenhall (W), Wiltshire, England (SU 2069)

1980.0043

State: Anglo-Saxon England, Ruler: Æthelred II (the Unready) (978-1016)
Type: Long Cross (997-1003)

Mint: Lincoln (LINC), moneyer: Dreng (DRENG).
Findspot: Lincoln, Lincolnshire, England (SK 9771)

1983.9954

State: Anglo-Saxon England, Ruler: Æthelred II (the Unready) (978-1016)
Type: Long Cross (997-1003)

Mint: Lincoln (LINC), moneyer: Ælfsige (Elfsige).
Findspot: Lincoln, Lincolnshire, England (SK 9771)

1986.0084

State: Anglo-Saxon England, Ruler: Æthelred II (the Unready) (978-1016)
Type: Long Cross (997-1003)

Mint: Lincoln, moneyer: Ragnald / Reinald (Reinald).
Findspot: Caistor-on-the-Wolds, near (B&B site C), Lincolnshire, England (TA 1101)

1996.0224

State: Anglo-Saxon England, Ruler: Æthelred II (the Unready) (978-1016)
Type: Long Cross (997-1003)

Mint: Lincoln, moneyer: Ubeinn (Vnbein).
Findspot: Rochester, near, Medway, England (TQ 7268)

1996.0225

State: Anglo-Saxon England, Ruler: Æthelred II (the Unready) (978-1016)
Type: Long Cross (997-1003)

Mint: Lincoln, moneyer uncertain.
Findspot: Oxborough, Norfolk, England (TF 7401)

2003.0194

State: Anglo-Saxon England, Ruler: Æthelred II (the Unready) (978-1016)
Type: Long Cross (997-1003)

Mint: Lincoln (LINC), moneyer: Drengr (DR.ENG).
Findspot: North Elmham, Norfolk, England (TF 9820)

2001.1178

State: Anglo-Saxon England, Ruler: Æthelred II (the Unready) (978-1016)
Type: Long Cross (997-1003)
Mint: Lincoln (LINC), moneyer: Drengr (DRENG).
Findspot: Thaxted, Essex, England (TL 6131)

2006.0039

State: Anglo-Saxon England, Ruler: Æthelred II (the Unready) (978-1016)
Type: Long Cross (997-1003)
Mint: Lincoln (LINC), moneyer: Kolgrimr (COLGRIM).
Findspot: Welbourn, Lincolnshire, England (SK 9654)

2009.0006

State: Anglo-Saxon England, Ruler: Æthelred II (the Unready) (978-1016)
Type: Long Cross (997-1003)
Mint: Lincoln (LI[]), moneyer: Drengr (DRENG).
Findspot: Hollingbourne, near, Kent, England (TQ 8455)

APPENDIX 11: GAZETTEER OF METALWORK FINDS FROM LINCOLN

All artefact descriptions are based on information recorded in the finds catalogue of The Collection and the CLAU (whose archive was transferred to The Collection in the autumn of 2008). Additional information was recorded through discussion with Jenny Mann (formerly of the CLAU), Kevin Leahy (Finds Advisor to the PAS) and Gabor Thomas (University of Reading). As many of the finds were residual, and the dating of the artefacts rests largely on art-historical grounds (chapter 2), all non-ferrous metalwork finds dated to the ninth to eleventh centuries are included, including some probable post-Conquest objects (no earlier finds were retrieved). This decision also allows for a more in-depth discussion of the use of different types of metal over time (see chapter 5). Ferrous finds (keys and horseshoes) are only included when they are of definite late Anglo-Saxon (i.e. pre-Conquest) date.

11.1: The Upper City

11.1.1: cwg86 (Castle Westgate)

No structural deposits of pre-Conquest date were recorded at this site (appendix 1.1.1.11). However, this site yielded a number of objects that should probably be placed in the immediate post-Conquest period (later eleventh or twelfth centuries). The first of these, <1533> (appendix 14), was catalogued as the arm of a pair of silver scales with a zoomorphic terminal. The terminal measured 3 mm in diameter, had incised eyes, and ears were laid back in its neck. The animal was biting into a circular bar, which measured 2 mm in diameter, with a globular terminal, measuring 4 mm in diameter. Its elongated body had a hexagonal cross-section, 2.5 mm in diameter, with ringed decoration along the two panels stretching back from behind its ears, suggestive of scales along the creature's back. On the opposite end of its body was a polyhedral 'lump', 4 mm in diameter, with hexagonal flat panels. Each major panel was decorated with four ringed incisions in the shape of a cross. The whole object measured 66 mm in length, and was assigned a tenth- to eleventh-century date. It was deposited in a modern context (Mann *pers. comm.*). Leahy (*pers. comm.*) identified this as being of *Urnes-* to Romanesque style, and assigned it an eleventh- to twelfth-century date, but would not make any commitments in terms of its function or use.

A second object from cwg86, <106> (appendix 13), was a rectangular stud made of copper alloy with zoomorphic gilt inlay decoration. The decoration depicted two symmetrical beasts with intertwined tails and ribbon-like bodies with back-turned heads facing each other. Around the entire panel was a rope-like decoration, c. 2 mm wide, reminiscent of the rope-like borders around the Lindsey-style grave covers and grave markers. The plate of the stud measured 34 x 18.5 mm, and was 2 mm thick; at the back a stud with circular cross-section remained in place, which was 10.5 mm long and 5 mm in diameter. It was catalogued as being of late eleventh- to twelfth-century date. It was deposited in a modern levelling layer (Mann *pers. comm.*). Leahy (*pers. comm.*) tentatively identified it as devolved *Ringerike* style, and assigned it a later eleventh-century date on the basis of similarities between these animal heads and those on the Sutton Brooch (Sutton, Isle of Ely) (depicted in Wilson 1964: pl. 83), which was found in a hoard that also contained coins of William the Conqueror. Another copper-alloy stud with gilt decoration, likewise dated to the eleventh- to twelfth centuries, is <1384>.

Finally, <695> was an iron key of late Anglo-Saxon date. A knife of late Anglo-Saxon date, <1464>, was also found on this site. Some organic and copper-alloy remains of the handle were still in situ.

11.1.2: sp72 (St Paul-in-the-Bail)

In addition to the coins discussed in chapter 4 and the metalworking scrap summarised in appendix 16, sp72 yielded a small quantity of ninth-century dress accessories, which have previously been published (Jones *et al.* 2003: 151 figs. 8.9 and 8.10). One of these was a cast silver buckle and strap slider of continental manufacture. The buckle loop had been repaired (Jones *et al.* 2003: 151).

Another silver buckle and a silver strap-end were decorated in *Trewhiddle* style, set against a niello background. The animal head terminal of the buckle had rounded ears, which suggests it belonged to a tradition centring on the East Midlands (Jones *et al.* 2003: 151). The strap-end measured c. 60 mm in length, and the buckle measured c. 30 mm across.

Finally, the catalogue of the CLAU lists two early medieval copper-alloy hooked tags found at sp72, <ae46> (decorated and whole) and <ae170>.

11.1.3: wb80 (West Bight)

Possibly the site of another pre-Conquest church, this site yielded one possible copper-alloy hooked tag (<ae13>), listed in the catalogue of the CLAU.

11.1.4: cl85 (Chapel Lane)

One knife that was identified as late Anglo-Saxon was found on this site (<14>).

11.2: The Lower City

11.2.1: dt74 (Danes Terrace)

This site yielded a number of objects that can be dated to the late Anglo-Saxon period. The first, <ae177>, was a fragment of a late Anglo-Saxon hooked tag made of copper alloy, but very corroded. Only part of the plate survives, but both the holes and the attachment hook were broken off. The corrosion hides any trace of potential decoration. The surviving fragment measured 7.5 x 0.9 mm, and (including corrosion) was 2 mm thick. It was found in a post-medieval robber trench (Mann *pers. comm.*). A second hooked tag, <ae116>, was on display in the museum. This was found associated with a high to late medieval building phase, but dated to the late Anglo-Saxon period (Mann *pers. comm.*).

<Ae108> was an eleventh-century copper-alloy *Urnes*-style openwork mount, previously published by Owen (2001: 212-23). It was sub-rectangular, and the openwork decoration was executed with a high level of craftsmanship. It measured 62 x 31 mm, and incorporated five different animals intertwined with fine tendrils. One of the animals was larger than the others, and only the four smaller ones bite each other, but all have canine heads seen from above. The biting was apparently unusual in the English *Urnes* style, but does occur in Scandinavia, such as at Urnes itself. It was found associated with a high to late medieval building phase (Mann *pers. comm.*). See Owen 2001.

Two knives of late Anglo-Saxon date were also found on this site (<fe637> and <fe846>).

11.2.2: h83 (Hungate)

<269> was an unidentified object that may represent a fragment of tweezers with splayed terminals. Only part of the splayed terminal and the arm survive. The arm may be decorated with plant-like scrolls, but the heavy corrosion on the arm makes it difficult to distinguish. The surviving fragment measured 34 x 12 mm, and without corrosion would have been just over 1 mm thick. It was found in the fill of a late Anglo-Saxon pit dated to the early to mid eleventh century (Mann *pers. comm.*). Leahy (*pers. comm.*) was not happy with its interpretation as a pair of tweezers, and suggested it could possibly be a stylus fragment, but did not want to count on that because a stylus was 'too important' an object to be expected in a late Anglo-Saxon urban context. However, although the corrosion made it difficult to identify the object, its shape was certainly similar to the styli from Flixborough (Pestell 2009).

<455> was a copper-alloy circular mount with gilt inlay (appendix 13). This seems to consist of a slightly convex circular plate of copper alloy, which was wafer thin, covered in gilt on its front, and on top of which some geometric figurative decoration was attached. The decoration consisted of punched strips of gilt copper-alloy with a filigree effect, and the pattern emerges as lines radiating from a centre point, and arches connecting the lines around the outer edge, all set within a border. The diameter of the entire object was 17 mm; the surviving width was 13 mm, which means that some 4 mm was missing. It was unstratified (Mann *pers. comm.*). Its billeted patterning was indeed reminiscent of a late Anglo-Saxon date, but Leahy (*pers. comm.*) would accept a late medieval or postmedieval date as well.

<407> was a lead bi-conical spindle whorl or weight, slightly irregular in shape, and flattened around the lip of perforation on both sides. The object measured 30 mm in diameter, and 10.5 mm in height. It was decorated on one side with raised dots, and on the other with raised lines. Only the find card was available for study. The dating of this object was uncertain, and could be either Anglo-Saxon or medieval; the context in which it was found was associated with the sixteenth-century demolition of a Tudor building. It was deposited along with post-medieval demolition rubble (Mann *pers. comm.*). Leahy (*pers. comm.*) immediately identified this as medieval.

<924> was a late Anglo-Saxon key, made of iron. A late Anglo-Saxon horseshoe was also found (<2009>), as well as a late Anglo-Saxon knife (<722>).

<847> was a set of copper alloy scales, dated to the late Anglo-Saxon to medieval periods.

Finally, <733> was a wire ear- or finger-ring, dated to the Roman or late Anglo-Saxon periods.

11.2.3: gp81 (Granta Place)

<57> was an iron plated hasp or hinge, probably for a box or potentially a book, with a rough zoomorphic terminal. The object measured 71 mm in length and 22 mm in width. The zoomorphic terminal was roughly 10 mm long and 7 mm wide, with lines across its width as decoration, and eyes at the back of the head. The object had two corroded iron bands

running across, which were probably used for fastening the hasp to another object. These were both originally c. 15 mm wide. It was found deposited in a late Anglo-Saxon levelling dump dated to the first half of the eleventh century, mixed with pottery of a mostly tenth-century date (Mann *pers. comm.*). Leahy (*pers. comm.*) interpreted it as a box fitting, and suggested that the lines on its face were silver inlay, but could suggest no direct parallels.

<44> was an openwork pendant made of copper alloy that was unfortunately never cleaned. The x-ray could not be located either when the current author visited the museum. Nevertheless, according to Colyer *et al.* (1999: 152) it displayed clear similarities to p70 <ae171>, which was on display in *The Collection*, leading to the suggestion that both came from the same mould. The attachment loop was still present. The object was roughly circular, probably incorporating a gripping beast (or interlace) motif inside a ring. At the bottom of the object, roughly at opposite ends to the attachment loop, was the remnant of something that stuck out by 4 mm from the surrounding ring, but had unfortunately broken off in antiquity. The diameter of the object measured 44 mm, and the attachment loop was 8 mm long. Including attachment loop and lump at bottom the entire object was 56 mm high. The thickness, including at least 1 mm of corrosion, was 4 mm. It was found associated with an eleventh-century building phase (Mann *pers. comm.*). See fig. 27.

Finally, the catalogue of the CLAU records <147>, a possible unfinished hooked tag made of copper alloy. A late Anglo-Saxon horseshoe was also recorded (<71>), as well as a knife of late Anglo-Saxon date (<167>).

11.2.4: lin73 (Saltergate/Silver Street)

<12> was a lead weight, cone-shaped and octagonal, and pierced at the top. It was very roughly shaped, and convex at the base. Its height was 48 mm, and its width was 33 mm at the base, and 8 mm at the top. It was found in a modern context (Mann *pers. comm.*).

<44> was a copper-alloy stud of late Anglo-Saxon to medieval date. Although the object was heavily corroded, it is possible that the surface was originally gilded.

<45> was a heavily corroded and broken iron mount or clasp. The biggest surviving fragment measured 52 x 28 mm; including the corrosion this was 10 mm thick. A smaller piece measured 21 x 18 mm, and was 7 mm thick. The remaining fragments survived only as crumbles. It was found in a late medieval robber trench (Mann *pers. comm.*).

<50> is a late Anglo-Saxon to early medieval stud, made of copper alloy with incised decoration.

<52> was a rather large bell, probably a cattle bell, made of iron. It was 134 mm high, oval-sectioned, and complete, the attachment loop still in place, and according to the x-ray also with the clapper still in situ. The suspension loop betrays traces of organic material (wood?), and some copper plating. It was heavily corroded. It was found in a medieval context (Mann *pers. comm.*).

<367> and <384> are two fragments of late Anglo-Saxon folding scales. In addition, <110> is a fragment of a set of copper alloy folding scales of late Anglo-Saxon to medieval date. <46> is a late Anglo-Saxon to medieval bun-weight, made of copper alloy.

<166> was a late Anglo-Saxon hoe blade, made of iron, 212 mm in height, 135 mm in width at the bottom, and 85 mm in width at the top, where it was shaped into a demi-circle to fit around a wooden handle. It was found deposited in a late Anglo-Saxon demolition context associated with structure two, containing mostly late ninth to mid-tenth century pottery (Mann *pers. comm.*).

<53> was an iron key of late Anglo-Saxon date. Two late Anglo-Saxon horseshoes were also found (<146> and <7>), as well as a late Anglo-Saxon spur (<219>) and two late Anglo-Saxon knives (<43> and <190>). Finally, <219> was a late Anglo-Saxon buckle plate, made of iron.

11.2.5: sh74 (Steep Hill)

Sh74 yielded a bi-conical pinhead made of copper alloy (<ae144>). The tapering head was separated from the short 4 mm length of pin that survived by a collar. The head was too corroded to reveal any potential decoration. The head measured 12 mm x 14 mm. The circular pin measured 4 mm in diameter. It was found in an early medieval dump, associated with residual late ninth- to early tenth-century pottery (Mann *pers. comm.*). Richards's work on the shifting settlement at Cottam had indicated that this type of pin existed into the tenth century AD (Leahy *pers. comm.*). In addition, a single copper-alloy stud of later eleventh- to twelfth-century date was also found (<ae114>).

11.2.6: wp71 (West Parade)

<Ae62> was a silver hooked tag with circular plate and two closely spaced circular holes with a 2 mm diameter each. The attachment hook was broken off, but a length of 4 mm remains still. The plate measured 1 mm in width and 10 mm in height. It was published in Colyer *et al.* 1999: 226 fig. 109. Disc-shaped hooked tags of this type, often highly

decorated, are a common find from Anglo-Saxon and Scandinavian sites from the seventh to eleventh centuries (Mann 1999b: 226). It was found in an early medieval pit, dated to the early to mid thirteenth century (Mann *pers. comm.*). See fig. 25 and appendix 14.

<Ae24> was an unfinished hooked tag made of copper alloy. The perforation holes are not yet present, and the hook was not yet formed. It measured 13 mm in width and 12 in height, and displays similarities in shape to Ae62, found on the same site. The coarse outline suggests it required further shaping. It was published in Colyer *et al.* 1999: 226 fig. 109. It was found associated with an early medieval hearth, dated to the mid- to late twelfth century (Mann *pers. comm.*). See fig. 25.

<Ae41> was a finger-ring made of copper alloy, which survived as a thin strip with tapering ends which had originally been knotted together, decorated with three parallel bands of punched decoration. Its diameter was 5.5 mm, but the object tapers towards the back, and was broken at the narrowest end. Its original internal diameter had been c. 12 - 16 mm (Mann 1999b: 226). It was published in Colyer *et al.* 1999: 226; 109. It was found in a pit of late eleventh- to twelfth-century date (Mann *pers. comm.*). See fig. 28.

<Fe40> was an iron key, previously published in Colyer *et al.* 1999: 229; 112. It was originally decorated with crossed spiral twists of non-ferrous wire (Mann 1999b: 229). Keys with similar ornament have been found on sites such as Thetford and York (Roesdahl *et al.* 1981: 111; Rogerson and Dallas 1984: 132, 179) as well as Scandinavia, from where, it was suggested by Roesdahl, they may have been imported (Mann 1999b: 229-30). Similar keys were also found at The Collection/Danesgate and Flaxengate.

<Ae41> was a circular wire penannular copper-alloy earring with an internal diameter of 12-13 mm. Parallels were found at Flaxengate (f72). Rings of this type are difficult to date, and this object may therefore also be late Roman (Mann 1999b: 226). It was published in Colyer *et al.* 1999: 226; 109.

11.2.7: p70 (The Park)

This site yielded four finds that are relevant in the current context. **<Pb11>** was a lead weight of roughly hemispherical shape, previously published in Colyer *et al.* 1999: 158 with a central perforation, which was very narrow at the top, but much wider at the bottom, suggesting it was intended for suspension from a rope with a knot. It measured roughly 29 x 25 mm, and its height was 11 mm. It weighs 47.54 g (Mann 1999b: 158). It was found in a pit fill dated to the Saxo-Norman to medieval transition period (Mann *pers. comm.*).

<Ae171>, displaying great similarities to gp81 <44>, was another copper-alloy pendant with openwork zoomorphic decoration. Although gp81 <44> was never cleaned, the two pieces appeared so similar that it was suggested they came from the same mould (Colyer *et al.* 1999: 152, 67; Mann 1999b: 152). The example from The Park measured 40 mm in diameter, was slightly convex, and measured c. 3 mm in thickness. It was thus slightly smaller than gp81 <44>, but as the latter had never been cleaned this does not necessarily exclude the possibility that both were produced from the same mould. P70 <ae171> displayed a (possibly winged) quadruped with gaping jaws grasping the plain frame. One of its rear legs and the adjacent portion of the frame are missing (Mann 1999b: 151). The object was dated to the eleventh century, and published as *Borre* style on the basis of its design, which was apparently strongly reminiscent of *Borre*-style mounds and pendants found in Scandinavia in late ninth and tenth century contexts (Colyer *et al.* 1999: 152). However, Leahy (*pers. comm.*) identified it as *Jellinge* style. What is more, Mann (1999b: 152) has drawn attention to the similarities between this object and objects from York, where local metalwork production, in particular of brooches, was influenced by the Scandinavian *Jellinge*-style prototypes. The current thesis identifies this object therefore as *Jellinge* style. It was an unstratified find (Mann *pers. comm.*). See fig. 27.

<Pb13> was a cast lead-alloy flat disc-brooch, published in Colyer *et al.* 1999: 158. This brooch had a diameter of 20 mm, and was less than 1 mm thick. The relief ornament of this crudely cast brooch consisted of a central boss within two concentric spheres enclosing a lozenge-shaped decoration formed by several lines (Mann 1999b: 156-57). This brooch was reminiscent of some examples from York, which have been dated to the Anglo-Scandinavian period (Mann 1999b: 157). An identical brooch, almost certainly from the same mould, was found nearby, at Grantham Street (<386 (131)>), in a post-medieval context, and again it was suggested that they were products of the metalworking industry at nearby Flaxengate (Mann 1999b: 157). This suggestion was strengthened by the fact that at Flaxengate, a double-sided stone mould was found (f74: m85), one side of which was used for casting brooches similar in style to these brooches, whilst the other side may have been used for casting lead or pewter objects (Mann 1999b: 168 n. 19). The brooch from p70 was an unstratified find (Mann *pers. comm.*). See fig. 28.

Jones *et al.* 2003: 296 list a small copper-alloy bell from The Park as well.

11.2.8: sw82 (Grantham Street)

A single cast lead flat disc-brooch <386 (131)> was found at this site, almost identical to p70 <pb13>. It had been suggested that they were from the same mould, and were produced at nearby Flaxengate (Mann 1999b: 157).

11.2.9: mh77 (Motherby Hill)

<Ae2> was a copper-alloy wire pin with a glass head. Only the find card was available for study; unfortunately the colour of the glass was not included in the description. The pin was bent, but seemed complete. The whole object measured 31.5 mm in length, and the flattened globular head measured 7.5 mm in diameter. A similar find was found at f72 <Ae197>. It was found in a fifteenth-to sixteenth-century ditch fill (Mann *pers. comm.*).

11.2.10: wo89 (Woolworth's Basement)

Wo98 produced two unfinished hooked tags made of iron, both with triangular plates.

<162> and <210> are listed in the catalogue of the CLAU. In addition, the archives of the CLAU list two possible unfinished copper-alloy hooked tags from this site.

The site also yielded a copper-alloy ringed pin, <352>, with a double ringed head. Ringed pins are commonly identified as 'Hiberno-Norse', and usually assigned to the ninth to eleventh centuries. This example came from a third-century Roman dumping layer that also included several intrusive potsherds of late ninth- to tenth-century date (Mann *pers. comm.*). Unfortunately the object was on display in The Collection and therefore not available for study, and no measured drawings or even measurements survived, but a rather detailed sketch was available on the finds card. In addition the object was visually inspected in the museum. It was a pin with a double ringed head, the pin itself bent, but complete, with a circular diameter. The lower ring was attached to the pin itself by means of a spiral wire, which became the ring itself, before forming a knot, and then continuing upwards to form the second ring. The upper ring did not quite close, but its two ends faced each other at either side of the pinhead itself. It was roughly the same length as the two ringed pins from Flaxengate (it was on display in the same cabinet).

A knife identified as late Anglo-Saxon was also found on this site (<114>). Finally, <119> was an iron arrowhead, identified as late Anglo-Saxon.

11.2.11: wnw88, ww89 (Waterside)

Also just south of the Lower City along the river, one of the sites along Waterside (wnw88) yielded four hooked tags, two made of iron (<306> and <2116>), and two of copper alloy (<577> and <1225>). Ww89 yielded <193>, a further hooked tag.

11.2.12: mch84 (Michaelgate)

This site yielded the only middle Anglo-Saxon find from the Lower City that was not found at Flaxengate (f72). It concerned a buckle with triangular plate, found in a residual (medieval) context (Jones *et al.* 2003: 153). A scaled drawing has been published in Jones *et al.* 2003: 153, fig. 8.14.

11.2.13: Idg03 (The Collection/Danesgate)

An arm of a hand-held balance <128> was found in a late Roman context, but was of a type that remained in use into the early medieval period, and was of a similar type to one found at Coppergate in York, which was believed to be of tenth- to eleventh-century date because of its decoration (Mainman and Rogers 2000, fig. 1258, 10415). Also, because the Roman finds are more domestic in nature, these scales may fit better in a late Anglo-Saxon context as they seem to suggest commercial activity. Their possible intrusive nature was not a problem, as some possibly intrusive antler waste was also found in late Roman context (Mann 2009).

A copper-alloy ring of circular-sectioned wire with overlapping terminals was also found, probably a late Anglo-Saxon finger ring, a suspension ring or part of jewellery (Mann 2009). Parallels for this find were found in significant numbers at Flaxengate (Mann 1982).

A very corroded iron barrel padlock key, decorated with a crosshatched patterns formed by thin lines, either grooved into tin plating, or tin inlay, was found in a post-medieval context (Mann Mann 2009). Keys of this type may have been a ninth-century innovation (Ottaway 1992: 676). A similar key from an eleventh- or twelfth-century context from West Parade had both plating and inlay (Mann 1999b: 229-30).

Another fragment with similar decoration was part of a rectangular loop, possibly a rectangular or square buckle fragment. Similar decoration had been seen on a five-sided buckle from Coppergate (Ottaway 1992: 3738, fig. 294), whilst a closer parallel in form and ornament comes from a bone trapezoidal object found at The Bedern in York (MacGregor *et al.* 1999: 8088, fig. 961).

A small biconical perforated lead object of late Anglo-Saxon or medieval date, either a lead weight or a whorl, was found as well. It was perforated slightly off centre, which would make it unsuitable for a whorl, but a similar piece from a tenth-century context at York has been interpreted as a spindle whorl (Walton Rogers 1997: 6638, fig. 809) (Mann 2009).

Other finds that could be dated to the late Anglo-Saxon period included a fragment of the iron backplate of a wool comb <5>, from a twelfth-century context (006). These combs were used to disentangle the fibers prior to spinning, and were in use in the late Anglo-Saxon and medieval periods. From the same context, two pieces of ceramic mould were also retrieved, associated with metalworking (Mann 2001; 2009).

11.2.14: f72 (Flaxengate)

11.2.14.1: Finished and part-finished objects from Flaxengate:

The following pins were found at Flaxengate:

<Ae64> was a copper-alloy pin with polyhedral head with rectangular cross-section, and sunken punched ring-and-dot decoration on the widest, flat sides of head. The head measured 6 mm in height and 7 x 4 mm in width. Decoration was present on all four sides. The pin was bent and broken near the tip, and the surviving fragment was also broken in two. The length of the pin (excluding the head) was 42 mm, and the pin had a circular diameter of 2 mm. A faint collar divides the head from the pin. It was found in a late Anglo-Saxon levelling dump of early to mid tenth century date, with a high percentage of residual late ninth-century and ESAX/MSAX pottery (Mann *pers. comm.*). Jones *et al.* (2003: 154) state that "a copper alloy pin with polygonal head decorated with ring and dot was equally likely to be of late Anglo-Saxon as middle Anglo-Saxon date". Leahy (*pers. comm.*) suggests an eighth- to ninth-century date on basis of the work done at Cottam, and identified it as a faceted-headed pin.

<Ae67> was a pin with a globular head, and no collar between the head and the broken pin itself. The head measured 10 mm in height and 11 mm across. The surviving fragment of the pin was 11 mm long; the whole object measured 21 mm in length. The pin was circular in diameter, and measured 3 mm across at its broken end, but tapered to a slightly wider diameter near the head. It was unstratified (Mann *pers. comm.*). Leahy assigned this a tenth-century date.

<Ae197> was a pin shaped of a piece of copper alloy wire with a globular green glass head, measuring 8 mm across and 5 mm in height. The head was cone-shaped at the top, tapering towards a central ridge, and had a flat base. The wire pin was bent, and c. 42 mm long. A similar pin was found at mh77 <Ae2>. It came from an early medieval building phase dated to the twelfth to thirteenth centuries (Mann *pers. comm.*). Leahy (*pers. comm.*) commented that the wire-like quality of the pin did not fit well in a late Anglo-Saxon context, but that he was still happy to assign it a late Anglo-Saxon date in the basis of its context, and the tight date for the period of glass working at Flaxengate.

<Ae290> was a ring-headed pin, measuring 94 mm in length. The head was polyhedral, and measured 6 mm in width, 5 in thickness, and 6.5 mm in height. The front and back face are lozenge shaped, and decorated with four lozenge-shaped depressions arranged in the shape of a cross. The ring had a diameter of 1.5 mm, and was circular in shape, but undecorated. The outside diameter of the entire ring was 10.5 mm. There was no collar between the pin and the head. The pin itself was 88 mm long, and was circular in diameter, measuring 3 mm across near the head and tapering towards a point. This type of ring belonged to the most common type of ringed pins found in the British Isles (Fanning type 12c), in particular Dublin and the Irish Sea region, between the early tenth and mid eleventh centuries (Mainman and Rogers 2000: 2582; Fanning 1994: 25). In Ireland, the polyhedral head was a viking innovation, and it was possible that these objects are indicative of trading links with the west, although the possibility that they are late survivals of the form, produced by local metalworkers, as the York examples, should be borne in mind. It was found in a twelfth-century context (building phase) (Mann *pers. comm.*).

The following brooches were found at Flaxengate:

<Ae107> was a badly preserved copper-alloy ansate brooch. The find card from the CLAU catalogue was the only record available, and contained no information other than a sketch, and a comment saying that it was found in a late Anglo-Saxon levelling dump of early to mid tenth-century date, with a high residual element of ninth-century and earlier pottery (including ESAX and MSAX). The same context group also yielded <ae64>, <ae72> and <ae107> (Mann *pers. comm.*).

<Ae23> was another possible ansate brooch, measuring 50 mm in length and 16 mm in width. It was roughly rectangular, and decorated with twelve simple lines, all except the outer two arranged in pairs, in low relief running across the obverse. It had no attachment lugs on the reverse, and was unstratified, and as a result was published as "a suspect identification" by Jones *et al.* 2003: 154.

<Ae302> was a flat disc-brooch, which was fairly damaged near one of its edges. It was made of copper alloy, and decorated with *Borre*-style interlace decoration emerging from a central lozenge-shaped boss. The catch plate and lug are missing. The object would have measured 32 mm in diameter, but now only 31 x 27 mm remains. It was roughly 3 mm thick. It was found associated with the thirteenth-century road surface, and may have been produced in East Anglia (Margeson 1997: 23). See fig. 28.

<Ae184> was also unavailable for study, because it was on display in the museum. The object was viewed in the museum, and otherwise only a sketch and description on the finds card from the CLAU database was available. This was identified on the finds card as an eleventh-century convex cast copper-alloy disc-brooch with elaborate knot design in relief on the front. The domed shape may suggest it was of ninth- or tenth-century date; however the decoration was highly unusual, and did not fit with the Anglo-Saxon *Winchester* style either (Leahy *pers. comm.*). Around the edge was a raised lip, c. 1 mm wide; the whole object had a diameter of c. 34 mm. The decoration consisted of a central circle divided into three fields by a kind of 'Mercedes'-emblem. This was surrounded by another concentric circle, the space between the two being divided into twelve by little cross-bars running from the first to the second concentric circle. Outside the second circle were twelve petal-shaped loops, three of which, at even distances, were divided into two by a central line. Only some of these touched the outer edge; the majority stopped short of it. It was found in an early to mid-twelfth century floor level associated with one of the buildings (Mann *pers. comm.*).

The following finger- and earrings were found at Flaxengate:

<Ag3> was a piece of copper alloy wire in the form of a ring, with several smaller bits of copper alloy wire attached to it. The whole thing was 17 mm in diameter, and uneven in cross-section. The diameter of the wire was roughly square, but uneven, and always smaller than 1,5 mm. It is possible that this was an earring that originally had the ends twisted around each other. It came from one of the spits, dated to the early to late tenth century (Mann *pers. comm.*).

<Ae221> was a copper-alloy ring, with a diameter of 14 mm, a square cross-section measuring maximum 1.5 mm across, with the ends twisted around each other. This was most likely to be an earring or finger ring. It was found in a mid- to late eleventh-century context (Mann *pers. comm.*).

<Ae259> was another earring, of either Roman or late Anglo-Saxon date. It had a circular diameter measuring c. 2 mm. The attachment end was missing. The earring itself had a diameter of 23 mm across x 20 mm in height. It was found associated with Saxo-Norman building T25, dated to the early to mid-twelfth century (Mann *pers. comm.*).

<Ae262> was a near-identical earring to **<ae259>**. The diameter of the wire was 2.5 mm, and the earring itself measured 22 x 20 mm. Again, it could be either Roman or late Anglo-Saxon in date. It was found in a Saxo-Norman levelling dump, dated to the late eleventh to early twelfth centuries (Mann *pers. comm.*).

A third wire penannular copper-alloy earring of either Roman or late Anglo-Saxon date was mentioned in the finds catalogue; this was **<ae250>**. It came from an early medieval pit dated to the late eleventh to early twelfth centuries (Mann *pers. comm.*). It was near-identical to **<ae262>** and **<ae259>**.

<Ae66> was a copper-alloy wire ring, possibly a finger ring. It was found in a mid eleventh- to mid twelfth- century levelling dump (Mann *pers. comm.*).

<Ae203> was yet another Roman or late Anglo-Saxon earring, similar to **<ae259>** and **<ae262>**. It measured 24 x 21 mm, whilst the circular diameter of the wire measured 2.5 mm. It was found associated with a late twelfth to early thirteenth century building (Mann *pers. comm.*).

<Ae470> had been drawn for publication but the publication drawing had got lost. It was a small copper-alloy finger ring formed of a short piece of wire with a diameter of c. 1 mm, with twisted terminals, and was complete. The inner diameter of the ring was c. 19 mm. It was assigned a possible ninth-century date. It was found in one of the late Anglo-Saxon spits, dated early to mid-tenth century (Mann *pers. comm.*).

The following buckles were found at Flaxengate:

<Ae44> was a copper-alloy D-shaped buckle with associated buckle-plate. The buckle had an outside diameter of 17.5 mm x 13.5 mm, and the metal bar varies between 2.5 and 3.5 mm in width, and was roughly 2.5 mm thick. The top of the buckle was decorated with incised decoration, consisting of eighteen incisions of c. 1 mm wide, along the outer edge of the buckle. The buckle-plate consists of a very thin double sheet of copper alloy, measuring 32 mm in length and 9 mm in width, which was still complete although completely bent. It had three rivet holes, with two of the three rivets still in place. The rivets measure 9.5 mm in diameter, are 5.5 mm in height, and are roughly cone-shaped with a flat, circular top c. 2.5 mm in diameter. It was found in a twelfth-century levelling dump, and identified as a typical

'viking' D-shaped buckle (Mann *pers. comm.*). Leahy (*pers. comm.*) had suggested that the bossed rivets are distinctive of Irish metalwork.

<Ae346> was another copper-alloy D-shaped buckle, made of a single loop with incised decoration along the edge in the shape of radial lines. The piece was broken in three pieces, and the lip was broken into two. One of the two pieces was still attached to the buckle itself. No other illustration than the finds card was available. It measured roughly 30 x 26 mm. It was found associated with Saxo-Norman building T20, dated to the eleventh century (Mann *pers. comm.*).

The following bells were found at Flaxengate:

<Ae72> was a small hexagonal bell, made of copper alloy, measuring 30 mm in height. The width at the bottom was 29 mm. The iron clapper remains inside and was heavily corroded. The bell was damaged considerably and was now bent and broken, with a big hole in one side. The attachment loop was broken off as well. The bell was too heavily corroded for any decoration to be visible. It came from the same context group as **<ae64>** (Mann *pers. comm.*).

<A166> was a typical hexagonal 'Norse' bell made of copper alloy, with a cusped bottom, created by the slightly longer length of the ribs. The clapper was missing. The bell was decorated with ring-and-dot decoration near the bottom on each side of the ridges, and at the top on the flat sides near the attachment loop, which was still present. The bell measured 32 mm in height and between 27 and 29 mm in width. It was found in a fourteenth- to fifteenth-century deposit that contained a large percentage of residual twelfth-century material (Mann *pers. comm.*).

<Ae192> was a small copper-alloy conical bell, with a faint rib near its break of slope. Half the bell and its clapper are missing, but the attachment ring was still present. The object was 18 mm high and 17 mm across. It was an unusual shape compared to most other 'Norse' bells found in the UK, which tend to be hexagonal in shape. It was found in a twelfth- to thirteenth-century context (Mann *pers. comm.*). Leahy (*pers. comm.*) believes this bell should be assigned a twelfth to thirteenth-century date, and on the basis of this later dating it had been excluded from the discussion in this thesis.

The following toilet implements were found at Flaxengate:

<Ae93> was a fragment of a pair of copper alloy tweezers with a slide that forms part of it. It measured 20 mm in length (but only a small fragment survives), and was 4 mm wide. The whole object was 4 mm thick at its thickest point as well. A similar pair of tweezers, but complete, was found at Coppergate (Roesdahl *et al.* 1981: 107; YD29). It was found in a mid-eleventh to mid-twelfth century context (Mann *pers. comm.*). Leahy (*pers. comm.*) suggested this could also be a fragment of a pair of "page holders", shaped a bit like a bulldog slip, with square jaws.

<Fe47> and **<fe98>** were two pairs of tweezers, made of iron.

The following pieces of equestrian equipment were found at Flaxengate:

<Ae234> was a buckle-shaped tinned copper-alloy terminal, probably a horse harness or stirrup strap-loop. The loop itself was undecorated, but the broken attachment end was decorated with parallel lines. The object measured 19 mm in length, and 18 mm in width, and was roughly 2 mm thick. It was found in a late eleventh- to early twelfth-century pit (Mann *pers. comm.*). Leahy (*pers. comm.*) agreed this might have been an eleventh- to twelfth-century harness fitting. See fig. 36. A single late Anglo-Saxon horseshoe was also found (**<fe1574>**), and a late Anglo-Saxon iron spur (**<fe1108>**).

The following mounts and studs were found at Flaxengate:

<Ae296> was a flanged enamelled decorative convex mount, probably tenth-century in date. The convex disc had a diameter of 43 mm, surrounded by a ribbed border and a raised inner part with traces of blue and red enamel, bulging towards an inner ring with vertical sides. Inside this, traces of red, white and blue enamel remained. The enamelled inner circle had a diameter of 25 mm. No clear decorative pattern was discernable. The object was severely damaged, with roughly a third part of the inner circle now missing. It came from a Saxo-Norman levelling dump of late eleventh to twelfth century date (Mann *pers. comm.*). Leahy (*pers. comm.*) assigns it a tenth-century date.

For **<ae243>** only the finds sheet was available for study. This object was a small square-headed stud made of copper alloy, with incised symmetrical decoration reminiscent of interlace on the convex head, and traces of gilding visible on the surface. The head was roughly 12 mm x 12 mm, and the stud at the back was roughly 7 mm long. It was assigned an eleventh- or twelfth-century date. It was found in a mid-twelfth to mid-thirteenth-century levelling dump (Mann *pers. comm.*). Leahy (*pers. comm.*) agreed with its dating.

<Pb15> was a cast lead alloy blank or mount, "trapezoid with a transverse slot at the narrow end, and three equally spaced loops at each side. The front face was decorated with debased foliate ornament. On the reverse, the edge moulding and median moulding are decorated in punched dots, and the fields are filled with a disintegrated swirling pattern. L. 8.1 x W 6.0 cm" (Roesdahl *et al.* 1981: 101; G1).

The following keys were found at Flaxengate:

<Ae67> was a copper-alloy padlock key, c. 80 mm long, with its bit set continuous to the shank. The end of the handle had a small perforation, and the sub-rectangular bit had a T-shaped hole and a rectangular hole, with two small circular piercings on either side. It was assigned a tenth- to early eleventh-century date. Unfortunately only the finds card was available for study. It was found in a late eleventh to early twelfth century levelling dump (Mann *pers. comm.*).

<Fe469> was another viking key found at Flaxengate, which was published by Roesdahl *et al.* (1981: 101; G2) in an exhibition catalogue entitled *The Vikings in England and in their Scandinavian Homeland*. Unfortunately there was no accompanying drawing with the description, and as a result only the description from the book and the sketch from the finds card were available for study. Roesdahl *et al.* (1981) describe the object as follows: "Incomplete iron slide-key (...) It had a circular bit with an elaborate cruciform perforation, and a bulbous stem inlaid with a spiral copper-alloy wire. L. 7.5 cm. A similar key was known from York (no. YDL18 [Roesdahl *et al.* 1981: 111; YDL18]), and this, like the Lincoln example, was probably a Scandinavian import. A key of this type from Lund was dated 1100-1150."

In addition, **<fe85>**, **<fe210>** and **<fe1792>** were listed in the CLAU catalogue as keys of late Anglo-Saxon date.

The following weights were found at Flaxengate:

<Pb38> entered the museum database as a lead weight, weighing 21.72 g, but since then the similarities between this hexagonally shaped object and the hexagonal copper-alloy bells were noted, leading to the suggestion that this object was related to the production of these bells, as a mould or trial piece (Mann *pers. comm.*). Leahy (*pers. comm.*) still prefers this as a weight; however, the object had no suspension loop. What is more, on its surface traces of copper alloy were detected. Unfortunately the object was unstratified, and only a measured sketch survived, suggesting that it measured roughly 25 mm in height, and had a vaguely hexagonal diameter of 19 x 23 mm. See fig. 36.

Some 26 knives of late Anglo-Saxon date were also found on this site (**<fe2562>**; **<fe2565>**; **<fe2585>**; **<fe45>**; **<fe119>**; **<fe161>**; **<fe162>**; **<fe187>**; **<fe197>**; **<fe355>**; **<fe442>**; **<fe446>**; **<fe455>**; **<fe480>**; **<fe507>**; **<fe524>**; **<fe232>**; **<fe789>**; **<fe1066>**; **<fe1795>**; **<fe1834>**; **<fe2060>**; **<fe2205>**; **<fe2403>**; **<fe2407>**; and **<fe2494>**). A fragment of an iron spoon **<fe539>** was found at Flaxengate as well. Finally, an iron spear-socket of late ninth- or tenth-century date was also found (**<fe195>**), as well as two late Anglo-Saxon iron arrowheads (**<fe283>** and **<fe538>**).

A large amount of finished and unfinished hooked tags were retrieved during the Flaxengate excavations, most of which were associated with structure 20. The total number of finished and part finished tags amounts to at least 45 copper-alloy fragments (one with silver niello inlay), and seventeen iron examples. The shape of their plates ranges from triangular to circular.

<Ae15> was a copper-alloy hooked tag with a circular plate, and two attachment holes, relatively closely spaced, one of which was broken. The plate measured 11 mm x 11 mm. The end of the hook was broken off, but the top part was still in place, reaching a length of 8 mm. A double row of punched dots decorates the front in the shape of a cross, with additional decoration possibly around the circumference of the plate. It was unstratified (Mann *pers. comm.*). See fig. 25.

<Ae538> was another copper-alloy hooked tag. It was found in one of the excavation spits that was loosely dated to the eleventh century. It was now missing, and no find card or drawing had survived either (Mann *pers. comm.*).

<Ae294> was a complete copper-alloy hooked tag with roughly pear-shaped plate, with two attachment holes at the top, and a double row of punched decoration all along the edge and in the shape of a cross over the surface of the plate. The plate measured 15 x 13 mm. The hook was 4.5 mm long. The total length of the hooked tag was 19.5 mm. It came from an early medieval levelling dump of late twelfth to thirteenth century date (Mann *pers. comm.*). Also see **<ae169>**. See fig. 25.

<Ae169> was an unfinished copper-alloy hooked tag published in Roesdahl *et al.* (1981: 101; G3), mentioned in connection to **<ae294>**, suggesting that the two may have been similar. No further description was provided.

<Ae45> was another copper-alloy hooked tag, this time with silver niello inlay. It was almost complete save for the tip of the hook, which was broken off. It had a circular plate measuring 14 x 14 mm, and the hook was 4.5 mm long. It had 2 attachment holes spaced rather far apart. The decoration was described in the CLAU catalogue as possibly zoomorphic, incorporating two eyes and a snout in frontal depiction. It was deposited in Saxo-Norman building T24, dated to the early to late twelfth century (Mann *pers. comm.*). Leahy (*pers. comm.*) strongly disagreed with the idea that this was zoomorphic, and suggested a tenth-century date for the artefact. It was similar to a copper-alloy example from Thimbleby (NLM-E7A805) (appendix 12.4.1), and a copper-alloy tag from Coppergate in York, which was described as decorated in *Ringerike*-style, and dated to the eleventh to early twelfth centuries (Tweddle 2004: 455, fig. 115). See fig. 25.

<Ae546> was another copper-alloy hooked tag, this time with a triangular body and two attachment holes at opposite corners. Each hole was 1 mm in diameter. The body of the hooked tag was decorated with a double row of punched decoration along the edge, whilst a similar double line runs halfway down across the middle, and from left to right roughly in the middle of the plate forming a T-shape, dividing the plate in three spaces. The body of the tag measured 17 mm in length, was 12 mm at its widest end and 6 mm at its narrowest end. The whole object measured 26 mm in length. The hook was nearly complete, and 9 mm long, and was 2.5 mm at the point of attachment to the body, tapering slightly towards 1.3 mm at the tip. The object was roughly 1 mm thick. It was found in one of the excavation spits, loosely dated to the eleventh century (Mann *pers. comm.*). See fig. 25.

<Ae485> was a half-manufactured hooked tag, published by Roesdahl *et al.* (1981: 101; G4) in the same entry as **<ae546>**, again suggesting that the two may have been of similar design. Unfortunately no further description or measurements were offered.

<Ae213> was another copper-alloy hooked tag with a triangular body and punched decoration, not unlike **<ae546>**, if slightly smaller. The body of this hooked tag measured 14 mm in length, 12 mm at its splayed end, tapering towards 4 mm near the hook, which was broken off. The attachment holes are placed in opposite corners of the widest end, and measure c. 1.5 mm in diameter. One of the holes was broken through. The remaining part of the hook was 2.5 mm, and the entire object measured 16.5 mm in length. The punched decoration follows a single line past the two vertical sides, with a double line dividing the plate from the attachment hook, and another probably double line in the middle of the body. Additional punching in a double line follows the outline of the attachment holes, but no punching was discerned along the edge of the wide end. The object displays clear similarities to **be73 <ae37>**. It was found in a medieval pit dated to the late twelfth to early thirteenth century (Mann *pers. comm.*). See fig. 25.

<White 1982 F84> (**<ae274>**) was an unfinished copper-alloy hooked tag with a triangular plate, heavily corroded, which was deposited in timber phase VII to VIII, or the mid to late eleventh century (White 1982: 51). It measured 20 x 14 mm. No attachment holes or hook was present. A row of punched decoration was visible on right side, curving inwards to delineate attachment hole, possibly around its entire perimeter.

<White 1982 F85> (**<ae25>**) was found in stone phase VI, or a late fourteenth- to early fifteenth-century layer. It was an unfinished hooked tag made of copper alloy, with a triangular plate, measuring c. 18 in length and 10 in width (White 1982: 51). No attachment holes or hook were present, and no decoration was visible.

<White 1982 F86> (**<ae164>**) was an unfinished copper-alloy hooked tag with a circular plate, measuring 21 x 14 mm. It was deposited in timber phase VII, or the second half of the eleventh century. Metallographic analysis had indicated that the object underwent a high degree of working, with little evidence for porosity or inclusions (White 1982: 52). The hook may have been present, but the end had now broken off. Decoration was not visible, and attachment holes were not present.

<White 1982 F87> (**<ae165>**) was deposited in timber phase VI, or the middle decades of the eleventh century. It was another unfinished copper-alloy hooked tag, with a triangular plate, and no attachment holes, measuring c. 20 x 7 mm (White 1982: 52-53). One row of punched dots was possibly just visible along the left edge of the object.

<White 1982 F88> (**<ae166>**) was another unfinished hooked tag made of copper alloy, with a triangular body. It was deposited in timber phase VI, between c. 1040 and 1070. It measured 19 x 12 mm (White 1982: 53). No attachment holes or hook were visible, but there were possibly some punched dots along the two sides.

<White 1982 F89> (**<ae167>**) was another unfinished copper-alloy hooked tag with a circular to oval plate, measuring c. 12 mm in width and 15 mm in height; the whole object, including the unfinished attachment hook, measured 25 mm in height. It was deposited in

timber phase VI, or the middle decades of the eleventh century (White 1982: 53). No attachment holes were visible. No decoration was visible.

<White 1982 F90> (<ae170>) was another possible unfinished copper-alloy hooked tag with a triangular-shaped plate, measuring 22 x 12 mm, and very bent and lob-sided. It was deposited in timber phase VI, c. 1040-1070 (White 1982: 54). No attachment holes were visible. No decoration was visible.

<White 1982 F91> (<ae183>) was deposited in timber phase VII, the second half of the eleventh century. It was another unfinished copper-alloy hooked tag, with a triangular body measuring 20 x 10 mm (White 1982: 54). No attachment holes or decoration were visible.

<White 1982 F92> (<ae254>) was a shield-shaped unfinished copper-alloy tag, measuring 21 x 18 mm. No attachment holes were visible. It was deposited in timber phase VII, or the second half of the eleventh century (White 1982: 54-55). There may have been some traces of punched decoration in the lower left-hand corner.

<White 1982 F93> (<ae281>) was another unfinished copper-alloy hooked tag with a shield-shaped plate, apparently decorated with a relief pattern on its face, consisting of two elongated panels on either side of a central vertical rib, possibly intended for inlay of some sort. No attachment holes are visible. It was deposited in timber phase VI, or the middle decades of the eleventh century, and measured 21 x 13 mm (White 1982: 55).

<White 1982 F94> (<ae286>) was another unfinished triangular-plated copper-alloy hooked tag, measuring 20 x 12 mm. It was deposited in timber phase VI, or the middle decades of the eleventh century. The x-ray suggests that attachment holes may already be in place, and White (1982: 55) described the object as "almost completed". Again, it seems to have a thin line of punched decoration around the outside perimeter.

<White 1982 F95> (<ae289>) was another unfinished hooked tag made of copper alloy, with a roughly triangular-shaped plate. It was deposited in timber phase VI, c. 1040-1070. It measured roughly 23 x 13 mm (White 1982: 56). No attachment holes were present, and the hook was not formed yet either. A diagonal row of small punched dots was visible in the lower left hand corner, and it seems that the corner, where one of the piercings would eventually have been located, was broken off, possibly during the process of decoration.

<White 1982 F96> (<ae299>) was another unfinished hooked tag made of copper alloy with a triangular plate. It measured 20 x 9 mm, and was deposited in timber phase VI, c. 1040-1070. There were no attachment holes visible (White 1982: 56).

<White 1982 F97> (<ae302>) was another unfinished triangular-shaped copper-alloy hooked tag. It was deposited in timber phase VI, or the period c. 1040-1070. No attachment holes and no decoration are visible (White 1982: 56-57).

<White 1982 F98> (<ae306>) was another unfinished copper-alloy hooked tag with a triangular plate, measuring 27 x 12 mm. It was deposited in timber phase VI, c. 1040-1070. No attachment holes were visible (White 1982: 57).

<White 1982 F99> (<ae308>) was another triangular-shaped unfinished copper-alloy hooked tag deposited in timber phase VI, dated to the period c. 1040-1070. The object measured 21 x 11 mm, and no attachment holes were visible (White 1982: 57).

<White 1982 F100> (<ae335>) were two unfinished copper-alloy triangular-plated hooked tags without attachment holes. One measured 19 x 9 mm, and the other measured 22 x 13 mm. They were both deposited in timber phase VI, or the period c. 1040-1070 (White 1982: 58). The smaller one seems to have had a line of punched dots running along its left-hand side.

<White 1982 F101> (<ae354>) was another unfinished triangular-plated copper-alloy hooked tag, without attachment holes, measuring 21 x 11 mm. It was deposited in timber phase VI, c. 1040-1070 (White 1982: 58). The lower left-hand corner was broken off, and a row of punched dots was visible just above and parallel to the break-line, as well as along the left hand side of the object, and possibly the right-hand side and the bottom, suggesting that the object may have been broken during the process of decoration.

<White 1982 F102> (<ae527>) was an unstratified and unfinished copper-alloy hooked tag, measuring c. 25 x 10 mm. It had no attachment holes (White 1982: 58-59). No decoration was visible either.

<White 1982 F103> (<ae85>) was another unfinished triangular-plated hooked tag, deposited in timber phase V or the period c. 1000-1040. The hooked end was still intact. The object was broken off at the attachment holes, and was seemingly decorated around the outside perimeter with a row of punched dots. The object measured roughly 13 x 9 mm (White 1982: 59).

In addition, the catalogue of the CLAU lists the following examples as (possible) unfinished hooked tags made of copper alloy: **<ae220>**; **<ae153>**; **<ae163>** (triangular plate); **<ae209>** (triangular plate, listed as having been exhibited in 1993); **<ae216>**; **<ae217>** (triangular plate, listed as having been exhibited in 1993); **<ae240>**; **<ae241>**

(two with triangular plates, both listed as having been exhibited in 1993); <ae242> (triangular plate); <ae259> (triangular plate); <ae296>; <ae385>; <ae439>; <ae484> and <ae529>.

<Fe2609> was a small triangular tag, consisting of a thin triangular sheet of iron with elongated apex which was slightly bent over, suggestive of a hooked tag, but without any attachment holes and/or decoration. It was roughly 22 mm long and 10 mm wide. Unfortunately only the finds card from the CLAU was available for study. It was suggested that this was either a trial piece, or unfinished. It was found in one of the late Anglo-Saxon spits dated to the early to mid-eleventh century (Mann *pers. comm.*).

In addition, the catalogue of the CLAU lists the following additional examples as (possible) unfinished hooked tags made of iron: <fe1443> (circular plate); <fe1620>; <fe1699> (triangular plate); <fe1788>; <fe1820>; <fe1934> (triangular plate); <fe1969> (triangular plate); <fe1984>; <fe1992>; <fe2163>; <fe2285> (triangular plate); <fe2329>; <fe2431> (triangular plate); <fe2524> and <fe658>.

11.2.14.2: Scrap-metal and evidence for metalworking from Flaxengate:

The metalworking crucibles from Flaxengate that were used for copper alloys were made mostly of Stamford ware, with some additional thimble-shaped ones of other, possibly local wares. The thimble-shaped form was reminiscent of contemporary Scandinavian metalworking crucibles (Bayley 1979: 1). The evidence for metalworking from Flaxengate has been analysed by Bayley (1979; 2008b) and White (1982). It included a large amount of scrap metal, such as a number of fragments of a bar ingots, and quantities of semi-manufactured material such as rods, bars, wire, and sheet metal off-cuts, as well as molten droplets that were spilled whilst casting metal. Almost all of this was related to the working of copper alloys. Copper-alloy slag was also found, and a small quantity of iron smithing slag represents the only evidence for ironworking (together with <fe2609>) (Bayley 1979: 2). White's (1982) unpublished dissertation on the Flaxengate non-ferrous metalworking debris discussed the copper-alloy material in detail. He divided the material into the following groups: 36 pieces of wire and rod (White 1982: F1-F36); eleven 'blobs' (White 1982: F38-F48), including all spherical and amorphous waste that was probably formed through spillage during casting; 35 bars and ingots (White 1982: F49-F83), separated from the wire on the basis of having flattened sides and a roughly square section; unfinished hooked tags (White 1982: F84-F103; see above); and 17 pieces of sheet (White 1982: F104-120). For a summary report, see Bayley 2008b.

The following descriptions comprise a selection of the rod and wire that may represent part-finished objects:

<White 1982 F2> (<ae282>), from timber phase VII, dated to the second half of the eleventh century, was a heavily corroded group of S-shaped links of copper alloy wire (White 1982: 19). They may represent part-finished chain.

<White 1982 F3> (<ae21>), dated to timber phase VII, or the second half of the eleventh century, was a small length of wire c. 3 mm in diameter, and 24 mm in length, with what appears to be a simple zoomorphic terminal at one end (White 1982: 19-20); the terminal appeared to be in late Anglo-Saxon style (White *pers. comm.*). It was not clear what this object would have been before it was scrapped.

<White 1982 F4> (<ae85>), from timber phase VII, or the second half of the eleventh century, was a copper-alloy hook with a circular section measuring 1.5 mm, tapering to a point. The object was 25 mm long, and the hook was 8.5 mm in width (White 1982: 20).

<White 1982 F13> (<ae329>) was a fragment of a small copper-alloy pin with circular section and a small head. It was 38 mm long, and its diameter was circular, measuring c. 1.5 mm just below the head. The body and head were separated by a slight recession, at which point the diameter was certainly no more than 1 mm. The head was c. 3 mm long, and had a flat end measuring c. 2 mm, tapering gradually inwards towards the incision separating the head from the pin's body. It belonged anywhere between timber phase II and VI, the early tenth to mid-eleventh centuries (White 1982: 24).

<White 1982 F16> (<ae417>) was a fragmentary copper-alloy ring fragment, probably an earring, similar to wp71 <ae41>, or f72 <ae262> or <ae259>. It was unstratified (White 1982: 25). The outer diameter of the entire object measured 20 mm in width by 19 mm in height, with the attachment ends broken off, and the circular diameter of the wire measured 1.5 mm.

<White 1982 F20> (<ae453>) was a copper-alloy unfinished needle or pin. It looked like it was in the process of being hammered into shape, but was bent before the head was shaped or pierced, and subsequently discarded (possibly to be re-used again as scrap). The diameter was roughly circular at 2mm just underneath the flattened head, and the length of the entire pin was c. 44 mm, of which the head took up no more than 2 mm. It belonged to timber phase III, or the period c. 930-970.

<White 1982 F22> (<ae477>) was another fragmentary copper-alloy ring fragment, probably an earring, similar to wp71 <ae41>, or f72 <ae417>, <ae262> or <ae259>. The outside diameter of the ring measured 23 mm in width, and 18.5 in height. The attachment ends are broken off, and the diameter of the circular wire was roughly 1 mm. It belonged to timber phase 1 to V, basically assigning it a deposition date between the late ninth and mid-eleventh centuries (White 1982: 27).

<White 1982 F26> (<ae69>) was a heavily corroded, short bent piece of rod, roughly circular in section, measuring c. 2 mm. The entire fragment measured c. 28 mm by 10 mm, and probably formed a short length of a bracelet, with an original diameter of at least c. 50 mm, suggesting it could have been a child's bracelet. The outside was decorated with cut grooves across the surface, over the entire length of the fragment. It was found in the pre-timber phase, and should thus be assigned a mid- to late ninth century date of deposition, although the object itself was likely to be earlier, possibly Roman, in date (White 1982: 28). The cut grooves were transverse, and only occurred on the outside.

<White 1982 F28> (<ae84>) was a copper-alloy hook with attachment fitting on one end, presumably for suspension. The length of the hook was 58 mm, and the width at the 'hooked' end was 17.5 mm. The diameter of the rod was circular and measured 2.5 mm. The object was decorated with grooves and notches. It was deposited in the pre-timber phase, between the mid- and late ninth centuries (White 1982: 29).

<White 1982 F29> (<ae102>) was one end of a bent copper-alloy pin with a circular section measuring 1 mm in diameter, which develops into a square section at the point. The surviving length was c. 23 mm. It was found in the pre-timber phase, between the mid- and late ninth centuries (White 1982: 29-30).

<White 1982 F30> (<ae120>) were three fragments of a heavily corroded circular ring. They were found in the pre-timber phase of the mid- and late ninth centuries. The pieces were a little too small to make a reconstruction of the original object, but in all likelihood it was not dissimilar to wp71 <ae41>, or f72 <ae417>, <ae262> or <ae259> (White 1982: 30).

<White 1982 F31> (<ae151>) was identified as part of a copper-alloy pin with a small globular head (White 1982: 30). It was found in the pre-timber phase, dated to before c. 870. The object measured 28 mm in length, and the head was c. 2.5 mm long, and 3 mm wide. There was no collar visible between the head and the pin, which as a diameter of c. 2 mm, tapering in but then suddenly widening again at the opposite end, where it broadens out to c. 2 mm again. The thickening may be caused by a different degree in working, such as the pin being hammered into shape but abandoned before the tip was reached. Alternatively it could be the results of corrosion or variations in metal composition (White *pers. comm.*).

<White 1982 F32> (<ae168>), found in timber phase III dated to c. 930-970, was a lightly corroded circular-sectioned rod with grooved decoration, or an incised 'collar', at one end, at c. 1 mm from the end. The diameter of the rod was c. 4 mm, and its length measured c. 52.5 mm (White 1982: 30-31). The original function of the rod was unknown, but in its present state clearly represented hack-metal.

<White 1982 F35> (<ae261>) was another heavily corroded ring fragment, possibly another earring like wp71 <ae41>, or f72 <ae417>, <ae262> or <ae259>. The outside diameter of the entire ring measured 18 mm, and the surviving width was 10 mm; both attachment ends were broken off. The diameter of the ring itself was semi-circular, measuring c. 1.2 mm, but tapering towards a flattish rectangular section towards the end (White 1982: 32).

The following descriptions comprise a selection of the bars that may represent part-finished objects and the ingots:

<White 1982 F53> (<ae19>) were two strips of copper alloy that fit together, with scored decoration, possibly part of a copper-alloy bracelet. It was found in timber phase II-VI, and was thus deposited between the early tenth and mid-eleventh centuries (White 1982: 38). Both strips measured 26 mm in length, and their diameter was c. 1.5 x 5 mm. Decoration was in broad, transverse and diagonal bands of various angles, giving it an unusual effect.

<White 1982 F55> (<ae48>) were two irregularly shaped copper-alloy fragments, identified as "part of some decorative strapping" (White 1982: 39). It was indeed the case that they were intended for use in conjunction with leather or cloth straps or fastenings, and it was possible that they formed part of a horse harness (bridle?) or similar arrangement. They measured 54 mm and 59 mm in length respectively, had a flattened rectangular diameter, and retained three holes, with a diameter of 2-3 mm. They were deposited in timber phase V, belonging to the first half of the eleventh century (White 1982: 39).

<White 1982 F59> (<ae151>) was a possible copper-alloy ingot, measuring 27.5 mm in length and with a square diameter of 8 mm (White 1982: 40). Metallographic analysis confirmed its potential function, as it had no traces of further working after being cast (White

1982: 41). (Note: F31 <ae151> (White 1982: 30, 40) had the same find number because it came from a different excavation season; later convention of the CLAU utilised continuous numbering throughout the various excavation years but this had not yet been adopted in the early 1970s.)

<White 1982 F61> (<ae258>) was deposited in timber phase VI, the middle decades of the eleventh century. It was another rectangular-sectioned bar of copper alloy, tapering towards a flat end at either side, measuring 51 mm in length, and with a maximum width of 8 mm. It was possible that this was also a cast ingot, but no metallographic analysis was carried out to confirm this (White 1982: 41).

<White 1982 F62> (<ae260>) was another possible copper-alloy ingot, measuring 23 mm in length, and with a square diameter of 6.5 mm, similar in shape and size to F59 <ae151B>. It was discovered in timber phase VI, or the middle decades of the eleventh century (White 1982: 41-42).

<White 1982 F64> (<ae283>) was a possible partially finished hook, consisting of a square sectioned rod of copper alloy with a slightly hooked end that tapers to a point. It measured 68 mm in length, and the hook had a diameter of c. 8 mm. The square section of the rod measured c. 3 mm. It was deposited in timber phase VI, or the middle decades of the eleventh century. Metallographic analysis indicated a high degree of working, with some evidence of porosity (White 1982: 42-43).

<White 1982 F66> (<ae288>) was another possible copper-alloy ingot, similar in shape and size to <ae260> and <ae151B>. It measured c. 24 mm in length, and had a square diameter of c. 8 mm. It was deposited in timber phase VI, or the middle decades of the eleventh century (White 1982: 43).

<White 1982 F67> (<ae301>) was another square sectioned rod of copper alloy, with a simple grooved line on one side, measuring 51 mm in length and with a diameter of 8 mm. It was deposited in timber phase VI, or the middle decades of the eleventh century (White 1982: 44). It was possible that this also represents an ingot, like <ae260>, <ae151B> and <ae288>.

<White 1982 F69> (<ae363>) was deposited in timber phase VI, or the middle decades of the eleventh century. It was a whole collection of scrap metal including a possible ingot, some melting waste, wire, bars and sheet (White 1982: 44-45).

In addition, the following evidence for silver-working activity from Flaxengate was not included in White's (1982) dissertation:

<Ag1>, a piece of silver wire, was found in a late Anglo-Saxon spit, dated to the late tenth to late eleventh century (Mann *pers. comm.*).

A single coin-die for a penny of Æthelred II, <fe2547>, was also found in Lincoln (Blackburn and Mann 1995). Its significance is discussed in chapter 4.

Stearns *et al.* (forthcoming) also mention a silver bracelet, and a silver ring.

A number of clay and stone moulds were retrieved from the site as well, mostly for casting ingots, with an additional one or two for casting finished objects (Bayley 1979: 2). A stone mould for finished metal artefacts (AM785241), as well as five stone ingot moulds were subjected to detailed analysis. Of these, AM875235 was not analysable, and AM785238 may never have been used. AM785237 and AM785239 were used for silver, although they did contain traces of copper, zinc and lead too, which were interpreted as impurities, alloying, or debasing elements. AM785237 and AM785240 also contained traces of bromine, a silver corrosion product (Bayley 1984: 1). The identification of silver working was surprising in the context of the high quantity of copper alloy artefacts, and crucibles used for copper alloy working from the site, but this could possibly be explained by the suggestion that base metals were cast by pouring the molten metal into a groove in the ground (Bayley 1984: 1-2). The mould for finished artefacts (AM785241) contained traces of lead or pewter (Bayley 1984: 2). See notes under Flaxengate p70 <pb13>.

11.3: Wigford

11.3.1: dm72 (Dickinson's Mill 1972)

No dress accessories were found on this site. The only possible late Anglo-Saxon metal object was an iron knife (<fe7>), measuring 40 mm in length and 11 mm in width. The knife was found in a mid-eleventh century pit (Mann *pers. comm.*). A single late Anglo-Saxon horseshoe was also found (<fe6>).

11.3.2: hg72 (Holmes Grainwarehouse)

Two unfinished and undecorated copper-alloy finger-rings were found on this site, <ae50> and <ae12>. Both were found in a late Anglo-Saxon dump containing a fair amount of eleventh-century pottery, and dated to the early to mid eleventh centuries (Mann *pers. comm.*). <Ae50> (fig. 28) was a tapered strip measuring 43 mm by 4.5 mm, and less than 1

mm thick. <Ae12> was another unfinished finger ring, consisting of a tapered strip that was broken in four pieces, measuring 8 x 2 mm, 6 x 3 mm, 12 x 4 mm and 16 x 4 mm. All fragments were less than 1 mm thick.

<Ae5> was a copper-alloy strap-end with zoomorphic terminal, probably of late Anglo-Saxon or viking date. This object was near complete, only the top corner being broken off at the attachment end. The object was crudely cast and bears punched ornament, probably representing a multi-headed strap-end of Thomas type 4. It measured 51 mm in length, c. 11 mm in width, and had a maximum thickness of 4 mm. Parallels are known from Scandinavia, Ireland, Iceland, and other areas of viking settlement in England (Steane *et al.* 2001: 130), such as PAS LIN-42F813 from Saltfleetby St Clement in East Lindsey, or Thomas 2001: 45; fig. 4.6b, an unprovenanced example from North Yorkshire. It was found in a late Anglo-Saxon dump containing a fair amount of eleventh-century pottery, which was dated to the early to mid eleventh centuries (Mann *pers. comm.*).

<Ae49> was a complete copper-alloy hexagonal bell with a cusped bottom and a double row of ring-and-dot decoration along the lower edge. The attachment end was still present, and measured 7 mm in height and 6 mm across. This was separated from the bell by a 2 mm wide collar; the entire object was 29 mm in height, and measured 23 mm in width. The iron clapper, albeit corroded, was still present. This bell displays very strong similarities to an almost identical example from Caithness, whilst other similar bells have been found across the area of viking settlement on the British mainland, as well as in Iceland and on the Isle of Man (Steane *et al.* 2001: 130). This bell was residual, and was found in an eleventh-century context (Steane *et al.* 2001: 130, fig. 8.33), containing a fair amount of eleventh-century pottery (Mann *pers. comm.*).

<Ae1> was a conical copper-alloy bell, deposited in a medieval levelling layer.

<Ae58> was an unstratified copper-alloy brooch of late tenth- to eleventh-century date, with traces of gilt on its surface (Mann *pers. comm.*).

<fe28> was a tin-plated iron key of late Anglo-Saxon date, and a knife of late Anglo-Saxon date was also recorded on the site (<fe20>).

In addition, two ingot moulds were retrieved from the site, one made of fired clay and the other of stone (AM785243). Both were probably used for copper alloys or impure silver (Bayley 1984: 1-2).

11.3.3: sb85 (St Benedict's Square 1985)

Sb85 produced a polyhedral-headed pin made of copper alloy, <64>. The head was 4 mm wide and 4 mm long, ending in a flat collar of equal width, measuring 1 mm in thickness. The pin itself was circular in section, and measured 1.5 mm in diameter, tapering to an end, and almost complete at 6.9 mm (including the head). The head seems to have been decorated with punched decoration on the flat lozenge shaped sides, consisting of five rings arranged in cross-shape around a central ring. It was found in a late Anglo-Saxon dump, dated to the early to mid-tenth century (Mann *pers. comm.*). A knife identified as late Anglo-Saxon was also found on this site (<64>).

11.3.4: z86, ze87 (St Mark's Station 1986, 1987)

<676> was a lead seal pendant, possibly late Anglo-Saxon but possibly also early post-Conquest, up to twelfth-century, in date. The dating was mostly derived from the late Anglo-Saxon context in which it was found. Although intrusive material was not unusual in some of the pits on this site, the pit fill containing this seal did not include any other intrusive medieval material (Mann *pers. comm.*). It was roughly circular with a double concentric border, potential lettering, and another circle around a central boss. At the top there was a protruding attachment end, basically a rod measuring 9 mm in length with a square diameter of 4 mm and a pierced hole at the top. The attachment end was decorated with parallel lines. The back was undecorated. The object was bent and damaged, with an additional accidental hole between the first and second concentric ring (when counting from the middle). The object measured 18 mm in width and 20 in length, and was c. 1 mm thick. It was suggested this could be a cloth seal re-used as a pendant. It was found in a late eleventh- to early twelfth-century pit containing a high percentage of tenth-century pottery (Mann *pers. comm.*). Leahy (*pers. comm.*) agreed with a late Anglo-Saxon date on the basis of the preference for lead jewellery in those days, although he could not suggest a direct parallel. However, similar objects were also retrieved from Coppergate in York, that were based on silver examples found in Scandinavia (Bayley 1992: 780 fig. 4.148). The casting flash and sprue was still attached in these examples, and were therefore definitely made at Coppergate. Although they cannot be proven to be from the same workshop as the Lincoln object, they certainly represent the same type of artefact.

A hexagonal copper-alloy bell with a cusped bottom (find number unknown), published by Jones *et al.* 2003: 296, was also found at z86. Unfortunately the published measured drawing was not scaled, but it was described as 'small'. The drawing suggests it was

undecorated, but otherwise standard for contemporary 'Norse' bells in terms of its cusped bottom, hexagonal shape, and flat attachment loop. This bell, assigned a tenth-century date, was found in a much later context (Mann *pers. comm.*).

One or two late Anglo-Saxon knives were also found on this site, one of which was labelled (<92>).

11.3.5: zea95, zeb95 (St Mark's Station 1995)

<443> was a buckle (and buckle-plate), of typical viking 'D-shaped' form, made of copper alloy but originally with an iron pin, causing very pronounced corrosion, especially near the buckle plate. The object was very corroded and unfortunately never cleaned, but on the least corroded side some traces of cross-banded decoration were still visible, whilst the x-ray revealed some faint possibly zoomorphic decoration on the buckle itself, near the lip. The buckle measured 10 mm across near the lip, and 3 mm in diameter at its narrow end. The outer measurements of the buckle were 33 mm x 29 mm, and the inner measurements were 29 x 19 mm. The buckle plate was 25 mm wide and 24 mm high, with a thickness of 10 mm. It was found in a late Anglo-Saxon ash layer dated to the mid ninth to early tenth centuries (Mann *pers. comm.*). This type of buckle found its roots in the tenth century in *Borre*-style buckles, but became increasingly crude, sometimes only retaining the shape but leaving the decoration out (Leahy *pers. comm.*).

<442> was a convex disc-brooch with possible *Jellinge*-style interlace decoration. This object was unfortunately not cleaned either so did not warrant photographing; instead the x-ray was available for study. It was slightly convex, but the decoration could not be made out precisely due to the state of the object. It measured 32 x 33 mm, and was c. 6 mm thick. It was assigned a late ninth- or tenth-century date. It was found deposited in a late Anglo-Saxon silt layer, which sealed postholes belonging to a possible timber building assigned a mid to late ninth- to mid to late eleventh-century date (Mann *pers. comm.*). It was entered onto the finds card of the CLAU as *Borre* style, but Leahy (*pers. comm.*) disagreed vehemently with the idea that this was *Borre*, and preferred *Jellinge* style, suggesting parallels from Cottam and Haldenby, and suggests the dished (convex) form suggests it could be Scandinavian manufacture.

Zeb95 <413> and <414> were late Anglo-Saxon iron padlock keys. A knife of possible late Anglo-Saxon date was also found on this site (zea95 <40>). Finally, a late Anglo-Saxon to early medieval fragment of a set of balances, possibly gilt (zea95 <16>), was found here too.

11.3.6: sm76 (St Mark's Church)

A single ansate brooch of seventh to ninth century date was found on this site. It measured c. 80 mm in length, and was probably produced prior to the arrival of the vikings (Jones *et al.* 2003: 154). This ansate brooch was found in a thirteenth-century pier base at the north of the nave. A very similar brooch was found on the 'viking' site of Domburg, the Netherlands (Mann 1986: 41).

<Fe365>, listed in the catalogue of the CLAU, was an unfinished iron hooked tag.

<Ae89> was another copper-alloy object, consisting of a twisted piece of wire, 40 mm long, and 5 mm x 3.5 mm in diameter, with a zoomorphic terminal, c. 12 mm in length, and with a conical diameter that measured 5 mm in width and 4.5 mm in height. The eyes are incised, with stylised ears laying flat in the creature's neck, at the start of the twisted wire body. The animal was biting into a possible metal rod or other form of extension that was unfortunately broken off; only a length of c. 2.5 mm survives. The function of this object was unknown, although it bears a certain resemblance to cwg86 <1533>, in which case it may be an arm of a pair of scales. Leahy (*pers. comm.*) suggested it could be a straightened part of an Anglo-Scandinavian bangle, possibly eleventh-century in date, and possibly *Urnes* style. It is also possible it was a piece of scrap-metal.

Finally, a burial assigned to period VIII (mid-tenth to mid-eleventh century) reportedly contained a twisted copper-alloy bracelet and a fragment of copper alloy tweezers, but they were Roman in type and may have been residual; a number of other burials contained residual Roman coins. However, grave finds were not entirely uncommon for the late Anglo-Saxon period, as was clear from the evidence of another grave in the same cemetery, which contained a limestone spindle whorl with incised ornament, typical of tenth and eleventh century finds from Flaxengate (Mann 1986: 41). It was therefore possible that the bracelet was late Anglo-Saxon rather than Roman (Mann *pers. comm.*).

11.3.7: bwe82 (Brayford Wharf East)

A late Anglo-Saxon knife was found at this site (<59>)

11.3.8: m82 (Monson Street)

<30> was a key of late Anglo-Saxon to medieval date.

11.3.9: hs90 (170 High Street)

<34> is a possible hooked tag, made of copper alloy.

11.4: Butwerk

11.4.1: be73 (Broadgate East)

Excavations here yielded a copper-alloy hooked tag <ae37>, measuring 20 mm in length, and 12 mm in width. The object was nearly complete, although the top right corner was damaged. The body was triangular, with two circular holes in the corners at the widest end, and faint traces of a double row of decorative punched lines still visible running along parallel to the edge and around the holes, and possibly in the middle of the triangular body. Its thickness was less than 1 mm. A sketch from the find card of the CLAU shows the decoration more clearly, and emphasises the similarities between this hooked tag and F72 <ae213>. It was found in a post-medieval dump (Mann *pers. comm.*). See fig. 25.

<Ae10> was a possible unfinished hooked tag made of copper alloy, recorded in the catalogue of the CLAU. No other information was recorded.

In addition, <ae164> was a ringed pin, now on display in The Collection. The length of the entire pin was 91 mm. The head was polyhedral, not dissimilar to F72 <ae290>, with four recessed holes on the lozenge-shaped front and back faces arranged in the shape of a cross. The head measured 6 mm in width, and 5 mm in height. There was a faint collar between the head and the pin itself, c. 1 mm wide, and protruding by no more than 0.5 mm. The ring was rectangular in diameter, c. 1.7 mm deep, with a decorated face that measured 1.5 mm in width, slightly tapering towards the back where it measured only 1 mm in width. The decoration on the front of the ring consisted of seven evenly spaced recessed oval holes, on average 1.5 mm in width and 1 mm in height, and no deeper than 0.5 mm. The length of the pin underneath the collar was 86 mm. The diameter of the pin was circular, and measured 4 mm towards the top near the head, tapering slowly to a point. It was found associated with a medieval building, dated to the early to mid thirteenth century (Mann *pers. comm.*). Ring-headed pins are commonly attributed to the ninth to eleventh centuries.

<Fe168> is a late Anglo-Saxon knife.

11.5: 'Lincoln'

A lead-alloy disc-brooch with a diameter of 37 mm was found in Lincoln as well. Its raised central boss is decorated with three backed crescents, surrounded by eleven circular lobes that project from the edge. Each lobe is roughly 5 mm in diameter. The lobes cover only c. two-thirds of the circumference of the brooch. The rest is missing, leading to its interpretation as a miscast, which implies brooches of this type were manufactured in Lincoln. Unfortunately the exact provenance is unknown, and the brooch was only recorded as coming 'from Lincoln' (Frick 1992: 376; Leahy and Couth 1987).

APPENDIX 12: GAZETTEER OF METALWORK FINDS FROM LINDSEY, KESTEVEN AND HOLLAND (per artefact type)

The artefacts below are collated from the PAS database, with additional information from Brown 2006 (for Torksey), Evans and Loveluck (eds) 2009 (for Flixborough), and various (un)published excavation reports. Artefact descriptions are based directly on those in the various sources. As the majority of finds are surface-finds, their dating rests entirely on art-historical grounds. As many artefact categories are difficult to date with precision, all finds with a date range that spans the eighth to eleventh centuries are included. This also provides a broad chronological context for the late Anglo-Saxon material.

12.1: Pins

The excavations at **Flixborough** produced no fewer than 521 pins, made of non-ferrous metals and iron (Rogers 2009c: 32). The 406 non-ferrous pins included globular-headed pins, polyhedral-headed pins, biconical-headed pins, spiral-headed pins, headless pins, disc-headed pins, triangular or trapezoidal-headed pins, inverted conical-headed pins, faceted dome-shaped headed pins, linked pins and other unclassified examples. The iron pins, 115 examples in total, likewise came in a variety of shapes. Their chronology probably covered the entire occupation sequence at Flixborough, from the seventh to the tenth or early eleventh centuries. They have been extensively discussed and catalogued in Rogers (2009c), and will not be repeated in any detail here.

12.1.1: Pins with globular, (bi)conical or 'pear-shaped' heads

12.1.1.1: Pins with globular, (bi)conical or 'pear-shaped' heads from Lindsey

The PAS lists a copper-alloy pin (NLM502) found in the parish of **Alkborough**. It had a rounded head and no collar, and measured 54.3 mm in length. The diameter of the head was 5.8 mm. This example was dated to the seventh to ninth centuries.

From Low Santon near **Appleby** comes SWYOR-A98A70, a copper-alloy pin with biconical head, measuring 7.5 mm in diameter, and with a collar separating the head from the shaft, which was circular in section. The length of the pin was 42.8 mm. On the basis of a similar but stratified example from Suffolk (West 1998), it was assigned a date between the seventh and tenth centuries.

A similar pin, also from Low Santon near **Appleby**, was SWYOR-A8C0F5. Again, the head was biconical, with a diameter of 9.2 mm. A collar separated the head from the shaft, which was circular in section. The whole pin measured 46.1 mm in length. It was dated to the ninth or tenth centuries on the basis of similarities to a stratified pin from York (Mainman and Rogers 2000: 2579, no. 10459), found in a ninth- or early tenth-century context.

The PAS reports the discovery of a ninth- to eleventh-century copper-alloy pinhead from the parish of **Barton-upon-Humber** in North Lincolnshire. YORYM1512 was globular, and measured 16.7 x 11.9 mm. The apex was slightly flattened, and the head was decorated with incised wavyform decoration.

The PAS lists a cast copper-alloy pin with globular, flat-topped head with a diameter of 8.9 mm, found at **East Kirkby** in East Lindsey (NCL-834072). The pin itself was circular in diameter and measured 1.9 mm in diameter. The pin was separated from the head by a collar. It was broadly dated to the period 400-1400, but similar pins have been dated to the late Anglo-Saxon period.

A pin with a conical head decorated with two incised concentric circles (NCL-BB4EB4) was discovered in **East Kirkby**. No precise date range was recorded. It measured 47 mm in length, and 2 mm in thickness.

NLM25, which measured 19 mm in length, was a copper-alloy biconical and uncollared pin dated to the period 700-900 AD, from the parish of **Elsham**.

NLM26, which measured 18.3 mm in length, was a copper-alloy biconical and uncollared pin dated to the period 700-900 AD, from the parish of **Elsham**.

NLM2882 was a copper-alloy biconical and collared pin dated to the period 700-900 AD, from the parish of **Elsham**. It measured 45.5 x 9.7 mm.

NLM2919 was a copper-alloy biconical and collared pin dated to the period 700-900 AD, from the parish of **Elsham**. It measured 15.9 x 9.7 mm.

NLM4234 was a copper-alloy collared biconical pinhead with ring-and-dot decoration, dated to the eighth century, from **Elsham**. It measured 30.1 x 9.7 x 2.1 mm.

NLM4919 was a copper-alloy biconical pinhead, collared, with ring-and-dot decoration, from **Elsham**. It measured 30.1 x 9.7 x 2.1 mm. It was dated to 700-800.

NLM2918 was a collared pin with a pear-shaped head from the parish of **Elsham**. It was dated to 700-900 AD, and measured 24.4 x 8.1 mm.

NLM4233 was an eighth-century copper-alloy pin from **Elsham** with a crosshatched pear-shaped head. It was collared, and measured 16 x 9.7 x 2.3 mm.

NLM4920 was an eighth-century copper-alloy pear-shaped pinhead from **Elsham**. It was crosshatched and collared, and measured 16 x 9.7 x 2.3 mm.

From **Gainsborough** was NLM2944, an eighth- to ninth-century copper-alloy collared pin with biconical head. It measured 15.4 x 10.3 x 2.2 mm.

NLM4283 was a copper-alloy collared biconical-headed pin from **Grimsby**, dated to the eighth century. It measured 29.8 x 10.8 x 2 mm.

The *PAS* reports the discovery of an early medieval collared pin with globular head from the parish of **Hatton** (YORYM-7DD6B0). No measurements were recorded, and it was broadly assigned to the period 410-1066.

A biconical-headed collared copper-alloy pin with medial band was found at **Hatton**. LIN-125224 measured 22.5 in length, and the head 10.1 in diameter. It was assigned an eighth- to ninth-century date.

LIN-3D8382 was another biconical-headed pin from **Hatton**. This one too was made of copper alloy and had a medial band and a collar. It measured 16.3 mm in length, and the pin 2 mm in diameter.

Also from **Hatton** was LIN-FD8DB2, a collared and biconical-headed copper-alloy pin of eighth- to ninth-century date. The whole object measured 18.7 mm, the head was 7.7 mm in diameter, and the pin itself measured 1.4 mm in diameter.

From **High Risby** comes NLM-F3CFD5, an eighth- to ninth-century copper-alloy pin with a globular head, with a flattened top with an incised cross. The head was decorated with deep radiating grooves. Below the head was a collar. The circular shaft was incomplete. The pin was 16.1 mm in length, and the head measured 8.5 x 7.5 mm.

The *PAS* reports another pin from **Horncastle**. NLM885 had a biconical head and no collar, and was dated to the eighth or ninth centuries. It measured 19.5 x 7 mm.

The *PAS* reports a pear-headed copper-alloy pin with drilled ring-dot decoration from the parish of **Horncastle** (NLM-477932). Its surviving length was 46.9 mm, its head had a maximum width of 8 mm, and its diameter was 2.1 mm. The pin had a collar separating the head from the shaft. It was assigned a date between 850 and 1066.

The *PAS* reports the discovery of NLM-553422, a copper-alloy collared pin with biconical head, dated to the period 720-850 AD. It was found in **Kirton in Lindsey** in North Lincolnshire. It measured 28.1 x 9.1 mm.

NLM7238 are **two** eighth-century copper-alloy biconical pins from **Laceby**, each measuring c. 31.7 x 8.7 mm.

The *PAS* reports a silver pin with flattened biconical head (NLM-9E9AA6) from the parish of **Market Rasen** in East Lindsey. The length was 20.5 mm, and the diameter of the head 6.4 mm. It was assigned an eighth- to eleventh-century date. See appendix 14.

The *PAS* reports the discovery of a copper-alloy pin of eighth- to ninth-century date from the parish of **Marton** in West Lindsey. LVPL1231 had a rounded undecorated head with a diameter of 11 mm, and a straight shaft; the object measured 26 mm in length.

Also from **Marton** in West Lindsey was LVPL1230. This example also had a rounded head but was decorated with spiral twists, and a border of small squares around the circumference. The head measured 13 mm in diameter. The shaft was circular in section, and the whole object measured 28.5 mm in length. It was made of copper alloy, and assigned an eighth- to ninth-century date.

NLM10 was an eighth- to ninth-century copper-alloy pin with a bulbous head from **Melton Ross** in North Lincolnshire. Its head was decorated with ring-and-dot motifs. It measured 33 x 6.9 x 1.5 mm.

NLM925 was an eighth- to ninth-century copper-alloy pin with a biconical head from **Melton Ross** in North Lincolnshire. The head was separated from the shaft by a collar. It measured 20.2 x 8.6 mm.

NLM926 was another eighth- to ninth-century copper-alloy pin with a biconical head from **Melton Ross** in North Lincolnshire. The head was separated from the shaft by a collar. It measured 20.3 x 7.6 mm.

NLM927 was an eighth- to ninth-century copper-alloy pin with a pear-shaped head from **Melton Ross** in North Lincolnshire. The head was separated from the shaft by a collar. It measured 73 x 6 mm.

NLM-B25CB0 was a copper-alloy collared globular pinhead with a globular head from **Middle Rasen** in East Lindsey, dated to c. 720-850. It measured 8.8 x 6.6 mm.

From **Nettleton** was a complete but bent copper-alloy pin with undecorated biconical head and a medial band, and a collar underneath the head (NLM-D45061). The complete pin measured 57.1 mm, and the head had a diameter of 7.8 mm. It was assigned an eighth- to early ninth-century date.

NLM2793 was a biconical collared copper-alloy pin dated to the period 700-900, and found in **Nettleton**. It measured 39.3 x 8.9 x 1.8 mm.

NLM2794 was a biconical collared copper-alloy pin dated to the period c. 700-900, and found in **Nettleton**. It measured 19.3 x 8.7 mm.

NLM2795 was a biconical collared copper-alloy pin dated to the period c. 700-900, and found in **Nettleton**. It measured 26.5 x 7.5 mm.

NLM2796 was a biconical collared copper-alloy pin dated to the period c. 700-900, and found in **Nettleton**. It measured 11.9 x 8 mm.

NLM2797 was a biconical collared copper-alloy pin dated to the period c. 700-900, and found in **Nettleton**. It measured 38.6 x 8.8 mm.

NLM2798 was a biconical collared copper-alloy pin dated to the period c. 700-900, and found in **Nettleton**. It measured 20.1 x 8.3 mm.

NLM2799 was a biconical collared copper-alloy pin dated to the period c. 700-900, and found in **Nettleton**. It measured 23.1 x 8.3 mm.

NLM2813 was a collared copper-alloy pin dated to the period c. 700-900, and found in **Nettleton**. It had a pear-shaped head. It measured 20.5 x 10.3 mm.

NLM2802 was a collared copper-alloy pin dated to the period c. 700-900, and found in **Nettleton**. It had a pear-shaped head. It measured 31.1 x 8.1 mm.

NLM2801 was a copper-alloy biconical and collared pin dated to the period c. 700-900, and found in **Nettleton**. It measured 9.7 x 7 mm.

NLM2800 was a collared copper-alloy pin with a pear-shaped head with spiralling incisions, dated to c. 700-900, found in **Nettleton**. It measured 23 x 7.3 mm.

LIN-0D6E31 was an eighth-century collared copper-alloy pin with an undecorated bulbous head from **Roughton** in East Lindsey.

SWYOR-4B5A87 was an eighth- to ninth-century copper-alloy pin with a biconical head, the upper half of which was slightly faceted, and a slight collar from **Scotton** in West Lindsey. It measured 14.5 x 8.4 mm.

The *PAS* lists a copper-alloy pin of eighth- to eleventh-century date from the parish of **South Ormsby cum Ketsby** (LIN-5610F4). The shaft of the pin was circular in section, with a diameter of 2 mm; the globular head had a diameter of 9 mm and was separated from the shaft by a small collar. The surviving length of the pin was 43 mm.

The *PAS* reports the discovery of a copper-alloy pin with globular head from the parish of **Swinhope** in West Lindsey (NLM7123). The head measured 7.6 x 7.8 mm, and had a double line of ring-and-dot motifs around its circumference. Only a short section of the pin itself remains, leaving a total length of 20.6 mm. It was assigned an eighth- to eleventh-century date.

NLM5409 is a copper-alloy pin dated to the period 700-900 AD from **Tattershall**. It has a biconical head, and a collar. It measures 22.5 x 8.3 x 1.9 mm.

The *PAS* reports a second copper-alloy pin with biconical head, dated to the period 700-900 AD, from **Tattershall** (NLM5408). It measured 34.8 x 10.5 x 2.3 mm.

The *PAS* reports the discovery of a pin with a biconical head and a collar, dated to the period 700-900 AD, and made of copper alloy, from **Tattershall** in East Lindsey (NLM5406). It measured 23.3 x 9.6 x 1.8 mm.

NLM5407 from **Tattershall** is a copper-alloy pin with biconical head and a collar, dated to before 900 AD. It measured 30.9 x 9.1 x 1.5 mm.

A copper-alloy pin with a pear-shaped head and a collar, dated to the period 700-900, was found in **Tattershall** (NLM5405). It measured 21.1 x 7.4 x 1.3 mm.

From **Thimbleby** was an eighth- to ninth-century cast copper-alloy pin (YORYM-E85898), with a globular head above a collar consisting of two incised lines. The pin itself had a circular section. Its length was 84.6 mm, and the head had a diameter of 8.6 mm.

YORYM-C18DE6 was a second eighth- to ninth-century cast copper-alloy pin from **Thimbleby**. It had a globular head with stamped ring-and-dot design above a collar. The section of the pin itself was circular, and measured 1.3 mm.

NLM4767 was an eighth- to ninth-century copper-alloy pin with a collar separating the head from the shaft, found in the parish of **Thimbleby**. The pinhead was biconical with a median band, and the object measured 26.3 x 8.3 mm.

Brown 2006: 272 was a collared copper-alloy pin with a globular head from **Torksey**, decorated with three horizontal grooves around centre. The upper half was divided into three equal zones by double grooves with three dots in each, whilst the lower half was divided into three zones by double grooves with two ring-and-dots in each. It measured 18.1 mm in length, and the shaft had a diameter of 2.5 mm. The head measured 10.0 x 10.2 mm.

The parish of **West Rasen** produced a collared copper-alloy pin with globular head, of eighth- to ninth-century date (NLM-C999F4). The length of the pin was 43.4 mm and the width of the head was 8.0 mm.

LIN-60E3D6 was a copper-alloy pin with a biconical head, dated to the eighth or ninth centuries, from **Willoughby with Sloothby**. It measured 28 x 1.9 x 7.6 mm.

LIN-60DF43 was a copper-alloy pin with a biconical head, dated to the eighth or ninth centuries, from **Willoughby with Sloothby**. It measured 28 x 1.6 x 9.5 mm.

LIN-60D854 was a copper-alloy pin with a biconical head, dated to the eighth or ninth centuries, from **Willoughby with Sloothby**. It measured 41 x 2.3 x 9.5 mm.

LIN-60CCC3 was a copper-alloy pin with a biconical head, dated to the eighth or ninth centuries, from **Willoughby with Sloothby**. It measured 34 x 2.4 x 9.7 mm.

LIN-60BCF5 was a copper-alloy pin with a biconical head, dated to the eighth or ninth centuries, from **Willoughby with Sloothby**. It measured 25 x 2.5 x 10 mm.

The parish of **Worlaby** in North Lincolnshire yielded two eighth- to ninth-century copper-alloy pins. NLM629 had a pear-shaped head and a collar between the head and the shaft. It measured 20 x 8.9 x 1.7 mm.

Also from **Worlaby** was NLM628, another copper-alloy pin, this time with a globular head, and likewise with a collar dividing the head from the shaft. It was also assigned to the eighth or ninth century, and measured 23.4 x 5.5 x 1.8 mm.

SWYOR-3DEE70 was an eighth- to ninth-century copper-alloy pin with traces of gilding, a globular head and a collar separating the head from the shaft. It was found in the parish of **Wragby** (appendix 13).

YORYM-E0A2A6 was an eighth- to ninth-century copper-alloy pin with a biconical head from **Wragby** in East Lindsey. It measured 17.2 x 7.7 mm.

12.1.1.2: Pins with globular, (bi)conical or 'pear-shaped' heads from Kesteven

NLM5652 was an eighth- to ninth-century pin from the parish of **Aswarby and Swarby** in North Kesteven. It had a biconical head with a median band, and was collared. It measured 20 x 10.4 x 2.3 mm.

The PAS lists a copper-alloy pinhead of eighth- or ninth-century date from **Folkingham** in Kesteven (LIN-679D56), with a small collar below the biconical flattened head, and a circular shaft, which was broken off shortly below the collar. It measured 18 mm in length, and the diameter of the head was 10 mm.

LIN-6811B7 was a copper-alloy pin dated to 600-900 from the parish of **Folkingham** in Kesteven. The shaft measured 14 mm in length, and the diameter of the head was 8 mm.

LIN-2B1374 was an eighth- to ninth-century copper-alloy silvered pin from the parish of **Folkingham** in Kesteven, with a slightly flattened bulbous head, and a small collar. It measured 15 x 1.5 x 8 mm. See appendix 14.

NLM6207 was an eighth-century copper-alloy biconical pinhead from **Folkingham** in Kesteven. It measured 12.4 x 8.7 mm.

NLM6112 was an eighth-century copper-alloy pin with a collar and a globular or biconical head from **Folkingham** in Kesteven. It measured 45.1 x 7.5 x 2.4 mm.

NLM6113 was an eighth-century copper-alloy collared pin from **Folkingham** in Kesteven, with a globular or biconical head. It measured 24.8 x 7.9 x 1.7 mm.

LIN-89F2C3, an eighth- to ninth-century copper-alloy pin from **Heckington** in North Kesteven, has a biconical head with a medial band, and a small collar beneath the head. It measured 17.7 x 1.7 mm; and the head was 8.8 mm across.

NLM734, from **Hougham** in South Kesteven, was a globular uncollared pinhead dated to 700-900, decorated with ring-and-dot motifs. It measured 21.2 x 9.7 x 9 mm.

NLM736 from **Hougham** in South Kesteven was dated to 700-900. It consisted of a copper-alloy pear-shaped pinhead, decorated with ring-and-dot motifs. The pin was not preserved. The object measured 10.6 mm in length.

The PAS lists an eighth- to ninth-century copper-alloy pin with a plain globular head and a ridged collar between the head and the circular pin found in the parish of **Lenton, Keisby and Osgodby** in North Kesteven (NLM-8FAA27). It measured 22.2 mm in length, and the head was 7.8 mm wide, whilst the pin had a diameter of 1.6 mm.

NLM6532 was a silver pin dated to 410-1066 from the parish of **Lenton, Keisby and Osgodby** in North Kesteven. It had a spherical head with a diameter of 6.4 mm, and was 21.4 mm in length. See appendix 14.

NLM-DF5226 was a copper-alloy pin from the parish of **Lenton, Keisby and Osgodby** in North Kesteven of eighth- to tenth-century date, with a biconical head and ring-and-dot decoration.

NLM-DEA357, **two** pins from the parish of **Lenton, Keisby and Osgodby**, were assigned an eighth- to tenth-century date. Both had globular biconical heads, and were made of copper alloy. One pin was complete, and measured 57.7 mm in length, with a maximum width of 7 mm. The dimensions for the other were not recorded.

LIN-149827 was a copper-alloy pin from the parish of **Lenton, Keisby and Osgodby**, with a globular head with a flattened top, and a faint collar underneath the head. It was assigned an eighth- to ninth-century, and measured 16 x 2 mm.

The PAS lists another copper-alloy pin (LIN-38B7D6) with a globular head above a small collar from **Osbourne** in North Kesteven. Again this pin had a circular shaft, broken 34 mm below the head, and measured 43 mm in length, with a diameter of 9 mm (head). It was assigned an eighth- or ninth-century date.

LIN-208391 from **Osbourneby** in North Kesteven was dated to the eighth or ninth century in date, and measured 60 x 3 x 7 (head) mm. It had a flattened bulbous head with a collar set between two narrowed bands below.

LIN-2000B2 was another eighth- to ninth-century collared copper-alloy pin from **Osbourneby** in North Kesteven, with a biconical head, measuring 8mm in diameter at its widest point. Beneath the head there was a collar. Its length was 45 mm.

LIN-3084D3 was a copper-alloy pin dated to c. 410-1066 from **Osbourneby** in North Kesteven, with an undecorated sub-conical head. It measured 32 x 9 mm.

LIN-307CB5 are **four** copper-alloy sub-conical undecorated pinheads dated to 410-1066 from **Osbourneby** in North Kesteven; dimensions were not recorded.

LIN-306CE5 from **Osbourneby** in North Kesteven was a copper-alloy plain conical pinhead and partial shaft, dated to the period 410-1066. It measured 26 x 7 mm.

12.1.1.2: Pins with globular, (bi)conical or 'pear-shaped' heads from Holland

No such pins have been recorded for Holland.

12.1.2: Pins with polyhedral or faceted heads

12.1.2.1: Pins with polyhedral or faceted heads from Lindsey

The village of Low Santon in the parish of **Appleby** produced a copper-alloy pin with polyhedral head and circular shaft, assigned a middle Anglo-Saxon date. SWYOR-E9DBC4 measured 21.4 x 7.5 mm, and was 7 mm thick. There was a collar separating the head from the shaft. Six of the facets on the head are decorated with ring-and-dot motifs; the facet forming the top of the pinhead was undecorated. It was assigned an eighth- to mid ninth-century date on the basis of similarities to a stratified specimen from Suffolk (West 1998: 214).

NLM-F6C022 was a copper-alloy collared polyhedral-headed pin with ring-and-dot decoration on each side of the head, which was 7.9 mm wide. The surviving length of the pin was 28.0 mm. It was found in the parish of **Binbrook** in East Lindsey. It was dated to the eleventh century on the basis of similarities to a pin in Biddle 1990: 555, no 1433. Many other polyhedral-headed pins from this database are assigned to the eighth or ninth centuries, suggesting that this type of pin was in use over a long period of time.

The *PAS* lists a copper-alloy pin with polyhedral head and stamped ring-and-dot pattern, found at **Claxby** (NLM-98CEF4). Its surviving length measured 27.8 mm, and its head was 8.9 mm x 6 mm. It was dated to the eighth or ninth century.

NLM-F30EB3 was a copper-alloy pin from **Crowle**. Its polyhedral head, measuring 7.9 x 6.3 mm, was decorated with a ring-and-dot motif on each face. There was a collar separating the head from the incomplete shaft. The surviving length of the entire object was 20.4 mm. It was assigned an eighth- to ninth-century date.

The *PAS* reports a faceted pinhead and pin fragment from the parish of **Hatton** in East Lindsey. LIN-FDACA3 was made of copper alloy, and decorated with a ring-and-dot motif on each face. The pin was collared. The whole object measured 16.4 mm in length, and the diameter of the head was 8.1 mm. The diameter of the pin itself was 2.1 mm. It was assigned an eighth- to ninth-century date.

Another eighth-to ninth-century copper-alloy collared pin with a faceted pinhead with ring-and-dot decoration (LIN-23AA51) was found at **Hatton**. This one measured 19 mm in length, and the head measured 5.9 mm in diameter.

The *PAS* also reports the discovery of BUC-A5C873, a further polyhedral-headed pin from **Hatton** that was decorated with ring-and-dot patterns, three on the two main faces and a single one on the smaller faces. The shaft was broken, leaving a length of 31.8 mm. The head measured 5.4 x 8.9 mm. It was assigned a ninth-century date.

In **Healing** a copper-alloy polyhedral pinhead was discovered, decorated with ring-and-dot motifs (NLM5331). It was assigned a ninth-century date. The head measured 12 x 8.5 mm, and was 4.8 mm thick.

The *PAS* reports the discovery of a copper-alloy pin with polyhedral head from the parish of **Hibaldstow** in North Lincolnshire (NLM-E1CB73). It was assigned a date between 720 and 850 AD.

The *PAS* reports a cast copper-alloy polyhedral pinhead (LIN-AC7FF0) from the parish of **Keelby**. The pinhead was an 8 mm wide and 3 mm thick faceted cuboid, and had a collar below the head. It was decorated with four ring-and-dot motifs, and an additional ring-and-dot on either side panel. The pin itself was circular in cross-section. It was assigned an eighth-century date.

The *PAS* reports a copper-alloy polyhedral pinhead from the parish of **Keelby** in West Lindsey, broadly dated to 410-1066. LIN-7B0374 measured 12 x 9 x 7 mm, and had five overlapping ring-and-dot motifs on one of the sides, and two in a vertical arrangement on the remaining three sides. The lower faces each have a single motif, but as the motif was bigger than the faces it did not quite fit.

From **Keelby** as well was LIN-7B49E4, a copper-alloy pin with a faceted head and a single ring-and-dot decoration on each main face. The top of the head bears an incised cross, and there was a collar below the head. The head measured c. 7 x 7 mm, and the length of the entire object was 47 mm. It was assigned to the period 410-1066.

LIN-7B2BC2 was another copper-alloy pin with a faceted head, made up of two rows of four facets, and a further facet at the base from where the stem of the pin protrudes from a small collar, and a facet at the top. All facets save the bottom one bear a single ring-and-dot motif. The pin itself was circular in diameter, but bent and broken. The whole object measured 32 mm in length, and the head measured c. 6 x 7 mm. It was found in **Keelby** in West Lindsey, and was assigned an eighth- to ninth-century date.

NLM7255 was an eighth-century polyhedral-headed pin from **Kettlethorpe** in West Lindsey, made of copper alloy, and decorated with ring-and-dot motifs on each side. It measured 25.4 x 5.8 x 6.1 mm.

NLM7237 was a copper-alloy pin with polyhedral head from **Laceby**. It was assigned an eighth-century date. Its head was decorated with ring-and-dot motifs on each side, and it measured 21.7 x 4.1 x 4.6 mm.

Another copper-alloy pin with a polyhedral head was discovered in **Marton** in West Lindsey (LVPL1224). It measured c. 6 mm in width, with a ring-and-dot motif on each of the four main faces. The pin itself was faceted and circular in section, with a collar below the head. The whole object measured 33.4 in length. It was assigned an eighth- to early ninth-century date.

NLM9 was an eighth- to ninth-century copper-alloy pin with polyhedral head and ring-and-dot motifs from **Melton Ross**. It measured 32.4 x 5.5 mm.

NLM928 was an eighth- to ninth-century copper-alloy pin with a polyhedral head from **Melton Ross**. Its head was decorated with ring-and-dot motifs. It measured 37.5 x 6.7 mm.

NLM2792 was a copper-alloy pin with a polyhedral head decorated with ring-and-dot motifs, dated to the period 700-900 AD, and found in **Nettleton** in West Lindsey. It measured 25.4 x 7.8 x 5.8 mm.

NLM2791 was a copper-alloy pin with a polyhedral head, dated to the period c. 700-900, and found in **Nettleton**. The head was decorated with ring-and-dot motifs on the large surfaces. It was collared, and measured 31.4 x 6.3 x 5.7 mm.

NLM2788 was a copper-alloy pin dated to the period c. 700-900, and found in **Nettleton**. It had a relatively flat faceted head, with ring-and-dot motifs on the larger surfaces. It was collared and measured 48.5 x 9.6 x 5.6 mm.

NLM2789 was a collared copper-alloy pin dated to c. 700-900, and found in **Nettleton**, with a relatively flat faceted head, decorated with ring-and-dot motifs on the largest surfaces, and additional cross hatching. It measured 29.8 x 9.3 x 3.3 mm.

NLM2790 was a copper-alloy pin dated to the period before c. 700-900, and found in **Nettleton**. It was collared, and had a relatively flat faceted head, with dots drilled into all surfaces. It measured 28.4 x 11.3 x 4.5 mm.

NCL-A998D7 was a copper-alloy pin of eighth- to ninth-century date from **Revesby** in East Lindsey, with a polyhedral head. The two largest faces on either side of the head were decorated with three ring-and-dot motifs; the other faces have one centred ring-and-dot motif each. Below the head was a moulded collar. The object measured 6.6 x 4.4 mm.

From the parish of **Rigsby with Ailby** in East Lindsey comes LIN-2916F8, a copper-alloy polyhedral-headed pin with ring-and-dot decoration on each face. The head measured 10 x 7 mm, and the entire object was 56 mm long; however, the pin was broken and the tip was now missing. These pins are commonly assigned an earlier, middle Anglo-Saxon date, but examples from Coppergate, York, came from deposits dated to the period c. 930/5-975 AD (Mainman and Rogers 2000: 2579, fig. 1274). On that basis this example was assigned a mid tenth-century date.

The *PAS* reports the discovery of a copper-alloy polyhedral-headed pin from the parish of **Scawby** in North Lincolnshire. NLM-5F1932 was decorated with a single big ring-and-dot motif on the main faces, and dated to the period 750-850.

Also from **Scawby** was NLM5767, another copper-alloy pin with polyhedral head, decorated with ring-and-dot motifs. It was dated to the period 700-900, and measured 82.3 x 9.7 x 7.5 mm.

From **Swinhope** in West Lindsey came NLM7122, a copper-alloy pin with a polyhedral head decorated with ring-and-dot motifs. The head measured 5.5 x 4.7 mm; only a small part of the shank remained, and the entire fragment was no more than 8.6 mm in length. It was assigned an eighth- to ninth-century date.

Another copper-alloy pin of eighth- to ninth-century date with a faceted head from the parish of **Swinhope** was NLM-7CEF22. The head measured 10.8 x 8.7 x 6.0 mm, and bears a ring-and-dot motif on each of the four main faces. The head was separated from the shaft by a small collar. The entire pin measured 29.5 mm, and the diameter of the pin was 1.9 mm.

NLM-E7D732 was a copper-alloy pin, dated to the period c. 720-850, from the parish of **Thimbleby** in East Lindsey. It had a plain polyhedral head measuring 8.4 x 7.5mm, and the diameter of the shaft was 3.5 mm.

Brown 2006: 273 was a copper-alloy collared pin with a faceted head from **Torksey**. The four main sides are decorated with one ring-and-dot motif. It measured 54.0 mm in length, and the head measured 7.6 x 4.5 x 4.4 mm.

Brown 2006: 275 is a copper-alloy pin of ninth-century date from **Torksey**. Its head was decorated with ring-and-dot motifs, and it measured 15.1 mm in length.

Brown 2006: 276 was a collared copper-alloy pin with a polyhedral head decorated with ring-and-dot motifs from **Torksey**. It measured 12.9 mm in length, with a shaft diameter of 2.3 mm. The head measured 10.6 x 8.5 x 7.8 mm.

Brown 2006: 277 was a collared copper-alloy pin with polyhedral head decorated with ring-and-dot motifs from **Torksey**. It measured 25.0 in length, and the head measured 7.0 x 5.4 x 5.1 mm.

Brown 2006: 278 was a collared copper-alloy pin with polyhedral head, decorated with ring-and-dot motifs, from **Torksey**. It was 30.8 mm long. The head measured 3.8 x 6.3 x 5.7 mm, and the shaft had a diameter of 2.2 mm.

Brown 2006: 279 was a collared copper-alloy pin with polyhedral head from **Torksey**. The head was decorated with ring-and-dot motifs. The object was 13.2 mm long. The head measured 7.2 x 7.6 x 3.4, and the shaft had a diameter of 2.2 mm.

12.1.2.2: Pins with polyhedral or faceted heads from Kesteven

NLM4271 was an eighth-century copper-alloy pin from **Ancaster** in South Kesteven. It had a polyhedral head with ring-and-dot decoration on all faces, and was collared. It measured 21.7 x 8.6 x 5.8 mm.

NLM4265 was an eighth-century copper-alloy polyhedral pinhead, decorated with ring-and-dot motifs, from **Baston**. It measured 17 x 12.5 x 7.8 mm.

NLM4293 was a copper-alloy polyhedral-headed pin of ninth-century date from **Burton Pedwardine** in North Kesteven. It measured 10.1 x 7.3 x 5.1 mm.

LIN-EEEC17 is a eighth- to ninth-century copper-alloy pin with a faceted head from **Heckington** in North Kesteven. Each face of the head was decorated with a ring-and-dot motif. The object measured 29.9 x 8.4 mm.

NLM735 from **Hougham** in South Kesteven was a collared polyhedral pinhead with ring-and-dot decoration, dated to 700-900, which measured 24.5 x 11.2 x 8.6 mm.

NLM733 was a polyhedral pin from **Long Bennington**, dated to c. 700-900. It was decorated with ring-and-dot motifs, collared, and measured 29.5 x 4.8 x 6.8 mm.

12.1.2.3: Pins with polyhedral or faceted heads from Holland

No such pins have been recorded for Holland.

12.1.3: Pins with flat heads

12.1.3.1: Pins with flat heads from Lindsey

LIN-08B6B4 from **Bardney**, West Lindsey was a gilt copper-alloy disc-shaped pinhead with a circular hole in the centre. The front of the pinhead was decorated with a trefoil pattern with concave sides. The surface had been gilded. It was assigned an eighth-century date (appendix 13).

Barton-upon-Humber yielded NLM-E1F121, an incomplete copper-alloy pin with a flat head. The shaft was oval in section, and had a diameter of 3.5 mm. It was decorated with a band of eight transverse ribs below the head. The head itself was broken, but may have been a circular disc with a central perforation. A single copper-alloy rivet was still *in situ* in the lower part of the head, where it was attached to the pin. The length of the entire object was 66.5 mm, and the width of the head was 4.0 mm. It was identified as middle Anglo-Saxon.

NLM4918 from **Elsham** was a racquet-headed pinhead, with ring-and-dot decoration, assigned to the period 700-800. It was made of copper alloy, and measured 25.2 x 12.5 x 1.7 mm.

NLM4235 was a copper-alloy collared racket-headed pin of eighth-century date from **Elsham**, with ring-and-dot decoration. It measured 25.2 x 12.5 x 1.7 mm.

From the parish of **Healing** was NLM5724, a racquet-headed pin of eighth- to ninth-century date. The object measured 42.4 x 10.9 mm, and had a diameter of 2.6 mm. It was decorated with incised line decoration.

NLM-028751 was an eighth-century silver gilt disc-headed pin from **Manton** in North Lincolnshire. See appendix 13.

NCL-05BEE3 was an eighth-century silver gilt pin with a flat zoomorphic pinhead from **Melton Ross**. The head measured 34 x 19 mm, and the shaft was 18mm in length. The head depicted a backward-turning bird of prey, possibly representing an eagle, decorated

with incised lines and punched dots. Possible parallels were suggested with the animal-head stone carvings from Monkwearmouth, Lastingham and Croft on Tees (Yorks.). Similar pinheads of eighth- and early ninth-century date were found at Brandon, Flixborough and York. See appendix 13.

From the parish of **Nettleton** in East Lindsey comes NLM-D47A72, a copper-alloy pin with a flat hexagonal head, measuring 29.2 mm x 8.2 mm. Both sides of the head have four ring-and-dot motifs, and further ring-and-dot motifs are placed around the outside of the head. The pin itself was circular in section and collared. The length of the entire object was not recorded. It was assigned an eighth- to ninth-century date.

The *PAS* lists a lozenge-shaped copper-alloy pinhead (NLM-DDC513) from **Osgodby**, found by metal detector. The pinhead measured 13.8 x 11.2 x 5.8 mm. It was assigned an eighth- to ninth-century date.

NLM-B86632 was a copper-alloy flat-headed pin of eighth- to ninth-century date, from the parish of **Roxby cum Risby**. It measured 29.9 mm in length, and the shaft had a diameter of 2 mm. It consists of a rolled sheet that splays out at the top to form the flat head; the top of the head was now broken off.

LIN-C219D3 **Roxby cum Risby** was the gilt copper-alloy head from a pin from a linked pin set. The head was flat and circular and had a raised band set just inside the perimeter. The face of the pinhead had a central cross dividing it into quarters, with a chip-carved interlace design in each quarter. Similar pins were reported from Torksey and Low Toynton, whilst a complete set was found in the River Witham (now in the British Museum). It was dated to the eighth century. See appendix 13.

The *PAS* reports the discovery of a copper-alloy racquet-headed pin from the parish of **Scunthorpe**. YORYMB25 (record duplicated as YORYM225) was decorated with ring-and-dot motifs, and identified as Anglo-Scandinavian, assigning it a ninth- to eleventh-century date. It measured 35.2 x 10.8 mm.

NLM-78C696 was a silver gilt eighth-century pin from **Swinhope**. The head was shaped like a bird, with incised cross-hatches across its wings to create the effect of feathers. It measured 30.0 mm in length, and the shaft had a diameter of 2 mm. It was assigned an eighth-century date. Another pin with a bird-shaped head (NCL-05BEE3), assigned to the eighth or ninth centuries, was found at Melton Ross (see above, this section). See appendix 13.

12.1.3.2: Pins with flat heads from Kesteven

From **Baston** in South Kesteven came NLM4241, a fragment of a circular pinhead with traces of gilding and interlace decoration, dated to the eighth century (appendix 13).

LIN-8B82C1 from **Heckington** was a flat circular gilt copper-alloy pinhead from a linked pin set. Like LIN-24A337 from Ruskington, its face was decorated with a central cross with interlace designs in each of the four corners. It was perforated, and probably once part of a linked pin-set. The area around the perforation had been repaired in antiquity. It was assigned an eighth-century date. See appendix 13.

SUR-CFE0C7 from **Morton** in South Kesteven was an eighth-century disc-shaped pinhead, probably part of a linked pin set. The head had a central circular aperture for a decorative stud; there was a second, damaged, hole near the rim, which was probably for the attachment of the chain. It was originally gilded (appendix 13).

LIN-8FCB77 was a copper-alloy gilt linked pin from **Osbourneby** in North Kesteven, dated to the late eighth century (appendix 13).

LIN-24A337 from **Ruskington** in North Kesteven was an eighth-century gilt copper-alloy disc-shaped pinhead, possibly part of a linked pin-set, as the head was pierced on the left hand side. The face was decorated with a central cross and an interlace design in each corner. This type of pin had a marked concentration in the East Midlands (*Treasure 2000*: 39-40). Also see LIN-8B82C1 from Heckington. See appendix 13.

NLM5765 from **Ruskington** in North Kesteven was another eighth-century copper-alloy pin with a disc-shaped head and chip-carved interlace decoration, with traces of gilding on the front. It had one perforation at the side, and was probably part of a linked pin-set. It had a double collar. See appendix 13.

LEIC-526CD1 was a gilt copper-alloy pinhead, undated, from **Waddington** in North Kesteven. It measured 25 x 2mm, and was therefore to all probability flat, although the shape was not explicitly recorded. It was decorated with an incised pattern forming triangles and circles, possibly representing a face with an upturned moustache. See appendix 13.

12.1.3.3: Pins with flat heads from Holland

No such pins have been recorded for Holland.

12.1.4: Ring-headed pins

12.1.4.1: Ring-headed pins from Lindsey

LIN-143411 was a copper-alloy pin shaft, formed of a rolled sheet tapering to a (now broken) point. Its length measured 37 mm, and its width 3 x 4 mm. It was assigned a ninth- to eleventh-century date. This type of pin is commonly interpreted as 'Hiberno-Norse' on the basis of its occurrence in Dublin and York (Mainman and Rogers 2000: 2580). It was found in the parish of **Riby** in West Lindsey.

Also from the parish of **Riby** in West Lindsey was LIN-134231, a complete ring-headed pin made of copper alloy. The entire object was 84 mm long, and the shaft was 4 mm in diameter, and was both flattened and rolled over to form a simple loop to hold the ring. The pin had a collar, which was decorated with five incised transverse lines, and the loop may have some very stylized zoomorphic elements at its terminal. The ring itself bears no decoration, and measured 19 mm in diameter, with a thickness of 4 mm. It was identified as 'viking', and assigned a late ninth- to eleventh-century date.

LIN-145C85 was a copper-alloy pin fragment, originally part of another ring-headed pin, also from **Riby** in West Lindsey. The ringed head was now missing, but the sub-rectangular shaft, measuring 69 mm in length, and 8 x 3 mm in diameter, retains part of the flattened top. Strong similarities were noted between this pin and LIN-134231. It was assigned a ninth- to eleventh-century date, and identified as being of 'viking' or 'Anglo-Scandinavian' manufacture.

Brown 2006: 280 was a ring-headed pin from **Torksey**. It had a circular-sectioned shaft with a biconical octagonal head, and a simple bent-over loop at the top of the head holding the ring. The ring was oval, circular in section, and had rounded tapering terminals. The object measured 116.6 in length. The shaft had a diameter of 4.3 mm. The head was 9.6 mm wide. The outside dimensions of the ring were 19.8 x 16.9, and its section had a diameter of 2.7 mm.

12.1.4.2: Ring-headed pins from Kesteven

No such pins have been recorded for Kesteven.

12.1.4.3: Ring-headed pins from Holland

No such pins have been recorded for Holland.

12.1.5: Pins (other)

12.1.5.1: Pins (other) from Lindsey

From **Appleby** came a silver-gilt pin with missing setting (SWYOR-72ABC5). It was 29.6 mm in length, and 13.5 mm in width. No other details were recorded, and images were not available. It was broadly dated to the early medieval period. See appendix 13.

Excavations at **Holton le Clay** produced three copper-alloy pins of ninth- to eleventh-century date (Albone 1999).

Another copper-alloy pin from **Horncastle** was NLM3400, which was dated to the period 410-1066. It measured 26.2 mm in length, the head was 9.2 mm in width, and the shaft had a diameter of 2.2 mm. No other details were recorded.

Excavations at **Horncastle** also produced a ninth-century pin (White and Everson 1983: 72-73).

NLM2803 was a copper-alloy pin with a rolled-in head, dated to the tenth or eleventh century, and found in **Nettleton**.

Brown 2006: 274 is a small collared copper-alloy pin with a cuboid pinhead from **Torksey**, with two ring-and-dot motifs on each face. It measured 49.0 in length, and the shaft had a diameter of 2.5 mm. The head measured 7.9 x 4.0 x 3.7 mm.

Finally, Brown 2006: no 210 (Blackburn 2002: 95) is a cut fragment of a decorated copper-gilt pinhead from **Torksey**.

12.1.5.2: Pins (other) from Kesteven

LIN-3060A0 from **Osbourneby** in North Kesteven were five copper-alloy pinheads with punched circular decoration all around the heads, roughly dated to the period 410-1066. Measurements and shapes of pinheads were not recorded.

12.1.5.3: Pins (other) from Holland

No other pins were recorded on the PAS website for Holland.

12.2: Strap-ends

12.2.1: Strap-ends from Lindsey

The PAS reports the discovery of a copper-alloy openwork strap-end in *Urnes* style from the parish of **Alford** in East Lindsey. NLM4292 consists of an openwork knotted terminal, representing a twisted snake, held in the jaws of another animal head facing forwards, which

was attached to the lower front plate of the split end. The back plate and the attachment hole(s) are missing. The surviving object measured 40.5 x 11.4 mm, and was 5.6 mm thick. It was assigned an eleventh-century date.

The PAS reports the discovery of a copper-alloy multi-headed strap-end in *Borre* style from **Alkborough** in North Lincolnshire. NLM4596 incorporated at least three stylised animal heads, was rectangular and elongated in shape, and measured 42.2 x 10.3 mm, with a thickness of 4.7 mm. The original attachment end was now missing, and a single centrally placed perforation at the broken split end can be interpreted as a secondary perforation. It was assigned a tenth-century date.

From Walcot in the parish of **Alkborough** also came a possible eleventh-century trapezoidal strap-end with three terminal knobs at the lower end. NLM651 was decorated in openwork and was broken at the split end, the remaining fragment now measuring 36.7 x 31.7 mm. It was 7.1 mm thick. Two further examples on the PAS database, both from Lincolnshire, were found at NLM2876 and LIN-3A1414. The latter had decoration suggesting an eleventh-century date. The alternative suggestion was made that these were stirrup-strap mounts, but Williams apparently disagreed (see entries for NLM2876 and LIN-3A1414).

From Low Santon in the parish of **Appleby** comes a *Winchester*-style openwork copper-alloy strap-end, of Thomas class E, type 1 (SWYOR-7DF7B5). The object measured 46.1 x 24.2 mm, and was 55.7 mm thick. It was tongue-shaped, and was decorated with a symmetrical pattern of simplified plant-scrolls. At the terminal end a rounded knob protrudes from the outer edge outwards. The split end had three rivet holes, one of which was now broken. It was assigned a tenth- to eleventh-century date.

SWYOR-7C4718 was a ninth-century zoomorphic copper-alloy strap-end of Thomas Class B, type 2 from **Appleby**. It measured 50.5 x 8.7 x 3.6 mm.

The PAS reports a tenth- to eleventh-century Anglo-Saxon strap-end from **Aylesbury** in North East Lincolnshire. NLM4544 was made of copper alloy, and measured 39.3 x 9.2 mm, with a thickness of 4.6 mm. The edges were faceted.

The PAS reports the discovery of a silver strap-end in *Trewhiddle* style from **Bardney** in West Lindsey (LIN-BF5F520; *Treasure* 2003). Only half the strap-end survived, with the split end now missing, and the remaining fragment measured 15 x 24 mm, with a thickness of 1 mm. It was assigned a late ninth- to tenth-century date. However, as this art-style belonged in the ninth century, the dating of this strap-end has been refined to the ninth century (appendix 14).

From Barnetby in the parish of **Barnetby le Wold** comes NLM4368, a ninth-century strap-end made of copper alloy. It was oval in plan, and had a zoomorphic terminal, whilst the central panel was decorated with incised lines forming a geometric pattern. It measured 33.2 x 11.1 mm, and was 2.7 mm thick.

The PAS also reports the discovery of a devolved *Winchester*-style strap-end from Barnetby near **Barnetby le Wold**, made of copper alloy. NLM134 was decorated in openwork, symmetrical, and retains two circular and two kidney-shaped perforations; both the tongue-shaped terminal and the split end are broken off. The remaining fragment measured 29.6 x 19.4 mm. It was assigned a tenth-century date.

The PAS reports the discovery of a copper-alloy zoomorphic strap-end from **Barrow upon Humber**. YORYM1507 was damaged, and no images were available, but it was described as "arc and step type". It measured 42.7 x 11.0 mm, and had a thickness of 4.7 mm. It had two rivet holes. It was assigned a ninth- to tenth-century date.

The PAS reports the discovery of an oval-shaped copper-alloy strap-end from the parish of **Barton-upon-Humber**. NLM-BD5082 was very worn, but a panel with crosshatched decoration was still visible on one side, and although all detail had disappeared the object clearly had a zoomorphic terminal. The split end had broken along the rivet holes. The surviving object measured 29.5 x 10.2 mm, with a thickness of 2.1 mm. It was assigned a ninth-century date.

Another copper-alloy strap-end from **Barton-upon-Humber** was NLM-027CB5. This strap-end belongs to Thomas Class A, type 5, and can be dated to the ninth century. It was broken at the lower end, and the zoomorphic terminal was missing. The surviving fragment measured 28.1 x 14.2 mm. Two rivet holes are still visible at the top, underneath which the strap-end was decorated by five incised crescents followed by two parallel panels of silver wire coil and scroll type motif; however, only two of the silver wire coils survive. It was assigned a ninth-century date. See appendix 14.

From the parish of **Belton** in North Lincolnshire comes a fragment of a *Borre*-style strap-end of copper alloy. NLM2763 only represented the upper part. Two rivet holes are present, one in each corner, and the top half of the central panel, decorated in *Borre*-style knotwork, and probably incorporating an animal's head, of which only the uppermost part was visible. The surviving fragment measured 26 x 20.2 mm, and was 4 mm thick. It was assigned a ninth-century date.

The PAS reports the discovery of a ninth-century copper-alloy strap-end from **Belton**

in North Lincolnshire. NLM2762 was elongated and oval in shape, and measured 47.9 x 10.9 mm, and was 2 mm thick. The terminal was zoomorphic, and the central panel was decorated with crosshatches. The front plate of the split end was broken off.

Also from **Belton** was a small fragment of a copper-alloy strap-end (*PAS* NLM-C0A3F7). Only the zoomorphic terminal survived, measuring 21.7 x 10.1 mm, and 4.6 mm thick. The animal head had a rounded snout, two small eyes and large rounded ears. It was assigned a ninth-century date.

NLM-E91463 was a strap-end dated to c. 1000 AD made of copper alloy, with a lozenge-shaped terminal plate, decorated with interlacing ribbons, and separated from the split end by a zoomorphic moulding with pointed ears and oval eyes. The split end was decorated with an incised border, and the copper-alloy rivet was still in place. The whole object measured 41.1 x 14.2 mm. It was found in **Binbrook** in East Lindsey.

The *PAS* reports an eighth- to ninth-century copper-alloy strap-end from **Binbrook** (NLM6616). Its decoration consists of a double animal head design halfway down the length of the object, and it had a rounded terminal. The top still had its single rivet hole and rivet in place. It measured 30.1 x 9.4 mm, and was 5.8 mm thick.

Also from **Binbrook** was another copper-alloy strap-end (NLM6404), measuring 46.2 x 16.4 mm, with a thickness of 1.3 mm. Its shape was elongated and oval, and the object bears decoration in the shape of two longitudinal lines of small crescents. The top was broken off at the attachment holes. The object was assigned a ninth- to tenth-century date.

A further strap-end from **Binbrook** was NLM-537F51, of Thomas Class A type 1 (*Trewhiddle* style), with a single copper-alloy rivet hole at the split end. The central panel was worn, but originally decorated with niello inlay in *Trewhiddle* style. The entire object measured 35.6 x 7.9 mm, and was assigned a ninth-century date.

The *PAS* reports another copper-alloy strap-end in *Trewhiddle* style with niello inlay from **Binbrook** (NLM-6D36A3). This one measured 38.7 mm x 14.1 mm, and was 2.3 mm thick, but was broken at the attachment end. It was assigned a ninth-century date.

LIN-B880D3 was a ninth- to tenth-century *Trewhiddle*-style copper-alloy strap-end from **Blyborough** in West Lindsey. The central panel contained a near-symmetrical zoomorphic motif, and the terminal was also zoomorphic.

WMID-5CD146 was an eighth- to tenth-century strap-end from **Bonby** with a (probably) zoomorphic terminal, and an incised cross on the main body. It was probably Thomas Class A, Type 2, of probable eighth- to tenth-century date.

From **Claxby** in East Lindsey came NLM-B3E021, a fragment of a tenth-century copper-alloy strap-end decorated with ring-and-dot, measuring 18.6 x 15.7 mm.

NLM-F3CD43 was a copper-alloy strap-end of eighth- to tenth-century date. It was elongated and sub-trapezoidal, retaining both copper-alloy rivets at the split end, although the back plate was missing. The attachment end bears decoration in the shape of a border of incised dots. The shaft bears two sets of parallel transverse grooves, and had a zoomorphic terminal. The whole object had a length of 40.8 mm, a width of 8.8 mm, and a thickness of 3.9 mm. It was not dissimilar in shape to the multi-headed strap-ends in *Borre* style, but without the additional animal heads. It was found near **Crowle** on the Isle of Axholme.

From **East Barkwith** came an incomplete rectangular cast copper-alloy strap-end of eleventh-century date (LIN-F9FED7), decorated with two opposing animals in *Winchester* style. It measured 26.9 x 19.9 mm.

Another strap-end from **East Barkwith** was NLM2877, a copper-alloy strap-end dated to the eleventh century. It displayed traces of tinning, and measured 32.4 x 12.8 mm, and was 4.1 mm thick. It had a rounded bottom with a protruding lump, in combination with two 'eyes' on either side, possibly representing a very stylized animal head, above which was another potential stylized animal head. The top was rectangular, with two rivet holes.

The *PAS* reports a copper-alloy strap-end from **East Barkwith** in East Lindsey. DENO-B6F215 was dated to the ninth century, was roughly oval in shape, and had zoomorphic decoration, with traces of gilding on the main panel. It measured 34.4 x 11.8 mm, and was 4.2 mm thick (appendix 13).

NCL-A10477 was a ninth- to eleventh-century copper-alloy strap-end of Thomas class A from **East Kirkby** in East Lindsey.

LIN-CA70F2, vaguely similar to NLM724, was the openwork plate of a strap-end post-dating c. 800 AD. The roughly triangular plate measured 19 x 13 mm, and was incomplete, with three circular perforations, and was 3 mm thick. It was found in the parish of **Edlington with Wispington** in East Lindsey.

Also from **Edlington with Wispington** was another elongated strap-end (LIN-2BACE4) of ninth-century date. The object was made of copper alloy, and measured 63 x 10 mm, with a thickness of 3 mm. It was assigned a ninth-century date. The strap-end had two attachment holes at the split end, and the central panel was decorated with two foliate patterns, possibly originally with niello. The terminal was zoomorphic.

NLM2897 was an eighth-century copper-alloy zoomorphic strap-end from **Elsham**,

measuring 17.5 x 8.3 x 1.6 mm.

The *PAS* reports the discovery of a copper-alloy gilt strap-end from the parish of **Elsham** in North Lincolnshire. NLM197 was triangular in shape, and had one single rivet at the split apex. It was decorated with a single line of rocker tracing around the outside perimeter. The object measured 14.7 x 16.8 mm, and was 0.2 mm thick. It was assigned an eighth- to ninth-century date. See appendix 13.

Also from **Elsham** in North Lincolnshire was NLM400, a tongue-shaped copper-alloy *Borre*-style strap-end decorated with double strands of interlace and triangles. One corner of the attachment end was broken off, as well as the back plate. The object measured 39.55 x 18.3 mm, and was assigned a tenth-century date.

A further copper-alloy strap-end from **Elsham** was NLM399, which probably represents the upper part of another tongue-shaped strap-end. The front plate of the split end was decorated with at least nine randomly placed ring-and-dot motifs. Two rivets are still in place, one in each corner. The lower part was decorated with coarse interlace. The surviving fragment measured 33.3 x 22.5 mm. It was assigned a tenth- to eleventh-century date, and was made of copper alloy.

NLM6084 is a copper-alloy strap-end from the parish of **Epworth** in North Lincolnshire. It was oval in plan, measuring 27.2 x 11.6 mm, and 0.6 mm in thickness. It was decorated with a simple rib with incisions, and dated to the tenth century.

The *PAS* reports the discovery of a narrow copper-alloy strap-end from the parish of **Faldingworth**. NLM-939E94 measured 41 x 9.6 mm, and had a zoomorphic terminal, and the main panel was decorated with interlace. The split end was broken, and no rivet holes survive. It was assigned a ninth-century date.

From **Firsby** in East Lindsey came a ninth- to tenth-century copper-alloy strap-end of Thomas type A (LIN-977213), measuring 30.9 x 8.7 mm. It had a zoomorphic terminal, and had an elongated oval in shape. The main panel was decorated with a rectangular panel filled with crossed lines. Image not available on the *PAS* website.

Also from **Firsby** was a second ninth- to tenth-century copper-alloy zoomorphic strap-end (LIN-978DD7), measuring 33.9 x 8.7 mm. The split end had a single rivet hole with traces of gilt around it; originally the whole object was probably gilded but this was no longer visible anywhere else. The strap-end tapers in towards the middle, before broadening again at the start of the zoomorphic terminal, which was sub-rectangular in plan, with a flattened nose. See appendix 13.

Also from **Firsby** was LANCUM-72C1A4, a complete copper-alloy strap-end with a zoomorphic terminal and a central panel with zoomorphic interlace decoration in niello. The split end had two rivet holes. The strap-end measured 36 x 9 mm, and was 2 mm thick. It was assigned a ninth-century date.

A group of 36 ninth- to early tenth-century copper-alloy strap-ends was found at **Flixborough** (Thomas 2009b). Strap-ends displaying Scandinavian decorative influences, and tenth-century tongue-shaped strap-ends, were absent from Flixborough (Thomas 2009b: 12-13). They are catalogued in Thomas 2009b: 13-16. In addition, some five tin-plated iron strap-ends were found, one of which showed similarities to three tin-plated iron strap-ends from Coppergate in York (Ottaway 2009b).

NLM-158FF3 was a fragment of a cast lead strap-end decorated with two opposed birds, back-turned around a central fountain- or palm-like motif. One iron rivet still survives. It measured 27.2 x 44.6 mm, and was assigned a date of c. 900-1000 AD. It was found in the parish of **Fulletby** in East Lindsey. See appendix 15.

Also from **Fulletby** in East Lindsey comes a ninth-century copper-alloy strap-end of Thomas type A (NLM-00A141). The split end had two rivet holes with two copper-alloy rivets. It was decorated with ring-and-dot decoration, and had a zoomorphic terminal. It measured 41.9 x 12.8 mm.

The *PAS* reports a ninth-century strap-end from the parish of **Gainsborough** (NLM33). It measured 45.7 x 15 mm, and had two rivet holes at the split end, with a zoomorphic terminal with a palmette on the beast's forehead at the opposite end. The interlace on the main panel was also zoomorphic. It was made of copper alloy.

The *PAS* reports the upper half of a broken ninth-century strap-end with three rivet holes from the parish of **Gainsborough** (NLM4508). It was made of copper alloy.

Excavations at '**Goltho**' produced two or three strap-ends, including an unusually shaped strap-end with decorated terminal, a very narrow strap-end with some leather surviving, and possibly a tenth- to eleventh-century tongue-shaped copper-alloy strap-end (Beresford 1975b: 91; Goodall 1987: 172).

From the parish of **Grimsby** comes a copper-alloy strap-end with zoomorphic terminal and incised decoration (NLM4285). It measured 34 x 12.3 mm, and was 1.3 mm thick. It was assigned an eighth- to ninth-century date.

Also from **Grimsby** was NLM4280, a tenth- or eleventh-century openwork strap-end of copper alloy, decorated in *Urnes* style. It measured 26.9 x 6.7 mm, and was 5.5 mm thick. A

single rivet hole remains at the split end. However, as the *Urnes* style did not develop until the eleventh century, the dating can be revised.

The *PAS* lists a tenth-century *Winchester*-style strap-end (NLM5373) from the parish of **Hatcliffe** in North East Lincolnshire, made of lead alloy. It depicts two opposing animals on either side of a vertical bar, and underneath a row of pellets and a horizontal rib. The remains of two attachment holes are still visible at the top; but they are broken off. The whole object measured 41.1 x 26.6, and was 4.1 mm thick. See appendix 15.

NLM-2CFD94 was a tenth-century zoomorphic copper-alloy strap-end from **Hatcliffe**. It measured 30.5 x 8.4 x 2.6 mm.

The *PAS* reports the discovery of an eighth- to ninth-century copper-alloy strap-end from the parish of **Hatton** in East Lindsey (LIN-101236). The object measured 41.5 x 9.3 mm, was elongated with a D-shaped cross section, and decorated with three grooves. There are two attachment holes at the split end.

NLM-BACCC3 was a ninth-century copper-alloy strap-end from **Haxey**. It originally had a zoomorphic terminal and interlace decoration on the main panel. The surviving length was 51.6 mm, the width was 14.9 mm, and the thickness was 3.3mm.

The *PAS* reports a copper-alloy strap-end of eighth- to ninth-century date from the parish of **Healing** (NLM5377). No decoration was visible. A single rivet hole was pierced through one end. It measured 50.7 x 10.7 mm. The accompanying drawing on the *PAS* website relates to NLM5378, so there was no image available.

The *PAS* reports the discovery of a *Trewhiddle*-style strap-end from **Hibaldstow**. NLM-5F3D53 was dated to the ninth century, and made of copper alloy.

The *PAS* reports the discovery of a copper-alloy tongue-shaped strap-end of tenth-century date from **Hibaldstow** in North Lincolnshire. NLM-5E6993 was decorated in *Winchester* style, with acanthus leaves, and there are three attachment holes at the top, arranged in a triangle, the centre one possibly secondary as it was slightly larger than the top two, and encroaches on the central panel. The back plate was missing. The object measured 44.8 x 18.3 mm, and the thickness was 3.1 mm.

Also from **Hibaldstow** was NLM-419320, a fragment of a lead-alloy strap-end of tenth-century date. Only the lower, rounded terminal survives, and this was executed in *Winchester* style, with two birds facing each other, their beaks touching. The surviving fragment measured 17.0 x 15.2 mm. See appendix 15.

Also from **Hibaldstow** in North Lincolnshire was NLM-BB49D3, a copper-alloy strap-end of ninth-century date. It was very worn, and most of the original surface of the front plate had worn away, but the remains of interlace decoration were visible in the central panel near the attachment end, which contained the remains of two copper-alloy rivets. The reverse was plain. The length was 32.2 mm, and the width was 7.4 mm.

Some 3 km to the north of Addlethorpe, in **Hogsthorpe** (TF5371), the *PAS* lists a heavily corroded cast copper-alloy object that was identified as a ninth-century zoomorphic strap-end (LIN-BABA25). It measured 37 mm in length, and 15 mm in width, with a thickness of 4 mm.

The *PAS* reports the discovery of a copper-alloy strap-end from the parish of **Holme** in North Lincolnshire. NLM-519DA5 was elongated in shape, measuring 43.2 x 8.8 mm, and with a thickness of 2.4 mm. The central panel was decorated with cross hatches, and the terminal was zoomorphic. It was assigned a ninth-century date.

Excavations at **Holton le Clay** produced a strap-end dated to c. 900 AD (Albone 1999).

NLM-47F7B8 was a fragment of a copper-alloy 'viking' strap-end found at **Horncastle**. It had a circular flat openwork body with four holes, and a triangular leaf-shaped distal end with a square hole in the centre. It measured 44.2 x 16.8 mm, and was 3.2 mm thick. It was assigned a date range of 850 - 1066 AD.

From **Horncastle** as well was a lead-alloy strap-end (NLM3377), dated to the tenth century. It measured 25.7 x 18.6 mm, and was 2.8 mm thick. No further details were recorded. See appendix 15.

An unusual copper-alloy openwork strap-end was found in the parish of **Horncastle** (NLM-BB2EF1). Its rounded bottom may have some stylized zoomorphic elements, from which a central bar raised up straight, and two further bars curve upwards and outwards giving the strap-end a tongue-shaped outer perimeter. The front had additional decorative punched marks. The top was broken off. It measured 25.1 x 23.1 mm, and was 2.5 mm thick. It was assigned a tenth-century date.

Excavations at **Horncastle** produced a ninth-century strap-end (White and Everson 1983: 72-73).

The *PAS* lists a tongue-shaped strap-end (LIN-892960) from **Keelby** in West Lindsey. It was decorated with a simple row of punched dots around the perimeter of the object, and was broadly dated to the early medieval period. It was 6.5 mm wide; no other dimensions were given.

From **Keelby** in West Lindsey was LIN-FC5447, a late ninth- to tenth-century copper-alloy strap-end of Thomas type A. It was roughly ovoid in shape, and had a zoomorphic terminal, with two rivet holes at the split end. The central panel was also decorated with animal motifs. The object measured 37 x 11 mm.

LIN-79D315 was an eighth- to eleventh-century triangular copper-alloy strap-end of Thomas type B, also from **Keelby** in West Lindsey. It was damaged, but probably originally had a zoomorphic ending and two attachment holes at the split end, where it was now broken. Decoration was present on both faces, and consists of incised lines. It measured 39 x 17 mm, and was 4 mm thick.

The *PAS* also reports the discovery of another copper-alloy strap-end of Thomas type B, of eighth- to eleventh-century date, from the parish of **Keelby** in West Lindsey. LIN-79B8A2 measured 44 x 9 mm, and was 3 mm thick. Its triangular body ended in a zoomorphic terminal, and had a single rivet hole at the split end.

DENO-2E7253 was a copper-alloy strap-end of ninth-century date from the parish of **Kettlethorpe** in West Lindsey. The attachment end was bifurcated and split, and had two rivet holes. A semi-circular panel with downward pointing trefoil was located between the rivet holes, and the central panel contained an interlaced animal. The zoomorphic terminal had deeply drilled eyes, as if they had been intended to contain (or had contained) inlaid garnets. It measured 2.9 mm in length.

The *PAS* lists a ninth- to eleventh-century copper-alloy strap-end (NLM7239) from the parish of **Laceby**. It was rectangular in shape and narrows in the middle, decorated with a collared raised circle, from which several lines radiate out. It measured 37.5 x 10.4 mm, and was 4.6 mm thick.

From the parish of **Laughton** in West Lindsey was SWYOR-69D346, a copper-alloy strap-end of Thomas class A type 2. It measured 35.5 x 8.4 mm, which means it was on the narrow side, and was 1.5 mm thick. The body of the strap-end was decorated with two rows of crescents inside an incised border, and it had a zoomorphic terminal. The attachment end was broken. It was assigned an eighth- to tenth-century date, and apparently belonged at "the cheaper end of the market".

Another ninth- to eleventh-century strap-end from **Laughton** was NLM385. It was made of copper alloy, with traces of incised decoration suggesting an early date, had three rivet holes at the split end, and was linear in shape apparently, measuring 14.5 x 11.5 mm, with a thickness of 0.9 mm.

Also from **Laughton** was NLM350, a copper-alloy strap-end dated to before the ninth-century, with remains of interlace decoration and a zoomorphic terminal. The object measured 32.5 x 9.2 mm.

The *PAS* lists an early medieval copper-alloy strap-end or decorative mount (SWYOR-1AA507) of possible Carolingian manufacture, of eighth- to ninth-century date. It measured 25.8 x 14.5 mm, and was 5.3 mm thick. It was triangular in shape, with foliate decoration including a small fleur de lis, and the surface was originally gilded. It was found in the parish of **Lea**. See appendix 13.

NLM2686 was a *Borre*-style strap fitting with multiple stylized animal heads, made of copper alloy. It measured 38.1 x 11.3 mm, and originally had two rivet holes at the top, although one was now broken off. This may have been a split end, but if so, the bottom plate was now missing. At the bottom were two perforated lugs, both still in place. It was assigned a tenth- to eleventh-century date. It was found in the parish of **Lincoln**. Also see the description for NLM-9B0C35 from Marsh Chapel.

NLM2744 was a strap-end of ninth-century date from the parish of **Lissington** in West Lindsey. It was made of copper alloy and had a zoomorphic terminal and a segmented main body panel. It measured 42.8 x 13.2 mm, and was 2.1 mm thick.

Also from **Lissington** was a tenth- to eleventh-century tongue-shaped lead-alloy strap-end in *Winchester* style. LIN-D17C35 had crude plant-scroll decoration with two confronting lizards with rounded heads. It measured 37 x 23 mm, and was 2 mm thick. The object originally had two rivet holes, but one was broken off. See appendix 15.

The *PAS* reports the discovery of a ninth-century silvered and gilt copper-alloy strap-end (LIN-E33095) from the parish of **Little Carlton**. It measured 41 x 11 mm, and was very worn but oval in shape, probably with a zoomorphic terminal. Two rivet holes are present at the split end, which was still complete. See appendix 13.

From the parish of **Low Santon** comes a copper-alloy silvered strap-end of Thomas type A. SWYOR-197DD8, measuring 44.9 x 14.5 mm, was dated to the ninth or tenth centuries. It had a zoomorphic terminal, and two attachment holes at the split end. The central panel was decorated in *Trewhiddle* style, depicting a stylised animal crouching down. As this art-style belonged in the ninth century, the dating of this strap-end has been refined to the ninth century. See appendix 14.

From **Ludford** in East Lindsey comes SWYOR-E61B80, a copper-alloy strap-end of Thomas Class A, oval and with a zoomorphic terminal, dated to the ninth century AD. The

attachment end and the rivet holes are missing. It had a zoomorphic terminal with rounded ears and a *Trewhiddle*-style animal on the central panel, in relief, with some traces of surviving silvering. It measured 45.3 x 13.4 mm, and was 3.8 mm thick. See appendix 14.

SWYOR-1614B6 was a ninth- to eleventh-century copper-alloy zoomorphic strap-end from **Ludford**, possibly Thomas Class B, type 1. It measured 31.5 x 9.5 x 3.5 mm.

The *PAS* reports a copper-alloy strap-end in *Urnes* style (NLM553) from the parish of **Louth**. It measured 39.7 x 10.8 mm, and had a single large rivet hole at the top, with a narrow body and a widening triangular terminal, possibly depicting a very stylized animal head, but as the strap-end was over-cleaned the decoration was difficult to identify. It was assigned a tenth-century date. However, as the *Urnes*-style does not really develop until the eleventh century, its dating probably had to be revised.

LIN-434DB5 was a ninth- to tenth-century strap-end of Thomas type A from the parish of **Mareham on the Hill** in East Lindsey. It was sub-rectangular in plan, with a zoomorphic terminal with faceted snout and large ears. The main panel had asymmetrical decoration consisting of two elongated stalking beasts combined with a central lozenge shape and incised lines in triangular shape. Two rivet holes are still present at the split end, and between the rivet holes and the main panel was an incised crescent motif. The object measured 33 x 7 mm.

The *PAS* reports the discovery of a ninth-century copper-alloy strap-end (NLM-FFBBB8) from **Market Stainton** in East Lindsey. The strap-end was very damaged, with only half of the front plate surviving; the back plate and terminal end are missing. The central panel was decorated with *Trewhiddle*-style zoomorphic interlace, and two rivet holes are still present. The surviving fragment measured 15.5 x 10.6 mm.

From **Marsh Chapel** in East Lindsey comes NLM-3102F2, a copper-alloy strap-end with a triangular plate and zoomorphic terminal. The strap-end measured 39.2 x 11.5 mm. No decoration survives because the strap-end was very worn, but the zoomorphic terminal was still recognizable. Two rivet holes remain at the split end. It was assigned a ninth-century date.

From **Marsh Chapel** in East Lindsey came NLM-9B0C35, a *Borre*-style strap fitting similar to NLM2686 from the parish of Lincoln. It was described as a strap-end, despite the presence of two pierced lugs at the bottom end, extending from the stylized zoomorphic terminal. Two rivet holes were present at the top, but the back plate was missing. The object measured 39.4 x 10.9 mm, and was assigned a ninth- to tenth-century date. Image available.

The *PAS* also reports the discovery of a tenth-century copper-alloy strap-end in *Winchester* style (Thomas Class E, Type 1) from **Marsh Chapel**. NLM-1E6C35 measured 67.2 x 21.2 mm, and was 3.7 mm thick. Decoration was in openwork, depicting symmetrical plant scrolls, and this narrow tongue-shaped object terminates with a rounded knob. The back plate was missing, and the strap-end was broken off at the attachment holes.

The *PAS* reports the discovery of a copper-alloy strap-end from the parish of **Melton Ross**. No image was available for NCL-91A553, but it was described as having two rivet holes at the split end, which was separated from the central part of the object by two horizontal mouldings, and a zoomorphic terminal. It measured 42 x 11 mm. It was identified as Late Anglo-Saxon.

Also from **Melton Ross** was NLM3, an oval-shaped copper-alloy strap-end with zoomorphic terminal, crescent-shaped incised decoration at the top and the bottom, and two panels of enamel inlay. The enamel had now disappeared, but two iron rivets were still present in the rivet holes at the top. It was assigned a ninth-century date.

NLM2 was a ninth-century silvered copper-alloy strap-end in *Trewhiddle* style, found in the parish of **Melton Ross** in North Lincolnshire. The zoomorphic terminal had inset blue glass eyes. Two silver rivets were still in place. See appendix 14.

NLM933 was a ninth-century copper-alloy strap-end with zoomorphic terminal, found in the parish of **Melton Ross** in North Lincolnshire.

NLM936 was a silvered ninth-century copper-alloy strap-end, found in the parish of **Melton Ross** in North Lincolnshire. It was fish-shaped, and its decoration was reminiscent of fish scales. It had a zoomorphic terminal. See appendix 14.

NLM935 was a ninth-century copper-alloy strap-end, found in the parish of **Melton Ross** in North Lincolnshire.

NLM934 was a ninth-century copper-alloy strap-end, found in the parish of **Melton Ross** in North Lincolnshire.

NLM3 was a ninth-century zoomorphic copper-alloy strap-end from **Melton Ross**, with crudely incised decoration, and originally also two panels of enamel inlay, which are now lost.

The *PAS* database lists a single cast copper-alloy ninth-century Carolingian strap-end (NLM-C222A7) at **Nettleton**. It measured 36.7 mm x 22 mm x 6.4 mm, with a rounded lower edge and stylised tree-like decoration, and had a hollow back.

The parish of **Nettleton** yielded lots of middle Anglo-Saxon material, including lots of pins (see above), but also three strap-ends dated to the ninth century. One of these was NLM2805, dated to the ninth century, with traces of silver or niello. See appendix 14.

NLM2806 was another ninth-century copper-alloy strap-end from **Nettleton**.

From the parish of **Nettleton** in West Lindsey as well came NLM2807, a copper-alloy strap-end dated to the ninth century.

The *PAS* also lists the upper part of a tenth-century copper-alloy strap-end from **Nettleton** (NLM-D9ACC6). Its surviving portion measured 17.9 x 16.3 mm, and its thickness was 3.5 mm. It was decorated with drilled ring-and-dot decoration.

A second tenth-century strap-end from **Nettleton** in West Lindsey was NLM2820, a *Borre*-style multi-headed copper-alloy strap-end measuring 53.1 x 10.1 mm, and with a thickness of 4.5 mm. It incorporates at least three animal heads, one at the terminal and two facing ones above. The rivet holes have broken off.

The *PAS* reports the discovery of NLM-890976, a lead-alloy strap-end of tenth-century date. It was tongue-shaped, and belonged to Thomas class E. The object was very worn, but a pelleted border was still discernible on the front. The object was broken, and the remaining fragment measured 23.7 x 21.6 mm, and was found in the parish of **Normanby le Wold** in West Lindsey. See appendix 15.

NLM7198 was a fragment of a probable strap-end from the parish of **North Thoresby** near Grimsby in East Lindsey, broadly dated to the period 410-1066. It was rectangular, with a border of punched dots. It measured 22.2 x 9.4 x 0.5 mm.

The *PAS* also lists the discovery of a copper-alloy strap-end in the parish of **Osgodby** (NLM-DD9042). The attachment end holds a single rivet hole with traces of iron corrosion. The terminal was zoomorphic, with its shoulders widening at the attachment end, a narrow neck, and a slightly wider head at the terminal. It measured 36.1 x 8.4 x 4.3 mm, and was assigned a tenth-century date.

The *PAS* reports the discovery of SWYOR-CC0064, a copper-alloy strap-end of Thomas Class A. It measured 37 x 15 mm, and was 3.9 mm thick. The attachment end was missing, but originally this strap-end would have been oval in shape, with a zoomorphic terminal. It may have been repaired, as a single rivet hole was present just before the terminal, through the main plate. It was assigned a ninth-century date. A similar example on the database was DENO-B6F215. It was found in **Owersby**.

Also from **Owersby** in West Lindsey was NLM-CFDC08, an incomplete copper-alloy strap-end with a zoomorphic terminal, and *Trewhiddle*-style decoration on the central panel. Two rivet holes are still in place. The object measured 33.58 x 11.0 mm. It was assigned a ninth-century date.

A possible tenth-century strap-end has been found at **Owston Ferry** (North Lincolnshire Museum OFCA1) (Head *et al.* 1998: 277).

The *PAS* reports an eighth-to eleventh-century strap-end, Thomas type A, of copper alloy from the parish of **Revesby** (NCL-FAE043). It was elongated and oval in plan, and measured 38.1 x 8.9 mm, and was 1.9 mm thick. The split end retains two rivet holes and one single copper-alloy rivet. The decoration on the body consists of a lozenge-shaped pattern within a rectangular frame, and its terminal was zoomorphic.

NLM-BD6BF8 was an eleventh-century copper-alloy tongue-shaped strap-end, decorated with *Urnes*-style zoomorphic decoration with two projecting heads, one at the top and another upside down at the bottom. The length was 31.2 mm, the width was 14.0 mm, and the thickness at the attachment end was 3.5 mm. It was found in **Roxby cum Risby**.

The *PAS* holds details of an openwork tongue-shaped strap-end made of copper alloy (NLM-B43784), found in the parish of **Roxby cum Risby**. It had a floral pattern in the centre, and two ring-and-dot motifs at the base. The attachment end had broken away. In its current state the object measured 35.6 x 19.4 x 4.1 mm. It was assigned a tenth- to eleventh-century date.

NLM-B43784 was a copper-alloy openwork strap-end in *Winchester* style, found in the parish of **Roxby cum Risby**. It was tongue-shaped, with a protruding knob at the centre of the terminal, and decorated with a simple foliate pattern, and apparently two ring-and-dot motifs at the base. The split attachment end was broken off. It measured 35.6 x 19.4 mm, and was assigned a tenth-century date.

Another copper-alloy strap-end from **Roxby cum Risby** was NLM-AB50F3. It was elongated in shape, measuring 38.3 x 8.6 mm, with a thickness of 1.4 mm. It had a rounded zoomorphic terminal, and two rivet holes. Some traces of iron corrosion are visible at the lower edge of the reverse. The surface was corroded, but decoration seems to have consisted of two segmented curves arranged back-to-back, creating a geometric pattern, with similar decoration both below and above it. It was assigned a ninth-century date.

NLM-DE9392 was a ninth-century zoomorphic copper-alloy strap-end from **Roxby cum Risby**. The surviving length was 38.2 mm, the width was 7.0 mm, and the thickness was 1.8 mm.

NLM-704C05 was a tenth- to twelfth-century copper-alloy strap-end from the parish of **Roxby cum Risby**. A single rivet hole with rivet was still present.

The *PAS* lists the discovery of an Anglo-Scandinavian strap-end in the parish of **Saltfleetby St Clement** (LIN-42F813). The strap-end was zoomorphic, of Thomas's class B, type 4 (multi-headed), and had a split end and tapering shaft. One copper rivet remains in the split end. The shaft had three raised transverse collars, decorated with punched ring-and-dot motif forming the eyes of three highly stylised animal heads, one of which forms the terminal. Further punched ring-and-dot motifs form the animals' nostrils. The copper-alloy object was 49 mm long, and reaches a maximum width of 13 mm, with a thickness of 5 mm. It was assigned a ninth- or tenth-century date.

The *PAS* reports an unusual strap fitting (LIN-E30446) from **Saltfleetby St Clement** in East Lindsey, dated to the eleventh century. It was made of copper alloy, and only its tip survives. Originally it would have had a hook at one end, and three arms fanning out to an open circular terminal. The surface of the fragment bears a hatched cross. The use of objects like this, often described as 'socketed hooks', many of which have been found in Norfolk, was uncertain, but it was suggested in the *PAS* entry that they held a rope or cord. They would have developed from Scandinavian circular strap-distributors with three perforations, often used as dress accessories on belts. If this was true, their subsequent development into socketed hooks was restricted to Britain. Another Lincolnshire example was LIN-F29FC4 from Kesteven. It measured 18 x 15 x 5 mm.

A similar example of a 'socketed hook', albeit more complete, was (LIN-3AD358), found at **Saltfleetby all Saints** in East Lindsey. The attachment end of this fitting was damaged, but the object was otherwise complete. It measured 35 mm in length, and 15 mm in diameter. It retains some decoration in the form of a quatrefoil, but was quite worn. For a more in-depth discussion of this type of artefact, see LIN-E30446.

The *PAS* reports the discovery of NLM-5DFD84, a ninth-century copper-alloy strap-end of Thomas type A, from the parish of **Scawby**, with two rivet holes at the top. The decoration on the front plate was heavily worn, though some engraved pattern was still visible. The length of the strap-end was 60.8 mm, and the width was 12.4 mm.

Also from **Scawby** was NLM-BB0FF1, a copper-alloy openwork strap-end in *Winchester* style (Thomas Class E, Type I). The strap-end was tongue-shaped, with two rivet holes at the split end, one of which retains its copper-alloy rivet, and the other of which was damaged. Decoration consists of a symmetrical foliate pattern. The object measured 47.8 x 19.7 mm, and was 4.2 mm thick. It was assigned a tenth-century date.

NLM4500 was an eighth-century copper-alloy strap fitting from **Scotton** in West Lindsey. It measured 38.5 x 6.7 x 2.1 mm.

From **Sibsey** was LIN-E69AF3, a copper-alloy strap-end of Thomas Type A, with zoomorphic terminal. It was very worn and broken (the split end was missing), and currently measured 20 x 19 mm, with a thickness of 1.2 mm. Traces of interlace are still visible on the central panel. It was assigned a late eighth- to tenth-century date.

The *PAS* reports a copper-alloy strap-end of Thomas type B, found in the parish of **Sixhills** in East Lindsey (LIN-E09DB2). It was assigned a ninth- to eleventh-century date. The dimensions were not recorded, but the strap-end was complete, with a tapering hollow rectangular sectioned shaft with two copper-alloy rivets at the attachment end. The underside of the strap-end was detachable, and consists of a rectangular plate that fits over the strap, joining onto the sides. The terminal was zoomorphic, with a three-dimensional head and raised triangular ears, represented by an incised line running diagonally, and a faceted snout with a rounded terminal, suggestive of an open mouth. It was similar to a strap-end from North Kesteven (LIN-6EF4E6).

Also from **Sixhills** in West Lindsey was an *Urnes*-style strap fitting of eleventh-century date. NLM4304 depicts a stylised stag's head with antlers in openwork, and was made of copper alloy. The object measured 34 x 14.4 mm, and was 5.1 mm thick.

LIN-E848A7 was a copper-alloy strap-end of ninth to eleventh-century date. It was originally tongue-shaped, but both ends are broken. Decoration consists of a faceted and stylized animal head, with its ears at the attachment end. The object measured 25 x 8 mm, and was 3 mm thick. It was found in **Skidbrooke with Saltfleet Haven**.

LIN-898ED7 was an eleventh-century copper-alloy strap-end from **Skidbrooke with Saltfleet Haven** in East Lindsey. The strap-end had a tapering elongated stem with a lozenge-shaped terminal, possibly zoomorphic or foliate. The attachment end splits into two to grasp the strap. One plate was missing, and the other had a rivet hole in it. It measured 46 x 13 x 4 mm.

LIN-531374 was a ninth- to tenth-century copper-alloy strap-end from the parish of **Skendleby** in East Lindsey. It measured 37 x 11 mm, and was 4 mm thick. The attachment end had a single central rivet hole, and the terminal was two-pronged. Just above the terminal was some stylized zoomorphic decoration incorporating incised lunate ears and drilled eyes.

LIN-2740A6 was a tongue-shaped copper-alloy strap-end decorated with a longitudinal central ridge. It measured 22 x 10 mm, and was assigned a tenth- to eleventh-century date. It was found in the parish of **South Ormsby cum Ketsby**.

The *PAS* reports the discovery of a copper-alloy *Borre*-style strap-end from the parish of **Sturton by Stow**. NLM1025 measured 42.3 x 10.6 mm, and was 2.3 mm thick, but the attachment end and rivet holes are missing. The terminal was zoomorphic. It was apparently poorly executed. It was assigned a tenth- to eleventh-century date.

The *PAS* lists the discovery of a copper-alloy zoomorphic strap-end of ninth- to tenth-century date (NLM-C07457) from the parish of **Swinhope**. The main body of the strap-end had a beaded border and possible interlace work in the centre. The object measured 39.1 x 13.3 x 1.7 mm. The strap-end retains traces of gilding (appendix 13).

NLM7137 was an oval-shaped strap-end made of copper alloy. The main panel was decorated with interlace, and the terminal was zoomorphic. The split end was missing, and the remaining fragment measured 27.1 x 8.1 mm, with a thickness of 1.2 mm. It was assigned a ninth-century date. Although images were not available, it sounds like it may be a *Trewhiddle*-style one. It was found in the parish of **Swinhope**.

A similar strap-end from **Swinhope** in West Lindsey was NLM7125, likewise oval in plan with a zoomorphic terminal, interlace decoration on the main panel, but complete, with two rivet holes at the split end. It was made of copper alloy, measured 51.1 x 11.4 mm, with a thickness of 2.6 mm, and was assigned a ninth-century date.

The *PAS* reports the discovery of a copper-alloy strap-end from the parish of **Swinhope** in West Lindsey. NLM-FB6685 was triangular in shape, with a zoomorphic terminal, and incised geometrical decoration, depicting a lozenge and a triangle in double lines. The split end had broken off. It measured 38.5 x 15.7 mm, and its thickness varies from 1.2 to 1.5 mm. It was assigned a ninth-century date.

Another ninth- to tenth-century copper-alloy strap-end from **Swinhope** was NLM-D5DCF6. This object was incomplete, and measured 24.4 x 26.2 mm, and was 2.8 mm thick. It belongs to Thomas Class E type 4. It was tongue-shaped, and had a lead core wedged between two sheets of copper alloy. One of the faces carries *Borre*-style interlace. See appendix 15.

Also from **Swinhope** in West Lindsey was NLM-C81422, a ninth-century strap-end in *Trewhiddle* style. It was oval in plan, with a zoomorphic terminal and several panels on the main body with *Trewhiddle*-style decoration. Two copper-alloy rivets remain at the top, and the object measured 31.0 x 12.0 mm.

A further copper-alloy strap-end from **Swinhope** was NLM-66E451. This object was incomplete, broken at the rivet holes as well as at the terminal, but seems to have been tongue shaped. It now measured 29.4 x 18.9 mm. The front depicts a *Borre*-style anthropomorphic mask. It was assigned a ninth- to tenth-century date.

NLM-0A9814 is a copper-alloy strap-end of ninth- to tenth-century date from **Swinhope**. This strap-end was zoomorphic, with large ears and pelleted eyes. The terminal consists of two pierced lugs. The attachment end tapers slightly, and has a single rivet hole in the centre, but was broken off along that line. It measures 42.1 x 10.4 mm, and belongs to the same group as LIN-531374 from Skendleby.

NLM6413, also from **Swinhope**, was another strap-end that was made of copper alloy, dated to the ninth century.

NLM7118, a gilt copper-alloy strap fitting from **Swinhope**, was dated to the fifth- to eleventh centuries. It was rectangular, with four rivet holes, one of which contained iron residue. Decoration comprises of a double concentric circle in the centre with dots in between the two circles. It measured 36.7 x 20.6 x 0.9 mm (appendix 13).

NLM6540, also from **Swinhope**, was a copper-alloy strap fitting dated to the ninth- to eleventh centuries. It had a rounded terminal, and a central ridge run down three quarters of the top plate. A single rivet hole was still present.

NLM6541 was a ninth- to eleventh-century copper-alloy strap fitting from **Swinhope**. It was oval in shape, and badly corroded so no decoration was visible.

From **Swinhope** in West Lindsey as well was NLM-7D4337, a fragment of a lead-alloy strap-end. The attachment end was missing, but the terminal was tongue-shaped, and decoration was in *Winchester* style, depicting a foliate pattern. The object measured 26.8 x 22.7 mm. It was assigned a tenth-century date. See appendix 15.

The *PAS* reports a devolved *Winchester*-style strap-end made of copper alloy from the parish of **Tathwell** in East Lindsey. NLM4730 was very incomplete, and only a fragment of the upper half, including one of the two rivet holes, survived. It measured 23.3 x 22.2 mm, and was 2.7 mm thick. Decoration was openwork, but at least five ring-and-dot motifs were also visible on its surface. It was assigned a tenth-century date.

The *PAS* reports the discovery of a copper-alloy strap-end from **Tattershall** in East Lindsey. NLM6355 was oval in shape, and had a long narrow and pointed terminal, which was probably zoomorphic, but the object was too heavily corroded and broken to be sure.

The strap-end seems to have an interlace panel with inlay, but again this was difficult to see. There were two rivet holes. The strap-end measured 56.1 x 13.7 mm, and was 2.6 mm thick. It was assigned a ninth- to tenth-century date.

Also from **Tattershall** was NLM2680, an openwork strap fitting decorated in *Urnes*-style, made of copper alloy but partially silvered. The decoration consisted of intertwined animals. The strap-end itself was triangular in shape, with a zoomorphic terminal, and a half-moon shaped attachment end with a single rectangular attachment hole, separated from the main body of the strap-end by a narrower undecorated stretch, which probably had a collar of some sort attached originally. The strap-end measured 29.7 x 34.3 mm (which seems to be wrong), and was 2.8 mm thick. It was assigned a tenth- to eleventh-century date, but as the *Urnes* style did not develop until the eleventh century, an eleventh-century date seems more appropriate. See appendix 14.

The *PAS* reports the discovery of an incomplete copper-alloy strap-end from **Tattershall Thorpe** in East Lindsey. NLM-466BD0 was originally tongue-shaped, although the bottom was damaged, and bears a *Borre*-style zoomorphic animal mask on its surface. The eyes are represented by ring-and-dot motifs, and the ears are rounded. Above the animal mask was a row of some further five ring-and-dot motifs, and above that, between the two rivet holes in the corners of the split end, are three more ring-and-dot motifs. The object measured 56.6 x 28.0 mm, and had a thickness of 3.9 mm. It was assigned a ninth- or tenth-century date.

A second copper-alloy strap-end from **Tattershall Thorpe** was NLM-463C08. This tongue shaped openwork strap-end, of Thomas Class E, Type 2, was also incomplete, being broken at the attachment end. The decoration was anthropomorphic, with a stylized human figure facing forward with his arms and legs apart. The arms are decorated with horizontal grooves, and could represent wings. It measured 40.7 x 23.1 mm, and its thickness was 2.4 mm. It was suggested on the *PAS* website that "the decoration was likely to be an abstract version of the Sherbourne St John Stirrup Strap Mount which depicts a naked man with serpents entwining around his arms and legs." This motif also sounds reminiscent of the crucifixion-scene on the *Jellinge* stone. It was assigned a ninth- to tenth-century date.

The *PAS* lists a ninth-century copper-alloy strap-end from **Thimbleby** (YORYM-E88227). The object was cast, and had 2 attachment holes of circular section. The terminal end was plain, but the central panel of the upper surface was decorated with an incised teardrop and a zoomorphic design in an incised frame. The object measured 26.7 x 9.9 mm, and was 3.6 mm thick.

The *PAS* reports the discovery of NLM4699, a copper-alloy strap-end in devolved *Winchester* style, dated to the tenth century. It measured 42.8 x 19.7 mm, and was 3.6 mm thick. It was found in the parish of **Thimbleby** in East Lindsey.

YORYM-C1FA41 was another cast copper-alloy strap-end from **Thimbleby**. The attachment end was missing, but the terminal end had zoomorphic decoration. The upper face had incised geometric decoration, and a line of stamped dots across the line of the strap-end next to the terminal. It measured 30.1 x 8.6 mm, and was 2.2 mm thick.

From **Thimbleby** in East Lindsey as well came a copper-alloy strap-end of Thomas class A type 1. NLM-E7FDC3 was roughly oval in shape, with two rivet holes at the attachment end, and one copper-alloy rivet still in place. The main panel was decorated in *Trewhiddle*-style zoomorphic interlace, and the terminal of the strap-end was likewise zoomorphic. It measured 30.1 x 11.3 mm. It was assigned a ninth-century date.

YORYM-C1E0C2, another copper-alloy strap-end of ninth-century date from **Thimbleby**, was leaf-shaped, and measured 52 x 14.5 mm, with a thickness of 2.5 mm. The upper end of the attachment end had broken off. The terminal end had zoomorphic decoration, and the upper face had geometric decoration. There may have been some enamelling as well, as indicated by two particularly wide parallel grooves running across the line of the strap-end.

NLM2866 was a copper-alloy strap-end from the parish of **Thonock** in West Lindsey, decorated with ring-and-dot motifs. It was roughly tongue-shaped. The split end was broken off, and the surviving fragment measured 26.6 x 11.6 mm, with a thickness of 2.4 mm. It was assigned a tenth-century date.

NLM2844 was a broad tongue shaped copper-alloy strap-end from the parish of **Thonock** in West Lindsey, measuring 23.3 x 18.8 mm, and with a thickness of 2.8 mm. The split end was missing, but most of the main body was still present, which was decorated with a central raised rib, surrounded by stamped zig-zag lines and crescent shapes. It was assigned a tenth- to eleventh-century date.

The *PAS* reports the discovery of NLM2876, a rectangular-shaped copper-alloy object measuring 40.2 x 19.6 mm, with a thickness of 7.1 mm. It had two rivet holes on one side, which had a cusped bottom consisting of three rounded protrusions. The central body was decorated with an openwork cross in the centre of an equal-armed etched cross. Four incised little pellets occupy the fields between the arms, one in each field. The cross was separated

from the attachment end by a thin line, whilst a thick etched border separated the central cross from the other side. At the other end, three circular holes (interpreted on the *PAS* database as rivet holes) are placed in a triangle, and a central lug protrudes from the outside edge. Two further lugs protrude straight backwards from the sides of the object. This object was interpreted as a possible strap-end. On the basis of both size and the backwards-protruding lugs, however, it was also suggested that this was a strap fitting for a horse harness, although Williams apparently disagreed with this (see entry for LIN-3A1414). It was found in the parish of **Thonock** in West Lindsey. Two further complete examples were also recorded in Lincolnshire, NLM651 from Alkborough and LIN-3A1414 from Ruskington. The latter had decoration suggesting an eleventh-century date. This one was also assigned an eleventh-century date.

NLM5771 (Brown 2006: 294) was a copper-alloy *Trewhiddle*-style strap-end from **Torksey**, with niello inlay. It measured 25.1 x 10.8 x 7.4 mm, and was dated to the eighth- to eleventh centuries.

NLM1060 (Brown 2006: 295) was a copper-alloy strap-end (Thomas Class E) from **Torksey** with two raised vertical ribs on the surface and three rivet holes. It was dated to the tenth or eleventh century, and measured 29.3 x 15.3 x 3.7 mm.

NLM1059 (Brown 2006: 296) was a copper-alloy strap-end, probably Thomas Class A type 2. It bore geometric decoration with a crosshatched panel, and had a zoomorphic terminal. It measured 29.5 x 9.8 x 1.7 mm, and was assigned an eighth- to tenth-century date. It was found in **Torksey**.

Brown 2006: 297 was a silver strap-end with zoomorphic terminal from **Torksey** (appendix 14). The centre panel was decorated with an interlace animal. It measured 36.2 x 10.8 x 1.7 mm. See appendix 14.

Brown 2006: 298 is a silver zoomorphic strap-end with green glass eyes from **Torksey**, with gilding and niello inlay (appendix 13). It measured 15.3 x 6.7 x 2.9 mm.

One additional copper-alloy strap-end from **Torksey** was recorded on the *PAS* as DENO-5F1FA5, a Haldenby Group 16 strap-end dated to the ninth century. The terminal, which would have been zoomorphic, was broken off. At the opposite are two rivet holes, one still with a copper-alloy rivet *in situ*. The object was decorated with a central panel of crosshatches. The object was rectangular and elongated in plan, and measured in its current state 39.4 x 12.2 mm, with a thickness ranging between 3.0 and 4.6 mm.

Excavations at **West Halton** produced two ninth-century strap-ends of a type that were probably produced in Northumbria (Hadley *pers. comm.*).

The *PAS* reports the discovery of a ninth-century copper-alloy strap-end from **West Keal** in East Lindsey (NLM2739). This strap-end measured 46.4 x 7.8 mm, and was 3.2 mm thick. Its terminal was zoomorphic, with small crescent shaped ears, and a large panel partially decorated with crescent shapes giving the effect of scales.

The *PAS* reports the discovery of an incomplete copper-alloy strap-end from the parish of **West Torrington**. LIN-277D42 belonged to Thomas type A, with zoomorphic terminal, and roughly oval in shape. This particular example measured 33 x 7 mm, and was 2 mm thick, and badly corroded, and broken off at the attachment holes. It was assigned a ninth- to tenth-century date.

The parish of **Willoughby with Sloothby** yielded a copper-alloy strap-end of Thomas type A, dated to the ninth century. LIN-85ED37 had a zoomorphic terminal, and would originally have been roughly oval in plan were it not that it was broken at the rivet holes. The surface was very worn. It measured 36 x 15 mm, and was 4 mm thick.

NLM-03C536 was a ninth-century copper-alloy strap-end from **Willoughby with Sloothby**. It was tongue-shaped, and the attachment end had broken off. Both the rivet holes were missing, but it was identified as *Trewhiddle* style. The length was 33.8 mm, and the thickness was 2.4 mm.

NLM-0449D3 was a worn zoomorphic ninth-century strap-end made of copper alloy from the parish of **Willoughby with Sloothby**. The length was 54.1 mm, the width was 14.2 mm, and the thickness in the centre was 0.7 mm.

NLM-03CF96 is a ninth-century zoomorphic copper-alloy strap-end from **Willoughby with Sloothby**. Its surviving length was 33.2 mm, and it was 3.2 mm thick.

NLM-03D576 was a ninth-century strap-end made of copper alloy from the parish of **Willoughby with Sloothby**. The strap-end may terminate with an animal head, though it was heavily worn and there was no decoration in the central panel. The length was 50.0 mm, and the thickness was 1.4 mm.

NLM-5AFCE4 is a tenth-century *Winchester*-style lead strap-end from **Willoughby with Sloothby**. It was tongue-shaped, with two rivet holes. In one of the holes was a surviving lead rivet. It measured 39.7 x 21.0 mm. See appendix 15.

The *PAS* reports the discovery of a copper-alloy strap-end from the parish of **Winterton**. NLM-E7A252 had a very rounded terminal, depicting an *Urnes*-style animal head with ring-and-dot motifs for eyes, which was identical on both faces. The animal had a

rounded snout with a further ring-and-dot motif in the centre. The split end was broken halfway down, leaving only one centrally placed incomplete rivet hole visible on one of the sides. The fragment measured 27.6 x 9.4 mm, and was 7.1 mm thick. It was assigned a later eleventh-century date.

Another copper-alloy strap-end of Thomas type A was found in **Wood Enderby**. NCL-435820 measured 38 x 11 mm, but was broken off at the rivet holes, and was 1.5 mm thick. It had a zoomorphic terminal and a central panel with zoomorphic decoration in *Trewhiddle* style, and traces of inlay. It was assigned a ninth-century date.

A strap-end of Thomas class A type 5 was also found at **Wood Enderby** in East Lindsey. LVPL-061084 was made of copper alloy, and dated to the ninth or tenth centuries. One of the rivet holes had broken off. It was oval in shape, measuring 38 x 12 mm, and 2 mm in thickness. The central main panel was decorated with an X, whilst an inverted V with a pellet on either side was present near the top, and the lower terminal was stylized zoomorphic. It probably originally had niello inlay. The finds entry in the *PAS* database also mentions gilding (appendix 13).

The *PAS* reports the discovery of two ninth-century strap-ends from the parish of **Worlaby** in North Lincolnshire. The first of these, NLM631, was fish-shaped, made of copper alloy, and assigned a ninth-century date.

The second strap-end from **Worlaby**, NLM630, was also dated to the ninth century. It was made of copper alloy, was short and fat in shape, and poorly decorated.

The *PAS* reports the discovery of a small fragment of a copper-alloy strap-end from the parish of **Wrawby** in North Lincolnshire. NLM4312 measured 32.7 x 12.8 mm, and was broken off along the two rivet holes; The surface bears three ring-and-dot motifs. It was assigned an eleventh-century date.

NLM4201 was a copper-alloy strap-end of eighth- or ninth-century date from the parish of **Wrawby**. It had a rounded zoomorphic terminal, and the decoration on the main panel was too worn to be identifiable. The strap-end was broken off along the two rivet holes, and the remaining fragment measured 34.0 x 9.3 mm.

12.2.2: Strap-ends from Kesteven

NLM4663 was a ninth-century copper-alloy strap-end from **Ancaster** in South Kesteven. It was very worn, and no decoration remained visible.

NLM4371 was an eighth- to ninth-century strap-end with silver wire decoration from **Ancaster** in South Kesteven (appendix 14). It was very worn, and measured 44.9 x 11.7 x 3 mm. See appendix 14.

DENO-9D9358 was a ninth-century copper-alloy strap-end from the parish of **Asgarby and Howell** in North Kesteven, with incised decoration forming a shield shape around the rivet holes, and what looks like herringbone lines going down along the length of the strap-end from there. There was another rivet hole holding a copper-alloy rivet, at the centre, close to the broken edge, which indicates it was repaired. It measured 13.7 x 10.6 x 2.2 mm.

LIN-D9A478 was an eleventh-century copper-alloy strap-end from **Aunsby and Dembleby** in North Kesteven, of Thomas Class G, tongue-shaped with openwork decoration depicting a sinuous beast with an asymmetrically interlaced body which emerges from a protruding animal mask located at the base of a plain, wedge-shaped split end. It measured 60 x 15 x 4 mm.

LIN-DA72D6 was an eleventh-century lead strap fitting from **Aunsby and Dembleby** in North Kesteven. It measured 62 mm in length and 5 mm in diameter, and entirely decorated on its exterior with eight faceted panels containing a row of half a chevron, resulting in one complete chevron per panel. See appendix 15.

NLM7093 was an eleventh-century rectangular strap fitting, decorated in *Urnes* style. It measured 53.9 x 25.9 x 2.6 mm. It was found in **Barkston**.

The *PAS* also lists a strap-end from **Baston** in South Kesteven (LIN-EB8C76). It was a copper-alloy strap-end of Thomas type A, with a wide flat body tapering to a zoomorphic terminal. The object was worn, but traces of the interlace motif on the main panel can still be discerned, as well as faint traces of the snout and eyes off the terminal. One of the two rivet holes at the attachment end was damaged. It measured 51 x 9 x 2 mm. It was assigned a date between the late eighth and tenth centuries.

NLM713 was an eighth- to ninth-century fish-shaped zoomorphic strap-end from **Baston**, with a zoomorphic terminal. Decoration seemed to have been suggestive of fish-scales. It had three rivet holes at the top, and measured 62.2 x 16.8 x 3.7 mm.

NLM717 was a ninth-century silvered copper-alloy strap-end from **Baston** in South Kesteven. It was roughly diamond-shaped, with two lobes at the top, and two iron rivets still in place. See appendix 14.

DENO-18A0A2 was an elongated copper-alloy zoomorphic strap-end from the parish of **Beckingham** in North Kesteven, with a zoomorphic terminal. It measured 43.9 x 12.4 x 1.7 mm. No other information was recorded.

LIN-D49BF2 was a ninth- to eleventh-century copper-alloy strap-end from the parish of **Branston and Mere** in North Kesteven that may have been silvered. There were two rivet holes at the attachment end, and the face was decorated with a border of punched dots. See appendix 14.

LIN-CBA8F3 was a copper-alloy strap-end of eighth- to eleventh-century date from the parish of **Branston and Mere** in North Kesteven.

LIN-0C6954 was a ninth- to tenth-century copper-alloy strap-end from the parish of **Branston and Mere** in North Kesteven, of Thomas type A.

LIN-0C0CC0 was a copper-alloy strap-end of Thomas type B from the parish of **Branston and Mere** in North Kesteven. It was of eighth- to eleventh-century date.

NLM748 was a ninth-century silver *Trewhiddle*-style strap-end from **Bourne** in South Kesteven. Two iron rivets were still *in situ*. The main panel was decorated with twisted animals, and the remains of niello were still visible. See appendix 14.

NLM4598 was a strap fitting with stamped decoration from the parish of **Culverthorpe and Kelby** in South Kesteven. It was made of copper alloy and dated to the ninth century.

NLM648 was a strap-end made of copper alloy from **Digby** in North Kesteven, dated to the tenth century.

NLM6056 was a tenth- to eleventh-century copper-alloy strap-end from **Digby** in North Kesteven, decorated in 'viking' openwork depicting an animal holding a snake in its mouth.

NLM4298 was an eleventh-century copper-alloy *Urnes*-style strap-end from **Ewerby and Evedon** in South Kesteven, depicting an animal holding a large twisting snake in its fangs. It measured 46.3 x 13.3 x 8.3 mm.

LIN-662203 was a copper-alloy strap-end (Thomas type B) from the parish of **Folkingham** in Kesteven. It was assigned an eighth- to eleventh-century date.

NLM4206 was a seemingly undecorated ninth-century copper-alloy strap-end from **Folkingham** in Kesteven.

NLM6111 was a ninth-century copper-alloy strap-end from **Folkingham**, with a zoomorphic terminal. The decoration was too worn to be visible any longer.

NLM684 was a tenth-century copper-alloy strap-end from **Grantham**. It was identified as 'viking', had two rivet holes, and some remains of interlace decoration.

NLM7144 was an eleventh-century lead strap fitting of *Winchester type* from **Grantham** in South Kesteven. The two rivet holes were still in place, both containing the remains of iron rivets. It measured 37.1 x 19.7 x 3.4 mm. See appendix 15.

The *PAS* reports a copper-alloy strap fitting with 'typical viking' incised line decoration found in the parish of **Great Ponton** in South Kesteven (NLM-DAC717). It measured 35.8 x 14.1 x 14.2 mm, and was assigned a date range of 850 – 1066 AD.

NLM682 was a ninth-century copper-alloy strap-end from **Great Ponton**. It had two rivet holes, incised decoration, and a stylised animal head terminal.

NLM2941 was another strap-end with a zoomorphic terminal and a central interlace pattern from **Great Ponton** in South Kesteven, dated to the ninth- to tenth-centuries, and also made of copper alloy.

NLM6094 is an eleventh-century, copper-alloy strap-end from **Great Ponton**. It was decorated with incised line decoration, and measured 27.8 x 16 x 3.5 mm.

From **Harmston** in North Kesteven was a copper-alloy zoomorphic strap-end (LIN-DE1305) of Thomas Type A. The object measured 37 x 9 mm, and was 1.6 mm thick. It was broken off at the attachment end where the rivet holes are, and the lower plate was missing. The body was decorated with an incised cross and a rectangular panel of zoomorphic interlace. It was assigned a tenth- to eleventh-century date.

The parish of **Heighington** in North Kesteven yielded a copper-alloy strap-end (LIN-979871) of Thomas type A, whose sides were possibly cut off, or otherwise are incredibly worn. The attachment was missing as well, broken off along the rivet holes. The remaining fragment was roughly triangular in shape, measuring 25 x 18 mm. The zoomorphic terminal was also missing. The panel was decorated with punched dots. It was assigned a ninth- to tenth-century date.

LIN-8854C6 was a ninth-century copper-alloy strap-end from **Heckington** in North Kesteven. Its face was decorated with two bands of interlocked crescents, cut into the surface. There were still two copper-alloy rivets at the attachment end.

NLM5674 was a tenth-century copper-alloy strap-end from **Heckington** in North Kesteven, tongue-shaped with linear decoration.

NLM4781 was an eleventh-century copper-alloy *Winchester*-style strap-end from **Honington** in South Kesteven. It measured 35.4 x 18 x 5.2 mm.

LVPL487 was a copper-alloy strap-end from **Hougham** in South Kesteven of Thomas class A, type 5. Some traces of silver wire scrollwork are still visible. It was assigned a ninth-century date. See appendix 14.

NLM2939 was a strap-end from **Ingoldsby** in South Kesteven.

LIN-D8E7B1 was a ninth- to eleventh-century enamelled copper-alloy strap-end from **Irnham** in South Kesteven, of Thomas Type A, but all that remained was the zoomorphic terminal. The snout was covered in degraded blue enamel. The reverse was slightly concave and it too was filled with blue enamel.

DENO-690C44 was a ninth-century copper-alloy strap-end from **Kirkby la Thorpe** in South Kesteven, with two rivet holes. The central panel of the strap-end was decorated with numerous simple punched half moon motifs. The distal terminal was broken off, but was probably originally zoomorphic. It measured 26.5 x 13.0 x 2.8 mm.

NLM618 was a tenth- to eleventh-century copper-alloy strap-end from **Leasingham** in South Kesteven, long and narrow, and decorated with slight vertical grooves. There were two rivet holes at the top.

LIN-170E36 was an elaborate silvered copper-alloy strap-end of Thomas type A from **Lenton, Keisby and Osgodby**, dated to the ninth to tenth centuries. Only the attachment end with two silver rivets survived. The main panel of the strap-end was decorated with two parallel silver motifs, each consisting a pair of conjoined spirals, with a silver dot in each corner, and a penannular ring on either side of the joining spiral arm. Two further silvered motifs were placed between the main panel and the silver rivets, each depicting a silver penannular ring with scroll-like terminals. See appendix 14.

PAS-A5F2A5 was a silver gilt strap-end from the parish of **Lenton, Keisby and Osgodby**. It had three rivet holes, and measured 15 mm in length. No exact date was recorded. See appendix 13.

LIN-4492E3 was a copper-alloy zoomorphic strap-end from the parish of **Lenton, Keisby and Osgodby**, dated to the eighth to eleventh centuries.

The PAS lists another incomplete copper-alloy strap-end from the parish of **Lenton, Keisby and Osgodby** (LIN-DA0133). The surviving fragment of this broken strap-end measured 26 x 7 x 4 mm. Its attachment end, which tapered towards a narrow collar consisting of a raised ridge between two narrow bands that was circular in cross section, was mostly broken off. The main body of the strap-end was blade shaped but was now also broken. It was assigned a ninth- to eleventh-century date.

LIN-170E3 is another copper-alloy strap-end from **Lenton, Keisby and Osgodby**.

NLM-52B5B2 is a ninth-century copper-alloy strap-end from **Lenton, Keisby and Osgodby**, with a zoomorphic terminal with rounded ears and two rivet holes.

LIN-16F330 was a copper-alloy zoomorphic strap-end of ninth- to eleventh-century date from the parish of **Lenton, Keisby and Osgodby**. It belonged to Thomas type A or B. The object was very worn.

LIN-0BC310 was a ninth- to eleventh-century copper-alloy strap-end from **Lenton, Keisby and Osgodby**. It belonged to Thomas type A, was tongue-shaped with two rivet holes at the attachment end. The main body was decorated with a rectangular panel containing the remains of niello hatching. The animal-head terminal was missing.

NLM2940 was a ninth-century copper-alloy strap-end from **Lenton, Keisby and Osgodby**, with niello and silvering, in *Trewhiddle* style. See appendix 14.

The PAS lists another copper-alloy strap-end from **Lenton, Keisby and Osgodby** (LIN-AC6B72). It belongs to Thomas type A, was oval in shape and had a zoomorphic terminal. The attachment end was broken off at the rivet holes. The face of the strap-end had been silvered. It was bent double now, and the object measured 31 x 28 mm in its current state, with a thickness of 1 mm. It was assigned a tenth-century date, although strap-ends of this type are usually dated to the ninth century. This thesis will therefore accept a ninth- to tenth-century date for this object. See appendix 14.

The PAS reports a further strap-end from **Lenton, Keisby and Osgodby** (LIN-665AB4). It was made of copper alloy, was roughly oval in plan but now broken at the attachment end and tip. The upper surface was decorated with incised hashed lines, and the lower surface was undecorated. The surviving part measured 24 x 12 mm, with a thickness of 1 mm. It was assigned a date range of AD 790-1000. It was probably Thomas type A.

NLM2939 was a ninth-century copper-alloy strap-end from the parish of **Lenton, Keisby and Osgodby** in North Kesteven. It had ring-and-dot decoration and terminal horizontal incisions at the lower end, which was all that survived.

NLM6105 was an eleventh-century tongue-shaped copper-alloy strap-end from **Little Ponton and Stroxtan** in South Kesteven. It had linear decoration, and two rivet holes at the top. It measured 28.4 x 33.2 x 2.6 mm.

NLM5270 was an eleventh-century copper-alloy strap-end from **Market Deeping** in South Kesteven. It was identified as 'viking', and depicted an abstract animal holding a snake in its mouth. It was similar to NLM6056 from Digby in North Kesteven. It measured

61.9 x 20.9 x 9.1 mm.

NLM7173 was a ninth-century copper-alloy strap-end from **Marston**. It was oval in shape, with knotted interlace decoration and a zoomorphic terminal.

NLM6552 was an eleventh-to twelfth-century copper-alloy strap fitting from **Normanton** with a zoomorphic terminal. It measured 42.2 x 4 x 4.2 mm.

LIN-CA9848 was a copper-alloy tenth- to twelfth-century composite strap-end from the parish of **North Hykeham** in North Kesteven. The body of the strap-end was sub-rectangular, and it was decorated with three ring-and-dot motifs along the body. It had a zoomorphic terminal. The type of composite strap-end was identified as "more at home in the thirteenth century", but on the basis of the ring-and-dot motifs and zoomorphic terminal it was assigned to the Anglo-Scandinavian period, or the transitional period, between the Anglo-Scandinavian and early medieval periods.

The PAS reports another zoomorphic copper-alloy strap-end, Thomas type B, from **Osbourneby** in North Kesteven (LIN-6EF4E6). It was complete, and measured 53 x 8.5 x 4 mm. It had a tapering hollow rectangular sectioned shaft, with two rivets at the attachment end. The underside had a detachable rectangular plate, which fits over the strap, and joins neatly onto the sides. The terminal was zoomorphic, with a three-dimensional head and raised triangular ears. The eyes are marked with two incised lines, and the snout was flared. It was assigned a date range of c. 800-1066. It was very similar to a strap-end from Lindsey (LIN-E09DB2).

LIN-5020B3 was an eleventh-century copper-alloy strap-end in openwork *Winchester* style from the parish of **Osbourneby** in North Kesteven. The strap-end was tongue-shaped, depicting a quadruped walking left looking back over its shoulder, with two rivet holes at the attachment end. It measured 50 x 23 x 2 mm.

LIN-6D3AB7 is a ninth-century zoomorphic copper-alloy strap-end from **Osbourneby**. Some interlace design remained. It was assigned a ninth-century date.

LIN-6D45E5 was a ninth-century copper-alloy strap-end from **Osbourneby** in North Kesteven. The terminal was zoomorphic, but the decoration was generally speaking too worn to be identifiable. It was assigned to the ninth century.

LIN-A0D5B1 was a ninth- or tenth-century copper-alloy strap-end from **Osbourneby** in North Kesteven of Thomas class A, with zoomorphic terminal.

LIN-294A88 was a ninth- to tenth-century copper-alloy strap-end from **Osbourneby** in North Kesteven, also Thomas class A. The strap-end had a leaf-shaped body, which was decorated with two pairs of curved lines at the sides and another pair at the top. There were two rivet holes at the attachment end.

LIN-55FA97 was a ninth- to tenth-century copper-alloy strap-end from **Osbourneby** in North Kesteven. It was a flat triangular strip of copper alloy decorated with punched ring-and-dot motifs, with a zoomorphic terminal.

LIN-71BA17 was a copper-alloy elongated strap-end, probably Thomas Type C, from **Osbourneby**. The narrow tapering strap-end was broken at the attachment end. It was assigned to the eighth or ninth century, and measured 37 x 7 mm.

LIN-A88864 was a fragment of an early medieval openwork strap-end from **Osbourneby**, with two rivet holes. The decoration was too worn to be identifiable. It measured 28 x 21 x 5 mm, and was assigned broadly to the period 410-1066.

LIN-6D6B27 was an elongated strap-end from **Osbourneby**, with a zoomorphic terminal. It was assigned to the eighth to tenth centuries. It measured 36 x 7 x 1.5 mm.

LIN-6D5C36 was an elongated strap-end from **Osbourneby**. The closed end was decorated with a single incised band running horizontally along the terminal of the outer face. Below this there was a very worn moulded decoration, possibly representing an animal head. It was assigned to the eighth to tenth centuries. It measured 41 x 11 x 3.

LIN-6D4F42 was a worn sub-rectangular strap-end with two holes at the attachment end, also from **Osbourneby**. This object was very probably decorated on both sides, however all evidence was now lost. It was dated to the eighth to tenth centuries.

LIN-F29FC4 was an eleventh-century copper-alloy strap fitting from **Osbourneby** in North Kesteven. It consisted of a disc, decorated with a grooved central circle, and three petals or ovals, which projected from the circle into the spaces between the attachment holes. The disc was 28 mm in diameter and 2 mm thick. Two of the attachment holes were broken. The function of these objects, known as 'socketed hooks', has long remained elusive. This example was the first to be found with the central disc and suggests the objects function as a strap distributor or junction. The absence of attachment points on the disc would indicate that it would have merely linked the fittings, and not itself been fixed to anything. Decoration is probably *Ringerike*-style, and they should probably be dated to the eleventh century. It measured 61 x 41 x 14 mm.

LIN-A82A07 was a worn copper-alloy zoomorphic ninth-century strap-end from **Osbourneby** in North Kesteven.

NLM705 was a ninth- to tenth-century copper-alloy co-called 'socketed hook' from

Pointon and Sempringham in South Kesteven. One end terminates in a hook, and it has one large attachment hole at the top, and incised decoration of lines and two rings.

LIN-D085E2 was a ninth- to tenth-century zoomorphic strap-end from the parish of **Ruskington** in North Kesteven, made of copper alloy. It belonged Thomas type A, and had two rivet holes at the attachment end. The strap-end was decorated but very worn.

LIN-D093E7 was a ninth- to tenth-century zoomorphic strap-end from the parish of **Ruskington** in North Kesteven, made of copper alloy, but with traces of silvering. The strap-end had two rivet holes at the attachment end. The snout of the animal head terminal was depicted with two curved lines of silvering (appendix 14).

LIN-3A1414 was an eleventh-century copper-alloy openwork strap fitting from the parish of **Ruskington** in North Kesteven, roughly rectangular, decorated in *Ringerike*-style. The decoration of the object suggests an eleventh-century date. An alternative suggestion was made that this could be a stirrup-strap mount. The entry stated that "David Williams had seen an image, however, and feels that the distance between this object and conventional stirrup-strap mounts was too far". Two further similar objects are recorded on the *PAS* database, also from Lincolnshire, at NLM2876 (Thonock) and NLM651 (Alkborough). It measured 54 x 29 mm.

The *PAS* reports an incomplete copper-alloy zoomorphic strap-end (LIN-66D1C6) in the parish of **Scopwick**. The terminal had a triangular snout with concave sides, with two incised lines representing the eyes. The forehead, represented by a trapezoidal panel, was decorated with an X-motif of oval petals. The perimeter of the main panel of the strap-end was hatched, with a very worn zoomorphic motif. The strap-end measured 27 x 14 mm, with a thickness of 2 mm. It was assigned an eighth- to tenth-century date.

NLM161 was a ninth-century copper-alloy strap-end from **Sleaford** in North Kesteven, decorated with coarse intertwined strands of interlace.

NLM4546 was an eleventh-century openwork copper-alloy devolved *Winchester*-style strap-end from the parish of **Silk Willoughby** in North Kesteven. It measured 58.4 x 16.9 x 3.9 mm.

The *PAS* lists a copper-alloy *Borre*-style strap-end from **Syston** (NLM-D834C5). It measured 44.4 x 11.5 x 9.3 mm, and retained a small hinge at the lower end.

NLM725 was a square tenth-century lead strap-end from **Thurlby** in South Kesteven. It was very square, and one iron rivet was still in place. It had incised, almost random decoration, and a rounded bottom. See appendix 15.

LIN-92EA51 was an eleventh-century lead strap-end from the parish of **Walcot near Folkingham** in North Kesteven. It was tongue-shaped and two rivet holes at the attachment end. It was decorated with a vegetal motif, or perhaps a standing male figure with tendrils and foliate wrapped around his arms and legs similar to Williams Class A Type 3 stirrup strap mounts. It measured 54 x 24 x 3 mm. See appendix 15.

LIN-9E5CD2 was a ninth- to tenth-century copper-alloy strap-end from the parish of **Washingborough** in North Kesteven, of Thomas type A. The attachment end was split, and had a single rivet hole.

LIN-D52C57 was a copper-alloy openwork strap-end of tenth- to eleventh-century date from the parish of **Wellingore** in North Kesteven, still containing the remains of two copper-alloy rivets. The motif was unclear.

LIN-C7C465 was a ninth-century gilt zoomorphic strap-end of Thomas class A from the parish of **Wellingore** in North Kesteven (appendix 13).

The *PAS* lists a copper-alloy strap-end from **Wellingore** (LIN-8B60C4), dated to the ninth or tenth centuries. It was nearly complete, and zoomorphic (Thomas type A) with a slightly undulated attachment end with a rivet hole in each corner. The surface was very worn but some traces of interlace, resembling a figure of eight, are still visible. The eyes are represented by two repressed dots. It measured 40.51 x 12.12 mm, and was 3.11 mm thick.

The *PAS* lists another, similar copper-alloy strap-end (Thomas type A)(LIN-A66B42) from **Wellingore**. It had a worn body and two rivet holes at the attachment end, where a small patch of interlace remains visible. The eyes are represented by two repressed dots. This strap-end measured 39.92 x 12.08 mm, and had a thickness of 3.14 mm. It was assigned a ninth- to tenth-century date. The possibility that this was one of a set of two matching strap-ends with LIN-8B60C4 should be considered.

12.2.3: Strap-ends from Holland

The *PAS* lists an incomplete *Winchester*-style copper-alloy strap-end from the parish of **Bicker** (LIN-F933F7). It was tongue-shaped, with a geometric tree design, each tree trunk decorated with five pinched ring-and-dot motifs. The attachment panel was missing, and the reverse was worn and undecorated. It was assigned a date between c. 975-1066. The strap-end measured 27.81 x 21.6 mm and was c. 1.83 mm thick.

LIN-463E93 was an eleventh-century copper-alloy strap-end with a *Winchester*-style openwork panel. It measured 50 x 25 x 2 mm. It was found in **Donington**.

LIN-A4C8C4 was a *Winchester*-style openwork strap-end from **Holbeach** in South Holland. It was tongue-shaped, and there are two rivet holes at the split end. It was decorated with a symmetrical zoomorphic pattern, probably comprising four animals on either side, all shown in profile. The object measured 58 x 26 mm, and was 2.5 mm in thickness. It was assigned an eleventh-century date.

From **Sutterton** comes NLM698, a highly unusual copper-alloy openwork strap-end in the shape of a bird's face. The bottom was broken, but the two piercings representing the eyes are still recognizable, as was the beak, which originally would have been flanked by two further holes. Above the bird's head was a border separating it from the attachment end, which was rectangular in shape, and decorated with at least seven ring-and-dot motifs, and had two rivet holes in each corner. The entire object measured 27.6 x 22.8 mm, and had a diameter of 3.3 mm. It was assigned a tenth-century date.

Not dissimilar to NLM698 was NLM696, also the top part of a strap-end, but with anthropomorphic rather than zoomorphic openwork decoration. This strap-end, also from **Sutterton** near Boston, depicted a male figure with outstretched arms touching the outer border of the strap-end, and a "very worried look on his face." Its not unthinkable this represents a crucifixion. Above the figure was a narrow band dividing the openwork decoration from a rectangular panel with two rivet holes, undecorated in this case. The whole object measured 28.9 x 24.4 mm, and had a thickness of 3.6 mm. It was identified as devolved *Winchester* style, and assigned a tenth-century date.

Another tenth-century strap-end in devolved *Winchester* style from **Sutterton** near Boston was NLM694. Of this object, both the top and the bottom were broken off, leaving a fragment measuring 28.5 x 26.7 mm, with a thickness of 2.9 mm. The fragment depicts two animals symmetrically placed back to back inside a border.

12.3: Buckles

12.3.1: Buckles from Lindsey

The *PAS* reports a tenth-century copper-alloy buckle of tenth-century date from the village of Low Santon in the parish of **Appleby**. SWYOR-AC86A7 had a D-shaped frame with an elaborate zoomorphic outer edge. The snout forms a protruding point to the buckle frame, whilst the ears of the animal are formed in relief in the buckle's surface. The bar is straight, and still has two hinged looped attached; the pin is missing. The object measures 28.7 x 24 mm, and had a thickness of 6.5 mm.

NLM-9739C0 was a zoomorphic copper-alloy buckle from **Barton-upon-Humber**, assigned a ninth- to tenth-century date. The buckle pin was missing. It measured 18.0 x 19.4 mm.

NLM6727 was a gilt copper-alloy D-shaped buckle with zig-zag decoration, measuring 20.6 x 45.3 mm, and with a thickness of 3.6 mm. The rectangular buckle plate was still present, with three rivet holes; one Fe rivet also remained. It was broadly assigned to the period c. 900-1400 AD. It was found in **Binbrook** (appendix 13).

The *PAS* reports a D-shaped buckle (NLM6726) from **Binbrook** in East Lindsey. It measured 20.3 x 41.4 mm, and had a thickness of 3.2 mm. It was made of copper alloy, with traces of gilding. The rectangular buckle plate with two rivet holes was still present, as are the two rivets. It was assigned a tenth- to fourteenth-century date. This buckle had engraved zig-zag decoration, like LIN-85C5D2 (appendix 13).

Also from **Binbrook** came a lead-alloy buckle (NLM6612), triangular in shape, with a serrated outer edge, and a narrow recessed bar. Most of the pin was still in place, and the buckle had a hole in each corner. It measured 23.6 mm in length, and was assigned a tenth- or eleventh-century date. See appendix 15.

The *PAS* reports the discovery of an eleventh-century rectangular buckle with buckle plate and lozenge-shaped belt guide from the parish of **Epworth** in North Lincolnshire. NLM6085 was made of copper alloy, and decorated with ring-and-dot motifs all over. The belt-guide had a central raised rib decorated with transverse incisions. The outer edge of the rectangular buckle itself was shaped in the form of a triangle. The whole object measured 19.8 x 28.6 mm, and was 9.2 mm thick.

Also from **Epworth** was a D-shaped copper-alloy buckle. NLM-75C340 was decorated with a scallop pattern of transverse grooves on either side of the rectangular pin rest, and measured 28.1 x 24.3 mm. A fragment of an iron pin remains *in situ* on the pin bar. It was assigned a ninth- to eleventh-century date (Marshall 1986: 8 (type IIB)).

The excavations at **Flixborough** produced no less than 87 copper-alloy and iron buckles (mostly oval-shaped) and other belt fittings (Rogers and Ottaway 2009). They probably cover the entire occupation sequence at Flixborough (roughly the seventh to tenth centuries). They are catalogued in Rogers and Ottaway 2009: 24-28.

The *PAS* reports the discovery of a D-shaped buckle of tenth- to eleventh-century date from the parish of **Fulletby** in East Lindsey. NLM-00CD52 was made of copper alloy, with an

expanded convex outer edge decorated with diagonal lines radiating from the notch for the pin. The object measured 22.5 x 16.0mm.

Excavations at '**Goltho**' produced a D-shaped buckle-frame with radial incisions and possible traces of gilding (Goodall 1987: 172) (appendix 13).

From **Haxey** came NLM6787, a tenth- to fifteenth-century rectangular copper-alloy buckle with three rivet holes and traces of gilding (fig. 28; appendix 13).

The PAS reports a copper-alloy buckle with integral triangular plate from the parish of **Healing**. NLM5420 measured 23.8 x 31.8 mm, and was 1.4 mm thick. It was decorated with a single ring-and-dot motif. It was probably of continental manufacture, and was assigned an eleventh- to thirteenth-century date.

NLM-A47915 was a D-shaped copper-alloy buckle with a thickened outer edge and a rounded knob, possibly a zoomorphic terminal biting the bar (the object was very corroded), on either side of the strap-bar. Some iron corrosion still remains in the centre of the bar, where originally the iron pin was attached. The object measured 27.5 x 21.0 mm, and was assigned a ninth- to tenth-century date. It was found in **Hibaldstow**.

Excavations at **Holton le Clay** produced a buckle dated to c. 900 AD (Albone 1999).

From **Horncastle** came a possible fragment of a buckle with ring-and-dot decoration (NLM3404). It measured 21.9 x 3.5 x 1.2 mm, was made of copper alloy, and broadly dated to the period 410-1066.

A further buckle from **Horncastle** in East Lindsey was NLM-BAFF81. This D-shaped copper-alloy object measured 33.9 x 30.7 mm, and was 3.8 mm thick. The buckle had some geometric decoration. It was assigned a date after the tenth century.

The PAS reports a D-shaped buckle with two animal head terminals that bite the bar, and a moulded pin-rest. NLM5391 was found in the parish of **Immingham** in North East Lincolnshire, and dated to the eleventh to twelfth centuries. The buckle measured 37.6 x 29.5 mm, and was 6.6 mm thick.

From **Laceby** was NLM6733, a rectangular copper-alloy buckle plate measuring 36.7 x 5.8 mm, and 2.3 mm in thickness. It was decorated along its border with zig-zag lines. The plate had three rivet holes; two of the rivets are still in place. The buckle was attached by two loops. It was assigned a tenth- to fourteenth-century date.

The PAS identified a single copper-alloy buckle in the parish of **Laceby** (NLM7242). It was sub-triangular in shape, with two animals biting the bar. It measured 19 x 17.3 x 3.2 mm. It was assigned a ninth- to eleventh-century date.

The PAS reports that a seventh- to ninth-century copper-alloy buckle (NLM-FD00B5) was found in the parish of **Middle Rasen**. It had an oval frame, with a folded plate, and its pin bends over the outer section of the buckle. Its recorded length was 18.1 mm, its width 17 mm, and it was 2.7 mm thick.

YORYM1514 was a kidney-shaped copper-alloy buckle of possible late Anglo-Saxon date. Pin still present, as well as two iron rivets. It measured 24.2 x 29.6 mm, and was 6.8 mm thick. It was found in **Owersby**.

The PAS database lists the discovery of a copper-alloy buckle of ninth- to eleventh-century date (NLM6330) in the parish of **Roxby cum Risby**. It measured 14.7 x 18.4 x 4.6 mm, was D-shaped, and the lower section of its frame was offset from the upper. The buckle depicted two animals biting the bar.

NLM-0FB862 was a ninth- to fifteenth-century copper-alloy D-shaped buckle from **Roxby cum Risby**.

LIN-85C5D2 was a tenth- to eleventh-century copper-alloy D-shaped buckle with a rectangular cross-section, measuring 21 x 31 mm, and 3 mm in thickness. It was decorated with 10 punched ring-and-dot motifs, two of which are now invisible due to corrosion. It was found in the parish of **Saltfleetby St Clement** in East Lindsey.

From the parish of **Scunthorpe** came YORYMB20 (record duplicated as YORYM220), a copper-alloy D-shaped buckle and incomplete buckle plate, identified as 'Anglo-Scandinavian'. The plate was formed of a folded sheet, decorated with ring-and-dot motifs around the perimeter, and held together by copper-alloy rivets. The buckle was decorated with some zoomorphic decoration. It measured 13.7 x 10.3 mm, with a thickness of 3.9 mm, and was assigned a tenth-century date.

The PAS reports the discovery of a copper-alloy buckle plate from the parish of **Skendleby** in East Lindsey. LIN-7936B6 was sub-rectangular, with a protruding knob at one end, and three rivet holes at the opposing end. It measured 27 mm in width; none of the other dimensions were recorded. The object was decorated in openwork, but the decoration can no longer be identified. It was assigned a ninth- to eleventh-century date.

From **Sudbrooke** in West Lindsey came NLM866, a D-shaped buckle with an ornate outer edge, widened and flattened, and decorated with at least five ring-and-dot motifs. It still retained some traces of tinning, and measured 31.5 x 24.2 mm, with a thickness of 2.6 mm. It was assigned an eleventh-century date.

The *PAS* lists a copper-alloy rectangular buckle (NLM7116) dated to the tenth to fifteenth centuries, with decoration consisting of three lines and punched triangles. It measured 19.2 x 11.7 mm. It was found in the parish of **Swinhope** in West Lindsey.

Also from **Swinhope** in West Lindsey was NLM-832251, a copper-alloy drop-shaped buckle frame with a central bar containing a copper-alloy pin, and an integral zoomorphic buckle plate with sunken eyes. It measured 38.4 x 11.5 mm, and was assigned a ninth-century date.

NLM5394 was D-shaped buckle with two zoomorphic terminals extending towards the bar. It was assigned to the eleventh or twelfth centuries. It measured 20.4 x 23.2, and was 4.7 mm thick. It was made of copper alloy, and found in **Tattershall**.

NLM5396 displays similarities to NLM5394, in that this was also a D-shaped buckle with two zoomorphic heads extending towards the bar. The frame of this buckle was decorated with radial lines. It measured 25.9 x 17 mm, and had a thickness of 3.4 mm. It was assigned to the eleventh or twelfth centuries, and found in **Tattershall**.

From **Tattershall** in East Lindsey as well was NLM5418, an oval buckle made of copper alloy dated to the period 700-900 AD. It measured 13 x 17.1 x 3.2 mm.

An eighth- to ninth-century oval buckle from **Tattershall** was NLM5419, measuring 18.1 x 12.6 x 2.6 mm. The buckle was undecorated, but the pin was still in place.

A copper-alloy D-shaped buckle and triangular buckle plate, the pin still present as well, were discovered in the parish of **Thonock** in West Lindsey. DENO-942EA1 was identified as Anglo-Saxon, and assigned an eighth- to ninth-century date. The buckle and pin were simple and undecorated, save for a decorative collar on the pin just before the bar. The buckle plate was zoomorphic, with an animal head at the triangle's apex, and further incised line decoration following the outline of the buckle plate. Three copper-alloy rivets are still present. Traces of gilt remain on the buckle, pin, and buckle plate. The entire object measured 57.4 mm in length, 40.2 mm of which was taken up by the plate. The maximum width, measured across the buckle frame, was 29.8 mm, and the maximum thickness was 7.1 mm (appendix 13).

Brown 2006: 308 was a zoomorphic copper-alloy buckle slider found at **Torksey**. It measured 23.6 x 18.2 x 8.8 mm.

LIN-516825 was a D-shaped buckle measuring 35 x 25 mm. The lip was expanded, reaching a thickness of 9 mm. The terminals of the buckle are zoomorphic, and bite the narrow bar. A similar specimen was recorded at Goltho Manor. It was found in **Willoughby with Sloothby** in East Lindsey, and assigned an eleventh-century date.

12.3.2: Buckles from Kesteven:

LIN-D9C500 was an eleventh-century zoomorphic copper-alloy buckle from the parish of **Aunsby and Dembleby** in North Kesteven. The buckle had an oval frame, rectangular in cross-section, and decorated entirely with four rows of dots, with a small zoomorphic elongated terminal. The copper-alloy pin was still attached to the bar. The butt-end of the pin was in the form of an animal head similar to the elongated terminal. It measured 34 x 22 mm, and was 2 mm thick.

LIN-77BF35 was a zoomorphic copper-alloy D-shaped buckle from **Barston**. It was dated to the tenth or eleventh century. The face of the buckle was decorated with a moulded line with a deep groove to either side, whilst a large side knob near the apex was decorated with three transverse moulded lines with grooves to either side.

NLM711 was a tenth- to eleventh-century buckle from **Baston** in South Kesteven. Its frame was decorated with two incised lines along the edge.

NLM711 was a tenth- to eleventh-century buckle from **Baston** in South Kesteven. Its frame was decorated with two incised lines along the edge.

NLM710 was a tenth- to eleventh-century copper-alloy sub-annular buckle from **Carlby**. It had a rough finish, with visible file-marks all over. The pin was missing.

NLM732 was a D-shaped zoomorphic copper-alloy buckle from **Greatford** near Stamford in South Kesteven. It was decorated with two stylised animal heads, with their snouts biting the bar. It was assigned a tenth- to eleventh-century date.

DENO-7FE548 was a tenth- to eleventh-century copper-alloy buckle from **Kirkby la Thorpe** in South Kesteven. The design was zoomorphic, involving two beast biting the bar. It was suggested it might be *Ringerike* style. It measured 39.1 x 26.5 x 5.9 mm. A similar buckle was published in Mills (2001: 20 no V14).

LIN-1868A6 was an eleventh- to twelfth-century D-shaped copper-alloy buckle from the parish of **Lenton, Keisby and Osgodby** in South Kesteven. The design was zoomorphic, involving two animals biting the bar. It measured 22 x 16 x 5 mm.

NLM730, from **Marston** in South Kesteven, was an oval buckle made of copper alloy with stylized *Borre*-style zoomorphic decoration, assigned a tenth-century date. The pin was still present. Similarities with examples from Norwich and Fishergate, York (Rogers 1993:

figs 650 and 652, nos 5314 and 5320), as well as strap-ends of Thomas's Class B, Type 4 (Thomas 2003: fig. 2, nos 16-17) were noted.

NLM731 was a copper-alloy buckle of tenth- to eleventh-century date from **Marston**. It was D-shaped, and had a zoomorphic lip and two incised lines along the visible edge. The pin was missing.

NLM946 was a square zoomorphic copper-alloy buckle with an iron pin from **Marston** in South Kesteven, assigned a tenth- to eleventh-century date.

NLM729 was a zoomorphic buckle from **Marston** in South Kesteven. The pin was missing, but it retained several incised lines and drilled holes as decoration. It was made of copper alloy, and assigned a tenth- to fifteenth-century date.

LIN-A2F766 was a tenth- to eleventh-century D-shaped buckle from **Osournby** in North Kesteven, made of copper alloy with silver inlay. The buckle had a solid expanded lip; two very worn animal heads were biting the narrowed and recessed pin bar. The surface of the buckle was decorated with two sub-rectangular panels, each decorated with a motif that could no longer be identified. There was a small section of silver inlay on the lip of the buckle. See appendix 14.

NLM5242 was an eleventh-century copper-alloy buckle from **Osournby** in North Kesteven, with a D-shaped frame and impressed line decoration, measuring 34.4 x 27.2 mm, and 2.8 mm in thickness.

NLM6194 was a copper-alloy viking D-shaped buckle from **Silk Willoughby** in North Kesteven, dated to the tenth or eleventh centuries.

LIN-676201 was an eleventh-century D-shaped copper-alloy buckle with eight ring-and-dot motifs evenly spaced along the surface of the frame, from the parish of **Walcot near Folkingham**. It was dated to the eleventh century. This buckle was found in the same location as LIN-4D2C91. It measured 29.6 x 20.8 mm, and was 2.5 mm thick.

LIN-4D2C91 was another D-shaped copper-alloy buckle of eleventh-century date from the parish of **Walcot near Folkingham**, also with eight ring-and-dot motifs evenly spaced along the surface of the frame. It measured 30 x 22 mm, and was 2 mm thick.

LIN-67C2B6 was a third copper-alloy buckle of eleventh-century date from the parish of **Walcot near Folkingham**. It was likewise D-shaped, but the lip was expanded, elaborately decorated in openwork *Winchester* style. It measured 37.8 x 28.4 x 4.1 mm.

12.3.3: Buckles from Holland

The *PAS* reports the discovery of a copper-alloy buckle from **Freiston** near Boston. NLM4249 was D-shaped, with a protruding pointy animal head in *Urnes* or *Ringerike*-style, with big rounded ears, on the frame. The pin was missing. It measured 35.7 x 44.5 mm, and was 12.1 mm thick. It was assigned an eleventh-century date.

LIN-5DCE01 was a copper-alloy buckle of tenth- to eleventh-century date, from the parish of **Pinchbeck** in South Holland. The object was D-shaped, and had a small moulded knob on either shoulder. The apex of the frame was decorated with two triangular grooves, and had three protruding knobs. The pin was missing.

The *PAS* reports the discovery of a rectangular buckle frame from the parish of **Sutterton** near Boston. NLM693 had stylized and quite abstract chased decoration, and measured 23.3 x 17.6 mm, with a thickness of 4.3 mm. One iron rivet was still in place, but the pin was missing. It was assigned a tenth- to eleventh-century date.

LIN-A0B651 was an eleventh-century copper-alloy D-shaped buckle from **Swineshead** near Boston, with an elaborate zoomorphic lip and tendril-like decoration. The pin was missing. It measured 37 x 26 x 3 mm.

12.4: Hooked tags

12.4.1: Hooked tags from Lindsey

Excavations at **Aylesby** produced a tenth- or eleventh century hooked tag. The copper-alloy hooked tag had a sub-circular plate and was decorated. Sub-circular plates appear from the eighth and ninth centuries but predominate in the tenth. They did not continue after the Conquest. Similar objects have been found at Fishergate, York (Watt 1995: 30).

The *PAS* reports the discovery of NLM-363911, a copper-alloy hooked tag, from **Barton-upon-Humber**. The object was incomplete, broken at the large circular attachment holes and missing the tip of its hook, but originally the plate was roughly teardrop-shaped. The decoration, consisting of five closely spaced ring-and-dot motifs arranged in a circle, was still intact. The surviving length was 23.1 mm, and the width was 15.3 mm. It was assigned a ninth-century date, and was of a very different, probably earlier, style as the tags produced at Lincoln.

The *PAS* lists an eighth or ninth-century hooked tag made of copper alloy from the parish of **Edlington with Wispington** (LIN-2B63A4). Its sub-triangular plate had ring-and-dot decoration, but the tip was broken away, leaving only part of one fastening hole. It was cast, and appears to have file marks along the side of the hook. It measured 25 x 11 x 1

mm. It was very similar to NLM-363911 from Barton-upon-Humber.

NLM2899 are **two** eighth-century hooked tags, made of copper alloy, triangular in shape, with stamped crescent-shaped decoration, from **Elsham**. The tags measured 16.4 x 11.5 x 0.6 mm and 19.6 x 12.1 x 0.6 mm respectively. They bore no resemblance to the tags produced at Lincoln.

NLM18 was a copper-alloy hooked tag of tenth- or eleventh-century date, found in the parish of **Elsham**. It had a sub-circular plate measuring 11.6 mm in diameter, with two attachment holes towards the top. The plate was decorated with a line of little dots around the outside perimeter, and another one forming a cross over the surface. The tip of the hook was now broken. The entire object had a length of 19.2 mm. It displayed clear similarities both in form and decoration to some of the hooked tags from Lincoln, for example f72 <ae15> (fig. 25), and may come from the same production centre.

The excavations at **Flixborough** produced 27 hooked tags made of copper alloy, iron and silver, including both triangular- and circular-plated examples (Thomas 2009a). Two of the triangular ones are reworked from later eighth-century gilded chip-carved metalwork (Thomas 2009a: 17-18). Their date range probably covers most of the occupation sequence of Flixborough (c. seventh to tenth centuries). Thomas (2009a: 19) has suggested that some of them may have been produced on site, whereas other, later examples could have come from the production site in Lincoln. However, none of the illustrated examples (Thomas 2009a: 20) display any of the typical ratchet decoration that seems to be the Lincoln-trademark. The tags are catalogued in Thomas 2009a: 19-22. See appendices 13 and 14.

The *PAS* database reports a hooked tag of eighth- to eleventh-century date (LIN-F72B77) found in the parish of **Grayingham** in West Lindsey. It was made of copper alloy, and measured 21.26 x 9.79 mm, with a thickness of 0.97 mm. It was incomplete, and misses its hook; otherwise the tag was flat and triangular, with a broken oval opening at the attachment end. The perimeter of the tag was decorated with a row of punched dots. It was found during field walking. The description of the object sounds similar to the tags from Lincoln, but unfortunately no image was linked to the *PAS* entry.

The *PAS* reports the discovery of NLM-99F413, a copper-alloy hooked tag with a triangular plate. One of the two attachment holes was broken off, but the hook was still present. The plate was decorated with two lines of punched dots around its outside perimeter and around the attachment holes, with a further line going from top to bottom across the middle of the plate. The object measured 21.5 x 11.4 mm. It was found in High Burnham in the parish of **Haxey**. It was assigned a ninth-century date. It was similar to examples from Lincoln, in particular f72 <ae546> and be73 <ae37> (fig. 25).

From **Healing** was a triangular hooked tag with ring-and-dot and rolled decoration (NLM5295), made of copper alloy. It had two rivet holes at the splayed end. It was assigned an eighth- to ninth-century date. It measured 20.5 x 21.9 mm, and was 0.3 mm thick. The hook was broken off. The decoration was unlike any of the tags from Lincoln.

The *PAS* reports a copper-alloy hooked tag, of seventh- to eleventh-century date. NLM3406 was found in the parish of **Horncastle**, and measured 19.6 x 9 mm, with a thickness of 0.7 mm. No further details were recorded, and image was not available.

From **Kirton in Lindsey** was NLM-3A5831, a copper-alloy hooked tag with roughly circular plate, measuring c. 13.3 mm in diameter, and two attachment holes. The plate was too corroded to show any decoration. The tip of the hook was also broken off, and the whole object measured 20.2 mm in length. It was assigned a ninth- to eleventh-century date. The shape of the object shows similarities to one of the hooked tags from Flaxengate, <ae15> (fig. 25).

NLM5725 was a hooked tag of ninth-century date, made of copper alloy, with niello inlay displaying a lozenge-shaped centre surrounded by spiral foliate patterns. The diameter of the central panel was 15.5 mm, and the length of the entire object including the hook was 24.8 mm. It was assigned a ninth-century date, and was discovered in the parish of **Ludford** in East Lindsey. It was rather unlike any of the Lincoln examples in terms of its decoration, although it was possible that its decoration was inspired by *Borre*-style motifs, especially from the *Borre*-style flat disc-brooches, which would place it in the later ninth or tenth centuries (fig. 25).

From **Ludford** as well was NLM5296, a small copper-alloy hooked tag with a triangular plate and a single central attachment hole at the top. The only decoration consists of an incised line around the outside perimeter. This tag measured 17 x 9.3 mm, and was 0.9 mm thick. It was assigned a ninth-century date. Again, the object shows no similarities to the tags produced in Lincoln.

NLM449 was an eighth-century hooked tag from **Melton Ross**, made of copper alloy. It had a circular plate with two attachment holes, and measured 54 x 22 x 1.1 mm.

NLM931 was a copper-alloy hooked tag of tenth- to eleventh-century date from the parish of **Melton Ross**. Its trapezoidal plate reaches a maximum width of 13.6 mm, and the top was decorative, shaped like two rounded mouldings around a central spike-like

protrusion. The hook was still intact, and the central panel had a decorative dot on either side of its attachment. The total length of the object was 27.7 mm, and it was 0.6 mm thick. Both the shape and the decoration are untypical of the examples from Lincoln.

NLM930 was a copper-alloy hooked tag of tenth- to eleventh-century date from the parish of **Melton Ross** in North Lincolnshire. Its plate was in the shape of a shield, with two attachment holes at the top two corners, and reaches a maximum width of 17.4 mm. It was decorated with a single incised flower set inside a circle. The hook was still intact. The total length of the object was 23.7 mm, and it was 0.7 mm thick. It bears no resemblance to any of the examples from Lincoln.

NLM929 was an undecorated copper-alloy hooked tag with circular plate, with a diameter of c. 15.5 mm, and two attachment holes. The hook was still present, and the object reaches a total length of 22.3 mm. It was 1 mm thick. It was found in the parish of **Melton Ross**. It was assigned a tenth- to eleventh-century date. Its simple, circular shape was reminiscent of the circular hooked tags from Lincoln, such as f72 <ae45> and wp71 <ae62> (fig. 25).

The PAS reports a copper-alloy hooked tag of tenth-century date from the parish of **Nettleton**. NLM15 had a circular plate with a diameter of 14.7 mm, and a total length of 23.8 mm. It was 0.3 mm thick. Its decoration was impressed, but the pattern could not be identified from the available sketch. It was assigned a tenth-century date. It bears no resemblance to any of the examples from Lincoln in terms of its decoration.

Also from **Nettleton** was NLM2804, a copper-alloy hooked tag fragment. Only a large part of the circular plate and one of the attachment holes survives, measuring 16 x 20.5 mm, with a thickness of 0.7 mm. It was decorated with an incised symmetrical pattern of crescents inside a double border of pellets, and dated to the ninth century. Its decoration and shape shows no similarities to any of the tags from Lincoln.

The PAS reports a hooked tag of copper alloy from the parish of **Revesby** (NCL-FDD822). The plate was circular in plan, and decorated with zig-zag lines in the shape of a simple, equal-armed cross, and had two circular perforations at the top. The hook had broken off. It measured 19.2 x 12.0 mm across, and had a thickness of 0.5 mm. It was assigned a tenth- to eleventh-century date. It bears a certain resemblance, both in terms of form and decoration, to <ae15> from Flaxengate (fig. 25), although the zig-zag lines have not been recorded at Lincoln.

The PAS also holds details of a copper-alloy hooked tag of seventh- to eleventh-century date, found in the parish of **Roxby cum Risby** (NLM-8163D4). Its attachment holes have broken through the top, and the hook was incomplete. The object in its current state measured 16.38 x 10.45 mm. Decoration was not visible, and the shape was atypical of the hooked tags from Lincoln.

The PAS reports the discovery of LIN-167E53, a copper-alloy hooked tag with triangular plate from the parish of **South Ormsby cum Ketsby** in East Lindsey. It was decorated with four ring-and-dot motifs, similar to NLM-363911 from Barton-upon-Humber, arranged in a circle, and had two attachment holes. The tip of the hook was broken off. The object measured 26 x 15 mm, and was 1 mm thick. It was assigned a seventh- to ninth-century date. It bears no resemblance to any of the Lincoln examples.

NLM-C85265 was a copper-alloy hooked tag from the parish of **Swinhope**. It had a roughly circular plate, measuring c. 11.1 mm in diameter, and no decoration was visible. The whole object, including the surviving hook, measured 18.3 mm in length. It had two asymmetrically placed attachment holes at the top. It was assigned a tenth-century date, and was similar in shape to <ae15> from Flaxengate (fig. 25).

The PAS also reports a teardrop-shaped hooked tag (NLM7120) from **Swinhope**, measuring 12.5 mm in width. It was decorated with a double row of punched dots along the outside perimeter, and in the shape of a cross over the front of the plate. Two perforations remain at the top, and a fragment of the hook was also still *in situ*. The PAS website did not contain any images, but the description suggests it was also similar to <ae15> from Flaxengate (fig. 25). It was assigned an eleventh- or twelfth-century date.

A coin hoard was discovered at **Tetney**, some ten miles south of Grimsby, in 1945 (Walker 1945). It was deposited in c. AD 963. In addition to some 420 silver coins (see appendix 9.1.39), two silver 'clips' were found, "which were presumably intended as small clasps for some article of wearing apparel" (Walker 1945: 81). These may represent hooked tags, but the report was no more specific. See appendix 14.

Brown 2006: 299 was an undecorated copper-alloy hooked tag with two unevenly spaced piercings from **Torksey**, measuring 16.90 mm in length. Its shape was similar to wp71 <ae24> from Lincoln, even in terms of its rough finish (fig. 25), suggesting that the object may have been part finished. However, as the hook was already bent, which was usually the last step in the manufacturing process for hooked tags (White *pers. comm.*), this must be a finished artefact after all.

DENO-601C85 (Brown 2006: 300) was an eighth- to eleventh-century hooked tag

from **Torksey**, made of copper alloy. The plate was pear-shaped, with the (now broken) hook extending from the apex, and two circular attachment holes at the opposite side. Some faint decoration of a double beaded line cross within a beaded border remains on the front; the reverse was not decorated. The object measured 22.18 x 11.6 x 3.68 mm. It was similar to examples from Lincoln, in particular f72 <ae15> (fig. 25).

Brown 2006: 301 (NLM5770) was another copper-alloy hooked tag from **Torksey** with concentric ring decoration around a single central perforation on its circular plate. The object measured 17.7 x 11.5 mm, and was assigned a ninth-century date. It bears no resemblance to any of the tags from Lincoln.

DENO-4E7742 (Brown 2006: 302) was a ninth-century copper-alloy hooked tag fragment from **Torksey**, with much of the plate missing, although it was probably originally disc-shaped. The plate was decorated with a V-shape within a triangle, surrounded by a beaded border and a plain line border. The hook was broken off. It measured 14.9 x 10.88 x 2.35 mm. Its decoration was untypical of the Lincoln tags.

Brown 2006: 303 was a copper-alloy hooked tag with a circular plate and protruding lugs for the attachment holes, also from **Torksey**. It measured 20.28 x 10.87 mm, and bears no resemblance to any of the Lincoln tags.

NLM7260 (Brown 2006: 304) was a copper-alloy hooked tag from **Torksey**. It measured 15.2 x 27.8 mm, with a thickness of 1.6 mm. It was heart-shaped, with two rivet holes at the top, and a collared hook at the bottom. Decoration consists of a row of drilled holes around the outside, and some silver wire scrollwork in the centre. Although no images were linked to the *PAS* entry, its description bears no resemblance to any of the Lincoln tags. It was assigned to the period 1000-1400. See appendix 14.

Brown 2006: 305 was a silver hooked tag from **Torksey**, made of a coin of King Burgred of Mercia (852-874). It measured 12.34 x 9.90 mm. No other hooked tags made of coins have been found in Lincoln or elsewhere in Lincolnshire. It probably belonged to the late ninth or tenth centuries. See appendix 14.

The *PAS* reports one further hooked tag from **Torksey**. DENO-80D627 was made of copper alloy, and had a triangular plate with originally two attachment holes at the top, along which line it was now broken. It was decorated with a row of punched dots across the outside perimeter, and a double border across the top edge. Another double row of punched dots runs transversely across the front about halfway down the plate. The tip of the hook was broken off. It measured 18.0 x 7.9 mm, and was 0.7 mm thick. It was assigned an eighth- to ninth-century date. It showed similarities in form and decoration to f72 <ae213> from Lincoln (fig. 25).

NLM4716 was a ninth- to tenth-century hooked tag, found in the parish of **Thimbleby** in East Lindsey. It had a triangular plate, decorated with three ring-and-dot motifs, and two evenly spaced attachment holes at the top. It measured 28.5 x 18.3 mm, and was 0.8 mm thick. It bears no resemblance to the examples from Lincoln.

From **Thimbleby** as well comes NLM4715, another complete copper-alloy hooked tag with a triangular plate. This object was decorated with a row of punched dots around the outside perimeter, which was similar to many of the tags from Lincoln (see f72 <ae213>), and had two attachment holes at the splayed end, each separated from the main body by a further row of punched dots. It was made of copper alloy, and assigned a ninth-century date. The tag measured 29.7 x 16.3 mm, and was 0.8 mm thick.

NLM-E7A805 was a third copper-alloy hooked tag from the parish of **Thimbleby**. This tag had a circular body, and only the tip of the hook was missing. The plate, measuring c. 15 mm in diameter, was decorated in niello with some tendrils and lines inside a border, and had two attachment holes at the top. The tag was 20.8 mm in length. It bears many similarities to a similar hooked tag from Lincoln, F72 <ae45> (fig. 25), and an example from York (Tweddle 2004). It was assigned an eighth- to ninth-century date, but the decoration on the York example was identified as devolved *Ringerike*-style, and assigned to the eleventh or twelfth centuries.

NLM-6EFB28 was a ninth-century hooked tag made of copper alloy from the parish of **Willoughby with Sloothby** in East Lindsey. It had a circular plate with two attachment holes, and was decorated with a row of punched dots around the outside perimeter, and across its face in the shape of a cross. It measured 18.3 x 0.7 mm. It was similar to the tags produced at Lincoln.

NLM-02DF43 was another ninth-century copper-alloy hooked tag from the parish of **Willoughby with Sloothby** in East Lindsey. It had a sub-triangular plate, decorated with a row of punched dots around the outside perimeter and several lines across its face, dividing it into rough geometric shapes. It measured 30.1 x 20.0 x 0.5 mm. The pattern thus created was not dissimilar to <ae546> from Flaxengate.

12.4.2: Hooked tags from Kesteven

LIN-D9DEB8 was a copper-alloy hooked tag from **Aunsby and Dembleby** in North Kesteven. It had a circular body, decorated with ten ring-and-dot motifs. It was broadly assigned to the seventh to eleventh centuries. It measured 18 mm in length, 1 mm in thickness, and 13 mm in diameter. It bore no resemblance to any of the Lincoln tags.

NLM727 was a tenth- to eleventh-century copper-alloy hooked tag from **Baston** in South Kesteven. It had a circular body with incised spiral decoration, and three attachment holes at the top. It measured 21.1 x 18.5 mm, and was roughly 1 mm thick. It bears no resemblance to any of the tags from Lincoln.

NLM4303 was a circular-plated copper-alloy hooked tag from **Brauncewell**. It measured 18.1 x 12.6 mm, and was decorated with a double row of punched dots around the outside perimeter, and in a cross-shape over the circular plate. Two unevenly spaced attachment holes were placed near the top. The *PAS* website assigned it an eighth- to ninth-century date, but on the basis of its clear similarities to the Lincoln examples (in particular f72 <ae15>; fig. 25), a tenth-century date was also plausible.

NLM2942 was a ninth-century copper-alloy hooked tag from the parish of **Great Ponton** in South Kesteven. It was of very elongated shape, and decorated across the body with horizontal ribs. It had two attachment holes at the flared end. The object measured 47.8 x 10.6 mm. It bears no resemblance to any of the Lincoln examples.

The *PAS* also lists a copper-alloy hooked tag of eighth- to eleventh-century date from the parish of **Lenton, Keisby and Osgodby** in North Kesteven (LIN-458F65). It was incomplete, its hook being broken off. The body was flat and triangular, with two holes, and decoration consisting of five triangular cells, each containing three pellets. It measured 25 x 14 mm, and had a thickness of 0.8 mm. Both in terms of form and decoration this tag was atypical of the examples from Lincoln.

The *PAS* reports another hooked tag made of copper alloy, found in the parish of **Lenton, Keisby and Osgodby** (LIN-EBA7A6). It was incomplete in the sense that its hook was broken, and had a flat triangular body with two circular holes in the corners for suspension. The face was decorated around its perimeter, the attachment holes, and across its body with a double row of punched dots. It was assigned a date range between the eighth and eleventh centuries. It measured 21 x 12 x 1 mm. It displays strong similarities to one of the Lincoln tags (f72 <ae213>) (fig. 25).

NLM1064 was an openwork silver hooked tag of ninth-century date from the parish of **Ruskington**. It had a circular body with a symmetrical interlace, a zoomorphic terminal at the bottom, and three attachment holes at the top. It was unlike any other recorded hooked tags from Lincolnshire. Dimensions were not recorded. See appendix 14.

NLM681 was a scutiform copper-alloy hooked tag of eighth- to ninth-century date from the parish of **Syston**. It measured 28.6 x 19.2 mm, with a thickness of 0.9 mm. It was decorated by a double row of incisions around the outside perimeter and down the middle (a single row at the top). It had two attachment holes. Although the decoration was somewhat reminiscent of the Lincoln tags, the form was atypical.

The *PAS* lists a copper-alloy hooked tag found in **Walcot near Folkingham** (LIN-506641). It was complete, and well-preserved. Its triangular flat body had two circular attachment holes at the flared end, and was decorated with large punched dots, whilst the flared end was decorated with punched triangles. The hooked end was separated from the body by a collar, also decorated with large punched dots. It was assigned a date of c. 750 – 1100. It does not show any similarities to any of the tags from Lincoln.

LIN-A6B647 was a copper-alloy hooked tag from the parish of **Wellingore** in North Kesteven. It measured 19.86 x 11.44 mm, was roughly oval in shape, with two large attachment holes near the top, which are broken. The surface was too worn for any decoration to have remained visible. It was assigned a ninth- to eleventh-century date. It was similar in shape to the oval hooked tag from Flaxengate (<ae15>) (fig. 25).

12.4.3: Hooked tags from Holland

No hooked tags were recorded for Holland.

12.5: Brooches

12.5.1: Ansate brooches

12.5.1.1: Ansate brooches from Lindsey

The *PAS* lists the discovery of an ansate brooch in the parish of **Apley** in West Lindsey (LIN-7B6462). It was made of copper alloy, and its terminals are roughly square, with slightly pinched corners and concave sides, and four pointy extensions protrude from the centre, two on each side. The bar itself was narrow, and arched, measuring 11 mm in width. The whole object was 48 mm long. Its slim quality was unusual amongst ansate brooches, and it was suggested that instead of the usual eighth- to ninth-century date, a tenth-century date was more appropriate for this particular brooch.

NLM966 was an eighth-century copper-alloy ansate brooch from **Barnetby**, measuring 50 x 10.2 mm.

NLM965 was an eighth-century copper-alloy ansate brooch from **Barnetby**, measuring 43.5 x 7.9 mm.

From **Binbrook** in East Lindsey was NLM-2063B4, an eighth to ninth-century ansate brooch made of copper alloy, measuring 40.3 x 11.0 mm. The brooch had flat rounded terminals, decorated with chevrons, and the reasonably flat bow was narrow, only measuring 4.0 mm in width. The attachment fittings are still in place.

The *PAS* reports the discovery of an incomplete eighth- or ninth-century ansate brooch from **Caistor**, made of copper alloy (NLM-738826). The arched bow was wide, with a diameter of 13.5 mm, and a length of 27.4 mm. It had three transverse ribs in the centre. The terminals are flat and circular, with a diameter of 18.7 mm, and undecorated. The attachment fittings are still partially present, but the originally iron pin had disappeared, leaving traces of corrosion. The entire object measured 54.2 mm.

NCL-8459B4 was another eighth- or ninth-century ansate brooch from the parish of **East Kirkby**, with a D-shaped bow, measuring 38.1 x 14.6 x 1.9 mm.

The *PAS* database lists an ansate brooch of eighth- to tenth-century date from the parish of **Elsham** (NLM-7AD765). It was equal-armed, with a hemispherical section, and two rectangular arms with moulded grooved terminals and a transverse ridge across the bow. It measured 40.4 x 9.8 x 3.4 mm. These brooches continued in use into the ninth and possibly the tenth century.

A further copper-alloy ansate brooch from **Elsham** in North Lincolnshire was NLM14, simple in shape and decorated with transverse mouldings. It measured 46.1 x 8.1 mm. It was assigned a tenth- to eleventh-century date.

The *PAS* lists a single eighth- or ninth-century copper-alloy ansate brooch found by metal detector at **Fulletby** (NLM-2816C0). It was cast, with a solid bow of D section, and two flat discoid terminals decorated with incised lines in the shape of a cross. The remnants of the catch-plate are still visible on the back, as are the remnants of an iron lug. It measured 40 mm in length.

LIN-FCA6F0 was an eighth- to ninth-century ansate brooch terminal. It was circular in plan, with a diameter of 11 mm. The bow was broken, leaving only a total length of 30 mm for the entire object. Some traces of the attachment fittings remain on the back. The object was undecorated. It was found in the parish of **Keelby**.

LIN-77C546 was a fragment of an eighth-century copper-alloy ansate brooch from **Legsby**, decorated with five ring-and-dot motifs. It measured 24 mm in length.

NLM745 was a seventh- to eighth-century continental ansate brooch from the parish of **Lincoln**. It was made of copper alloy, with lozenge-shaped terminals decorated with a raised cross, creating four recessed fields with scratched floors that may have been decorated with enamel. The pin was now missing. The brooch had a high raised bow with a central knob, and measured 32.7 x 11.2 x 10.9 mm.

NLM924 was an eighth- to ninth-century copper-alloy ansate brooch from the parish of **Melton Ross** in North Lincolnshire. It was rectangular, with ring-and-dot decoration, and heavily moulded ribs. It was identified as being of possible continental manufacture. It measured 39.6 x 8.4 x 8.8 mm.

The *PAS* database lists a single copper-alloy ansate or fat caterpillar brooch (NLM203) found in the parish of **Stainton by Langworth**. It measured 37.8 x 7.8 mm. Both ends are trilobed, and the middle had two parallel incisions. The pin had gone. It was assigned an eighth-century date.

12.5.1.2: Ansate brooches from Kesteven

NLM1010 was an ansate brooch of eighth- or ninth-century date from **Baston** in South Kesteven. It measured 20.3 x 16.3 x 2.1 mm.

NLM962 was an eighth-century copper-alloy ansate brooch from **Greatford** in South Kesteven. It measured 38.4 x 6.6 mm.

LIN-87D785 was an eighth-century copper-alloy ansate brooch from **Heckington** in North Kesteven, decorated with ring-and-dot motifs. It was 35 mm in length.

LIN-389E16 was an ansate brooch from the parish of **Osournby** in North Kesteven. It was made of copper alloy, and measured 43 x 6 x 10 mm.

NLM-D26081 was an eighth-century copper-alloy ansate brooch from **Ropsley and Humby** in North Kesteven. It had a D-shaped bow, and measured 24.7 x 8.5 x 2.8 mm.

The *PAS* reports an ansate brooch found in the parish of **Syston** in South Kesteven (LIN-6CC476). It was made of copper alloy, and measured 39 mm in length, with a width of 12 mm. The bow was rectangular, and arched with a flat terminal at either end. The terminals are circular, with a diameter of 12 mm, and are decorated with a cross-shape of four petal-shaped cells set within a circle shaped of four additional petal-shaped cells. It was assigned a date of 700-850 AD.

NLM5271 was an eighth- to ninth-century copper-alloy ansate brooch with vertical mouldings from the parish of **Washingborough**. It measured 47.9 x 8.4 x 14.9 mm.

12.5.1.3: Ansate brooches from Holland

No such brooches have been recorded for Holland.

12.5.2: Lozenge-shaped brooches

12.5.2.1: Lozenge-shaped brooches from Lindsey

The PAS reports a lozenge-shaped brooch from **Binbrook**. NLM7136 was made of copper alloy, and the attachment fittings for the pin are still present; the plate itself, however, was bent in the middle. The decoration consists of a row of stamped dots around the outside perimeter, and in a straight line across the middle. It measured 26.3 x 9.6 mm, and was 0.7 mm thick. It was assigned a date between c. 700-900.

NLM194 was a copper-alloy lozenge-shaped brooch from the parish of **Elsham** in North Lincolnshire. The four terminals are zoomorphic, and it had an equal-armed cross in the centre. It was identified as *Borre* style, and assigned a date between 850 and 950 AD. The object measured 34.6 mm in diameter. It was 6 mm thick.

NLM6083 was a fragment of a copper-alloy openwork lozenge shaped brooch in *Borre* style from the parish of **Epworth** in North Lincolnshire. One of the zoomorphic corners was now broken off, and the surviving fragment measured 19.7 x 26.8 mm, with a thickness of 6.1 mm. It was assigned a tenth-century date.

In the district of **Lincoln**, an incomplete lozenge-shaped openwork copper-alloy brooch was found (LIN-DFAF06). The brooch was square, symmetrical, with four holes, pinched corners, and a lug for the pin and catch-plate still attached to the back. It measured 28 mm across. It was assigned a ninth- to eleventh-century date. Brooches of this type are considered to be *Borre* style. No further information about its precise location was recorded.

12.5.2.2: Lozenge-shaped brooches from Kesteven

No such finds were recorded.

12.5.2.3: Lozenge-shaped brooches from Holland

No such finds were recorded.

12.5.3: Flat disc-brooches

12.5.3.1: Flat disc-brooches in *Borre* style

12.5.3.1.1: Flat disc-brooches in *Borre* style from Lindsey

From the parish of **Bonby** comes NLM-1DDC81, a fragment of a copper-alloy disc-brooch. The object was heavily corroded, but the decoration that was still visible consists of four strands of interlace set around a central boss, possibly in *Borre* style. One of the attachment fittings survives on the back. The surviving diameter was 28.3 mm, and the brooch was 1.7 mm thick. It was assigned a date range between c. 850 and 950 AD.

A small and extremely worn central fragment of another copper-alloy disc-brooch in *Borre* style (recorded on the PAS website as a trefoil brooch fragment) was found in the parish of **Hatton** in East Lindsey. LIN-FA4AF2 retained traces of *Borre*-style decoration and some attachment fittings on the back. The fragment measured 19.8 x 18.1 mm, and was assigned a ninth-century date.

The PAS reports the discovery of a *Borre*-style disc-brooch from the parish of **Manton**. NLM402 was made of copper alloy, and measured 22.5 x 23.0 mm. The surface was badly corroded but it was still clear that the decoration consisted of four identical double strands of interlace around a lozenge-shaped centre. It was assigned a tenth-century date. Three attachment fittings were still present on the reverse.

LIN-A35B75 was a *Borre*-style flat disc-brooch, but executed in copper-alloy. Remains of the catch-plate are still on the back. It was assigned a tenth-century date, and had a diameter of 25 mm. It was found in the parish of **Newball**. See fig. 28.

NLM-743AB7 was an incomplete lead flat disc-brooch decorated in *Borre* style, with a raised pellet inside a lozenge-shaped centre surrounded by knotwork. Some of the attachment fittings are still present, but almost a quarter of the object was completely missing. The diameter of the entire fragment was 28.2 mm. It was assigned a mid ninth- to mid tenth-century date, and found in the parish of **North Ormsby**. See appendix 15.

NLM6994 was a flat copper-alloy ninth- or tenth-century disc-brooch with *Borre*-style decoration. There was iron corrosion on the back, where the pin had been. It measured 28.7 x 1.6 mm. It was found in the parish of **Roxby cum Risby**.

The PAS reports a late ninth-century *Borre*-style flat disc-brooch from the parish of **Sibsey** in East Lindsey (LIN-57B041). It was made of copper alloy, and its face was decorated with a central hollow surrounded by a lozenge-shaped double ribbon that extends to form *Borre*-style knot motifs. This type of brooch was mass-produced and very common in

East Anglia. The pin lug and catch-plate are still visible on the reverse, but the pin itself was missing. The dimensions were not recorded. Its date range was determined as c. 865-900. See fig. 28.

The PAS reports a lead-alloy flat disc-brooch in *Borre* style, dated to the ninth or tenth centuries, from **Torksey**. NLM-72D1C7 (Brown 2006: 289) measured 35.2 x 35.6 mm, and was 4.0 mm thick. It was dated to the period 850-1066 AD. It was in good condition, still retains the attachment fittings at the back. See appendix 15.

From the parish of **Wickenby** comes a fragment of a copper-alloy disc-brooch with *Borre*-style decoration. DENO-FB8444 represents only the central part of the brooch plate, now measuring no more than 27.2 x 21.9 mm, and 7.6 mm thick, incorporating the central boss and lozenge-shaped centre from which the beginnings of interlace emerge; most of the interlace however had been broken off. Part of the catch-plate was still present on the back. It was assigned a late ninth- to tenth-century date.

12.5.3.1.2: Flat disc-brooches in Borre style from Kesteven

LIN-EF9212 was a flat disc-brooch with *Borre*-style interlace from **Burton Pedwardine** in North Kesteven. It was decorated with a central hollow surrounded by a lozenge shape, from which strands of interlace knot-work sprang. This type of brooch was probably produced in East Anglia, and assigned a late ninth-century date.

DENO-953944 was a ninth-century copper-alloy brooch with *Borre*-style aspects from **Norton Disney** in North Kesteven. It was dated to the ninth century. The brooch was formed of a flat, circular plate cast with a design with roundels and indications of interlace. The artefact consists of two adjoining fragments. From the existing fragments it can be postulated that the original design had four roundels spaced around the exterior of the brooch but it is not possible to be more specific about the overall design. The fragment is worn, but there does not seem to be any zoomorphic element to the design. The layout is similar to that of the Scandinavian-inspired *Borre*-style disc-brooches of the late ninth and early tenth centuries.

LIN-6B7BD2 was a Scandinavian *Borre*-style disc-brooch with interlace springing from a central lozenge from the parish of **Osbournby**. It was made of copper alloy, with traces of gilding on the front. It was assigned a tenth-century date. The surviving fragment measured c. 29 mm in diameter, and was 1 mm thick. See appendix 13.

Leahy and Paterson (2001: 197, fig. 10.8) report another flat disc-brooch in *Borre* style from **Ruskington** near Sleaford in Kesteven.

LIN-0029B0 was a flat copper-alloy *Borre*-style disc-brooch, with interlace knotwork springing from a central lozenge, dated to the ninth century from the parish of **Walcot near Folkingham**. It had a diameter of 28 mm, and was 1 mm thick.

12.5.3.1.3: Flat disc-brooches in Borre style from Holland

The PAS also reports the discovery of NLM956, a copper-alloy *Borre*-style flat disc-brooch, from **Sutterton**. Its decoration consists of a central boss set inside a lozenge from whose terminals strands of interlace emanate, forming knots. There are two remaining attachment fittings on the back. The object measured 29.6 x 28.9 mm, and was 2.1 mm thick, and was assigned a tenth- to eleventh-century date. See fig. 28.

12.5.3.2: Flat disc-brooches in Jellinge style

12.5.3.2.1: Flat disc-brooches in Jellinge style from Lindsey

No such finds were recorded.

12.5.3.2.2: Flat disc-brooches in Jellinge style from Kesteven

LIN-FC1347 was a flat lead-alloy disc-brooch dated to the tenth or eleventh century from the parish of **Walcot near Folkingham** in North Kesteven. It was decorated with a *Jellinge*-style animal inside a pelleted border. It had a diameter of 33 mm, and was 2 mm thick. See appendix 15 and fig. 28.

12.5.3.2.3: Flat disc-brooches in Jellinge style from Holland

No such finds were recorded.

12.5.3.3: Flat disc-brooches with cross design

12.5.3.3.1: Flat disc-brooches with cross design from Lindsey

NLM6464 was an eighth- or ninth-century copper-alloy flat disc-brooch from **Binbrook**, decorated with a central cross separating the artefact into four sections, with an interlace motif in each angle, surrounded by a plain border. It measured 25.1 x 20.2 x 0.9 mm.

A cast lead-alloy disc-brooch with a diameter of 34.1 mm was found in the parish of **Binbrook**. NLM-CF5DC7 was later adjusted by drilling a hole through its centre, but the flattened catch-plate and hinge are still present on the back. It was decorated with a beaded

border around the outside perimeter, and two additional plain bands inside around a central equal-armed cross with a pointed oval with a pellet on each arm. The background was decorated with incised cross-hatching. It was assigned a ninth- to tenth-century date (similar examples can be found in Hattatt 1989: 200-02). It was creased and folded around the edges, but seems to have been flat originally. See appendix 15.

The *PAS* reports a flat lead disc-brooch from the parish of **Edlington with Wispington** in East Lindsey. NLM193 had a central boss surrounded by a Maltese cross inside a double border with a row of punched dots. It measured 7.1 mm in thickness; its diameter was not recorded. The attachment fittings were still present on the back. It was dated to the tenth century. See appendix 15.

DENO-6C04E1 was a flat lead-alloy disc-brooch of tenth- to eleventh-century date. Its decoration consists of a central boss surrounded by drop-shaped petals in a cross-shape within a raised plain border measuring 7.5 mm in width, with a beaded border around the outside perimeter. The attachment fittings are still partially in place in the reverse. The brooch had a diameter of 40.6 mm, and a thickness of 8 mm in the centre, and 2.3 mm. It was found in the parish of **Fulletby**. See appendix 15.

The *PAS* reports a lead-alloy disc-brooch from **Laceby** (NLM6736), measuring 34.4 mm in diameter, and with a thickness of 1.2 mm. Its surface was decorated with a central boss and a cross motif with ridged edges and beaded centre, whilst the outside perimeter of the brooch itself was also decorated with a ridged and beaded border. It was assigned a tenth-century date. The *PAS* website had no linked images. See appendix 15.

The *PAS* reports the discovery of a flat disc-brooch decorated with a cross and five ring-and-dot motifs from the parish of **Swinhope** in West Lindsey. NLM7119 measured 20.8 x 19.9 mm, and was 7 mm thick. The iron pin and catch-plate are still present. It was assigned a seventh- to eleventh-century date.

The *PAS* reports the discovery of a fragment of a (probably flat) lead disc-brooch from the parish of **Thimbleby** in East Lindsey. NLM4701 originally had a central boss, forming the centre of an equal-armed cross with splayed arms, extending to the outside border. Four circular pellets occupied the fields between the arms, one in each field. Only about a quarter to a third of the object now survives, measuring 25.0 x 25.1 mm, and with a thickness of 4.3 mm. It was assigned a tenth-century date. It was similar to NLM193 from Edlington with Wispington. See appendix 15.

Also from **Thimbleby** came NLM4700, another flat lead-alloy disc-brooch of tenth-century date. Again, the design was based on a cross, and consists of a central circular boss, which forms the centre of a cross, but in this case the arms are extremely narrow and short, creating more of a star-shaped effect than a real cross-shape. Placed between all four arms are four unevenly placed small round pellets, and the outside border of the brooch was decorated with a row of small pellets inside a thick border consisting of two lines enclosing a border of closely spaced oval pellets. The arms of the cross do not reach the outside border. The brooch was nearly complete, and the surviving fragment measured 31.8 x 34.5 mm, with a thickness of 4.3 mm. See appendix 15.

12.5.3.3.2: Flat disc-brooches with cross design from Kesteven

LIN-900B71 was a flat lead disc-brooch with a raised rim from the parish of **Osbourneby** in North Kesteven. It was decorated by a moulded pellet in the centre, surrounded by petals with lozenge-shaped borders, creating a cross-shape. The background was decorated with hatched decoration. The object measured 34 mm in diameter, and was 2.5 mm thick. It was assigned an eleventh-century date. See appendix 15.

NLM6063 was a flat lead disc-brooch from the parish of **Ruskington** in North Kesteven. It bears an equal-armed cross on the front, with a central pellet, and measured 33.9 x 34.4 mm, with a thickness of 1.8 mm. It was assigned a tenth- or eleventh-century date. See appendix 15.

12.5.3.3.2: Flat disc-brooches with cross design from Holland

No such finds were recorded.

12.5.3.4: Cloisonné brooches

12.5.3.4.1: Cloisonné brooches from Lindsey:

The parish of **Elsham** produced a cloisonné brooch of tenth- to eleventh-century date. NLM398 was circular in shape, with a diameter of 22.4 mm, and a thickness of 4.4 mm. The raised centre part was decorated with enamel, consisting of a central pink circle surrounded by a green star shape formed by five half-circles in blue around the perimeter, their rounded side pointing inwards. Originally there were six protruding circles set with blue enamel, spaced evenly around the central disc, but now only four and a half survive, and the blue enamel survives in only two. Remains of gilding are visible on the front. See appendix 13.

The *PAS* reports the discovery of a cloisonné disc-brooch from the parish of

Horncastle, dated to the ninth century (although a tenth-century date seems more plausible, as these cloisonné brooches were dated to the tenth and eleventh centuries). NLM6212 was circular in plan, with a diameter of c. 23.5 mm, and seven lateral protrusions. The centre panel was enamelled in yellow, white, dark turquoise and dark blue, with three heart-shaped fields and three triangular fields radiating out from the centre against a blue background. Traces of gilding were discovered on back. Its thickness was 5.2 mm. See appendix 13.

The PAS reports a cloisonné disc-brooch from the parish of **Marston**. LVPL1234 consisted of an enamelled cruciform pattern inside a frame with twelve round lugs on the outside, four of which originally were larger and had a blue glass bead setting; now one of these was missing. The colours used on the main panel are navy blue and pale blue, and traces of gilding also remain. It was assigned a tenth- to eleventh-century date. The object measured 22 mm in diameter, and 4 mm in thickness. See appendix 13.

NLM2895 was a cloisonné brooch with a diameter of c. 25.5 mm, and a thickness of 4.7 mm. The surface of the brooch was decorated with a kind of cross-shape, and the cells thus created are enameled in turquoise, dark blue and light blue. The disc had seven circular protrusions, each with a little stone set into its centre. It was found in the parish of **Sixhills** in West Lindsey, and assigned a tenth to eleventh-century date.

12.5.3.4.2: Cloisonné brooches from Kesteven

LVPL496 was a tenth- to eleventh-century cloisonné disc-brooch from the parish of **Navenby** in North Kesteven, with traces of gilding (appendix 13).

LIN-629513 was a cloisonné disc-brooch from the parish of **Osournby** in North Kesteven. It was dated to the tenth or eleventh centuries.

12.5.3.4.3: Cloisonné brooches from Holland

No such finds were recorded.

12.5.3.5: Other disc-brooches

12.5.3.5.1: Other disc-shaped brooches from Lindsey

The PAS reports a copper-alloy flat disc-brooch (NCL-76F167) from **East Kirkby**. It measured 27.7 x 3 mm. The front depicts a back-turned animal inside a square-beaded border. The animal depicted was possibly a lion, because its scaled neck was interpreted as a mane. Its paws have three toes, and its tail was thick. On the reverse, the hinge and catch plate are still present. It was assigned a tenth-century date.

NCL-771FB5 from **East Kirkby** in Lindsey was a copper-alloy disc-brooch of eighth- to ninth-century date, with a central stud made of silver. The disc was decorated with a broad band of interlace in eighth-century style, and the face was gilded, though only a few small specks are visible. One edge of the disc had broken, leaving a relatively straight line for a break. Two circular perforations pierce the interlace band on opposite sides of the disc. The reverse of the plate was featureless, suggesting that it attached to a base-plate which had the pin attachment, or it was possible that the two perforations are related to the attaching of a hinge with pin and catch-plate. Another possibility, though less likely was that the object was the head of a pin, but no scar remains of the pin shaft, unless this was the reason for the break in the plate. See appendix 13.

A silver-gilt disc-brooch of eighth- to ninth-century date with symmetrical zoomorphic decoration was found at **Flixborough** (Rogers *et al.* 2009: 4-5). It is illustrated in Evans and Loveluck 2009: 3, fig 1.2 and colour plate 1.2. See appendix 13.

NLM6687 was a fragment of a flat copper-alloy disc-brooch, dated to the period between the eighth and tenth centuries, found in the parish of **Hatcliffe**. The fragment, whose rim was partially broken, measured 25.6 x 22 mm across, and was 1.5 mm thick. No note was made concerning any decoration (not included in any distribution maps).

From the parish of **Hatton** came a lead disc-brooch (YORYM-7F0EB4). No other information was recorded (not included in any distribution maps). See appendix 15.

The PAS reports the discovery of NLM-874B54, an eleventh-century lead-alloy nummular brooch from **Hibaldstow**. It was flat and circular, measuring 33.1 mm in diameter and 1.8 mm in thickness. The design imitates the reverse of an eleventh century coin (although which one was not mentioned), with a beaded border around the outer edge. Some of the attachment fittings were still present. See appendix 15.

LIN-01DE95 was a flat gilded copper-alloy disc-brooch from **Sibsey**, decorated in openwork in the form of an equal-armed cross with splayed arms and smaller, similar arms set diagonally. In the centre there was an empty rivet hole that would have contained a small boss. The larger arms are each decorated with zoomorphic interlace. A very similar example was discovered at Elmsett, Suffolk, and was published in West 1998: 140, fig. 24.6. It was assigned a ninth-century date. Similarities with LIN-833322 from Osournby in Kesteven were also noted. See appendix 13.

LIN-E192E8 was a copper-alloy flat disc-brooch with silver inlay and four evenly spaced ring-and-dot motifs on its face. It was found in the parish of **South Carlton**. It had a diameter of 36 mm. The pin was missing, but the other attachment fittings are still present on the back. It was assigned a broad date range of 410-1066. See appendix 14.

Brown 2006: 286 (NLM7020) was a disc-brooch from **Torksey** with cruciform enamelled decoration, consisting of a circular section separated by a central cross in the middle, separated into four equal sections, with a sub-triangular terminal to one side, containing a central cell surrounded by four cells all containing yellow enamel. It was identified as being of Irish design. No images were linked to the *PAS* entry.

Brown 2006: 288 (NLM-A57114) was a silver-gilt brooch fragment, probably of an openwork disc-brooch, from **Torksey**, with chip-carved zoomorphic and interlace-decoration, measuring 15 mm across. The fragment can be read as part of an animal with only the front leg, shoulder and curve at the junction of the neck and back remaining. It was assigned an eighth-century date. See appendix 13.

12.5.3.5.2: Other disc-shaped brooches from Kesteven

LIN-DA08E0 was a post-Conquest eleventh-century flat lead disc-brooch from the parish of **Aunsby and Dembleby**. Its decoration was similar to the reverses of the coins of William II, specifically the 'cross-voided' type (circa 1092-1095). See appendix 15.

NLM-D33EF6 from Great Humby in the parish of **Braceby and Sapperton** was an eighth-century copper-alloy disc-brooch inlaid with enamel in the shape of a cross. The diameter of the brooch was 21.0 mm, and its thickness was 3.6 mm. It was probably of continental origin.

NLM6185 was a tenth-century lead disc-brooch from **Folkingham**. Only a fragment survived, which measured 35.8 x 18.9 mm. Its decoration consisted of a number of beaded borders around a cross design, also executed with beaded decoration. It was similar to contemporary brooches from York. See appendix 15.

NLM6591 was a lead disc-brooch, representing a copy of a coin of Æthelred II (Long Cross type) in the centre, surrounded by six concentric rings. It was found in the parish of **Navenby**. It was of tenth- to eleventh-century date. See appendix 15.

LIN-833322 was an incomplete flat gilt disc-brooch from the parish of **Osbournby** in North Kesteven. The brooch was very worn, but decoration seemingly consisted of an openwork equal-armed cross with splayed arms and smaller, similar arms set diagonally, with a central boss (now only the rivet hole survives). Some patches of gilding are still visible. It was assigned a ninth-century date. The *PAS* website notes that "a similar example was discovered at Sibsey and was recorded on the *PAS* database as LIN-01DE95". See appendix 13.

12.5.3.5.2: Other disc-shaped brooches from Holland

From **Sutertton** near Boston was NLM4637, a flat disc-brooch decorated with a backturned animal inside and gripping a pelleted border. The beast was decorated with four ring-and-dot motifs arranged in a cross-shape, one of which functioned as its eye. It was made of copper alloy, and although its diameter was not recorded, its thickness measured 1.8 mm. The attachment fittings were still present on the back but the pin was missing. It was assigned a tenth- to eleventh-century date. Check if similar to NCL-76F167 from East Kirkby in Lindsey.

12.5.4: Domed disc-brooches and 'saucer'-brooches

12.5.4.1: Domed disc-brooches in Borre style

12.5.4.1.1: Domed disc-brooches in Borre style from Lindsey

The *PAS* records the discovery of a ninth- to eleventh-century domed disc-brooch from the parish of **Gainsborough**. NLM260 was decorated in *Borre* style, with interlace incorporating three animal heads, of a type commonly found in Scandinavia. It was 7 mm thick; its diameter was not recorded. Three attachment fittings were present on its back.

NLM4191 was a slightly domed circular copper-alloy disc-brooch from **Revesby** in East Lindsey. It was decorated in *Borre* style, with interlace springing from a lozenge-shaped centre, and retains two attachment fittings on the back. It was assigned a tenth-century date. The diameter was not recorded, but the thickness reached 4.5 mm.

Leahy and Paterson (2001: 196, fig. 10.7) report a convex disc-brooch decorated in *Jellinge* style from **South Ferriby** in Lindsey.

12.5.4.1.2: Domed disc-brooches in Borre style from Kesteven

NLM617 was a domed *Borre*-style copper-alloy disc-brooch with traces of gilding, from the parish of **Osbournby** in North Kesteven. It was decorated with zoomorphic decoration consisting of three frontal animal heads arranged in a symmetrical pattern around the centre. The diameter was not recorded, but the thickness was 5.9 mm. It was assigned a

tenth-century date. The domed shape suggests that it may be of Scandinavian manufacture. See appendix 13.

12.5.4.1.2: Domed disc-brooches in Borre style from Holland
No such finds were recorded.

12.5.4.2: Domed disc-brooches in Jellinge style

12.5.4.2.1: Domed disc-brooches in Jellinge style from Lindsey

A copper-alloy disc-brooch decorated in *Jellinge* style was discovered in the parish of **Roxby cum Risby** (NLM-0F69C5). It was a convex disc-brooch with S-shaped ribbon-style animals, their bodies intertwined by straight lines. The catch plate was still visible. Its diameter was 26.6 mm, and its thickness 3.2 mm. It still retains some of its attachment fittings. It was assigned a ninth- or tenth-century date.

Also from **Sixhills** in West Lindsey was NLM4529, a slightly domed disc-brooch with *Jellinge*-style zoomorphic decoration. The front retains traces of gilding, whilst the back retains two of its attachment fittings. It measured 23.5 x 24.5 mm, and had a maximum thickness of 7.4 mm. It was assigned a tenth-century date. See appendix 13.

In 2000, a metal detectorist discovered a silver and gilded convex disc-brooch with abstract decoration in high relief at **Whitton**. It was an unusual find for the area, but has clear southern Scandinavian parallels (*Treasure* 2000: 30-31). The description suggests it may be decorated in *Jellinge* style. See appendix 13.

12.5.4.2.2: Domed disc-brooches in Jellinge style from Kesteven
No such finds were recorded.

12.5.4.2.3: Domed disc-brooches in Jellinge style from Holland
No such finds were recorded.

12.5.4.3: Openwork 'saucer'-brooches (lead alloy)

12.5.4.3.1: Openwork 'saucer'-brooches (lead alloy) from Lindsey

A 'saucer'-brooch, made of lead alloy, was found in **Elsham**. NLM395 incorporated an openwork equal-armed cross in the centre, surrounded by two rows of openwork rectangles interspersed with flat trapezoidal sections displaying three pellets arranged in triangular shape. The outside perimeter was damaged, but seems to have been openwork as well. The surviving fragment measured 36.4 x 31.1 mm. It was assigned a tenth-century date. A near-identical example was found at Whitton, although the latter was dated to the eleventh century (NLM-A6CCD1). See appendix 15.

NLM-A6CCD1 was a circular openwork brooch (but without any remaining attachment fittings) made of lead alloy, from the parish of **Whitton** in North Lincolnshire. It had a diameter of 38 mm, and a beaded border around the edge. The centre was decorated in openwork, depicting a wheel design around a central cross, with four evenly spaced triangular plates, decorated with three pellets each, also in a cross formation. It was assigned an eleventh-century date. A near-identical example was found at Elsham, although that was assigned a tenth-century date (NLM395), and it was possible that this specimen too should be moved to the tenth century. The find entry on the PAS website mentions that "there was an exact parallel ... from a Saxo-Norman context in York (Bayley 1992: 780, fig. 340, no 4278." See appendix 15.

12.5.4.3.2: Openwork 'saucer'-brooches (lead alloy) from Kesteven

LIN-2666B7 was a cast lead openwork saucer-brooch from the parish of **Aunsby and Dembleby** in North Kesteven. It was circular in diameter, with a raised centre, and zoomorphic decoration. It measured 32 mm in diameter, and was 6 mm thick. It was assigned an eleventh-century date. See appendix 15.

12.5.4.3.3: Openwork 'saucer'-brooches (lead alloy) from Holland
No such artefacts have been found.

12.5.4.4: 'Saucer' brooches (lead alloy)

12.5.4.4.1: 'Saucer' brooches (lead alloy) from Lindsey

NLM396 was a fragment of a lead-alloy 'saucer'-brooch, with a raised circular centre and a flat circular border, more than half of which was missing. The remaining fragment measured 30.66 x 25.7 mm. The raised centre was decorated with three swirls arranged in a triangular shape around a central pellet, set within a plain border. The lower edge had a double incised zig-zag pattern. It was assigned a tenth-century date. It was found near **Elsham** in North Lincolnshire. See appendix 15.

The PAS reports the discovery of a 'saucer'-brooch from **Osgodby**. NLM-64E8D7 was

made of lead, and depicted a central boss with four petals arranged in a cross-shape around it, with four pellets between the petals. The outer edge was pelleted, and recessed. The object had a diameter of 34.7 mm, and measured 3.7 mm in thickness. It was assigned a tenth-century date. See appendix 15.

12.5.4.4.2: 'Saucer'-brooches (lead alloy) from Kesteven
No such finds were recorded.

12.5.4.4.3: 'Saucer'-brooches (lead alloy) from Holland
SWYOR-939E21 was a tenth- to eleventh-century lead-alloy 'saucer'-brooch from **Weston** in South Holland. It had a diameter of 27.1 mm and was 6.5 mm thick. It had a border consisting of a raised line with a band of raised pellets on either side. The raised centre of the brooch was decorated with a single ribbon consisting of two parallel raised lines, twisted to form six loops grouped in pairs, set around a lozenge-shaped centre. It seems to have been inspired by the traditional *Borre*-style brooches decorated with interlace around a lozenge-shaped centre. See appendix 15.

12.5.5: Penannular brooches

12.5.5.1: Penannular brooches from Lindsey

NLM-A0DEB5 was a copper-alloy penannular brooch, now broken in two, from **East Ravendale**. It consists of a narrow ring with circular diameter, and two sub-rectangular terminals that seem to be decorated, although the decoration itself was unclear from the available image. The ring itself may have some transverse decorative ribbing in places. The pin itself was simple and undecorated, and attached to the ring by a cylinder that had a wide rib in the middle, and two ribs at either terminal, giving it a segmented look. The dimensions of the object were not recorded, nor was a date given. The penannular shape suggests that it was of Irish origin (Graham-Campbell 1972; Green 1996).

The *PAS* reports that a fragment of a penannular brooch (NLM639), possibly of Irish manufacture, was found in the parish of **Laceby**. Its edges were bordered with openwork decoration. It was assigned an eighth- to eleventh-century date. It measured 21.5 x 33.8 mm, and was 3.1 mm thick. It was made of copper alloy.

The *PAS* also reports the discovery of an Irish penannular brooch from the parish of **Market Rasen**. NLM4501 was made of copper alloy, and had an ornate interlace panel on the centre of the bow, and one remaining terminal in the shape of a roundel. Some traces of gilding are still visible in the recessed areas. It measured 73 x 74 mm, and was 5.5 mm thick. It was assigned an eighth- to ninth-century date. See appendix 13.

Torksey produced a cut fragment of an Irish penannular brooch, dated to the period 700-900 AD (Blackburn 2002: 95; Brown 2006: no 209).

From the parish of **Welton** in West Lindsey came another fragment of a penannular brooch, possibly of Irish manufacture. NLM607 was one terminal of such a brooch, measuring 33 x 37.6 mm, and decorated with a single circle. It was made of copper alloy. It was assigned a ninth- to eleventh-century date.

The *PAS* reports the discovery of a copper-alloy penannular brooch from the parish of **Winteringham** in North Lincolnshire. NLM-A11E87 was complete, but its dimensions were not recorded. It consisted of a simple penannular ring with overlapping moulded terminals. Their decoration could not be identified from the available image. The ring was decorated in places with transverse grooves. The pin was attached to the ring by a moulded cylinder, also decorated with transverse grooves. The penannular shape suggests that it was of Irish origin (Graham-Campbell 1972; Green 1996). No date was recorded.

12.5.5.2: Penannular brooches from Kesteven
No such finds were recorded.

12.5.5.3: Penannular brooches from Holland
No such finds were recorded.

12.5.6: Trefoil brooches

12.5.6.1: Trefoil brooches from Lindsey

The *PAS* reports that a complete copper-alloy trefoil brooch in *Borre*-style decoration was found in **Alford**. NLM5243 measured 71.9 x 81.1 mm, and was 5.7 mm thick, with three attachment fittings still on the back. It was assigned a date between 850 and 950 AD.

A fragment of a copper-alloy trefoil brooch was recorded from **Hibaldstow**. NLM-6AFAC0 represents one of the three arms, still with the attachment fitting on the back. There seems to have been a central perforation, along which the arm was broken off; this may have been secondary. The decoration consists of devolved *Jellinge*-style zoomorphic

decoration with intertwined and ribbon like animal bodies. It measured 31.0 x 17.4 mm, and the thickness was 1.7 mm. It was assigned a date between 850 and 1066.

Leahy and Paterson (2001: 194, fig. 10.4) list a copper-alloy trefoil brooch, decorated with highly stylised acanthus-leaf decoration set within a double border, from **Keelby**. This type of decoration, which occurs on all the examples from Kesteven and Holland, occur throughout the Scandinavian-controlled regions of England and Denmark.

The PAS reports the discovery of a fragment of a possible trefoil brooch from the parish of **Roxby cum Risby** in North Lincolnshire. NLM6529 measured 29.9 x 20.1 mm, and was 2.1 mm thick. It had a rounded terminal, and was slightly tapering. The back was flat, without any attachment fittings. A hole had been punched through at the opposite (broken) end, slightly off-centre, suggesting a secondary use as a strap-end. The object was decorated in *Jellinge* style. It was assigned a broad date range of 410 to 1066 AD. No linked images were found on the PAS website to verify its identification.

Leahy and Paterson (2001: 193, fig. 10.3) list a gilt trefoil brooch, made of copper alloy and decorated in the *Borre* style, from **Stallingborough** in Lindsey. This brooch was almost certainly produced in Scandinavia, as the attachment fitting on the back were typically Scandinavian, and involved the presence of a suspension loop in one arm.

12.5.6.2: Trefoil brooches from Kesteven

The PAS reports the finding of a trefoil brooch dated to the period 850-950 from **Asgarby and Howell** (DENO-E9A0F5). It was made of copper alloy, and measured 37.7 x 42.1 mm, and was 4.8 mm thick. It was decorated with three foliate patterns, one on each lobe, inside a double border, around a central lozenge in the centre of the brooch.

LIN-16CB00 was a trefoil brooch from **Lenton, Keisby and Osgodby** in North Kesteven. It was decorated in similar fashion to DENO-E9A0F5, with three stylised foliate patterns inside a double border. It was dated to the late ninth or tenth century.

LIN-87E516 was a fragment of an eleventh-century copper-alloy trefoil brooch from **Washingborough**, just to the south-east of Lincoln. Only one lobe survived, which was decorated with a similar foliate pattern, but traces of enamel also survived on the recessed background. It measured 21 x 14 mm, and was 1.2 mm thick.

12.5.6.3: Trefoil brooches from Holland

A fragment of a trefoil brooch was recorded from **Sutterton** near Boston. NLM1004 was one third of such a brooch, made of copper alloy. It measured 17.7 x 15.0 mm, and was 1.3 mm thick. Its decoration consists of a foliate pattern inside a double border. A single attachment fitting was still present on the back. It was assigned a tenth-century date.

12.5.7: Bird-brooches

12.5.7.1: Bird-brooches from Lindsey

NLM5638 was a viking bird-brooch, dated to the eleventh century. It was made of copper alloy, and retains some traces of niello inlay. The brooch measured 35.3 x 52.9 mm, and was 2.1 mm thick. It was found in the parish of **Caistor**.

The PAS reports a copper-alloy bird-brooch from the parish of **South Ferriby**. NLM4341 measured 27.2 x 40.8 mm, and was 3.5 mm thick. The head of the bird was broken off. It was decorated with ring-and-dot motifs, one on the neck, four on the wing, arranged in a cross, and at least another seven on its lower body. Its upper body was decorated with rows of punched dots. It was assigned an eleventh-century date.

12.5.7.2: Bird-brooches from Kesteven

No such finds were recorded.

12.5.7.3: Bird-brooches from Holland

No such finds were recorded.

12.5.8: Other brooches

12.5.8.1: Other brooches from Lindsey

LIN-B7B0C6 was a ninth- to tenth-century copper-alloy rectangular plate-brooch from **Blyborough** in West Lindsey. It was slightly domed, but incomplete. It was decorated with a series of punched dots and a perimeter of punched crescents. Plate-brooches are rare in the Late Anglo-Saxon period. Two examples were excavated at Mill Lane, Thetford, and a fragment had been found in Barton Bendish (Youngs 2004: 38-40). A possible parallel (made of lead) was NMS-7F7086 from the parish of Loddon in Norfolk.

A group of nine or ten copper-alloy and silver safety pin brooches from **Flixborough**, a type of brooch that appears to continue prehistoric types, are dated to the eighth or ninth centuries (Rogers *et al.* 2009: 2). None have been recognised elsewhere in Lindsey, although until recently these brooches were dated to the early Anglo-Saxon period or before, and their

absence may be the result of a lack of recognition. Catalogued in Rogers *et al.* 2009: 1-6. A group of 22 iron safety pin brooches were found in period 4 deposits (early to mid ninth century) at **Flixborough**. They are discussed and illustrated in Ottaway 2009e: 6-7. Also see appendix 14.

From the parish of **Hatton** in East Lindsey came a copper-alloy "viking brooch". No other details were recorded for YORYM-7F5A40.

From **Owersby** came SWYOR-322826, a lead-alloy brooch dated to the period 720-850 AD, even if the use of lead may suggest it was slightly later in date. The fragment was sub-rectangular with a transverse raised bar in the middle, and interlace patterns on either side. It probably represents either a middle Anglo-Saxon strip brooch, or a continental ansate brooch, but no exact parallel had been found yet. See appendix 15.

DENO-DD64A4 (Brown 2006: 290) was a Scandinavian brooch from **Torksey**, depicting a gripping beast with a large head protruding eyes wearing a conical cap, measuring 19.9 x 18.6 x 7.7 mm, similar to gripping beasts published in Graham-Campbell (1980: 136). It was dated to the late eighth to early ninth centuries.

NLM5583 was an eighth-century copper-alloy strip-brooch from **Ludford** in East Lindsey with ring-and-dot decoration, measuring 52.1 x 5.7 x 0.6 mm.

Brown 2006: 287 was an elongated lozenge-shaped brooch, dated to the eighth century, from **Torksey**. It had inlaid silver decoration, and was decorated with a central equal-armed cross. It measured 33.7 x 13.9 x 1.1 mm, and was assigned a pre-viking, ninth-century date. It was very different to the 'Scandinavian' lozenge-shaped brooches discussed above. See appendix 14.

Brown 2006: 338 was a fragment of a gilt copper-alloy brooch with interlace decoration and an inset spherical piece of dark blue/black glass. It measured 22.5 x 11.1 x 2.3 mm, and was found at **Torksey**. See appendix 13.

12.5.8.2: Other brooches from Kesteven

The PAS reports the discovery of a rectangular copper-alloy brooch fragment of probably Carolingian manufacture. LIN-5FCA06 was interpreted as a Carolingian rectangular brooch, but may possibly represent the arm of a cross-shaped brooch, broken off at one end. The surviving sides are slightly concave, and the two surviving corners protrude, and have three slight knobs each. The outside perimeter was decorated with an engraved ladder pattern, and the inside bears four incised lines. The fragment measured 19 x 15 mm, and was 1.5 mm thick. It was found in the parish of **Heighington** in North Kesteven. It was assigned a ninth- to eleventh-century date.

LIN-A864F4 was an annular brooch with *Borre*-style aspects from **Osbourneby**.

DENO-184477 was an eighth- to ninth-century Carolingian brooch with acanthus-leaf motifs, with gilt and silver inlay, found near **Sleaford**. See appendix 13.

NLM7007 was an eleventh-century copper-alloy gilt *Urnes*-style brooch, of a type that is common in Denmark. Only one other (unprovenanced) example is known from the British Isles (now in the British Museum: accession no. BM 1982, 6-2, 1). It measured 40.6 x 25.5 x 2.9 mm, and was found in **Walcott** in North Kesteven. See appendix 13.

12.5.8.3: Other brooches from Holland

No such finds were recorded.

12.6: Equestrian equipment

12.6.1: Stirrups and stirrup mounts

12.6.1.1: Stirrups and stirrup mounts from Lindsey

LIN-B40686 was an eleventh-century stirrup-strap mount from **Beesby with Saleby** in East Lindsey, of Williams Class A, Type 1. The mount was pentagonal and had a very worn face. The decoration was too worn to be identifiable. There were two rivet holes at the base of the face, and another at the top. It measured 42 x 30 x 9 mm.

LIN-E4D022 was part of an Anglo-Scandinavian stirrup, one of only a few examples found in the country. It measured 96 x 14 mm, and was made of a copper-alloy sheath around an iron core. It was decorated with a number of raised ribs. It was dated to the eleventh century, and found in the parish of **Bilsby** in East Lindsey.

The PAS reports an eleventh-century stirrup terminal (NLM-4B4AF7) from the parish of **Binbrook**. It was made of copper alloy, and measured 36.1 x 11.6 mm. It had a zoomorphic shape, with a high relief animal head with prominent ears and a protruding snout. The terminal was hollow, with possible traces of lead solder.

LIN-E25BD7 is an eleventh-century stirrup-strap mount Williams Class B, Type 1 from **Blyborough**. Only the lower part of the mount survived. The main body was openwork, with an animal head in the centre at the base. It measured 30 x 18 x 4.

NLM-339290 was an eleventh-century copper-alloy stirrup-strap mount from **Broughton** in North Lincolnshire, of Williams Type A, class 11a. It was sub-triangular, and

depicts a lion in relief facing right, looking upwards with its front paw raised and its tail curled between his legs and bends backwards. The surviving length was 47.7 mm, the maximum width was 27.7 mm, and the thickness was 3.8 mm. Stirrup-strap mounts of this type occur widely in East Anglia as well.

NLM-72D577 is an eleventh-century copper-alloy stirrup-strap mount from **Caistor**, of Williams Class B. It was trapezoidal in shape and decorated in openwork, with two upper attachment holes, one of which was incomplete. Intertwining around the edge of the mount and in between the apertures was a simple form of a *Ringerike*-style biting beast. At the bottom of the mount was an angled flange with two lower attachment holes. The length was 42.2 mm, and the width was 37.8 mm.

Also from **Caistor** was a rectangular openwork mount, possibly a bridle mount, decorated with intertwined animals. NLM794 measured 60 x 35.4 mm, and was 2.7 mm thick. It was made of copper alloy. Three rivets were still in place. It was assigned a tenth- or eleventh-century date.

The *PAS* also reports an eleventh-century copper-alloy stirrup-strap mount from **Claxby** (NLM-9E4EE4), which measured 36.5 x 34.6 mm. It was decorated in zoomorphic openwork, with three projecting zoomorphic heads on the mount, two in the upper corners of the mount and one larger head in the centre. The upper, smaller heads are not clearly defined. The central head had visible ears, but the other facial features are not defined. The mount had been classified as Williams Class B, Type 1, group 2.

DENO-CCC688 was an eleventh-century copper-alloy stirrup-strap mount from **Corringham** in West Lindsey of Williams Class A Type 8. It was sub-triangular, with a large zoomorphic terminal at the apex, and smaller zoomorphic heads projecting downwards from either end of the base. Its length was 46.8 mm, the width at base was 26.3 mm, the width at the top was 8.9 mm, and the maximum thickness was 5.6 mm.

LIN-3E00B4 was an eleventh-century copper-alloy stirrup-strap mount from **East Barkwith** in East Lindsey, of Williams Class A, Type 1. The mount was pentagonal and had a pierced apex and two further rivet holes at the base. The face of the mount was decorated with an interlace design. It measured 46.1 x 31.9 x 2 mm.

LIN-F9AEB3 was an eleventh-century copper-alloy stirrup-strap mount from **East Barkwith** in East Lindsey, of Williams Class A, type 11. The mount was triangular with a pierced trefoil terminal. The face of the mount was decorated with a lion facing right. The lion had its front paw extended forward and its head pointing upwards and mouth open as if it was bellowing. This type of stirrup mount was common in East Anglia, and has been found elsewhere in Lincolnshire as well. It measured 58.9 x 30.2 mm.

The parish of **East Kirkby** in East Lindsey yielded a leaded copper-alloy stirrup mount dated to the eighth to tenth centuries (NCL-82FF81). The mount was sub-triangular in plan, and had openwork decoration consisting of quatrefoils and pellets. It measured 34.1 x 34.4 mm, and was 5.5 mm thick.

NCL-76AEA7 was a tenth- or eleventh-century copper-alloy stirrup-strap mount from **East Kirkby**, of Williams Class A, type 11. The mount was triangular in shape, with a perforated trefoil terminal. The face of the mount was decorated with a lion or wolf facing right, with one front paw extended forward and its head pointing upwards and mouth open as if it was roaring or howling. Detail of the beast was exceptional, with ears, the main, and toes visible. See also NLM-339290 from Broughton, and LIN-64A357 from Fotherby. It measured 56.9 x 31.1 x 4.5 mm. This type of stirrup-strap mount was common in East Anglia.

LIN-C9F5C3 was an eleventh-century copper-alloy stirrup-strap mount from **Fiskerton**, rectangular in plan and semi-circular in cross-section. The surface was in the form of an animal head, resembling a snake. It measured 29.4 x 8.5 x 8.3 mm.

LIN-C95B77 is an eleventh-century copper-alloy stirrup-strap mount from **Fiskerton**. The mount is 'P' shaped, with a curled-up crested animal head facing 'up' the stirrup (a description that sounds like *Urnes* style). It measured 46.1 x 28.4 x 12.4 mm.

The *PAS* reports a triangular stirrup mount with a pierced trefoil top (LIN-64A357) from **Fotherby**. It was made of copper alloy, and depicts an animal (possibly a lion) with open mouth looking upwards. One of his front claws was extended horizontally to the right. Some iron corrosion was visible along the bottom. It measured 55 mm in length. It was dated to roughly 1000 AD.

Also from **Fotherby** in East Lindsey was LIN-ADE591, an eleventh-century zoomorphic stirrup terminal mount made of copper alloy, with the remains of lead solder still attached where it was affixed to the stirrup itself. It was rounded in section, measuring 13 mm across, and was 45 mm long.

NLM-2698E1 was a cast, copper-alloy stirrup-strap mount from **Fulletby**, which measured 42.6 x 30.5 mm, and was 5.1 mm thick. It was pentagonal in shape and the surface was heavily abraded, rendering the engraved decoration practically invisible. This

strap mount was of Williams Class A, Type 1, and should probably be dated to the eleventh or twelfth centuries.

NLM-265802 was a cast, copper-alloy stirrup-strap mount from **Fulletby**, which measured 40.4 x 32 mm. This mount was also pentagonal in shape, and identified as Williams Class A, type 1, dated to the eleventh or twelfth centuries.

NLM-25FA34 was a complete copper-alloy stirrup-strap mount from **Fulletby**, this time in the shape of a cross. It measured 40.1 x 32.1 mm. There was an attachment hole in the centre of the cross. The expanded lower half of the mount retains traces of incised linear decoration. This stirrup mount was identified as Williams Class A, Type 14, and was likewise dated to the eleventh or twelfth centuries.

LIN-11D642 was an eleventh-century stirrup-strap mount from **Hatton**, of Williams Class A, type 1. The mount was roughly pentagonal in plan. The face of the mount was very corroded however a faint incised double-linear decoration around the perimeter and perhaps a chevron across the centre was still visible. It measured 47.8 x 25.7 mm.

LIN-E7BE50 was an eleventh-century copper-alloy stirrup-strap mount from **Hatton**, of Williams Class A, type 1. The mount was flat, pentagonal and had a broken pierced apex. The face of the mount bears an engraved decoration, comprising two lines inside the perimeter, and a pair of lines forming a 'V'-shaped across the centre. It measured 39 x 26.4 x 1 mm.

The parish of **Hatton** yielded two more copper-alloy stirrup mounts, YORYM-814EC7 and YORYM-815280. Both were recorded as "viking stirrup-mounts", but no other information or exact date range was recorded.

NLM6790 was a copper-alloy stirrup-terminal of tenth- or eleventh-century date from **Haxey** in North Lincolnshire. It depicts an animal face, whose nose forms a lobe, and was made of copper alloy. It measured 32.1 x 10.5 mm, and was 8.7 mm thick.

From the parish of **Hemingby** came an eleventh-century *Urnes*-style stirrup mount (NLM2761). It measured 39.9 x 14.4 mm, and was made of copper alloy.

NLM-475B45 was a copper-alloy 'viking' stirrup mount found in the parish of **Horncastle**, decorated with three little animal heads. It measured 37.7 x 29.6 mm, and was 3.8 mm thick. It was assigned a date range of 850-1066 AD.

From **Horncastle** as well was NLM6159, a tenth- to eleventh-century copper-alloy stirrup mount in the shape of a back-turned animal with manes, dated to the tenth century. The object was 36.8 mm in length, and 23 mm in width, with a thickness of 10.3 mm. See also (for example) NLM-339290 from **Broughton**, and LIN-64A357 from **Fotherby**. This type of stirrup-strap mount was common in East Anglia.

NLM7227 is an eleventh-century copper-alloy stirrup-strap mount of Williams class A from **Laceby**. The object measured 29.3 x 23.7 x 5.2 mm. It had two rivet holes at the top, and two at the bottom. The strap mount was decorated with a design similar to an inverted face above openwork, with scrollwork around the border.

SWYOR-162A42 was an eleventh-century copper-alloy stirrup-strap mount from **Ludford** in East Lindsey, identified as Williams group A, although this example was very worn and no decoration survived. It measured 39.7 x 20.5 x 2.4 mm.

From **Market Stalnton** was an eleventh-century stirrup-terminal (NLM-E73595), measuring 38.3 x 13.0 mm, and with a thickness of 17.0 mm. It had a zoomorphic terminal in *Ringerike* style, with a prominent brow, flared nostrils, tendrils on either side, and rounded ears. It was D-shaped in section, and had a hollow shaft, into which the stirrup arm would originally have fitted. The shaft still contains traces of iron corrosion.

NLM-1EBE96 was an eleventh-century stirrup-strap mount from **Marsh Chapel** in East Lindsey. It was pentagonal in shape, with two rivet holes at the bottom and a suspension loop at the top. It was originally decorated with a linear design engraved with niello. It measured 48.9 x 32.5 mm.

The *PAS* also records an eleventh- or twelfth-century sub-rectangular stirrup-strap mount, made of copper alloy (SWYOR-CC3956), from the parish of **Owersby**. The decoration was openwork and zoomorphic, with a animal head in the centre. The mount measured 29.4 x 28.2 mm, and was 5.8 mm thick.

From the parish of **Owersby** came YORYMB380, a stirrup-strap mount, made of copper alloy, and dated to the eleventh century. It measured 46.4 x 38.9 x 3 mm. Williams no. 477 was referred to as the closets (published) parallel, which also had two trapezoidal apertures in the shape of elongated crosses, three attachment holes along the top, and engraved 'wriggle-work' decoration that followed the shape of the object.

The *PAS* reports another eleventh-century undecorated stirrup mount from the parish of **Revesby** (NCL-112393). It was made of copper alloy, had a rectangular bottom with two rivet holes, and a triangular top with a single rivet hole. No rivets are in place any more. It measured 44.9 x 30.0 mm, with a thickness of 2.9 mm.

LIN-B1ADB3 was an eleventh-century stirrup-strap mount from **Rigsby with Ailby**, of Williams Class A type 12. The mount was diamond-shaped. The main body was executed in

openwork and decorated with a central diagonal cross giving four apertures. There was a projecting integral circular boss at each angle. It measured 46 x 30 mm.

LIN-A0A7F4 was an eleventh-century zoomorphic copper-alloy terminal for a strap distributor from **Roughton**. It measured 26 x 15 x 11 mm.

LIN-EA2E51 was an eleventh-century stirrup copper-alloy strap mount from **Saltfleetby St Peter** in East Lindsey, of Williams Class A, Type 11. The mount was triangular and had a narrow ledge on the reverse at the bottom. The apex of the mount was in the form of a pierced trefoil. The body of the mount was decorated with an incised lion walking to the right, with its mouth open. This type of strap-end occurred widely in East Anglia. It measured 56 x 28 x 3 mm.

The *PAS* reports the discovery of a copper-alloy stirrup-terminal from the parish of **Scawby**. NLM-6B5572 had a *Ringerike*-style zoomorphic terminal, with two prominent eyes and a ridge above the slightly upturned nose, and was D-shaped in section, measuring 24.0 x 10.9 x 7.7 mm. The shaft was hollow so that it can be attached to the stirrup-arm. It was assigned an eleventh-century date.

A second copper-alloy stirrup-terminal from the parish of **Scawby** was NLM-E0C460. Once more its terminal was zoomorphic and decorated in *Ringerike* style, with a prominent brow and rounded ears, and the object was D-shaped in section and hollow. It measured 29.1 x 10.7 x 11.3 mm. It was assigned an eleventh-century date.

NLM7168 was a copper-alloy stirrup-strap mount of the eleventh century. It was diamond shaped, with a central boss, and a raised cross dividing it into four recessed panels. It had a single loop on top and a hole in the bottom. It was found in **Scotton**.

The *PAS* reports the discovery of NLM788, a copper-alloy stirrup mount with openwork decoration, depicting a central animal mask flanked by two animal heads in profile. The mount had seven circular perforations. The two animal heads in profile have open jaws with waterlines coming out of them, forming the outside perimeter of the stirrup mount. Some remains of iron corrosion are visible on the back. It was assigned a tenth- to eleventh-century date. It was found in the parish of **Scunthorpe**.

From **Skendleby** comes LIN-528217, an eleventh-century copper-alloy stirrup-strap mount of Williams class A type 1. It was roughly pentagonal in shape, with a rectangular base and triangular top with trefoil terminal, measuring 47 x 30 mm. The terminal was pierced by a single rivet hole, and two iron rivets remain in place at the bottom end. The face of the object was engraved with a double border around the outside perimeter, and a shield shape below the trefoil top terminal.

LIN-9EA0F5 was an eleventh-century stirrup-strap mount from **Stixwould and Woodhall**, of Williams Class A, type 11. The mount was triangular with an incomplete pierced trefoil terminal. Its face was decorated with a lion facing right. The lion had its front paw extended forward and its head pointing upwards and mouth open as if it was bellowing. It was 47 mm long. This type of strap-end is common in East Anglia.

An openwork eleventh-century stirrup-strap mount, measuring 62.7 x 32.5 mm, was found at **Swinhope** (NLM-DE19D1), of Williams's Class A, Type 3. It was decorated with a central figure surrounded by openwork decoration.

NLM6651 was a tenth-century copper-alloy stirrup mount from the parish of **Swinhope**. It was sub-triangular in shape, and bore *Mammen*-style zoomorphic decoration. There was a rivet hole in each corner, the bottom one inside a loop, and zoomorphic knobs protrude from the corners. It measured 61.8 x 31.2 x 3.3 mm.

From **Tathwell** in East Lindsey came a 'viking' stirrup mount, dated to the tenth or eleventh century, with a right-facing upward-looking beast. NLM4738 was made of copper alloy. It belongs to Williams's Class A, Type 11. It measured 53 x 27.6 mm, and was 6 mm thick. See also (for example) NLM-339290 from **Broughton**, and LIN-64A357 from **Fotherby**. Mounts like these are common in East Anglia.

From the parish of **Thimbleby** in East Lindsey was NLM1039, a copper-alloy stirrup mount depicting an *Urnes*-style animal head. It measured 34.2 x 10.0 x 10.4 mm, and was assigned a tenth-century date. However the *Urnes*-style did not develop until the eleventh century, and the dating of this object should therefore be revised.

Also from **Thimbleby** was NLM1035, a copper-alloy stirrup mount with openwork decoration, incorporation what may be one central animal head. It was very corroded but near complete, measuring 35.1 x 26 mm, with a thickness of 4.6 mm. Two iron rivets were still in place at the bottom end. It was assigned a tenth- to eleventh-century date.

From the parish of **Thimbleby** comes NLM1036, a possible fragment of a stirrup made of copper alloy. The object had a sub-globular terminal, and was slightly concave on one side, with a horseshoe-shaped terminal at the other end, which suggests it may have been intended to fit around a circular rod or something similar. It measured 30.8 mm in length, and reached a maximum width of 14.2 mm. The sub-globular terminal was decorated with incised lines, and sits in a sort of collared socket.

LIN-F6D795 was an eleventh-century copper-alloy triangular stirrup-strap mount from **Thimbleby**. There was an incomplete trefoil head at the top. The face of the mount was decorated with a right-facing beast with head upwards and mouth open as if roaring. It measured 47 x 30 x 6. This type of strap mount was very common in East Anglia.

Also from **Thonock** in West Lindsey was a little copper-alloy *Urnes* style stirrup mount (NLM2846). It measured 18.3 x 10.6 mm, and consisted of a sub-rounded terminal decorated with some incised lines, not dissimilar to the terminal of an unidentified object from Thimbleby (NLM1036) in East Lindsey. It was assigned a tenth-century date. However, the *Urnes*-style didn't really develop until the eleventh century, and its dating should therefore be revised.

Brown 2006: 311 was a copper-alloy stirrup-terminal from **Torksey**. It was filled with iron, and had a rectangular projection from the centre and circular sectioned piercing in the solid end. It measured 39.2 x 12.0 x 17.2 mm.

Brown 2006: 312 was a stirrup-strap mount from **Torksey**, decorated with an animal with raised head, and two iron rivets were still in place. This is possibly the type of stirrup-strap fitting that occurs widely in East Anglia. It measured 44.9 x 27.3 x 7.0 mm.

Brown 2006: 313 was an openwork stirrup-strap mount from **Torksey**. It measured 46.4 x 28.9 x 4.5 mm.

The *PAS* reports an openwork stirrup-strap mount from **Welton** (NLM613). The mount measured 39.5 x 30.5 mm, and was decorated with a single central animal head. The openwork was no longer open, due to heavy corrosion on the back, where it had been attached to the stirrup. It was assigned an eleventh-century date.

The *PAS* reports a copper-alloy unidentified object, possibly a stirrup terminal or other piece of horse equipment, from **Whitton**. NLM881 consists of a sub-triangular terminal with an open centre, attached to a short protrusion with D-shaped cross-section and hollow back, presumably where it fitted onto something else. The terminal was decorated with three protruding knobs and incised lines. It was identified as 'possibly viking', and attributed to the tenth or eleventh century. It measured 30.0 x 39.0 mm.

The *PAS* lists an openwork stirrup-strap mount of Williams Class B Type 1 from **Wickenby** (LIN-A2E242). The object had a triangular top and rectangular bottom, and was decorated in openwork, with three protruding animal faces, one in the centre of the bottom, and two on either side halfway up, at the lower corners of the triangular top. Two rivet holes with iron corrosion remain on the bottom. No other details are visible. It was assigned an eleventh-century date. Dimensions are 37 x 29 mm.

LIN-60B697 was an eleventh-century copper-alloy stirrup-strap mount from **Willoughby with Sloothby** in East Lindsey. It measured 52 x 8 x 8.

LIN-60A955 was an eleventh-century copper-alloy stirrup-strap mount from **Willoughby with Sloothby** in East Lindsey. The mount was semi-circular in cross-section. It measured 75 x 8 x 8.

The *PAS* reports the discovery of a copper-alloy stirrup mount of Williams Class A, Type 8 from the parish of **Winteringham**. NLM1077 measured 57.1 x 32.6 mm, and was 3.8 mm thick. It had three rivet holes arranged in a triangle with the apex pointing upwards, and was decorated with two zoomorphic mouldings in relief on either side, their heads pointing downwards. It was assigned a tenth- to eleventh-century date.

NLM-1809C7 was an eleventh- to twelfth-century copper-alloy stirrup-strap mount from **Winterton**. It had a zoomorphic terminal, with a D-shaped head. At the back of the head was a pair of large rounded ears. The eyes are hollow and the nose was incomplete. Through the centre of the terminal was an iron shaft, which protrudes from either end. The neck of the beast was covered in iron corrosion from the iron shaft. The length was 44.4 mm, and the width was 12.2 mm. Similar examples, which came from eleventh- to twelfth-century contexts, were published in Williams (2002: 115-18).

12.6.1.2: Stirrups and stirrup mounts from Kesteven

NLM4561 was a tenth- to eleventh-century copper-alloy stirrup mount from the parish of **Asgarby and Howell** in North Kesteven. It was decorated with an impressed devolved animal design, and identified as 'viking'.

DENO-18CF44 was an eleventh-century copper-alloy stirrup-strap mount from the parish of **Asgarby and Howell** in North Kesteven. It was decorated in openwork, with one central zoomorphic head, rectangular, with small rounded ears on the top corners, big eyes, and an open mouth. There are two piercings to either side of the head. It was assigned to Williams Group B. It measured 26.8 x 24.5 x 8.8 mm.

NLM1051 was a tenth- to eleventh-century copper-alloy strap fitting from the parish of **Aunsby and Dembleby**. It was similar to stirrup mounts of Williams Class A, Type 11, with one rivet hole in the mouth of the beast and one through the chest.

LIN-DA2226 was an eleventh-century copper-alloy stirrup-strap mount from **Aunsby and Dembleby** in North Kesteven, of Williams Class A, type 1. The mount was very debased and there was no surviving decoration. It measured 31 x 32 x 2.

LIN-597C42 was an eleventh-century zoomorphic copper-alloy stirrup terminal. It measured 18 x 9 x 14 mm, and was found in **Aunsby and Dembleby**.

LIN-599A34 was an eleventh-century copper-alloy stirrup terminal from **Aunsby and Dembleby**. The terminal was the upper part of a highly decorative crested animal head type common in East Anglia and Lincolnshire. It measured 15 x 11 x 9 mm.

DENO-AA9CA5 was an eleventh-century copper-alloy stirrup mount from **Barrowby** in South Kesteven, of Williams Class A, Type 12, decorated in openwork. It was lozenge shaped, with a central openwork diagonal cross, and a projecting circular pierced loop at the top. There was a circular boss at the centre of the cross and at the end of each of the two side angles. It measured 50.0 x 30.4 x 8.3 mm.

NLM7162 was a copper-alloy eleventh-century stirrup-strap mount from the parish of **Beckingham** in North Kesteven, identified as being of Scandinavian manufacture (Williams Class B, Type 1, Group 1). It measured 37.1 x 46.4 x 2.9 mm.

NLM7161 was a copper-alloy eleventh-century stirrup-strap mount from the parish of **Beckingham**, of Williams Type 1 Group 1. It was rectangular in shape, with a central animal head flanked by smaller beasts, and four openwork ovals. Two rivet holes at the bottom showed evidence for iron residue. It measured 37.0 x 33.2 x 3.3 mm.

LIN-ABAC36 was an eleventh-century copper-alloy stirrup-strap mount from **Burton Pedwardine** in North Kesteven. The terminal was in the form of a crested animal head curled round to face up the stirrup, thereby forming an aperture. There are two openwork holes in the crested head. This terminal forms part of a highly distinctive group found East Anglia and Lincolnshire. Another similar example was found in the Sleaford area, and was recorded on the database as LIN-3AF7D7. It was 40 mm long.

LIN-EF73A8 was an eleventh-century copper-alloy stirrup-strap mount from **Burton Pedwardine** in North Kesteven. The mount would have been pentagonal in shape although the upper quarter was now missing. It was identified as Thomas class A type 1, and measured 25 mm in width.

LIN-EE76D6 was an eleventh-century stirrup-strap mount from **Burton Pedwardine** in North Kesteven. It was sub-triangular and depicts a lion, or what was intended to be a lion, looking upwards with its front paw raised and tail curled between the legs and over the back. This type of strap-end is common in East Anglia (see above). It was identified as Williams Class A, type 11a, and measured 30 mm in width.

LIN-EF4B51 was an eleventh-century copper-alloy zoomorphic stirrup-strap mount from **Heckington** in North Kesteven, possibly of Williams Class B, which occur in concentrated numbers in Lincolnshire. The animal had a large rounded forehead, with a rivet straight through its centre. The ears were small flat semi-circles and the eyes consisted of two large holes. A flat sub-rectangular panel extended from the base of the snout. This panel had a rounded, pierced terminal with a flat, semi-circular extension to either side. It measured 39.3 x 8.3 x 14.4 mm.

NLM677 was a copper-alloy stirrup mount depicting a howling beast from **Honington** in South Kesteven. This type was common in East Anglia.

NLM6154 was a tenth- to eleventh-century copper-alloy stirrup mount from **Hougham** in South Kesteven. There was no trace left of the decoration.

LIN-558197 was an eleventh-century copper-alloy stirrup-strap mount from **Lenton, Keisby and Osgodby**, of Williams Type 6 or 7. The mount had a sub-triangular body with worn knobs on either side. The apex of the mount was missing, which appears to have been in the form of a zoomorphic head. In the centre of the mount was a multi-branched symmetrical tree-like shape. Dimensions were not recorded.

NLM4784 was a copper-alloy *Urnes*-style stirrup mount from **Market Deeping**. It was made of copper alloy, and assigned a tenth-century date; however as the *Urnes*-style did not really develop until the eleventh century its dating should be revised.

NLM4603 was a fragment of a stirrup mount from **Marston** in South Kesteven, made of copper alloy and assigned to the tenth century.

NLM6141 was a tenth- to eleventh-century copper-alloy stirrup mount from **Marston** in South Kesteven, executed in the shape of a stylised fleur-de-lys.

LIN-C9EDF3 from **Nocton** in North Kesteven was an eleventh-century stirrup-strap mount, of Williams Class A, Type 8. The mount was sub-triangular with a large zoomorphic head terminal at the apex and with smaller projecting heads on either side of the base. From the upper head a series of looping and bifurcating tendrils project, which end in lobes. The lower heads have rounded snouts with flaring nostrils, long pointed eyes and large pointed ears. There are three holes in the body of the object, one of which was filled with iron corrosion. It measured 59 x 32 x 5 mm.

LIN-B82F64 was an eleventh-century copper-alloy stirrup-strap mount from **Norton Disney** in North Kesteven, of Williams Class A, Type 1. The mount was an incomplete pentagonal shape with a lip at the bottom with two rivet holes, and a further rivet hole towards the bottom of the face. The face was decorated with deeply incised channels depicting a debased foliate motif. It measured 32 x 26 x 12mm.

NLM676 was a copper-alloy stirrup mount from **Old Somerby**. It had six perforations and a rounded top. It was identified as 'viking'.

LIN-F25105 was an eleventh-century copper-alloy stirrup terminal. The mount depicted a slender beasts head with a long snout defined by a single diagonal ridge on either side. It measured 45 x 11 x 10 mm, and was found in **Osbournby**.

LIN-3AF7D7 was an eleventh-century copper-alloy openwork stirrup terminal from the parish of **Osbournby**, executed in *Urnes* style. It measured 46 x 20 x 7 mm.

LIN-3AD5F2 was another copper-alloy openwork stirrup terminal from the parish of **Osbournby**, executed in *Urnes* style. This one measured 39 x 23 x 12 mm.

LIN-A64A26 was an eleventh-century copper-alloy stirrup mount from the parish of **Osbournby** in North Kesteven. The mount was nearly pentagonal in form, with three rivet holes. The face of the object was engraved with a pair of beasts on either side. From the animal heads project a sequence of loops, which represent the animals' bodies. It belonged to Williams Class A, Type 1, and measured 48 x 32 x 2 mm.

LIN-A683E5 was a copper-alloy eleventh-century openwork stirrup strap mount from **Osbournby**. The face was flat and bore an engraved design. It was tentatively identified as Williams Class B, Type 2, Group 2. Dimensions were not recorded.

DENO-E10181 was an eleventh-century copper-alloy stirrup-strap mount from **Waddington** in North Kesteven, of Williams Class A, Type 8. The mount was sub-triangular in shape with debased animal heads at the bottom corners. The face of the mount was decorated with indented panels, some of which have the remains of enamelling. It measured 39.5 x 27.4 x 9.6 mm.

LIN-D8A8B2 was an eleventh-century copper-alloy zoomorphic stirrup-strap mount from **Walcot near Folkignham**. The mount was in the form of an elongated animals head. The underside of the head was rounded and covered with iron corrosion. The head was oval in cross-section and the forehead sloped gradually towards the snout. It had two oval eyes, and the snout was upturned. It measured 37.4 x 8.6 x 10.5 mm.

LIN-008B58 was an eleventh-century stirrup-strap mount from **Walcot Near Folkignham**, of Williams Class A Type 8. The mount was sub-triangular in plan with a large zoomorphic head terminal at the apex and with smaller projecting heads on either side of the base. The heads are very worn and no detail was visible. Down either side of the main body are a series of looping and bifurcating tendrils with end in lobes, probably intended as wings. It measured 47 x 30 x 5 mm.

The PAS lists an eleventh-century stirrup terminal (LIN-941D48) of copper alloy, with a slender zoomorphic form, and a hollow reverse. It measured 45 x 12 x 10 mm. It was assigned an eleventh-century date. It was found in **Washingborough**.

LIN-1DC304 from **Welbourn** was an eleventh-century stirrup-strap mount, of Williams Class A, Type 1. Only the upper half of the once pentagonal mount survived. The decoration could no longer be identified. It measured 31 x 26 x 2 mm.

12.6.1.3: Stirrups and stirrup mounts from Holland

The PAS reports the discovery of NLM4247, a 'viking' stirrup mount, from the parish of **Freiston** near Boston in South Holland. It was decorated with three facing animal heads, had four perforations, and was made of copper alloy. It was dated to the tenth century.

LIN-647E23 was an eleventh-century stirrup-strap mount from **Freiston** in near Boston, of Williams Class A, Type 13. The mount was diamond-shaped. The lower part of the mount had slightly bulged edges and was decorated across the surface with an incised cross. The centre of the cross contains a rivet hole, which was filled with iron corrosion. The mount was similar to examples from Suffolk. It measured 44 x 35 x 2 mm.

LIN-681CD4 was an eleventh-century copper-alloy stirrup-strap mount from **Pinchbeck** in South Holland. The terminal was semi-circular in cross-section with a flat base. The front of the mount had a moulded zoomorphic decoration depicting a beast's head with bulging elongated eyes, prominent ears and large rounded nostrils. This mount was discovered circa 40 yards from LIN-67F924 and it was suggested that the two were part of the same pair. It measured 22 x 12 x 11 mm.

LIN-67F924 was an eleventh-century copper-alloy stirrup-strap mount from **Pinchbeck** in South Holland. The terminal was semi-circular in cross-section with a flat base. The front of the mount had a moulded zoomorphic decoration depicting a beast's head with bulging elongated eyes, prominent ears and large rounded nostrils. The reverse of the mount was covered with a white-ish lead solder. This mount was found circa 40 yards from

LIN-681CD4 and it was suggested that the two were part of the same pair. It measured 22 x 12 x 11.

NLM706 was a tenth- to eleventh-century copper-alloy stirrup mount from the parish of **Quadring** in South Holland. It was identified as Williams, Class B, Type 3, Group 1, and was decorated with a central animal head.

NLM707 from the parish of **Quadring** in South Holland was a stirrup-strap mount of Williams, Class A, Type 16, with a very stylised depiction of a central animal head. It was made of copper alloy, and of tenth- to eleventh-century date.

NLM708 was a copper-alloy tenth- to eleventh-century stirrup-strap mount from the parish of **Quadring** in South Holland. It was identified as a Williams Class A, Type 5.

NLM709 was a copper-alloy, tenth- to eleventh-century stirrup-strap mount from the parish of **Quadring** in South Holland. On the basis of its outline, it was identified as Williams Class A, type 1, but there were absolutely no traces of any decoration left.

NLM950 was a copper-alloy tenth- to eleventh-century stirrup mount from the parish of **Quadring** in South Holland. It was decorated in openwork, with three animal heads, and identified as Williams, Type 1, Group 3.

NLM958 was a copper-alloy tenth- to eleventh-century stirrup mount from the parish of **Quadring** in South Holland, depicting a man in a tree, tentatively identified as Woden. It belonged to Williams, Class A, Type 3.

NLM-3070E6 was an eleventh-century copper-alloy stirrup strap fitting from **Sutton Bridge**, identified as Williams Class A, type 1. The front was decorated with a raised *Urnes*-style design of a devolved pair of entwined beasts. The heads are pointed downwards and the bodies form loops above and below the heads. The length was 48.6 mm, the width was 31.9 mm, and the maximum thickness was 10.3 mm.

12.6.2: Cheek pieces, strap fittings and bridle fittings

12.6.2.1: Cheek pieces, strap fittings and bridle fittings from Lindsey

Excavations at **Aylesby** produced a tenth- or eleventh century strap-distributor. The strap-distributor was of iron, and identified as 'typically Anglo-Scandinavian'; it was probably a piece of horse equipment, as in one of a set attached to a bridle. Fixed arm strap-distributors are uncommon in Britain, and this specimen is furthermore uncommon for not having straight arms (Watt 1995: 31). Although no direct parallels could be found, such artefacts appear to be more common in Scandinavia, where occasionally they have hooked loops, like this one, too. Similar examples were found at Thetford and Winchester, which both came from tenth- to eleventh-century contexts (Watt 1995: 32).

The *PAS* reports the discovery of NLM-EB0C03, an Anglo-Scandinavian copper-alloy strap distributor for a horse's harness, in the parish of **Bonby** in North Lincolnshire. It was roughly shaped like a Mercedes-sign, consisting of a ring divided into three spaces by three short arms protruding from a central boss. Each arm had a *Borre*-style zoomorphic terminal 'biting' the outside ring. The object had a diameter of 43.1 mm, and was 11.4 mm thick. A similar incomplete example was recorded as NMS-8A1BE0 from Outwell in Norfolk. It was assigned a tenth-century date.

NLM-21A0C7 was a fragment of a copper-alloy strap-distributor, representing the lozenge-shaped terminal of one arm, with a rounded knob on the three corners. It measured 24.1 x 24.6 mm, and was assigned an eleventh-century date. It was found near **Crowle** on the Ilse of Axholme.

Flixborough yielded very few items of equestrian equipment. These included only three fragments of bits, discussed in Ottaway (2009d). They were all made of iron.

From **Fotherby** as well was LIN-AE7743, a copper-alloy bridle fitting, possibly a cheek piece, not dissimilar in shape to <ae234> from Flaxengate in Lincoln, confirming the latter's function as a bridle fitting. The terminal loop was rectangular, and the bar was rectangular in plan and D-shaped in cross-section. The only visible decoration consists of a worn zoomorphic collar near the broken end. The object measured 32 x 17 mm, and was dated to the eleventh century. See fig. 36.

A possible copper-alloy cheek piece in *Ringerike* style, LIN-C27541 was also from **Fotherby**. It measured 34 x 19 mm, with a thickness of 3 mm, and was D-shaped in cross section. The object consists of two twisted strands with some zoomorphic elements, but was very worn. It was assigned an eleventh-century date.

Excavations at '**Goltho**' produced an equestrian fitting (Goodall 19987: 187).

The *PAS* reports the discovery of an eleventh-century copper-alloy bridle cheek piece from the parish of **Hardwick**. NLM-CBA861 measured 72.6 x 20.3 mm, and consists of a bar of rectangular section with a central lozenge-shaped boss and a rounded knob on either side. A lozenge-shaped terminal with a circular perforation for the harness straps sits at either end, again with rounded knobs at the corners.

The *PAS* reports a tenth-century 'viking' horse-harness strap fitting or cheek piece fragment (NLM5328) from the parish of **Healing**. It measured 20.3 x 11.3 mm, and had a

thickness of 2.4 mm. It was made of copper alloy, and the top was slightly trefoil in shape, with a single attachment hole through the top knob. The bottom separated into two lugs, but was broken off. The surface was divided into fields by incised lines.

The *PAS* reports the discovery of an incomplete copper-alloy strap-distributor from the parish of **Holton le Moor** in East Lindsey. NLM-91F7D3 had a central raised boss with two D-sectioned bars projecting from two opposite sides. They both terminate in a loop, both of which are now broken. The whole object measured 60.9 mm in length, and the bars are 5.8 mm wide, whilst the central boss had a diameter of 11.9 mm. It was assigned an eleventh-century date.

The *PAS* reports the discovery of an eleventh-century stylized zoomorphic copper-alloy cheek piece in *Ringerike* style (NLM-BB5F70). It measured 29.3 x 28.4 mm, with a thickness of 3.5 mm. It was found in the parish of **Horncastle**.

The *PAS* also reports the discovery of DENO-903C41, a copper-alloy cheek piece of eleventh-century date, in *Ringerike* style (Williams type 2). The surviving fragment, sub-triangular in shape, measured 37.8 x 15.0 mm, and was 3.9 mm thick. Decoration at the junction of the projection and the plate consists of an engraved spiral motif in *Ringerike* style. The reverse was undecorated. It was discovered in **Horncastle**.

NLM383 was also a copper-alloy strap fitting, probably a strap-distributor, that was found in the parish of **Laughton**. It was assigned a tenth- to eleventh-century date, and had a "round central bit" and "two rings either end". It measured 28 x 13.4 mm.

From the parish of **Lusby with Winceby** in East Lindsey was an eleventh-century copper-alloy strap-distributor for a horse harness, dated to the eleventh century (NLM-C681E7). It was made of copper alloy, and had four arms, which are D-shaped in section, forming the shape of an equal-armed cross, with a central circular raised boss measuring 16.4 mm in diameter. Each arm ends in a lozenge-shaped terminal with an oval aperture. The whole object measured 59.3 mm in diameter.

The *PAS* also lists a 'viking' bridle bit, dated c. 850-1066 AD, from **Nettleton** (NLM-D92414). It measured 70.7 x 21.4 mm, and was 9.7 mm thick.

NCL-AC4ED5 was a ninth- to eleventh-century copper-alloy strap-junction from **Revesby** in East Lindsey, dated to the ninth to eleventh centuries. It consisted of a sub-square frame with three open cells, all of sub-rectangular shape, two oriented vertically. The third cell was oriented with its length running horizontally along the bottom half of the frame. The centre of the frame was zoomorphic. It measured 23.7 x 24.4 x 5.5 mm.

The *PAS* reports the discovery of LIN-4997F4, a ninth-century copper-alloy mount of Irish manufacture with gilding on its surface. It was flat, depicting two animal heads with upturned snouts and open mouths in profile, with a rivet hole between the two beasts, and it was suggested that this could be a harness mount. The dimensions of the mount were not recorded. It was found in the parish of **Riby**.

LIN-4997F4 was another ninth-century copper-alloy mount from **Riby**, possibly of Irish manufacture, with gilding (appendix 13). The mount was flat, possibly originally part of a horse-harness mount, and had two zoomorphic terminals on either end.

From **Skendleby** in East Lindsey was LIN-DD4333, an eleventh- to twelfth-century copper-alloy strap fitting for a horse's harness. The object was roughly rectangular, and in the centre was an animal head in relief, with large circular ears, prominent pellet eyes, and a shovel-shaped snout, and three raised ovals or petals projecting in a sunburst fashion behind to either side. This decoration leaves a triangular void above and below, closed by two strap bars, for the strap to pass through. The style of head was very similar to those found on the stirrup-strap mounts of Williams's Class B Type 1 Groups 1 and 2, and Type 3 Group 1, all of which have a distribution weighted to the northern parts of Lincolnshire. It measured 38 x 24 x 3 mm.

Also from **Skendleby** was LIN-52DD63, a copper-alloy bridle cheek piece with an oval terminal loop. The object measured 39 x 18 mm, and had a thickness of 7 mm. The central section of the shank was circular, and was divided by a collar from the split end, which was broken. It was assigned a tenth- to eleventh-century date.

A second tenth- to eleventh-century copper-alloy cheek piece from **Skendleby** was LIN-52BF53. This example also had an oval terminal loop, but with three evenly spaced knobs. Again the shank was collared, and semi-circular in section. The object measured 39 x 28 mm, with a thickness of 5 mm. The reverse was hollow.

An eleventh-century double-ended strap-distributor was found at **Swinhope**. NLM-253044 was made of copper alloy, with two pierced terminals at either end off a central convex roundel with two knobs. Both terminals have an oval aperture, and a rounded knob on each angle. The object measured 54.6 x 20.2 mm.

The *PAS* reports the discovery of a copper-alloy strap fitting for a belt of horse harness from the parish of **Tattershall**. NLM6281 was decorated in *Borre* style, incorporating three animal heads looking inwards, and measured 28.5 x 26.9 mm, and was 5.4 mm thick. It was assigned a date between the mid ninth and tenth centuries.

Brown 2006: 309 was a fragment of cheek piece from **Torksey**, with possible zigzag decoration on the narrow side. It measured 24.8 x 2.9 x 1.1 mm.

Brown 2006: 310 was a cheek piece from **Torksey**. There was a hollow raised rib situated at roughly one third of the way from the outer edge, and it was engraved with double zig-zag decoration on the outer curved edge. It measured 58.3 x 27.0 x 4.0 mm.

LIN-AB7480 was an eleventh- to twelfth-century copper-alloy harness fitting from **West Keal** in East Lindsey, tentatively identified as a strap junction. The object had a lozenge-shaped frame, decorated with a moulded knob at each corner. The frame was D-shaped in cross-section. From one end a bar extended; the rest of the object was missing. Dimensions were not recorded.

From **Whitton** as well was NLM482, a lozenge-shaped horse-harness cheek piece dated to the eleventh century. Its three corners have a rounded knob-like terminal, and the central perforation was circular. Many other examples of these have been found. It measured 32.3 x 26.7 mm.

NLM-045158 was a tenth-century copper-alloy fragment from a harness strap-distributor from **Willoughby with Sloothby** in East Lindsey. The lozenge-shaped terminal was concave in section and had a large circular aperture. On three of the angles was an integral knob, and on the other angle are the remains of the rectangular bar. The surviving length was 28.5 mm, the width was 29.0 mm, and the thickness was 6.0 mm.

12.6.2.2: Cheek pieces, strap fittings and bridle fittings from Kesteven

NLM955 was a tenth- to eleventh-century *Urnes*-style strap-distributor from **Ancaster** in South Kesteven. However, the *Urnes* style was commonly dated to the eleventh century, so the dating of this object may have to be revised.

LIN-E61858 was a ninth- to eleventh-century bridle bit from the parish of **Aswarby and Swarby**. The object had a broken D-shaped loop. The other side was missing.

NLM5651 was a tenth- to eleventh-century copper-alloy viking harness fitting from the parish of **Aswarby and Swarby** in North Kesteven. No other details were recorded.

NLM719 was a tenth- to eleventh-century copper-alloy harness cheek piece from **Baston**, sub-diamond in shape with protruding knobs. The arm was broken off.

LVPL-1E5FB8 was an eleventh-century copper-alloy strap mount from **Boothby Graffoe**. It belonged to Williams Class A Type 12, and was executed in openwork. The mount was diamond shaped, with a central diagonal cross creating four apertures. The flat base was decorated with linear ridges. It had 7 projecting circular bosses positioned at the junctions of the cross and the frame, and one knob. At the top of the diamond was a circular loop for attachment. It measured 46 x 33 x 5 mm.

NLM6074 was an eleventh-century copper-alloy harness fitting from the parish of **Folkingham** in North Kesteven. It was decorated with openwork strips, and covered in ring-and-dot motifs on both sides. It measured 105.7 x 17.2 x 3.4 mm.

LIN-0B10F2 was a Viking-Age crescent-shaped copper-alloy object that was probably part of a bridle fitting, found in the parish of **Lenton, Keisby and Osgodby** in North Kesteven. It was entirely occupied by an animal in *Urnes* style, and measured 35 x 14 mm, with a thickness of 2 mm. The beast's head was depicted open-mouthed and in profile, with nielloed grooves, and formed the terminal. The beast had oval eyes, and small, rounded ears. It was possible that it formed part of a piece that contained several interlaced animals. It was of eleventh-century date.

NLM-5524C4 was a tenth-century iron strap-distributor from **Syston**. The distributor had four central oval loops attached to four short arms in the form of an equal armed cross. These arms were placed around a central raised boss. One of the arms was missing. There were some traces of tinning on each of the three remaining loops. The diameter of the central boss was 22.1 mm and the length of the arms was 6.9 mm.

NLM720 was a tenth- to eleventh-century copper-alloy horse-harness cheek piece from **Thurlby**. It was sub-diamond in shape, with protruding knobs. One arm was still present, including its polygonal widening where the bit would have been attached.

LIN-401FF1 was a tenth- to eleventh-century strap fitting from a cheek piece for a horse harness from the parish of **Thurlby**, made of copper alloy. At one end there was a lozenge shaped eye with a bulbous moulding at each angle. There was an incomplete rectangular joining bar between. This bar was D-shaped in cross-section and had a transverse recessed channel in the centre. The other lozenge shaped eye was missing.

NLM6155 was a tenth- or eleventh-century copper-alloy horse-harness cheek piece, apparently of 'viking' manufacture, from the parish of **Uffington** in South Kesteven. It was decorated with stylised animals.

12.6.2.1: Cheek pieces, strap fittings and bridle fittings from Holland

From the parish of **Boston** was a *Borre*-style cross-shaped strap fitting, which may well be part of a horse harness. NLM4782 measured 44.9 x 18.5 mm, and was 4.3 mm thick. It was

made of copper alloy, and had the remnants of iron rivets at either end, and was assigned a tenth-century date.

Also from **Boston** was NLM168, part of a highly decorated an eleventh-century horse-harness strap-divider. The object was trapezoidal in shape, with intricate openwork decoration portraying two-harnessed horses with their backs to each other, set inside an intricate floral pattern. There were rectangular attachment loops at the top and bottom. It measured 119.0 x 64.4 mm, and was 6.5 mm thick.

NLM7200 was a gilt copper-alloy strap fitting, possibly for a horse harness, of late tenth- or eleventh-century date, from **Donington** in South Holland. It was concave in section, and decorated in *Ringerike* style, with a back-turned animal within a border, and four rivet holes. One of the copper-alloy rivets was still *in situ*. See appendix 13.

The *PAS* reports the discovery of a fragment of a copper-alloy cheek piece of a horse harness from **Pinchbeck** in South Holland. LIN-5DEAC3 had an oval shank with two square-sectioned moulded collars. The far end of the shank was broken. The other end of the shank divides into two arms, now broken but presumably once coming together to form an oval loop. The two arms are rectangular in cross-section. It measured 45 x 19 mm, and was assigned a tenth- to eleventh-century date.

NLM723 was an eleventh-century copper-alloy harness fitting from **Pointon and Sempringham**, consisting of a central plaque that was supposed to cover the bit, and two arms, now broken off. Traces of linear rocker-trace decoration were still visible. It was identified as 'Saxo-Norman', and measured 13.6 x 48.5 x 3.9 mm.

The *PAS* reports the discovery of a cheek piece for a horse harness from **Quadring** in South Holland. NLM722 consists of a pear-shaped plate with an attachment hole at its lozenge-shaped terminal, and an integral lug at the opposite end placed at ninety degrees to the plate. the lug ends in a lozenge-shaped terminal with circular perforation, intended to take the reins. The decoration was almost entirely worn off. The object measured 52 x 41.5 mm, and the plate was 4.4 mm thick. It was assigned an eleventh-century date.

The *PAS* also reports the discovery of an eleventh-century copper-alloy Romanesque strap fitting, NLM726, possibly for a horse harness, from the parish of **Quadring** in South Holland. It measured 37.8 x 15.8 mm.

From the parish of **Sutterton** near Boston came NLM721, a complete copper-alloy cheek piece of a horse harness. It consisted of a pear-shaped plate, which would have covered the bit, with incised decoration, and a trilobe shaped terminal with attachment hole. At the opposite end was an integral attachment ring for the reins, set at a ninety-degree angle to the pear-shaped plate. The ring was circular. It measured 49.0 x 48.3 mm, and was 2.8 mm thick. It was assigned an eleventh-century date.

From **Weston** in South Holland was NLM2943, a fragment of a harness fitting. It consists of an oval stud with an equal armed cross in niello inlay, attached to a metal rod which bends ninety degrees to extent towards a ring-shaped terminal, presumably intended to take a strap. The ring-shaped terminal was broken. The object measured 43.5 x 18 mm, and was tentatively assigned to the late Anglo-Saxon period.

12.6.3: Harness pendants

12.6.3.1: Harness pendants from Lindsey

The *PAS* reports the discovery of an eleventh-century copper-alloy harness pendant from **Hibaldstow**. The terminal of NLM-3CD626 was lozenge shaped and flat, with symmetrical openwork decoration in *Ringerike* style with incised lines and four openings, two kidney-shaped, and two circular. It also still had two integral attachment plates, turned at a ninety-degree angle to the pendant, with a copper-alloy rivet still in place. The object measured 54.5 x 33.0 mm.

NLM-574F83, a copper-alloy horse-harness pendant, also comes from **Owersby** in West Lindsey. It was an openwork lozenge shaped object measuring 54.1 x 33.0 mm, with a thickness of 8.5 mm. It was decorated with crude interlace, resembling some *Ringerike*-style metalwork. A single attachment plate remains at the top, as well as a single iron rivet. Similarities with NLM-3CD626 from Hibaldstow were noted. It was assigned an eleventh-century date.

The *PAS* reports the discovery of a copper-alloy horse-harness pendant from the parish of **Roxby cum Risby**. NLM-ECF7F6 measured 18.4 x 27.8 mm, and was 2.3 mm thick. It was lozenge shaped, but one of the corners was now broken off. It was decorated in openwork, originally probably incorporating four circular piercings, and the surface was decorated with incised lines. It was identified as *Ringerike* style, and attributed to the tenth or eleventh century. Similarities with NLM-3CD626 from Hibaldstow and NLM-574F83 from Owersby were noted.

12.6.3.2: Harness pendants from Kesteven

No such finds were recorded.

12.6.3.3: Harness pendants from Holland

No such finds were recorded.

12.7: Bells

12.7.1: Bells from Lindsey

The *PAS* lists a so-called 'Norse' bell from the parish of **Bilsby** (LIN-E37D15). It was hexagonally shaped, with a scalloped lower edge, and made of copper alloy. The suspension loop was missing, as was its iron clapper, now only indicated by traces of iron corrosion on the inside. The sides of the bell are decorated with incised punched ring-and-dot motifs, three on each side, arranged in pyramid fashion. The bell measured 23 mm in length, and had a diameter of 25 mm. It was assigned a tenth-century date.

DENO-1D57D7 was a tenth-century copper-alloy 'Norse' bell from Warren Hill, Panton, in the parish of **East Barkwith**. The bell was squashed, and most of the lower half of the hexagonal wall of the bell was missing. It measured 31.6 x 17.1 x 5.9 mm.

The excavations at **Flixborough** produced a total of eleven iron bell fragments of varying sizes, two of which were similar to examples from Anglo-Scandinavian contexts at Coppergate in York (Ottaway 2009h). The **Flixborough** tool hoards, which included a significant number of woodworking tools, also included a copper-plated iron bell measuring c. 160 mm in height. It was decorated with two incised eight-armed crosses, one on either side. Ottaway (2009c) states that "Large bells of a similar size ... are rare in archaeological contexts, although it may be noted that a [similar] large bell ... comes from a late 9th-century context adjacent to the Anglo-Saxon church at Repton, Derby." Another similar example was found in Lincoln (appendix 11) (Ten Harkel in prep. b).

Excavations at '**Goltho**' produced a 'Norse' bell, hexagonal in section and made of copper alloy; with the bottom edge rolled inwards (Goodall 1987: 176).

The *PAS* also reports the discovery of a tenth-century copper-alloy bell from the parish of **Hibaldstow** in North Lincolnshire. NLM-872FA3 was in complete, missing its attachment loop and clapper, and the lower cusped edge was damaged. Its body however was hexagonal, and measured 25.5 mm in length and 22.6 mm in width. It was seemingly undecorated. Similar examples have been found on a large number of other 'viking' sites, including York (Mainman 2000: 2599).

LIN-AA80A0 was another tenth-century bell made of copper alloy from **Lissington**. It had a hexagonal body, with traces of three ring-and-dot motifs on each face. The suspension loop at the apex was largely missing. The rim was damaged but each 'side' would have been concave. In the centre on the inside, the corroded remains of an iron staple for the (now missing) clapper on could still be seen.

Another tenth-century hexagonal copper-alloy bell was found in **Roxby cum Risby**. NLM-0B8F36 was incomplete, but the surviving fragment unmistakably represented a 'Norse' bell with cusped lower edge. The attachment lug at the apex was still present, and stained with iron corrosion, suggesting it was attached to an iron ring or chain or wire. The length of the bell was 32.3 mm, and the width was 21.7 mm.

NLM-D48443 was an incomplete cast copper-alloy 'Norse' bell. The hexagonal body had a fluted lower edge. One side of the bell was missing and none of the clapper survives, but there was some iron staining inside the bell. The length was 28.0 mm, and the maximum surviving diameter of the mouth was 24.9 mm. It was found in **Winterton**. It was assigned an eleventh-century date, but it could also be tenth-century.

12.7.2: Bells from Kesteven

The *PAS* lists a tenth-century 'Norse' copper-alloy bell from **Lenton, Keisby and Osgodby** (LIN-EA95E2). It was conical with a cusped lower edge, and measured 25 x 24 x 16 mm. Its suspension loop was worn and damaged. The sides of the bell consist of six evenly spaced faces, decorated with three incised dot-and-ring motifs arranged in a triangle. Traces of iron corrosion indicate that the bell once had an iron clapper.

LIN-4DB330 was a hexagonal bell from **Osbourneby** in North Kesteven.

12.7.3: Bells from Holland

No such finds were recorded.

12.8: Pendants

12.8.1: Pendants from Lindsey

NLM2720 was a circular pendant from **Elsham**, whose diameter was not recorded. It was made of copper alloy, and divided into different cells, consisting of a central circle with three sub-trapezoidal shapes at equal distance from each other radiating out, and all enclosed inside a further circle. The fields would originally have been inlaid with garnet, and one of the fields still had crosshatched gold foil inside. Traces of gilding are still visible on the surface. It

was 8.42 mm thick. A single piercing for suspension, possibly a secondary addition, interrupts the outer circle. It was assigned an eighth- to ninth-century date, and was possibly continental in origin (appendix 13).

The PAS reports the discovery of a 'viking' pendant from the parish of **Hatton** in East Lindsey (YORYM-814631). No other information was recorded.

DENO-61E4C6 was a pendant, found in the parish of **Knaith**. It had the shape of an equal-armed cross, with a hole pierced through one of the arms, and was made of lead alloy. The arms of the cross flare out slightly towards their terminals, and a faint vertical raised rib runs across the middle, though slightly off-centre; it was suggested this may be a very stylized representation of Christ on the cross. The object measured 24.78 x 22.16 mm, and was 7 mm thick. Parallels have been found in Birka (Sweden) and Trondheim (Norway), leading to its possible identification as a Scandinavian or Anglo-Scandinavian artefact. A similar object was also found at Torksey (see below). It was assigned a date between the eleventh and twelfth centuries. See appendix 15.

The PAS reports a coin pendant from **Lissington**. LIN-C65986 was made of a bronze Roman coin of the late third to fourth centuries, minted at London, and simply pierced on one side to be used as a pendant. When suspended, the coin imagery was on its side. The coin had a diameter of 18 mm, and a thickness of 1 mm. The obverse was worn, but the reverse depicts an altar and the letters VOTIS. It was assigned an early medieval date, although it could not be dated any closer than to the period 410-1066.

NLM922 was a fragment of a tenth- to eleventh-century circular openwork mount or pendant, possibly decorated in *Jellinge* style. It bears a faint resemblance to the openwork pendants <44> from Granta Place and <ae171> from The Park, Lincoln. The fragment measured 43.3 x 49.2 x 3.2 mm. It was found in **Melton Ross**. See fig. 27.

NLM2810 was an eighth-century copper-alloy disc-shaped pendant with stamped circles as decoration from **Nettleton** in West Lindsey. It measured 0.8 mm in thickness; other dimensions were not recorded.

LIN-9F1715 was a lead pendant from **Rigsby with Ailsby**. The use of lead may suggest a ninth- to eleventh-century date. Its face was decorated with anthropomorphic or zoomorphic designs, resembling the type commonly found on gold bracteates. Its diameter was 29 mm, and its thickness 4 mm. See appendix 15.

Leahy and Paterson (2001: 195, fig. 10.6) report a pendant in *Borre* style from **Tathwell** in Lindsey. It was assigned to the ninth or tenth centuries, and interpreted as being of Scandinavian manufacture.

Brown 2006: 292 is a lead cross pendant with raised ribs along all arms, measuring 24.0 x 19.8 x 4.0 mm. It was found in **Torksey**. See appendix 15.

Brown 2006: 293 is a lead Thor's hammer pendant with a damaged loop, although a similar example from York was (wrongly) identified as a weight. It measured 23.7 x 23.0 x 4.4 mm, and weighed 6.6 g. It was found at **Torksey**. See appendix 15.

NLM632 from **Worlaby** was a gilt pendant made of copper alloy, with interlace decoration. It was dated to the eighth century. See appendix 13.

12.8.2: Pendants from Kesteven

The PAS reports a circular mount or pendant of seventh- to tenth-century date (LIN-DE3493), found at **Heckington** in North Kesteven. It was fragmentary, and made of cast copper-alloy. It was originally circular, with a curved outer frame and openwork inner decoration, possibly representing an animal. The frame was D-shaped. The surviving fragment measured 25 x 38 x 2 mm. It shows a faint resemblance to the openwork pendants from The Park <ae171> and gp81 <44>, but the object was too fragmentary to support direct comparison. See fig. 27.

NARC-B3E1B5 was a zoomorphic *Ringerike*-style comb-shaped pendant from the Baltic, found in the parish of **Leasingham** in North Kesteven. It was identified as being of Scandinavian or Baltic origin. The comb measured 47 mm in length, was 35 mm wide and 3 mm thick, and had a tooth gauge of approximately 4 teeth per cm. It had a deep green, mottled patina. The top centre of the comb was perforated for suspension; the hole still retained the remains of a large copper-alloy suspension ring.

The PAS reports an incomplete object made of copper alloy from **Newton and Hacey** that was probably an oval pendant (LIN-157131). The attachment hole was broken, and the object was decorated around its perimeter with a row of punched circles, with a larger pellet-in-ring motif near the suspension hole. It measured 25 x 21 x 1.5 mm. It was assigned a broad date range of c. 450-1066.

NLM4636 was a tenth-century pendant from **Old Somerby** in South Kesteven. The object was made of copper alloy and was circular in shape, with four cut-out areas to form an equal-armed cross. It measured 37.4 x 40 mm, and was 3.7 mm thick.

LIN-8C54F1 was a gilt copper-alloy pendant from **Old Somerby** in South Kesteven, of possible eleventh-century date. It measured 24 x 16 x 1 mm. See appendix 13.

12.8.3: Pendants from Holland

The PAS reports the discovery of a copper-alloy pendant from **Weston** in South Holland. SWYOR–A89283 was sub-rectangular in shape, and tapered towards one of its ends, which was pierced. It measured 24.6 x 5.8 x 5.0 mm. The front was decorated, possibly with zoomorphic designs within a space delineated with a transverse groove at the top, and one at the bottom. The reverse was flat and undecorated. It was assigned a broad date range of c. 410-1066 AD.

12.9: Finger- and earrings

12.9.1: Finger- and earrings from Lindsey

The excavations at **Flixborough** produced one silver finger ring, one copper-alloy and silver finger ring, a plain finger or earring, and a silver inscribed alphabet-ring (Brown and Okasha 2009; Rogers 2009b). The alphabet-ring was dated to the eighth or ninth centuries (Brown and Okasha 2009: 138). The other rings were unstratified, but at least one of them seems to have had *Trewhiddle*-style decoration and can be assigned a ninth-century date (Rogers 2009b: 28). Excavations at **Flixborough** also produced an inscribed silver finger-ring of eighth- to ninth-century date, which is discussed in detail in Brown and Okasha (2009). See appendix 14.

The parish of **Horncastle** in East Lindsey yielded a twisted copper-alloy penannular finger- or earring ring. NLM3403 was identified as Scandinavian, and dated to the tenth or eleventh century. It had a diameter of c. 24 mm, and a thickness of 5.4 mm.

The PAS reports an incomplete copper-alloy finger-ring of ninth- to eleventh-century date. NLM–62EFB4 was a tapering strip bent into a circle, and decorated with two rows of punched ring-and-dot motifs. The terminals of the strip are both missing. The ring measured 25.5 mm, and was 6.7 mm wide. A similar example, dated to the tenth or eleventh centuries, is Mainman and Rodgers 2000: 2586, no 10515. Rings with ring-and-dot decoration do not occur in Lincoln. It was found **Kirton in Lindsey**. Also see LIN-E42F77 from Aswarby and Swarby and NLM4572 from Asgarby and Howell.

From **Market Stainton** in East Lindsey comes NLM–E71AB3, a copper-alloy finger ring decorated with rows of punched dots. The object was penannular in shape and formed from a slightly tapering strip; its terminals have broken off. The surviving external diameter of the ring was 21.7 mm, and the width of the band was c. 5.0 mm. It was assigned a very broad date range of fifth- to eleventh-century date, but on the basis of similarities to the unfinished examples from Holmes Grainwarehouse and the finished ring from West Parade, Lincoln, a late Anglo-Saxon date can be suggested.

From **Torksey** was LIN–D251F2, a fragment of a gold finger-ring. The fragment was roughly square, and its surface was decorated with several rows of punched circles, some of which are overlapping. The circles are crudely executed with some overlapping. There are cut marks on either side, which suggests that the ring was purposefully cut down. The fragment measured 10 x 11 mm, and was 1 mm thick. It was assigned a late ninth- to tenth-century date (appendix 13).

Excavations at **West Halton** by the University of Sheffield produced a couple of copper alloy rings that are probably of 10th-century date (Hadley *pers. comm.*).

12.9.2: Finger- and earrings from Kesteven

NLM4572 was a seventh- to eleventh-century copper-alloy finger ring from **Asgarby and Howell** in North Kesteven, consisting of a strip of sheet metal decorated with ring-and-dot motifs. It measured 19.2 x 18.6 mm, and the sheet was 0.4 mm thick.

LIN-E42F77 was a complete ninth- to eleventh-century copper-alloy 'viking' finger-ring from **Aswarby and Swarby** in North Kesteven. It was formed of a flat tapered band; the ends had been knotted together. The outer face of the band was decorated with a row of punched ring-and-dot motifs. This type of ring has been found in viking graves and hoards of the later ninth and earlier tenth centuries (Graham-Campbell 1980). A nearly identical example was found at Coppergate, York, dating to the tenth or eleventh centuries (Mainman and Rogers 2000: 2585, fig. 1279, no 10517). Also see NLM4572 from Asgarby and Howell and NLM–62EFB4 from Kirton in Lindsey.

LIN-82FB84 is a copper-alloy penannular finger- or earring of tenth- to eleventh-century date, similar to a silver example published in *Treasure Annual Report 2004*, no. 87. The diameter tapered from 4 to 1 mm in diameter. It was found in **Osbournby**.

LIN-304A15 was a copper-alloy finger-ring from the parish of **Osbournby** in North Kesteven, decorated with incised vertical lines. It was broadly dated to 410-1066. It bore no resemblance to the Lincoln examples. It measured 20 x 7 mm.

LVPL500 was a tenth-century gilt cloisonné finger ring from **Tallington** in South Kesteven. See appendix 13.

12.9.3: Finger- and earrings from Holland

No such finds were recorded.

12.10: Weapons and knives

12.10.1: Knives

12.10.1.1: Knives from Lindsey

Some 250 iron knives were discovered during the excavations at **Flixborough**. They are comprehensively catalogued and discussed in Ottaway (2009g).

Excavations at '**Goltho**' produced twelve iron knives (Goodall 1987: 187).

The *PAS* reports the discovery of a copper-alloy zoomorphic object, probably a knife terminal, from **Lusby with Winceby**. DENO-B9C5E6 was sub-rectangular in plan, with three piercings and a protruding knob on one of the sides, and slightly tapering in section. The surface was decorated with a symmetrical zoomorphic motif consisting of incised lines representing two animal heads on both of the short sides. The object was broken at the other long side, where the remnants of an iron object measuring 4.4 x 3.4 mm are still attached, which may be a tang. The whole object measured 18.5 x 19.0 mm, and had a thickness of 5.22 mm. It was assigned a tenth- to eleventh-century date.

LIN-B8D083 was an iron knife blade and tang, found in the parish of **Keelby**. It measured 90 x 16 mm, and assigned a date between the sixth and eleventh centuries.

NLM466 was an iron knife broadly dated to 410-1066 from **Whitton**.

12.10.1.2: Knives from Kesteven

LIN-52E856 was an iron knife from **Osournby** in North Kesteven, broadly dated to 410-1066.

12.10.1.3: Knives from Holland

No such finds were recorded.

12.10.2: Swords

12.10.2.1: Swords from Lindsey

From **Alkborough** comes a croissant-shaped copper-alloy sword pommel. NLM4674 measured 50.1 x 28.0 x 15.2 mm, and had a crescent-shaped lower edge. It was assigned a date between c. 700-900. This pommel belongs to Petersen L type VI, a fusion of Scandinavian and Anglo-Saxon fashions, and dates to the 10th or 11th century.

The *PAS* reports the discovery of a sword pommel with *Borre*-style decoration from the parish of **Calcethorpe with Kelstern** in East Lindsey. NLM-C3B377 was made of copper alloy, and measured 69.6 x 25.9 mm, with a thickness of 23.9 mm. It was sub-rectangular in shape, and pointed oval in section. The decoration consists of niello inlay on the front, where a protruding central animal head was surrounded by interlace representing two intertwined animals, whilst the back was decorated with more simple interlace, also representing two intertwined animals. The top on either side of the hole was decorated with simple crosshatched interlace. It was assigned a tenth-century date.

WMID2970 was an iron blade dated to 410-1066 from **High Toynton**. It was a flat and elongated oval shape, with a slightly curving protrusion at one terminal. One long edge was slightly more curved than the other. It measured 82.0 x 24.2 x 8.7 mm.

The *PAS* lists a copper-alloy croissant-shaped sword pommel measuring 61.5 x 17.1 mm (NLM-D8B031). It was found in **Nettleton**, and dated to c. 850 - 1066.

NLM872 (Brown 2006: 315) was a crown-shaped hilt decoration of a 'viking' sword. It was heavily gilded and deeply chip-carved, and dated to the period 900-1000. It was found at **Torksey** (appendix 13).

SWYOR-FAF477 was another copper-alloy croissant-shaped sword pommel, of tenth to eleventh-century date, measuring 52.8 x 29.6 mm. This form was considered to be of English origin, with parallels in Wales and Anglesey, but was described as 'viking'. It was found in the parish of **Ulceby with Fordington**.

12.10.2.2: Swords from Kesteven

LIN-C552C3 was a tenth- to eleventh-century croissant-shaped copper-alloy sword pommel from **Stapleford**. This pommel belonged to Petersen L type VI, a fusion of Anglo-Scandinavian and Anglo-Saxon fashions, and dates to the 10th or 11th century.

LIN-7F8FA7 was a tenth- to eleventh-century croissant-shaped copper-alloy sword pommel from **Washingborough** in North Kesteven. The pommel measured 53 mm in length, 17 mm in width, and 22 mm in height. The tang hole measured 6 mm by 5 mm.

12.10.2.3: Swords from Holland

No such finds were recorded.

12.10.3: Daggers

12.10.3.1: Daggers from Lindsey

The PAS reports a copper-alloy dagger guard with *Ringerike*-style decoration from **Bardney**. LIN-7FE604 measured 93 x 22 x 17 mm. It was made of copper alloy, and the decoration had zoomorphic elements, as well as two shield patterns on either side of the hole. It was assigned a late tenth- to eleventh-century date.

12.10.3.2: Daggers from Kesteven

No such finds have been recorded.

12.10.3.3: Daggers from Holland

No such finds have been recorded.

12.10.4: Scabbard chapes and mounts

12.10.4.1: Scabbard chapes and mounts from Lindsey

The PAS reports the discovery of a copper-alloy scabbard for a dagger from **Hibaldstow**. NLM-876836 was a scabbard mouth consisting of a band twisted into an oval shape, though the back of the band was missing. A central triangular terminal and two smaller triangular terminals projected from the bottom of the band. The fitting was decorated with *Urnes*-style interlace patterns. The entire object measured 34.8 x 21.6 mm. It was assigned a tenth-century date.

From the parish of **Middle Rasen** in West Lindsey was NLM-FD16A4, the bottom part of a copper-alloy *Ringerike*-style scabbard chape, dated to the tenth century. The object measured 30.5 x 36.7 mm, and was 2.6 mm thick.

NLM-51CCF1 was an eleventh- to twelfth-century copper-alloy scabbard chape from **Roxby cum Risby** in North Lincolnshire. It measured 32.3 x 21.4 x 1.8 mm.

Brown 2006: 314 was a highly decorated solid silver-gilt scabbard mount of possible continental manufacture, measuring 31.0 x 22.5 x 7.3 mm. It was found at **Torksey**. It was not given an exact date (appendix 13).

From **Tupholme**, in Lindsey some 12 miles east of Lincoln, came DENO-527092, a tenth- to eleventh-century copper-alloy dagger scabbard with openwork decoration. The decoration consists of a central human figure, and a zoomorphic mask below. It measured 36.9 x 33.0 x 9.2 mm (see Mills 2001: 101 no. V281 for a near-identical example from South Humberside).

12.10.4.2: Scabbard chapes and mounts from Kesteven

NLM6140 was a tenth- to eleventh-century copper-alloy openwork sword or dagger chape, identified as 'viking', from **Baston** in South Kesteven.

NLM4620 was a continental scabbard, probably for a sword, from **Honington**.

12.10.4.3: Scabbard chapes and mounts from Holland

No such finds have been reported.

12.10.5: Arrowheads

12.10.5.1: Arrowheads from Lindsey

Eight iron arrowheads, three of which were tanged and may be late Anglo-Saxon in date, were also found at **Flixborough**. They are discussed in Ottaway (2009i).

12.10.5.2: Arrowheads from Kesteven

A barbed and tanged arrowhead was found in the parish of **Birchwood** in North Kesteven, at SK9445067940 (just to the southwest of Wigford), which was classified as 'Scandinavian' (Lincoln Museum accession number 43.60; Lincoln HER 70581-MLI90820).

12.10.5.3: Arrowheads from Holland

No such finds have been recorded.

12.10.6: Other weapons

12.10.6.1: Other weapons from Lindsey

A tenth- to eleventh-century viking spearhead and axe-hammer have been found near **Haxey** (Head *et al.* 1998: 277).

12.10.6.2: Other weapons from Kesteven

No such finds have been recorded.

12.10.6.3: Other weapons from Holland

No such finds have been recorded.

12.11: Weights and gaming pieces

12.11.1 Weights and gaming pieces from Lindsey

LIN-424F33 was a flat disc shaped lead weight or gaming piece, weighing 81.07 g, with a diameter of 35, and a thickness of 7 mm. It was found in the parish of **Bullington** in West Lindsey. Its surface was decorated with a simple cross.

LIN-2746A7 refers to three lead weights or gaming pieces. They are plano-convex and undecorated; two have central dimples at the back whilst the third had a hollow back. They were assigned an early medieval date, post-500, and were found in the parish of **East Barkwith**, East Lindsey. The first measured 15.5 mm in diameter and 9.4 mm in height, and weighed 9.5 g. The second measured 15.8 x 9.6 mm, and weighed 12.1 g. The third measured 14.7 x 8.3 mm, and weighed 8.99g.

A total of twelve lead weights (four cylindrical, one truncated pyramid, three disc-shaped and four cone-shaped) have been discovered at **Flixborough**. None were found in contexts predating the late ninth century, and Wastling (2009) has suggested this indicates a transition to a bullion-based economy as a result of the Scandinavian settlement and subsequent coin shortages.

From the parish of **Gainsborough** came a very irregularly shaped lump of lead that was interpreted as a possible weight. NLM39 weighed 12.64 g, was measured 11.5 x 17 mm. It was assigned a late ninth to tenth century date.

Excavations at '**Goltho**' produced a perforated weight (or spindle whorl) (Goodall 1987: 175) from the ovens of the early eleventh-century kitchen. Another perforated lead weight was reportedly found in the clay floor layers of the preceding ninth- to tenth-century kitchen (Goodall 1987: 176).

The PAS reports the discovery of a copper-alloy coin-weight from the parish of **Hatton** in East Lindsey (YORYM-7DEDD3). No other details were recorded.

The PAS reports an eighth- to ninth-century lead plano-convex gaming piece or weight from **Hatton**, with three moulded knobs on the top. LIN-7D8F62 measured 12.3 mm in length, had a diameter of 15.7 mm, and weighs 14.3 g.

Also from **Hatton** was a ninth-century copper-alloy barrel-shaped weight. LIN-0F0337 was slightly irregular in shape, and displayed hammer marks on its surface. It measured 10.6 mm in length, had a diameter of 13.1 mm, and weighs 8.7 g. NLM-A824D0 was a copper-alloy weight or gaming piece from **Hibaldstow**. It was disc-shaped and circular in plan, with a diameter of 12.0 mm, and measuring 4.4 in thickness. It weighs 3.66 g. It was decorated with a border of eleven incised dots around the outside perimeter of one of the faces. It was assigned a date range of c. 410-1066.

The PAS reports the discovery of SWYOR-4F8082, a possible lead-alloy gaming piece or weight. The object was solid and cone-shaped, and had a rounded apex and a concave base, with a diameter of 17.1 mm, measuring 12.8 mm in height, and weighing 15.7 g. It was assigned a broad date range of 410-1066. It was found in **Laughton**.

The PAS reports a lead coin-weight from the parish of **Lissington**. LIN-956197 was oval in plan, measuring 52 x 43 mm, with a thickness of 11 mm. A worn copper-alloy coin with a diameter of 18 mm, probably a styca, with a voided short cross inside a circle surrounded by an unintelligible legend was placed in the centre. Stycas were often used for viking weights, as were silver Lunette pennies or sometimes late Roman bronze coins. The lead surface of this weight was furthermore decorated with some 18 radiating lines coming from around the cross, each measuring c. 2 mm across. It was assigned a ninth- to eleventh-century date.

The PAS reports three weights or gaming pieces from the parish of **North Thoresby** near Grimsby in East Lindsey. Images are not available for any of them. NLM7252 was made of lead, domed in shape, and interpreted as a gaming piece. It measured 13.7 x 15.5 x 14.6 mm, and weighed 20.6 g.

NLM7196 from **North Thoresby** was interpreted as a gaming piece. It was conical and hollow in shape. It was 12.8 mm in length, and 14.7 mm in diameter.

NLM7254 was simply identified as 'a weight', found in **North Thoresby**. It was made of lead, with an inset of a piece of gilded copper-alloy, possibly originally an arm of a cruciform brooch, and was dated to the ninth century. See appendix 13.

The PAS reports the discovery of SWYOR-CC1332, a possible copper- and lead-alloy gaming piece or weight, from the parish of **Owersby** in West Lindsey. It was made of a U-shaped copper-alloy object with one zoomorphic terminal, and a lead-alloy filling, and measured 14.2 x 13.8 x 10 mm. It had a flat base. Parallels with similar objects from Ireland were suggested, albeit vaguely, and a date range of c. 850-950 was offered.

SWYOR-CC1E24 was a ninth-century lead-alloy object identified as a weight, inset on the top with a piece of gilded and decorated copper-alloy. It measured 24.2 x 19 mm, and was oval in plan, with a height of 9.2 mm. It was hollow on the reverse, and weighs 22.2 g.

This piece was assigned a ninth- to tenth-century date, and ascribed to the vikings. It was found in **Owersby** in West Lindsey. See appendix 13.

From the parish of **Revesby** was a lead pyramid-shaped gaming piece with four ridges and a hollow core (NLM-FC6F80). It measured 19 x 16.6 x 13.6 mm, and was assigned an eighth-to tenth-century date.

The PAS reports the discovery of a sub-conical lead weight made of sheet lead rolled into a cylinder from the parish of **Roxby cum Risby**. NLM6264 was undecorated. It measured 15.7 x 16 x 14.4 mm; it weighed 18.7 g.

Also from **Roxby cum Risby** was NLM-EBA6E3, a complete copper-alloy polyhedral weight. It was twelve sided, with six lozenge-shaped faces and eight triangular ones. The edges of each face are decorated with rows of punched dots, and the lozenge shaped faces are each decorated with six larger punched dots, arranged in two rows like the 'six' on a dice. It measured 8.7 mm across, and weighs 3.88g. Similar weights have been found in large numbers in Torksey. It was assigned a ninth- to tenth-century date.

NLM-A27134 was another ninth- to eleventh-century copper-alloy polyhedral weight from **Roxby cum Risby**. It measured 8.8 mm across. The weight was twelve sided, with six lozenge shaped sided faces and eight triangular. Each of the lozenge shaped faces contains six punch marks in two rows of three. The weight was 3.88 g.

The PAS reports the discovery of NLM5766, a lead coin-weight of tenth- to eleventh-century date, identified as 'viking', from the parish of **Scawby** in North Lincolnshire. The silver coin was probably one of King Wiglaf of Mercia (830-840). It was nearly circular, and measured 21.1 x 21.2 mm. It is 8.4 mm thick, and weighs 23.44 g. See appendix 14.

From the parish of **Swinhope** came NLM7127, identified as a gaming piece. This object was a hollow cone, and it was dated to the eighth- to eleventh centuries.

Also from **Swinhope** was NLM6483, a weight made from a tapering rolled tube of lead, dated to the period 410-1066. It measured 17.8 x 11.6 x 3 mm, and weighed 27.8 g.

In Torksey, a large number of weights were found, including the following polyhedral weights:

DENO-C08AA8 (Brown 2006: 215) was a copper-alloy polyhedral weight of ninth- to tenth-century date from **Torksey**. No decoration was visible although the weight was quite corroded. It measured 5.4 x 5.0 x 4.9 mm, and weighed 0.75 g.

NLM-466707 (Brown 2006: 216) was a copper-alloy polyhedral weight of tenth-century date from **Torksey**. The square faces were decorated with one dot. It measured 5.0 x 5.2 x mm, and weighed 0.73 g.

DENO-C08136 (Brown 2006: 217) was another copper-alloy polyhedral weight of ninth- to tenth-century date from **Torksey**. The square faces were decorated with two dots and a beaded border and the triangular faces were undecorated. It measured 6.3 x 6.1 x 6.0 mm, and weighed 1.16 g.

DENO-944EA3 (Brown 2006: 218) was another copper-alloy polyhedral weight of ninth- to tenth-century date from **Torksey**. It was decorated with two dots and a plain linear border on the square faces, and had undecorated triangular faces. It measured 6.2 x 6.2 x 6.2 mm, and weighed 1.29 g.

DENO-C075A3 (Brown 2006: 219) was another copper-alloy polyhedral weight of ninth- to tenth-century date from **Torksey**. The square faces were decorated with two dots and a beaded border. The triangular faces were undecorated. It measured 6.4 x 6.3 x 6.0 mm, and it weighed 1.32 g.

DENO-9442F8 (Brown 2006: 220) was another copper-alloy polyhedral weight of ninth- to tenth-century date from **Torksey**. The square faces were decorated with two dots and a beaded border on square faces. The triangular faces were undecorated. It measured 6.4 x 6.0 x 6.0 mm, and weighed 1.44 g.

DENO-9458A3 (Brown 2006: 221) was another copper-alloy polyhedral weight of ninth- to tenth-century date from **Torksey**. The square faces were decorated with two dots and a beaded border. The triangular faces each had one dot. It measured 6.8 x 6.7 x 6.1 mm, and weighed 1.50 g.

DENO-C065B4 (Brown 2006: 222) was another copper-alloy polyhedral weight of ninth- to tenth-century date from **Torksey**. Three dots and a plain linear border decorated the square faces, and the triangular faces were undecorated triangular. It measured 7.0 x 7.0 x 6.8 mm, and weighed 1.66 g.

DENO-943A82 (Brown 2006: 223) was another copper-alloy polyhedral weight of ninth- to tenth-century date from **Torksey**. It was decorated with three dots and a beaded border on the square faces, and had undecorated triangular faces. It measured 6.5 x 6.6 x 6.5 mm, and weighed 1.67 g.

NLM725 (Brown 2006: 224) was another copper-alloy polyhedral weight of ninth- to tenth-century date from **Torksey**. It was decorated with three dots and a beaded border on the square faces, and had undecorated triangular faces. It measured 6.6 x 6.6 x 7.0 mm, and weighed 1.76 g.

DENO-943053 (Brown 2006: 225) was another copper-alloy polyhedral weight of ninth- to tenth-century date from **Torksey**. It was decorated with three dots and a beaded border on the square faces, and had undecorated triangular faces. It measured 7.1 x 7.2 x 7.0 mm, and weighed 2.13 g.

DENO-942613 (Brown 2006: 226) was another copper-alloy polyhedral weight of ninth- to tenth-century date from **Torksey**. The square faces were decorated with four dots and a plain linear border; the triangular faces were undecorated. It measured 7.3 x 7.0 x 7.2 mm, and weighed 2.06 g.

NLM-465AF3 (Brown 2006: 227) was a copper-alloy polyhedral weight of tenth-century date from **Torksey**. It was decorated with four dots and a beaded border on square faces. It measured 7.4 x 6.9 mm, and weighed 2.24 g.

DENO-940F54 (Brown 2006: 228) was another copper-alloy polyhedral weight of ninth- to tenth-century date from **Torksey**. Four dots and a beaded border decorated the square faces, and the triangular faces were undecorated. It measured 7.6 x 7.4 x 7.6 mm, and weighed 2.53 g.

DENO-941C56 (Brown 2006: 229) was another copper-alloy polyhedral weight of ninth- to tenth-century date from **Torksey**. It was decorated with four dots and a beaded border on the square faces. The triangular faces were undecorated. It measured 7.8 x 7.8 x 7.4 mm, and weighed 2.60 g.

DENO-93F6E7 (Brown 2006: 230) was another copper-alloy polyhedral weight of ninth- to tenth-century date from **Torksey**. The square faces were decorated with four dots on square faces, and it had undecorated triangular faces apart from a beaded border around all the faces. It measured 8.0 x 7.5 x 7.6 mm, and weighed 2.64 g.

Brown 2006: 231 was another copper-alloy polyhedral weight of ninth- to tenth-century date from **Torksey**. It was decorated with six dots and a beaded border on the square faces. The triangular faces were undecorated. It measured 8.1 x 8.1 x 8.0 mm, and weighed 3.22 g.

DENO-93DA24 (Brown 2006: 232) was another copper-alloy polyhedral weight of ninth- to tenth-century date from **Torksey**. It was decorated with six dots and plain linear borders on the square faces, and was undecorated on the triangular faces. It measured 8.5 x 8.2 x 8.5 mm, and weighed 3.56 g.

Brown 2006: 233 was another copper-alloy polyhedral weight of ninth- to tenth-century date from **Torksey**. The square faces were decorated with six dots and beaded borders, and with three dots on the triangular faces. It measured 8.4 x 8.4 x 8.7 mm, and weighed 3.70 g.

DENO-934697 (Brown 2006: 234) was another copper-alloy polyhedral weight of ninth- to tenth-century date from **Torksey**. It was decorated with six dots and beaded borders on the square faces, and three dots on the triangular faces. It measured 9.9 x 8.6 x 8.1 mm.

DENO-93B390 (Brown 2006: 235) was another copper-alloy polyhedral weight of ninth- to tenth-century date from **Torksey**. The square faces were decorated with six dots and plain linear borders. The triangular faces were undecorated. It measured 8.7 x 8.7 x 8.6 mm, and weighed 3.87 g.

DENO-9338F5 (Brown 2006: 250) was an irregularly shaped copper-alloy polyhedral weight of ninth- to tenth-century date from **Torksey**. It had six randomly arranged punched dots on four of the six square faces. It measured 10.1 x 8.6 x 9.3 mm, and weighed 4.58 g.

Brown 2006: 251 was another undecorated copper-alloy polyhedral weight of ninth- to tenth-century date from **Torksey**. It had six large octagonal faces and eight very small triangular faces. It was dated to 850-950.

DENO-C09D37 (Brown 2006: 251) was a copper-alloy polyhedral weight from **Torksey**, dated to the ninth- to tenth-century.

NLM7256 was a tenth- to eleventh-century polyhedral weight from **Torksey**, with six sides containing three dots each within a beaded border.

The following polyhedral weights were published by Blackburn (2002) and recorded by Brown as additional to the above-mentioned weights. Their dimensions were not given:

Brown 2006: 236 (Blackburn 2002: 96-99) was another copper-alloy polyhedral weight of ninth- to tenth-century date from **Torksey**. One dot was placed on the square faces, and the triangular faces were undecorated. It weighed 0.86 g.

Brown 2006: 237 (Blackburn 2002: 96-99) was another copper-alloy polyhedral weight of ninth- to tenth-century date from **Torksey**, with two dots on the square faces and one dot on the triangular faces. It weighed 1.01 g.

Brown 2006: 238 (Blackburn 2002: 96-99) was another copper-alloy polyhedral weight of ninth- to tenth-century date from **Torksey**, with two dots on the square faces. The decoration on the triangular faces was uncertain. It weighed 1.51 g.

Brown 2006: 239 (Blackburn 2002: 96-99) was another copper-alloy polyhedral weight of ninth- to tenth-century date from **Torksey**, with two dots on square faces. The triangular faces were undecorated. It weighed 1.53 g.

Brown 2006: 240 (Blackburn 2002: 96-99) was another copper-alloy polyhedral weight of ninth- to tenth-century date from **Torksey**. It was decorated with two dots on the square faces and had undecorated triangular faces. It weighed 1.63g.

Brown 2006: 241 (Blackburn 2002: 96-99) was another copper-alloy polyhedral weight of ninth- to tenth-century date from **Torksey**, with three dots on the square faces and undecorated triangular faces. It weighed 1.82 g.

Brown 2006: 242 (Blackburn 2002: 96-99) was another copper-alloy polyhedral weight of ninth- to tenth-century date from **Torksey**. It was decorated with three dots on the square faces, and one dot on triangular faces. It weighed 1.94 g.

Brown 2006: 243 (Blackburn 2002: 96-99) was another copper-alloy polyhedral weight of ninth- to tenth-century date from **Torksey**. It was decorated with three dots on the square faces, and had undecorated triangular faces. It weighed 2.09 g.

Brown 2006: 244 (Blackburn 2002: 96-99) was another copper-alloy polyhedral weight of ninth- to tenth-century date from **Torksey**. It was decorated with three dots on the square faces. The triangular faces were decorated with a border. It weighed 2.33 g.

Brown 2006: 245 (Blackburn 2002: 96-99) was another copper-alloy polyhedral weight of ninth- to tenth-century date from **Torksey**. It was decorated with four dots on the square faces, and one dot on the triangular faces. It weighed 2.59 g.

Brown 2006: 246 (Blackburn 2002: 96-99) was another copper-alloy polyhedral weight of ninth- to tenth-century date from **Torksey**. It was decorated with four dots on the square faces, and one dot on the triangular faces. It weighed 2.60 g.

Brown 2006: 247 (Blackburn 2002: 96-99) was another copper-alloy polyhedral weight of ninth- to tenth-century date from **Torksey**. It was decorated with four dots on the square faces and one dot on the triangular faces. It weighed 2.61g.

Brown 2006: 248 (Blackburn 2002: 96-99) was another copper-alloy polyhedral weight of ninth- to tenth-century date from **Torksey**. It was decorated with six dots on the square faces, and had undecorated triangular faces. It weighed 3.50 g.

Brown 2006: 249 (Blackburn 2002: 96-99) was another copper-alloy polyhedral weight of ninth- to tenth-century date from **Torksey**. It was decorated with six dots on the square faces, and had undecorated triangular faces. It weighed 3.78 g.

*From **Torksey** as well were the following three truncated-sphere weights, consisting of a copper-alloy exterior with an iron core, the truncated poles set with silver discs (appendix 14), as well as thirteen lead weights, the majority of which was inset with coins or pieces of silver or (gilded) copper-alloy (appendices 13 and 14):*

Brown 2006: 252 was a truncated-sphere weight from **Torksey**. The discs are decorated with a beaded border and a central cross. It measures 16.7 x 21.6 mm and weighs 30.74 g.

Brown 2006: 253 was a truncated-sphere weight from **Torksey**. One inset disc was missing. The decoration of the other was unclear, except for a beaded border. It measured 14.8 x 18.5 mm, and weighed 15.16 g.

Brown 2006: 254 was a truncated-sphere weight from **Torksey**. One inset disc was missing and the decoration of the other was unclear except for a beaded border. It measured 11.1 x 13.4 mm, and weighed 7.26 g.

Brown 2006: 255 (EMC 1995.0125) is a disc-shaped lead weight from **Torksey** with an anonymous Northumbrian styca from the York mint (850-867) set at an angle into the top. The moneyer was uncertain. The weight measures 10.5 x 15.0 mm, and weighs 16.0 g.

Brown 2006: 256 was a lead weight with a copper-alloy disc inset (possibly a coin) from **Torksey**. It measured 18.9 x 18.1 x 8.4 mm, and weighed 6.62 g.

Brown 2006: 257 was a rectangular lead weight with a rectangular copper-alloy inset from **Torksey**. It measured 11.2 x 9.3 x 3.9 mm, and weighed 2.02 g.

Brown 2006: 258 was a sub-square lead weight with a gilded copper-alloy inset, decorated with interlace. It measured 26.2 x 25.2 x 10.2 mm, and weighed 49.0 g. It was found at **Torksey**. No exact date was given. See appendix 13.

Brown 2006: 259 was a sub-square lead weight with a silver inset, possibly a strap-end. It measured 22.8 x 20.8 x 8.2 mm, and weighed 20.8 g. It was found at **Torksey**. See appendix 14.

Brown 2006: 260 was a cylindrical lead weight with an inset rectangle of chip-carved gilded copper-alloy. It measured 12.3 x 17.3 mm, and weighed 21.5 g. It was found at **Torksey**. No precise date was given. See appendix 13.

Brown 2006: 261 was a disc-shaped lead weight with a circular indentation and traces of gilding. It was found at **Torksey**. It measured 15.6 x 4.8 mm, and weighed 5.6 g. No exact date was given. See appendix 13.

Brown 2006: 262 was a disc-shaped lead weight with a rectangular inset (possibly glass) from **Torksey**, measuring 15.8 x 7.7 mm, and weighing 12.47 g.

Brown 2006: 263 was a square lead weight with a green glass inlay from **Torksey**. It measured 7.9 x 9.4 x 9.2 mm.

NLM880 (Brown 2006: 264) was a weight consisting of a gilded openwork copper-alloy hemisphere filled with lead. Decoration was zoomorphic. It was assigned a tenth-century date, and found at **Torksey**. See appendix 13.

Brown 2006: 265 was a roughly triangular lead weight from **Torksey** with an inset of a copper-alloy boar's head with tiny spherical glass eyes (left was green, other possibly blue). It measured 17.2 x 12.8 x 11.4 mm, and weighed 9.75 g.

DENO-64EDB4 (Brown 2006: 266) was a conical lead object from **Torksey**, probably a weight. It had a sub-circular base, rounded top and wide shallow depression in roughly the centre of the base. Undecorated. It measured 16.8 x 13.0 mm, and but its weight was not recorded. It was assigned a ninth-century date.

Brown 2006: 267 was classed as a 'viking' weight from **Torksey**, dated to the ninth century. It was accidentally discarded, and no other details were recorded.

*Also from **Torksey** were the following five objects, listed as gaming pieces:*

NLM-0D6D38 (Brown 2006: 268) was a lead gaming piece consisting of an undecorated solid dome-shaped object with three projections on the top. It measured 13.1 x 12.0 mm, and weighed 9.53 g. It was found at **Torksey**, and dated to the period 850-1066.

Brown 2006: 269 from **Torksey** was identified as two gaming pieces, one inside the other. Both had three projections at the top. The larger one measured 20.0 x 16 mm, and weighed 7.06 g. The smaller one measured 17.1 x 15 mm, and weighed 6.45 g.

Brown 2006: 270 was a domed piece of lead, tentatively identified as a gaming piece although it is uncertain on which grounds. It was found at **Torksey**. It measured 11.6 x 17.5 mm, and weighed 17.6 g. It was dated to the period 800-1000.

NLM5774 (Brown 2006: 271) was an undecorated cast lead conical object, identified as either a weight or a gaming piece. The dimensions and weight were not recorded. It was found at **Torksey**.

Finally, the *PAS* reports the discovery of a tenth- to eleventh-century gaming piece made of copper alloy from the parish of **Welton** in West Lindsey. NLM609 was roughly conical in shape, consisting of a broad circular base, followed by a thinner section and then again a circular collar separating the lower part from the zoomorphic apex, which had bird-like qualities including a pointy beak and two big round eyes. It was 18 mm high, and weighed 5.72 mm.

12.11.2: Weights and gaming pieces from Kesteven

NLM4647 was a weight, comprising an eighth-century Irish copper-alloy blue and yellow enamelled panel set into lead. It measured 22.4 x 19.8 x 8.7 mm, and weighed 24 g. It was found in **Baston**.

LIN-1A5042 was a lead cuboid weight or gaming piece from the parish of **Lenton, Keisby and Osgodby** in North Kesteven. It was decorated on the top with an incised cross. It measured 14 x 17 x 7 mm. Its weight was not recorded.

LIN-CB2640 refers to 21 lead weights or gaming pieces from the parish of **Stapleford** in North Kesteven. One of the weights was flat, circular and decorated with a raised cross on one side. The other pieces were all plano-convex, or hollow-convex. Two of these were decorated with three pellets on the apex. They were assigned a ninth- to eleventh-century date. Their dimensions were not recorded.

12.11.3: Weights and gaming pieces from Holland

LIN-5EDCF6 was a plano-convex tenth-century lead gaming piece (or weight) from **Donington** in South Holland. It was decorated with a raised cross design at the top, and identified as being tenth-century in date.

12.12: Other objects

12.12.1: Mounts and fittings

12.12.1.1: Mounts and fittings from Lindsey

From **Bardney** in West Lindsey was NLM6040, a tongue-shaped mount made of copper alloy, measuring 31.4 x 19.6 mm, with a thickness of 2 mm. The mount had a central circular rivet hole, with panels of carved interlace above and below, but the top was broken off. The object was assigned a ninth-century date.

NLM-D9AC57 was an eleventh-century copper-alloy openwork mount decorated in *Urnes* style. The surviving length was 23.1 mm, and the width was 30.2 mm. It was found in **Bigby** in East Lindsey.

The *PAS* reports the discovery of an elongated triangular mount from the parish of **Caistor**. NLM5272 was made of copper alloy, and measured 34.2 mm in length, and 14.1 in width. It was 5 mm thick, and shaped like an animal's head with antlers curling upwards. There are two rivet holes at the top, and one near the bottom. It was assigned a tenth-

century date.

NLM21 was an eighth-century copper-alloy gilt circular mount from **Elsham** with sunburst decoration, and a central rivet. See appendix 13.

The PAS reports the discovery of a small copper-alloy *Urnes*-style mount or fitting from the parish of **Garthorpe and Fockerby**. NLM4773 was sub-lozenge shaped in form, with a crescent-shaped hole in the middle, and possibly very stylized zoomorphic decoration protruding from one of the corners. The remaining three corners had a simple small lobe protruding. It measured 12.9 x 14.9 mm, and was 2.1 mm thick. It was assigned a tenth- or eleventh-century date, although as the *Urnes* style did not develop until the eleventh century, an eleventh-century date seems more probable.

Excavations at '**Goltho**' produced a mount with two iron rivets and relief animal-head decoration with a glass or stone gem in a central setting (Goodall 1987: 172). The glass gem can be paralleled on examples from a viking grave in Cronk Moor (Goodall 1987: 173) and Torskey.

The PAS reports the discovery of an eighth- to ninth-century Irish anthropomorphic mount from **Holton le Moor**. NLM258 was an copper-alloy equal-ended mount with traces of gilding on the front. The two terminals are human heads, and the middle of the mount was decorated with simple interlace. halfway down the middle two pierced lumps extend on either side for attachment. Some traces of iron remain, indicating the use of two iron rivets. It measured 52.3 x 17.7 mm. See appendix 13.

NLM6156 was a long narrow mount, measuring 87.6 x 14.4 mm, with a thickness of 8.1 mm. It was decorated with stylized animal heads, not unlike the multi-headed zoomorphic strap-ends in *Borre* style (Thomas 2000b), although this object was assigned an eleventh- to twelfth-century date. Three iron rivets are still in place, and it was suggested that this was a box mount. It was found in the parish of **Horncastle**.

A Frankish copper-alloy mount from **Horncastle**, NLM-BAB507 was originally probably lozenge shaped, but one corner was broken off. The three remaining corners have a rivet hole in the centre. The mount was decorated in simple geometric shapes. It measured 27.1 x 35.2 mm, and was 3 mm thick. It was assigned a tenth-century date.

NLM1 from **Melton Ross** was a diamond-shaped silver-gilt plate, decorated with zoomorphic interlace, and perforated at one end. It may represent a book mount. The ornament suggests an eighth-century date. See appendix 13.

NLM4 from **Melton Ross** was an eighth-century copper-alloy folded sheet-metal mount with two rivet holes and simple interlace decoration. It retained traces of gilding on both sides. See appendix 13.

From the parish of **Nettleton** in West Lindsey came NLM2825, an unidentified shield-shaped copper-alloy mount dated to the period 700-900, with two attachment fittings on its back. It measured 25.7 x 16 x 2.1 mm.

The PAS lists a copper-alloy belt mount found at **Nettleton** (NLM-DA9534). The mount was fragmented but was originally oval in shape, and decorated with ring-and-dot. It now measured 21.8 mm in length, with a surviving width of 11.9 mm, and was 2 mm thick. It had a raised crosshatched band. It was assigned a date of 850 - 1066 AD.

The PAS reports the discovery of an unidentified mount depicting an open-mouthed beast from the parish of **North Ormsby**. YORYM661 was dated to the seventh to eleventh centuries, and made of copper alloy. It measured 15.6 x 12.3 x 3.9 mm

The PAS reports an openwork mount from **North Thoresby** (LIN-0FA0A3). The outer edges are no longer present, and only its roughly crescent-shaped inner part, measuring 22 x 26 mm, survives. A single rivet hole with remains of an iron rivet remains near the top of the mount. The object seems to have been decorated with foliate patterns. It was possible that it formed part of a stirrup strap mount, or perhaps a tongue-shaped *Winchester*-style strap-end. It was assigned an eleventh-century date.

The PAS reports an eighth- to ninth-century Anglo-Scandinavian mount from the parish of **Revesby** (NCL-0EDE41). It was made of copper alloy and triangular in shape, with a raised stud in each corner where the attachment rivets are, and two-strand decorative interlace on its face. It measured 21.5 x 34.2 mm, and was 2.1 mm thick.

The PAS reports an unidentified copper-alloy object from **Riby** that was probably a mount, judging by two remnants of studs still visible on the back. LIN-939104 was now broken, but may have been sub-triangular in shape, in which case only one of the corners had broken off. It was suggested it may have been a trefoil brooch, but the shape would be atypical; besides the absence of the usual attachment fittings, and the presence of what may have been studs on the back, sways its interpretation in favour of a mount. The entire object measured 36 x 20 mm, and was decorated with incised lines and curves. It was assigned a ninth- to eleventh-century date.

NLM-DA7151 was an Irish openwork mount or pendant, made of copper alloy, from the parish of **Roxby cum Risby**. It was origin ally hexagonal in shape, but only about half now survives; its dimensions were not recorded. It was decorated in openwork, with four

beasts with spiral hips arranged around a central roundel biting each other. The bodies of the beasts are made up of strips decorated with diagonal hatches, with associated tendrils. Their feet have three toes. It was not assigned a definite date, but may have arrived in the area as a result of viking activity.

NLM-C060B2 is a gilt mount with silver wire inlay dated to the period 400-800 from **Roxby cum Risby**. It measured 43.0 x 8.9 x 6.2 mm (appendix 13).

From **Sibsey** in East Lindsey was an openwork *Urnes*-style book or box mount (LIN-028CC7), dated to the eleventh century. Only a fragment survives, but the mount was originally probably sub-triangular in plan, and incorporates at least one intertwined beast that bites its own tail, that of another, or some tendril. It was either running or swimming, indicated by the active position of its front paw and pronounced shoulder. The mount had similarities to the *Urnes mount* from Lincoln, although it was slightly simpler in style. The reverse of the mount was concave, and no evidence for any attachment loops are visible. No dimensions were recorded.

The *PAS* reports the discovery of an openwork mount with gilt surface from the parish of **Sibsey** in East Lindsey. LIN-01DE95 displays an equal-armed cross with splayed arms and zoomorphic interlace decoration, and a smaller cross set at an angle behind it, creating a star-shape. An empty rivet hole in the centre may have contained a boss. The arms of the larger cross also bear rivet holes. A similar example was discovered at Elmsett, Suffolk, and was published in West 1998: 140, fig. 24.6. It was assigned a ninth-century date. See appendix 13.

From the parish of **South Ormsby cum Ketsby** in East Lindsey comes LIN-5580D0, an eleventh-century *Urnes*-style mount, strap-end or possible horse-harness fitting. It consists of an open circle divided into four by two twisted strands, which join at the top outside the circle, at which point the object seems to have broken off something else. The strands may have had zoomorphic elements, but if so these have worn off. It measured 29 x 17 mm, and was 3 mm thick.

From **Swinhope** came NLM6550, a copper-alloy binding strap, probably for a casket. It had zoomorphic decoration in the shape of a stylized animal head at the front. There was also a rivet hole at the front. It was bent into a J-shape (but it's unclear whether this was intentional, or accidental damage). It had a circular cross-section. It measured 37.4 x 8 mm, with a thickness of 3.4 mm. It was assigned a ninth- to eleventh-century date.

Also from **Swinhope** came NLM6638, a lead-alloy circular mount measuring 39.7 x 35.1 mm, and 1.6 mm thick. Its raised face depicts a small cross in the centre, with a face at each end, and a further, presumably smaller, cross in between each face, all surrounded by a beaded border. There are three loops at the top, and a fourth at the base. The decoration was identified as *Borre*-style, and it was therefore assigned a ninth- to tenth-century date. See appendix 15.

DENO-4F59E7 (Brown 2006: 316) was a possibly gilt copper-alloy mount fragment, consisting of a flat sheet with animal and vegetal chip carving. It measured 14.3 x 11.5 x 1.7 mm. It was dated to c. 750-850, and found at **Torksey**. See appendix 13.

DENO-872273 is a flat rectangular gilt copper-alloy mount or fitting from **Torksey**, with four additional silver mounts with niello inlay. It was of continental manufacture, and measured 28.9 x 19.1 x 3.7 mm. It was dated to the period 750-1000. See appendix 13.

DENO-4F8407 (Brown 2006: 318) was a flat copper-alloy gilded mount fragment with a double plain line border containing two ring-and-dot motifs. It measured 15.6 x 14.4 x 1.2 mm. It was found at **Torksey**. This object was broadly assigned to the early medieval period, but on the basis of its find spot it seems plausible that it was part of the dispersed 'viking' hoard(s). See appendix 13.

DENO-4F45A0 (Brown 2006: 319) was a copper-alloy mount fragment with openwork decoration, possibly in *Urnes* style, dated to the eleventh century. It measured 20.0 x 19.1 x 3.1 mm, and was found at **Torksey**.

DENO-4F73D6 (Brown 2006: 320) was a gilded copper-alloy mount fragment, flat and disc-shaped, with a copper-alloy rivet, measuring 0.6 x 11.0 x 1.2 mm. It was found at **Torksey**. See appendix 13.

DENO-4F0601 (Brown 2006: 321) was an eleventh-century copper-alloy mount fragment from **Torksey** executed in *Urnes*-style openwork decoration involving at least one sinuous beast. It measured 25.7 x 19.0 x 2.9 mm.

DENO-4F69E4 (Brown 2006: 322) was a gilded copper-alloy mount fragment from **Torksey**, roughly dated to the ninth century. It was flat, with interlace chip-carving and an iron rivet, and measured 19.9 x 13.4 x 8.3 mm. See appendix 13.

Brown 2006: 323 was a gilded copper-alloy mount fragment from **Torksey**, measuring 22.5 x 18.2 x 2.0 mm. No exact date was given. See appendix 13.

DENO-F0C674 from **Torksey** was an eighth-century triangular fragment of a gilded interlace mount. It measured 25.3 x 12.3 x 1.3 mm. See appendix 13.

Brown 2006: 324 was a gilded silver mount with rivet holes at each end. It was

decorated with a central circular cross-motif. It measured 48.8 x 15.9 x 1.4 mm. It was found at **Torksey**. No exact date was given. See appendix 13.

Brown 2006: 325 from **Torksey** was a hinge-like object with four projecting 'heads', made of copper alloy. It measured 38.2 x 35.2 x 3.8 mm.

NLM7257 (Brown 2006: 326) from **Torksey** was a copper-alloy furniture fitting, rectangular in shape, with chip carving in a lozenge shape, with a raised border on two sides, and a rivet hole in one corner. It was assigned an eighth-century date.

Brown 2006: 327 from **Torksey** was a copper-alloy clasp with three rivets. It measured 37.9 x 10.7 mm, and was assigned a ninth-century date.

Brown 2006: 328 from **Torksey** was a fly mount with two rounded projections, and measured 20.0 x 16.9 x 4.3 mm.

LIN-6D8533 was a ninth- to eleventh-century strap or box mount. It was triangular in plan, and sub-rectangular in cross-section, with two broken arms protruding from the wider end. The terminal was zoomorphic, with a loop for a snout and faceted eyes and ears. There was a hole in the centre of the triangular body, surrounded by a triangle of niello decoration. Around the perimeter of the object are incised lines, following the contours. It was found in **Torksey**. Not recorded in Brown 2006.

NLM-02AE88 was an eleventh-century copper-alloy mount decorated in openwork *Urnes*-style moulding on the top. The length was 38.2 mm, and the width was 14.0. It was found in **Willoughby with Sloothby** in East Lindsey.

NLM-0862B6 was an unidentified copper-alloy object from the parish of **Winteringham** in North Lincolnshire. It was probably a mount or a fitting of some sort. It was irregular in shape, with an irregular trilobe-shaped plate with two unevenly shaped circular perforations, and an integral lug at one end, set at ninety degrees from the plate. The lug had a further circular perforation. It measured 38.0 mm x 20.6 mm, and the plate itself was 5.8 mm thick. It was assigned an eleventh-century date.

12.12.1.2: Mounts and fittings from Kesteven

LIN-DA35B2 from **Aunsby and Dembleby** in North Kesteven was an incomplete gilt copper-alloy mount. The mount was originally circular and decorated with an incised cross. It was dated to the period 700-1100. See appendix 13.

NLM1125 was a tenth- or eleventh-century copper-alloy 'viking' mount or plaque from **Baston**, with a plain line forming a kind of border. It was roughly circular in shape.

NLM1002 was a circular mount or fitting with burnt remains from **Edenham** in South Kesteven, in the shape of a running dog. It was made of copper alloy, and assigned a ninth-century date.

NLM6052 was an Anglo-Scandinavian openwork mount with four attachment lugs from the parish of **Ewerby and Evedon** in South Kesteven. It was made of copper alloy, and assigned an eleventh-century date. It measured 43.9 x 46.2 x 3.3 mm.

NLM-D14591 was an eleventh-century zoomorphic gilt copper-alloy mount from **Foston** in openwork *Urnes* style. It measured 21.4 x 27.6 x 3.4 mm. See appendix 13.

LIN-D904B4 was a ninth- to eleventh-century copper-alloy hexagonal mount from **Irnham** in South Kesteven. The mount was decorated on the obverse with an incised or chip-carved motif of a curled-up dragon with a slender, scaled tail. In the centre was a 'wheel' like motif consisting of a central pellet surrounded by four wedges. There was a small incomplete iron stud in the centre on the reverse, which had corroded through on to the obverse. It was alternatively assigned a post-medieval date, which the current author agrees with more readily on the basis of its decoration.

LIN-DFD6A1 was a ninth- to eleventh-century copper-alloy eagle-shaped mount of Anglo-Scandinavian design from the parish of **Nocton** in North Kesteven. The eagle was depicted in flight in plan, with its head looking to the right. The details of the body are created by a series of equally spaced incised lines within a single line decorating the perimeter of the bird. The head had a thick neck and thin beak. The eagle was identified as being distinctly different to the type of eagle brooches that are attributed to the sixth century AD, and it was stated that a parallel had not been found, which makes the current author wonder what they base their statement it is of Anglo-Scandinavian design on. The style of the incised panel decoration strongly resembles the garnets laid onto Merovingian brooches, and it was suggested that this find was a base metal copy of such a piece.

LIN-02FA51 was a bovine-head shaped mount from the parish of **Osbourneby** in North Kesteven, plano-convex in section, with two incomplete horns at the top. The head had a long snout, which was decorated with four incised lines. The eyes were depicted by two pointed oval shaped grooves. It was made of copper alloy, and assigned a broad date range of 450-1499 AD.

NLM703 was a long and narrow 'viking' mount from the parish of **Pointon and Sempringham** in South Kesteven. There were traces of a rivet hole at one end and in the centre. It was tenth-century in date, and made of copper alloy.

NLM702 was an eleventh-century copper-alloy Anglo-Scandinavian mount or plaque from the parish of **Pointon and Sempringham** in South Kesteven, with a plain line border, and the remains of a rivet in the centre. It measured 46 x 26.2 x 4.2 mm.

NLM704 was a copper-alloy tenth- to eleventh-century zoomorphic *Urnes*-style mount from the parish of **Pointon and Sempringham** in South Kesteven. However, the *Urnes* style did not develop until the eleventh century and therefore the dating of this object should be revised.

DENO-80E676 was a copper-alloy zoomorphic mount from **Sleaford** in North Kesteven, with prominent bulbous eyes, and small ears with pellets behind. It measured 23.8 x 7.1 x 6.5 mm. It was broadly assigned an early medieval date. No other details were recorded.

NLM118 was a cruciform mount dated to c. 700-900 AD from **Sleaford** in North Kesteven, with gilding and possibly of Irish manufacture. See appendix 13.

NLM737 from **Wilsford** in North Kesteven was a fragment of an eighth-century gilt copper-alloy circular mount with two piercings and interlace-decoration. See appendix 13.

12.12.1.3: Mounts and fittings from Holland

The PAS reports the discovery of NLM695, a copper-alloy openwork mount found in the parish of **Sutterton** near Boston. It measured 25.4 x 33.7 mm, and was 2.7 mm thick. It depicts two facing animals with open mouths and drilled eyes, their tails protruding from the bottom of the mount. It was originally possibly symmetrical but was now bent somewhat. The rivet holes are placed in two protruding knobs, springing from the backs of the animals. It was assigned an eighth- to eleventh-century date.

12.12.2: Keys and latch-lifters

12.12.2.1: Keys and latch-lifters from Lindsey

A number of iron padlocks, keys and bolts for fixed locks were also retrieved from **Flixborough**. They are comprehensively catalogued in Ottaway (2009f), and will not be discussed in any more detail here.

Excavations at '**Goltho**' produced a fragment (the end-plate) of a barrel padlock. The object was found in the tenth-century hall floor layers (Goodall 1987: 175). In addition, a key, a lock-bolt, and a chain link were found (Goodall 1987: 187).

NLM5369 was an Anglo-Saxon latch lifter, of sixth to eleventh-century date, found in the parish of **Healing**. It had an ovoid suspension loop, and measured 75.4 x 27.6 mm. It was made of copper alloy.

The PAS lists the discovery of a copper-alloy barrel padlock key in the parish of **Normanby le Wold**, dated to the seventh- to twelfth centuries (NLM-FCC262). It had an oval bit with a square aperture, but the handle was missing. Its surviving length was 41.8 mm, with a maximum width of 13.1 mm and a thickness of 4.5 mm.

NLM-5B60B5 was a copper-alloy middle Anglo-Saxon slide lock key. The sub-circular sectioned shank terminated in a semi-circular shaped bow with a central circular aperture. The length of the key was 73.2 mm, the length of the shank was 5.8 mm, and the width of the bow was 38.0 mm. It was found in **Willoughby with Sloothby**.

NLM-5B9193 was an incomplete copper-alloy middle Anglo-Saxon slide lock key. The short shank terminated with a flattened oval bow with an oval aperture. The length of the key was 35.4 mm, and the width of the bow was 16.3 mm. It was found in **Willoughby with Sloothby**.

NLM-5B9D31 was a complete copper-alloy middle Anglo-Saxon slide lock key. The short circular shank terminated with a D-shaped bow with two knobs at the end of the shank. There was also a circular aperture near the shank end of the bow. The length of the key was 62.0 mm, and the width of the bow was 37.0 mm. It was found in **Willoughby with Sloothby**.

12.12.2.2: Keys and latch-lifters from Kesteven

No such finds have been recorded.

12.12.2.3: Keys and latch-lifters from Holland

LIN-67C243 was a tenth- to eleventh-century copper-alloy key from **Whaplode** in South Holland. The key had a roughly circular loop with two knobs at one end. The shank was circular in cross-section, with a moulded collar dividing it from the loop. There was a downward facing biting animal head at the base of the shank, just before the bit, which was shaped as an openwork cross with a small flat-headed lug projecting at the end.

12.12.3: Ingots and metalworking waste

12.12.3.1: Ingots and metalworking waste from Lindsey

YORYM-FA6027 from **Brampton** (treasure case 2007 T184) was a silver droplet, identified

as metalworking waste of the Anglo-Scandinavian period. Surface metal analysis conducted at the British Museum indicated that the silver content for the droplet was c. 92%. The remainder was gold, with small amounts of copper and lead. It weighed 1.13 g, and measured 9 mm in length. See appendix 14.

One ingot made of debased silver has been found at **Flixborough**. Rogers (2009d: 422) has suggested that the impurity of the silver indicates that it consisted of molten down coinage, and that it may have been cast during the earlier tenth century, because there are no coin finds for this period from Flixborough at all. See appendix 14.

A single gold ingot has been found in Springthorpe near **Gainsborough** (*Treasure* 2000: 50).

The PAS lists the discovery of a copper-alloy hammered ingot with rectangular cross-section from the parish of **Market Rasen** in West Lindsey. DENO-63EB93 measured 80.1 x 8.6 x 5.7 mm, and weighed 19.1 g. It was assigned to the viking period, and it was even suggested it was of viking manufacture.

NLM-683755 was a silver ingot of ninth- to tenth-century date, found in the parish of **Roxby cum Risby**. See appendix 14.

NLM1063 was an eighth-century copper-alloy Anglo-Saxon die or matrix for the manufacture of decorative foil. It was rectangular in shape, depicting four intertwined animals with spiral-shaped shoulders, their bodies decorated with a double outline and internal diagonals. It was found in **Stickford** in East Lindsey. Leahy (2006) identifies the decoration on this object as *Jellinge*-style, which would place it in the later ninth or tenth centuries. It measured 28.2 x 38.2 x 2.7 mm.

Finally, **Torksey** produced several silver ingots and ingot fragments (Blackburn 2002: 95; Brown 2006: nos 204, 206, 207); a gold ingot (Brown 2006: no 213); a small hoard containing one silver ingot, four silver ingot terminal fragments, one piece of a silver spiral ring, one piece of a 'Hiberno-Norse' arm-ring, one gold ingot terminal fragment, and one fragment of a gold arm-ring (Blackburn 2002: 95; Brown 2006: no 205; Graham-Campbell 2001a: 56); several pieces of hack-silver (Brown 2006: no 208; Graham-Campbell 2001a: 56, and hack-gold (Brown 2006: 211, 212, 214; Graham-Campbell 2001a: 56).

12.12.3.2: Ingots and metalworking waste from Kesteven

No such finds have been recorded.

12.12.3.3: Ingots and metalworking waste from Holland

No such finds have been recorded.

12.12.4: Textile making tools

12.12.4.1: Textile making tools from Lindsey

LIN-423CF5 was a plano-convex lead spindle whorl with seven vertical ribs, with a diameter of 32 mm, and a thickness of 11 mm. It was found in the parish of **Bullington** in West Lindsey, and assigned a broad date range of 410-1066.

A collection of seven lead spindle whorls was discovered at **Flixborough**. The evidence for textile production, which included spindle whorls, loom weights, pin beaters, wool combs, shears and needles, has been discussed by Walton Rogers (2009).

Excavations at '**Goltho**' produced heckle teeth, a shear-board hook, a set of shears, a square-sectioned awl for piercing leather, and a needle (Goodall 19987: 187)

Excavations at **Holton le Clay** produced a needle dated to c. 900 AD (Albone 1999).

NLM6515 was a lead spindle whorl, broadly dated to the period 410-1066. It was found in the parish of **Roxby cum Risby**.

NLM2743 was a lead spindle whorl decorated with struck rings on the surface. Its diameter was not recorded, but it was 14.5 mm thick. It was assigned a broad date range of 410-1066. It was found in the parish of **Stickford** in East Lindsey.

12.12.4.2: Textile making tools from Kesteven

DENO-A54B53 was a lead early medieval spindle whorl, similar to Anglo-Scandinavian objects from Coppergate, found in **Norton Disney** in North Kesteven. It was 29.9 mm in diameter, and measured 8.1 mm in thickness. It was broadly assigned to the early medieval period.

12.12.4.3: Textile making tools from Holland

No such finds have been recorded.

12.12.5: Styli

12.12.5.1: Styli from Lindsey

Flixborough produced more than 20 *styli*, made of copper alloy and iron. They are discussed in Pestell (2009).

LIN-2561C7 was a copper-alloy stylus, discovered in the parish of **Hatton** in East Lindsey. It measured c. 109 mm in length, and its circular diameter reaches a maximum width of 3.6 mm. Some grooves are visible on the surface, and on the lower part some irregular faceting was visible. The lower end may have been flattened. It was assigned an eighth- to ninth-century date.

The PAS database lists the discovery of a copper-alloy stylus fragment in the parish of **Roxby cum Risby** (NLM-1F85D6). It had a round-sectioned body tapering to a point, with a decorative low moulding on either side of two incised lines in the mid-point of the fragment. The surviving length was 70.79, with a diameter of 4.5 mm. It was assigned an eighth- to eleventh-century date.

12.12.5.2: Styli from Kesteven

No such finds have been recorded.

9.12.5.3: Styli from Holland

No such finds have been recorded.

12.12.6: Tweezers and toilet implements

12.12.6.1: Tweezers and toilet implements from Lindsey

The PAS reports the discovery of a pair of copper alloy tweezers with broad, splayed terminals from the parish of **Elsham**. NLM198 measured 66.7x 19.7 mm, and was 2.1 mm thick. The suspension ring was still in place, and both faces of the splayed arms are decorated with a transverse rib, with three drilled dots arranged in a triangle on either side. It was assigned an eighth- to ninth-century date.

Up to 15 pairs of tweezers have been found during the excavations at **Flixborough** (Rogers 2009e). They were not dated with any precision, and are catalogued in Rogers (2009c: 30-32). An ear-scoop of eighth- to ninth-century date was also found (Rogers 2009e: 30).

NLM-167C02 was a fragment of a pair of eighth-century copper-alloy tweezers, decorated with ring-and-dot, from **Fulletby**. It measured 20.1 x 15.2 x 0.8 mm.

From the parish of **Melton Ross** comes a complete pair of copper alloy tweezers with broad, splayed terminals. NCL-BE2897 measured 49.2 mm in length, and 12.5 mm in width at its widest point. The splayed terminals bear simple decoration, consisting of four punched dots in a straight longitudinal line on one side, and five punched dots arranged in a cross shape on the other. It was assigned broadly to the early medieval period, but on the basis of similarities with other tweezers its date can be refined to the middle Anglo-Saxon period.

Another fragment of a pair of broad copper-alloy tweezers from the parish of **Melton Ross** in North Lincolnshire was NLM6. This pair measured 51.5 x 8.16 x 4 mm, and was assigned a seventh- to ninth-century date.

Brown 2006: 332 was a set of undecorated copper-alloy tweezers from **Torksey**. It measured 35.5 x 4.5 mm, and was assigned a ninth-century date.

Brown 2006: 333 was one arm of another set of copper alloy tweezers from **Torksey**. The triangular terminal was decorated with transverse grooves. It measured 44.7 x 19.3 x 4.0 mm.

NLM-250B52 was a pair of copper alloy tweezers, found in **West Rasen**. The object was 72 mm long, and reached a maximum width of 9.2 mm at its one remaining terminal, which was the widest part. A copper-alloy ring for attachment was still present at the other side, and the tweezers bear two sets of transverse double engraved lines on each arm as decoration. It was assigned an eighth- to tenth-century date.

12.12.6.2: Tweezers and toilet implements from Kesteven

The PAS lists a large pair of copper alloy tweezers (LIN-4E71F6) found at **Heckington** in North Kesteven. They are complete, with two decorative rectangular arms, decorated with five rectangular panels each containing an incised cross with a transverse line flanking it on either side. The arms are joined by a small loop. The object had a reddish patina, and was 55 mm long, and 22 mm wide at its widest point. It was assigned a rough date of c. 500-1000 AD.

NLM-F068A7 was a pair of tweezers from the parish of **Lenton, Keisby and Osgodby** in North Kesteven, assigned a broad date range of c. 410-1066. It was decorated with ring-and-dot motifs. It measured 54 x 4.1 x 1.4 mm.

12.12.6.3: Tweezers and toilet implements from Holland

No such finds have been recorded.

12.12.7: 'Other' artefacts

12.12.7.1: 'Other' artefacts from Lindsey

The *PAS* reports a cast copper-alloy figurine from **Caistor**, and assigned a broad early medieval date (NLM-A243C8). No dimensions or additional information were recorded.

DENO-1D6161 from Warren Hill, Panton, **East Barkwith** in East Lindsey was an unidentified object made of copper alloy, with what appears to be *Ringerike*-style decoration on one surface. It measured 29.7 x 22.4 x 10.3 mm.

Some fragments of copper alloy vessels, including a mount for a hanging bowl, were found at **Flixborough**. Most of these were attributed an early to middle Anglo-Saxon date. They are discussed in detail in Rogers (2009a).

The excavations at **Flixborough** also produced three copper-alloy bracelets, which may date to the later ninth and tenth centuries as some parallels are known from York (Rogers 2009b: 28). A twisted silver ring, too small for an arm-ring but possibly similar to the rings from the Cuerdale hoard that were used to store silver, was also found (Rogers 2009b: 28-29). See appendix 14.

Excavations at **Flixborough** also produced an inscribed lead plaque of eighth- to ninth-century date, which is discussed in detail in Brown and Okasha (2009).

The excavations at **Flixborough** produced a significant number of domestic fittings made of iron, copper-alloy and lead. They are excellently discussed in Ottaway, Wastling et al. (2009), and will not be discussed further here.

Only three agricultural tools – a plough-share, a bill hook and a spade iron – were found during the excavations at **Flixborough**. They are discussed in Ottaway (2009a). A hoard of iron woodworking tools contained in two lead tanks was found at **Flixborough**, outside the excavation area, to the west (Ottaway 2009c). Similar lead tanks were found at Bottesford (appendix 2).

Excavations at '**Goltho**' produced an agricultural tool, a spoon or spatula, and a claw-hammer, all made of iron (Goodhall 1987: 187).

The *PAS* reports the discovery of a fragment of a flat copper-alloy object measuring 18.8 x 17.8 mm, with a thickness of 2 mm. NLM75 displays a *Borre*-style animal head, and was assigned a tenth- to eleventh-century date. The fragment was too small to ascertain where it came from, although the decoration was similar to that on certain disc-brooches in *Borre* style. It was found near **Gainsborough** in West Lindsey.

WMID2966 was a copper-alloy hanging bowl with an incomplete base from **High Toynton**. The surface was partially silvered or tinned. No escutcheons are fixed to the exterior any more, although their outlines are still visible, alternating between a trefoil shape and a sub-circular shape for the hook escutcheon. There are three trefoil shapes and three hook escutcheon shapes all evenly spaced around the bowl. See appendix 14.

WMID2967 were fragments of silvered decorative strip for a hanging bowl from **High Toynton**. The strips probably fitted under the rim of WMID2966. Two fragments of the strip survive; their combined length is 170 mm. See appendix 14.

WMID2968 was a copper-alloy hook escutcheon of a hanging bowl, probably WMID2966, from **High Toynton**. The hook and the escutcheon were cast in one piece. The hook protruded from an undecorated semi-circular collar. The hook bore zoomorphic decoration, with traces of red enamel.

WMID2969 was a silvered copper-alloy trefoil escutcheon for a hanging bowl, probably WMID2966, from **High Toynton**. It had a domed centre with a circular hole in the centre. Each leaf of the trefoil had an incised design consisting of a linear border with a series of perpendicular parallel grooves joining the linear border to the outer edge. See appendix 14.

The *PAS* reports the discovery of an unidentified object, possibly a handle, in the shape of an animal's head, from the parish of **Mareham le Fen** in East Lindsey. NLM579 measured 36.7 x 18.4 mm, and was made of copper alloy, depicting a three-dimensional animal's head and neck with rounded ears and an open mouth around an attachment loop. Some iron corrosion was present, suggesting it may have been attached to something made of iron. It was identified as either Merovingian or viking, and assigned a date between the ninth and eleventh-centuries. However as the Merovingian time period had come to an end by then, it seems more likely that it was of Scandinavian origin.

LIN-B8AA32 was an eleventh-century copper-alloy fragment from an unidentified object, possibly a strap-end or strap mount, identified as being decorated in *Urnes* style although the current author prefers *Winchester* style. It measured 29 x 13 x 1 mm, and was found in **Riby** in West Lindsey.

The *PAS* lists the discovery of a fragment of a copper-alloy bracelet or armband in the parish of **Saltfleetby St Peter**, with a surviving length of 70 mm, and a thickness of 7 mm (LIN-C33EE4). It was quadrangular in section, and tapered to a flat circular terminal at one end. It was suggested that the object was originally penannular and symmetrical, and not unlike some of the silver bracelets and armbands from the Anglo-Saxon and viking periods from the viking Douglas hoard on the Isle of Man. It was assigned a broad date range of c.

410-1100.

LIN-99CD50 was an unidentified copper-alloy object from **Tetford** in East Lindsey, of ninth-century date. The object was decorated with a moulded interlace decoration, and may have been a strap-end. It measured 25.5 x 11.2 x 1 mm.

Brown 2006: 330 was a varnished wolf's head stud, with fine crosshatch decoration on its forehead. The facial features were depicted by grooves. It measured 14.5 x 11.5 x 7.7 mm, and was found at **Torksey**.

Brown 2006: 331 was another wolf's head stud, with crosshatch decoration on its forehead; the facial features were represented by grooves. It measured 13.9 x 10.2 x 6.0 mm, and was found at **Torksey**.

Brown 2006: 334 was a piece of thick copper-alloy, curved transversely (i.e. concave from side to side) on obverse, curved longitudinally (concave from end to end) on reverse. The obverse was decorated with an interlace pattern. It was tentatively identified as a Pressblech die. It was found at **Torksey**. It measured 19.1 x 13.1 x 5.4.

Brown 2006: 335 was a silver gilded boar's head from **Torksey**. It measured 18.1 x 14.1 x 9.5 mm. No precise date was given. See appendix 13.

NLM873 (Brown 2006: 336) was a gilded plaque fragment with carved decoration, found at **Torksey**. It was dated to the ninth century. No dimensions were given. See appendix 13.

NLM874 (Brown 2007: 337) was another ninth-century flat trapezoidal chip-carved plaque fragment with interlace from **Torksey**, with traces of gilding. No dimensions were given. See appendix 13.

Brown 2006: 339 was a plaque with rectilinear decoration, measuring 44.1 x 25.3 x 2.3 mm. It was found at **Torksey**.

The PAS reports the discovery of a copper-alloy gilt sleeve clasp from the parish of **Wood Enderby** in East Lindsey. NCL-844EC1 was roughly D-shaped, and measured 29 x 15 mm. It was largely undecorated save for several parallel incised lines that follow its outside perimeter, and traces of gilding on its surface. Three rivet holes are present in the middle, arranged in a triangle, and there are two hooks along the straight edge of the object. It was broadly assigned to the period 410-1066. See appendix 13.

SWYOR-8EAC71 from **Appleby** was a fragment of an unidentified copper-alloy object measuring 12.1 x 10.2 x 1.8 mm. It was decorated with a typical eighth-century spiral design of gilded chip-carving. The piece had clearly been cut from a larger object. See appendix 13.

LIN-B8FA61 from **Riby** was a gilt copper-alloy fragment dated to c. 700-799. The object was flat, 1.5 mm thick, with chip-carved decoration. Every side of the fragment had been cut. It was suggested that it was part of a brooch or mount. See appendix 13.

NLM6686 from **Hatcliffe** was a copper-alloy rectangular object, originally part of something larger, with gilt and gemstone, dated to the eighth century. See appendix 13.

12.12.7.2: 'Other' artefacts from Kesteven

LIN-DA87D8 was an eighth-century silver spout or terminal for a drinking horn. It had the form of an animal head with protruding ears, with an open mouth through which liquid could have been drunk. The eyes were recessed, and one had the remains of a blue glass setting. Traces of gilding were still visible. It was believed to be of middle Anglo-Saxon manufacture, although it also showed similarities to contemporary Irish horn terminals. It measured 39 x 14 mm. It was found at **Barrowby** in South Kesteven. See appendix 13.

LIN-DE96A2 was an unidentified object identified as a lead trial piece, mount or possible trefoil brooch from the parish of **Heckington**. It measured 23 x 21 x 1.5 mm, and was roughly assigned to the seventh to fifteenth centuries. See appendix 15.

LIN-3AA985 was a 'clothing fastener' of ninth- to tenth-century date (kind of weird buckle/hooks tag cross-over) from the parish of **Nocton** in North Kesteven. It consisted of a circular face with a central rivet hole, and a suspension loop at the top. The lower terminal had an oblong strip, through which a flat leather strap may have been passed.

LIN-C1B795 from **Osournby**, dated to c. 700-799, was a fragment of a gilt copper-alloy object with geometric decoration, sub-triangular in its fragmentary state. It was possibly a fragment of a linking piece from a linked pin set. See appendix 13.

NLM4220 was an unidentified zoomorphic object of 'viking' or 'Anglo-Saxon' manufacture from **Threkingham** in North Kesteven. It may have been zoomorphic shape, and had two attachments on the reverse. It measured 21.6 x 36.3 x 2.2 mm.

12.12.7.3: 'Other' artefacts from Holland

Also from **Sutterton** near Boston was NLM697, an unidentified object, consisting of an openwork knot made of four ribbons. It represents only (part of) the middle part of an object, as the border was missing everywhere. The surviving fragment measured 29.0 x 29.8 mm, and was 4.4 mm thick. The knot work was assigned an eleventh-century date, and

identified as Anglo-Scandinavian.

NLM724 was an unidentified object, possibly of ninth- to eleventh-century date, made of copper alloy, and measuring 64.1 x 23.3 mm. It was possibly a kind of strap-end, with a thin split end that was now damaged, and a roughly lozenge-shaped openwork plate with three circular perforations, and linear chased decoration. It was found in the parish of **Sutterton** near Boston. It had some similarities to LIN-CA70F2, identified as a strap-end post-dating c. 800.

APPENDIX 13: GOLD AND GILT ARTEFACTS FROM LINCOLNSHIRE

Period	Reference	Parish	District	Description	Origin
400-800	NLM-C060B2	Roxby cum Risby	Lindsey	Gilt mount with silver wire inlay	
700-800	SWYOR-8EAC71	Appleby	Lindsey	Unidentified copper-alloy chip carved object with gilding	England
	LIN-08B6B4	Bardney	Lindsey	Gilt copper-alloy pin head	England
	NLM21	Elsham	Lindsey	Copper-alloy gilt mount	England
	NLM6686	Hatcliffe	Lindsey	Copper-alloy fitting with gilt and gemstone	England
	NLM-028751	Manton	Lindsey	Silver gilt disc-headed pin	England
	NLM1	Melton Ross	Lindsey	Silver gilt book mount	England
	NCL-05BEE3	Melton Ross	Lindsey	Silver gilt zoomorphic pin head	England
	NLM4	Melton Ross	Lindsey	Gilt copper-alloy mount	England
	LIN-B8FA61	Riby	Lindsey	Gilt copper-alloy fragment, possibly part of brooch or mount	England
	LIN-C219D3	Roxby cum Risby	Lindsey	Gilt copper-alloy pin head	England
	NLM-78C696	Swinhope	Lindsey	Silver gilt pin	England
	DENO-F0C674	Torksey	Lindsey	Silver gilt book mount	England
	DENO-4F69E4	Torksey	Lindsey	Copper-alloy gilt mount	England
	NLM-A57114	Torksey	Lindsey	Silver-gilt brooch fragment	England
	NLM7257	Torksey	Lindsey	Copper-alloy gilt furniture fitting	England
	NLM632	Worlaby	Lindsey	Gilt copper-alloy pendant	England
	LIN-DA87D8	Barrowby	Kesteven	Silver gilt drinking horn terminal	Ireland?
	NLM4241	Baston	Kesteven	Copper-alloy gilt pinhead	England
	LIN-8B82C1	Heckington	Kesteven	Gilt copper-alloy head from a linked pin	England
	SUR-CFE0C7	Morton	Kesteven	Disc-shaped copper-alloy gilt pinhead	England
	LIN-8FCB77	Osournby	Kesteven	Copper-alloy gilt linked pin	England
	LIN-C1B795	Osournby	Kesteven	Gilt copper-alloy pin	England
	NLM5765	Ruskington	Kesteven	Copper-alloy gilt pin	England
	LIN-24A337	Ruskington	Kesteven	Copper-alloy gilt pin	England

	NLM737	Wilsford	Kesteven	Gilt copper-alloy circular mount	England
700-900	NCL-771FB5	East Kirkby	Lindsey	Copper-alloy gilt disc brooch with central stud made of silver	England
	NLM2720	Elsham	Lindsey	Pendant with gilding and garnet inlays.	Frankish realm
	NLM197	Elsham	Lindsey	copper-alloy gilt strap-end	England
	Evans and Loveluck 2009: 3, fig 1.2	Flixborough	Lindsey	Silver-gilt disc brooch	England
	NLM258	Holton le Moor	Lindsey	Anthropomorphic copper-alloy equal-ended mount with traces of gilding	Ireland
	SWYOR-1AA507	Lea	Lindsey	Copper-alloy gilt strap-end or decorative mount	Possibly Frankish realm
	NLM4501	Market Rasen	Lindsey	Pennanular brooch with traces of gilding	Ireland
	DENO-942EA1	Thonock	Lindsey	zoomorphic D-shaped copper-alloy gilt buckle	England
	DENO-4F59E7	Torksey	Lindsey	Copper-alloy mount fragment with animal/vegetal chip carving and possibly traces of gilding on the upper surface	England
	SWYOR-3DEE70	Wragby	Lindsey	Copper-alloy pin with traces of gilding	England
	SWYOR-3DEE70	Wragby	Lindsey	copper-alloy pin with traces of gilding	England
	NLM118	Sleaford	Kesteven	Cruciform mount with gilding	Ireland
	DENO-184477	Sleaford	Kesteven	Brooch with gilt and silver inlay	Frankish realm
800-900	DENO-B6F2 15	East Barkwith	Lindsey	Copper-alloy strap-end with traces of gilding	England
	LIN-E33095	Little Carlton	Lindsey	Silvered and gilt copper-alloy strap-end	England
	NLM7254	North Thoresby	Lindsey	'Viking' weight with an inset of a piece of gold brooch	'Viking'
	LIN-4997F4	Riby	Lindsey	Copper-alloy gilt mount	Ireland

	LIN-01DE95	Sibsey	Lindsey	Gilded disc-brooch	England
	DENO-4F69E4	Torksey		Gilded copper-alloy mount fragment	
	NLM873	Torksey	Lindsey	Ninth-century copper-alloy plaque with gilding	England
	NLM874	Torksey	Lindsey	Copper-alloy gilt trapezoidal chip-carved plaque fragment	England
	LIN-833322	Osbournby	Kesteven	Gilt disc-brooch	England
	LIN-C7C465	Wellingore	Kesteven	Gilt strap-end	England
800-1000	LIN-978DD7	Firsby	Lindsey	Copper-alloy strap-end with gilding	England
	Thomas 2009a: 17-18	Flixborough	Lindsey	Two hooked tags, reworked from later eighth-century gilded chip-carved metalwork	England
	SWYOR-CC1E24	Owersby	Lindsey	Lead weight with piece of gilded copper-alloy inset into top	'viking'
	Leahy and Paterson (2001: 193, fig. 10.3)	Stallingborough	Lindsey	Gilt trefoil brooch	Scandinavia
	NLM-C07457	Swinhope	Lindsey	Copper-alloy zoomorphic strap-end with traces of gilding	England
	LVPL-061084	Wood Enderby	Lindsey	Copper-alloy strap-end with possible traces of gilding	England
850-1000	LIN-D251F2	Torksey	Lindsey	Solid gold finger ring	England
900-1000	NLM4529	Sixhills	Lindsey	Domed copper-alloy disc-brooch in <i>Jellinge</i> style with gilding	Possibly Scandinavia
	NLM872	Torksey	Lindsey	Gilt hilt of a viking sword	Scandinavia
	NLM880	Torksey	Lindsey	Gilt openwork weight	'Viking'
	NLM617	Osbournby	Kesteven	Gilt copper-alloy domed <i>Borre</i> -style disc brooch	Possibly Scandinavia
	LIN-6B7BD2	Osbournby	Kesteven	Gilt copper-alloy <i>Borre</i> -style disc brooch	Possibly Scandinavia
	LVPL500	Tallington	Kesteven	Gilt cloisonné finger ring	England

900-1100	Hg72 <ae58>	LINCOLN		Gilt copper-alloy disc-brooch	
	NLM398	Elsham	Lindsey	Gilt cloisonné disc brooch	England
	NLM6212	Horncastle	Lindsey	Cloisonné disc brooch with traces of gilding on its back	England
	LVPL1234	Marion	Lindsey	Gilt cloisonné disc brooch	England
	NLM2895	Sixhills	Lindsey	Gilt cloisonné disc brooch	England
	<i>Treasure</i> 2000: 30-31	Whitton	Lindsey	Silver-gilt convex disc brooch	Scandinavia?
	LVPL496	Navenby	Kesteven	Gilt cloisonné disc brooch	England
	NLM7200	Donington	Holland	Gilt copper-alloy strap fitting, possibly for a horse harness	England
1000-1100	NLM-D14591	Foston	Kesteven	Gilt copper-alloy mount, <i>Urnes</i> style	
	LIN-8C54F1	Old Somerby	Kesteven	Gilt copper-alloy pendant	
	NLM7007	Walcott	Kesteven	Copper-alloy gilt <i>Urnes</i> style brooch	Scandinavia
<i>Uncertain date</i> (late Anglo-Saxon?)	H83 <455>	LINCOLN		Gilt circular mount	England
	Goodall 1987: 172	'Goltho'	Lindsey	D-shaped buckle-frame with radial incisions and possible traces of gilding	
<i>Uncertain date</i> (middle to late Anglo-Saxon)	SWYOR-72ABC5	Appleby	Lindsey	Silver-gilt pin	
	NLM7118	Swinhope	Lindsey	Gilt copper-alloy strap fitting	
	Brown 2006: nos 205, 211-14	Torksey	Lindsey	Several pieces of hack-gold and gold ingots.	
	DENO-872273	Torksey	Lindsey	Gilt and silver copper-alloy mount	
	Brown 2006: 314	Torksey	Lindsey	Solid silver gilded scabbard mount	Frankish realm
	Brown 2006: 258	Torksey	Lindsey	Lead weight with a gilded copper-alloy inset	'Viking'

	Brown 2006: 260	Torksey	Lindsey	Lead weight with inset rectangle of chip-carved gilded copper- alloy	'Viking'
	Brown 2006: 261	Torksey	Lindsey	Lead weight with traces of gilding	'Viking'
	DENO-4F8407	Torksey	Lindsey	Copper-alloy gilded mount fragment	
	DENO-4F73D6	Torksey	Lindsey	Gilded copper- alloy mount fragment	
	Brown 2006: 323	Torksey	Lindsey	Gilded copper- alloy mount fragment	
	Brown 2006: 324	Torksey	Lindsey	Gilded silver mount	
	Brown 2006: 335	Torksey	Lindsey	Silver gilded boar's head	
	Brown 2006: 338	Torksey	Lindsey	Gilt copper-alloy brooch	
	Brown 2006: 298	Torksey	Lindsey	Silver strap-end with green glass inlays, and traces of gilding and niello inlay	
	LIN-DA35B2	Aunsby and Dembleby	Kesteven	Gilt copper-alloy mount	
	PAS-A5F2A5	Lenton, Keisby and Osgodby	Kesteven	Silver-gilt strap-end	
	LEIC- 526CD1	Waddington	Kesteven	Gilt copper-alloy pinhead	
Late Anglo- Saxon to medieval	NLM6787	Haxey	Lindsey	Gilt copper-alloy buckle	England
	NLM6726	Binbrook	Lindsey	D-shaped gilt copper-alloy buckle	England
	Cwg86 <106>	LINCOLN		<i>Ringerike</i> -style copper-alloy stud with gilt inlay	England
	F72 <ae243>	LINCOLN		Copper-alloy stud with gilt inlay	England
	Lin73 <44>	LINCOLN		Copper-alloy stud with possible traces of gilding.	England
	Zea95 <16>	LINCOLN		Set of copper- alloy balances with possible traces of gilding	

APPENDIX 14: SILVER(ED) OBJECTS FROM LINCOLNSHIRE

This table does not include objects that were also gilt; for those, see appendix 13. Strap-ends in Thomas type A are the same as strap-ends in Trewiddle style.

Period	Reference	Parish	District	Description	Origin
Middle Anglo-Saxon	WMID2966 WMID2967 WMID2969 WMID2968	High Toynton	Lindsey	Silvered copper-alloy hanging-bowl	England
700-800	Brown 2006: 287	Torksey	Lindsey	Copper-alloy lozenge brooch with silver inlay	
700-900	Ottaway 2009b: 6-7	Flixborough	Lindsey	Silver 'safety pin' brooches	England?
	Brown and Okasha 2009; Rogers 2009a	Flixborough	Lindsey	Silver finger rings	England
	NLM4371	Ancaster	Kesteven	Silvered copper-alloy strap-end	England
	LIN-2B1374	Folkingham	Kesteven	Copper-alloy silvered pin	England
800-900	LIN-BF5F520	Bardney	Lindsey	Solid silver strap-end in <i>Trewiddle</i> style	England
	NLM-027CB5	Barton-upon-Humber	Lindsey	Copper-alloy strap-end with silver wire coils; Thomas class A, type 5	England
	Jones <i>et al.</i> 2003: 151	LINCOLN		Silver buckle in <i>Trewiddle</i> style	England
	Jones <i>et al.</i> 2003: 151	LINCOLN		Silver buckle	Continent
	Jones <i>et al.</i> 2003: 151	LINCOLN		Silver strap-end in <i>Trewiddle</i> style	England
	SWYOR-197DD8	Low Santon	Lindsey	Silvered copper-alloy strap-end in <i>Trewiddle</i> style (Thomas class A)	England
	SWYOR-E61B80	Ludford	Lindsey	Copper-alloy silvered strap-end, Thomas class A	England
	NLM2	Melton Ross	Lindsey	Copper-alloy silvered strap-end in <i>Trewiddle</i> style with silver rivets	England
	NLM936	Melton Ross	Lindsey	Silvered fish-shaped copper-alloy strap-end	England
	NLM2805	Nettleton	Lindsey	Copper-alloy silvered strap-end	England
	NLM717	Baston	Kesteven	Silvered copper-alloy strap-end	England
	LIN-170E36	Lenton, Keisby and Osgodby	Kesteven	Copper-alloy silvered strap-end in Thomas class A	England
	LIN-AC6B72	Lenton, Keisby and	Kesteven	Silvered strap-end, Thomas class A	England

		Osgodby			
	NLM2940	Lenton, Keisby and Osgodby	Kesteven	Copper-alloy strap-end with niello and silvering, <i>Trewhiddle</i> style	England
	LIN-D093E7	Ruskington	Kesteven	Copper-alloy silvered strap-end of Thomas class A	England
	NLM1064	Ruskington	Kesteven	Openwork solid silver hooked tag	
	NLM748	Bourne	Kesteven	Solid silver <i>Trewhiddle</i> style strap-end	England
	LVPL487	Hougham	Kesteven	Copper-alloy strap-end with silver inlay, Thomas class A type 5	England
800-1000	YORYM- FA6027	Brampton	Lindsey	Silver droplet	
	NLM-683755	Roxby cum Risby	Lindsey	Silver ingot	
	Brown 2006: 305	Torksey	Lindsey	Silver hooked tag made of a coin	
800-1100	LIN-D49BF2	Branston and Mere	Kesteven	Copper-alloy strap-end with traces of silvering	
900- 1100	Gp81 <57>	LINCOLN		Iron-plated mount with possible traces of silver inlay.	England
	NLM5766	Scawby	Lindsey	Lead coin-weight	'Viking'
	LIN-A2F766	Osournby	Kesteven	Copper-alloy buckle with silver inlay	
1000- 1100	Rogers 2009d: 422; 2009a: 28-29	Flixborough	Lindsey	Silver ingot and twisted silver ring	
	F72 <ag1>; Steane <i>et al.</i> forthcoming	LINCOLN		Piece of silver wire, silver bracelet and a silver ring	
	NLM2680	Tattershall	Lindsey	Copper-alloy silvered openwork strap fitting decorated in <i>Urnes</i> style	
<i>Uncertain date (410- 1066 AD)</i>	LIN-E192E8	South Carlton	Lindsey	Copper-alloy flat disc-brooch with silver inlay	
	NLM6532	Lenton, Keisby and Osgodby	Kesteven	Silver pin with spherical head	
<i>Uncertain date (middle to late Anglo-</i>	Wp81 <ae62>	LINCOLN		Silver hooked tag	

Saxon)					
	Thomas 2009a: 19-22	Flixborough	Lindsey	Silver hooked tags	
	NLM-9E9AA6	Market Rasen	Lindsey	Silver pin with biconical head	
	Walker 1945	Tetney	Lindsey	Two silver hooked tags?	
	Brown 2006: nos 204-08	Torksey	Lindsey	Several pieces of hack-silver and silver ingots.	
	Brown 2006: 297	Torksey	Lindsey	Solid silver zoomorphic strap-end	
	Brown 2006: 252	Torksey	Lindsey	Truncated-sphere weight inset with silver discs	'Viking'
	Brown 2006: 253	Torksey	Lindsey	Truncated-sphere weight inset with silver discs	'Viking'
	Brown 2006: 254	Torksey	Lindsey	Truncated-sphere weight inset with silver discs	'Viking'
	Brown 2006: 259	Torksey	Lindsey	Truncated-sphere weight inset with silver discs	'Viking'
Late Anglo-Saxon to medieval	F72 <ae45>	LINCOLN		Copper-alloy hooked tag with silver inlay in <i>Ringerike</i> -style	England
	NLM7260 (Brown 2006: 304)	Torksey	Lindsey	Copper-alloy hooked tag with silver inlay	England
	Cwg86 <1533>	LINCOLN		Silver zoomorphic fragment, possibly of set of scales	

APPENDIX 15. LEAD OBJECTS FROM LINCOLNSHIRE

Weights, gaming pieces, spindle whorls, tools, domestic fittings and other utilitarian objects are excluded from this appendix.

Period	Reference	Parish	District	Description	Origin
700-900	SWYOR-322826	Owersby	Lindsey	Lead strip- or ansate brooch	English or Frankish?
800-1000	NLM6638	Swinhope	Lindsey	Lead-alloy circular mount in <i>Borre</i> style	English
	NLM-CF5DC7	Binbrook	Lindsey	Lead disc-brooch with equal-armed cross	English
	NLM-743AB7	North Ormsby	Lindsey	Lead disc brooch in <i>Borre</i> style	English
	NLM-D5DCF6	Swinhope	Lindsey	Copper-alloy strap-end with lead core; <i>Borre</i> style	English
	NLM-72D1C7	Torksey	Lindsey	Lead flat disc brooch in <i>Borre</i> style	English
900-1000	NLM193	Edlington with Wispington	Lindsey	Lead disc-brooch with equal-armed cross	English
	NLM395	Elsham	Lindsey	Openwork disc-brooch with cross design	English
	NLM396	Elsham	Lindsey	Lead disc-brooch	English
	NLM-158FF3	Fulletby	Lindsey	Lead strap-end	English
	NLM5373	Hatcliffe	Lindsey	Lead strap-end, <i>Winchester</i> style	English
	NLM-419320	Hibaldstow	Lindsey	Lead strap-end, <i>Winchester</i> style	English
	NLM3377	Horncastle	Lindsey	Lead strap-end	English
	NLM6736	Laceby	Lindsey	Lead disc brooch with cross design	English
	NLM-890976	Normanby le Wold	Lindsey	Lead strap-end, Thomas class E	English
	NLM-64E8D7	Osgodby	Lindsey	Lead disc-brooch with cross design	English
	NLM-	Swinhope	Lindsey	Lead strap-	English

	7D4337			end, <i>Winchester</i> style	
	NLM4701	Thimbleby	Lindsey	Lead disc- brooch with cross design	English
	NLM4700	Thimbleby	Lindsey	Lead disc- brooch with cross design	English
	NLM-5AFCE4	Willoughby with Sloothby	Lindsey	Lead strap- end, <i>Winchester</i> style	English
	NLM6185	Folkingham	Kesteven	Lead disc brooch	English
	NLM725	Thurlby	Kesteven	Lead strap- end	English
900-1100	NLM6612	Binbrook	Lindsey	Lead-alloy buckle	English
	DENO- 6C04E1	Fulletby	Lindsey	Lead disc brooch with cross-shaped petals	English
	LIN- D17C35	Lissington	Lindsey	Lead strap- end in <i>Winchester</i> style	English
	NLM- A6CCD1	Whitton	Lindsey	Openwork disc-brooch with cross design	English
	NLM6591	Navenby	Kesteven	Lead nummular brooch	English
	NLM6063	Ruskington	Kesteven	Lead disc brooch with cross design	English
	LIN-FC1347	Walcot near Folkingham	Kesteven	Lead disc brooch in <i>Jellinge</i> style	English
	SWYOR- 939E21	Weston	Holland	Lead disc brooch	English
950-1100	P70 <pb13>	LINCOLN		Lead disc brooch	English
	Sw82 <386 (131)>	LINCOLN		Lead disc brooch	English
1000- 1100	NLM- 874B54	Hibaldstow	Lindsey	Nummular brooch	English
	LIN-DA72D6	Aunsby and Dembleby	Kesteven	Lead strap- end	English
	LIN-2666B7	Aunsby and Dembleby	Kesteven	Lead openwork zoomorphic disc brooch	English
	LIN-DA08E0	Aunsby and Dembleby	Kesteven	Lead nummular brooch	English
	NLM7144	Grantham	Kesteven	<i>Winchester</i> style strap- end	English
	LIN-900B71	Osournby	Kesteven	Lead disc brooch with	English

				cross-shaped petals	
	LIN-92EA51	Walcot near Folkingham	Kesteven	Lead strap-end	English
<i>Uncertain date</i> (probably late Anglo-Saxon)	YORYM-7F0EB4	Hatton	Lindsey	Lead disc brooch	English
	F72 <Pb15>	LINCOLN		Unidentified object	
	LIN-9F1715	Rigsby with Ailsby	Lindsey	Lead pendant	
	Brown 2006: 292	Torksey	Lindsey	Lead cross-shaped pendant	English?
	Brown 2006: 293	Torksey	Lindsey	Lead Thor's Hammer	English or Scandinavian?
<i>Uncertain date</i> (middle to late Anglo-Saxon)	EMC 2001.0290; Brown 2006: 329	Torksey	Lindsey	Lead trial piece for a Louis the Pious solidus	
Late Anglo-Saxon to medieval	DENO-61E4C6	Knaith	Lindsey	Lead cross-shaped pendant	English
	z86 <676>	LINCOLN		Lead seal pendant	English
<i>Uncertain date</i> (600-1500 AD)	LIN-DE96A2	Heckington	Kesteven	Unidentified object (possibly trefoil brooch)	

APPENDIX 16: TABLE SUMMARISING EVIDENCE FOR METALWORK PRODUCTION IN LINCOLN (850-1100)

The following table summarises White 1992 tables 1 and 2, p. 5-6, with added information from Bayley 2008b: 44 (for the Lower City) and the various volumes in the Lincoln Archaeological Studies and the Archaeology of Lincoln series. Foley (1981: 16) adds the information that crucibles were also found at St Mark's Church in Wigford (SM76).

	LOWER CITY							
Site:	DT74	GP81	WP81	H83	LIN73	MCH84	SH74	F72
Metal waste:	-	✓	✓	✓	✓	✓	-	✓
Supporting evidence (crucibles, moulds, slag, etc.):	✓	✓	✓	✓	✓	✓	✓	✓
Types of metals worked:	Copper-alloys?	Silver, copper-alloys	Copper-alloys	Lead, silver	Silver, copper-alloys, iron.	Copper-alloys, iron.	Silver, copper-alloys	Silver, copper-alloys, lead, iron.

UPPER CITY			EXTRA-MURAL SITES (Wigford, Butwerk, and Waterside)			
P70	CL85	SP72	BE73	SM76	HG72	Waterside 87-90
-	-	✓	✓	✓	✓	✓
✓	✓	✓	-	✓	✓	-
Gold?	Silver? Copper-alloys?	Silver, copper-alloys.	Copper-alloys, iron	Copper-alloys, iron?	Copper-alloys	Copper-alloys

APPENDIX 17: LATE NINTH- AND TENTH-CENTURY POTTERY TYPES FOUND IN LINCOLN AND LINDSEY

The following appendix summarises the main pottery types produced and used in Lincoln and Lindsey during the period c. 850-1000. The information is taken from Young and Vince 2005; the period covered in this appendix corresponds to their ceramic 'horizons' ASH6 to ASH11 (Young and Vince 2005: 12-14) (see chapter 2.4.6). The appendix is organised as follows: first, pottery produced locally is discussed; and second, other, non-local pottery types that occur in the region are discussed. Non-local pottery types (also referred to as 'imported wares' or 'imports') may be produced elsewhere in England, outside the immediate region surrounding Lincoln, or on the continent. Both sections in this appendix are organised chronologically, per ceramic 'horizon' as identified by Young and Vince (2005).

17.1: Locally produced pottery types

17.1.1: Mid to late ninth century (Young and Vince AHS6)

The only site within Lincoln where this ceramic horizon may have occurred is Saltergate, which also produced a number of possible middle Anglo-Saxon burials (see appendix 5.2.2). However, it is unclear whether the contexts that contained this pottery were actually in situ, or whether they were residual (Young pers. comm.). The only other site in Lincoln that produced evidence for equally early activity was St Paul-in-the-Bail, but this remained a-ceramic until the tenth century (Young pers. comm.).

17.1.1.1: Northern Maxey-type ware (MAX)

Produced from the late seventh century (ASH2) onwards, MAX were handmade, coil-built, barrel-shaped and flat-bottomed wares, although by the second half of the ninth century they sometimes had wheel-turned rims (Symonds 2003a: 71; Young and Vince 2005: 12). The fabric was shell tempered, and thin-section analysis has indicated that the geological components of the different sub-types of this ware were remarkably constant (Young and Vince 2005: 36). It seems therefore that the production of MAX was quite specialised, and took place in a number of production centres in Lincolnshire that centred on the Lincoln Edge (Young and Vince 2005: 36).

This ware had a widespread distribution throughout Lindsey and further south, in Kesteven and Holland (fig. 39). In addition, over a hundred sherds have been found in the city so far. However, all but the ones from Saltergate (LIN73D) were from residual or unreliable contexts (see above; Young and Vince 2005: 36). Pottery types included mostly thin-walled barrel-shaped cooking vessels, as well as some bowls and small globular vessels that may have been lamps (Young and Vince 2005: 35-36).

17.1.1.2: Early Lincolnshire fine-shelled ware (ELFS)

Produced from the early ninth century (ASH 5 or 6), the production of ELFS took place in the Lincoln area before the wheel-turned wares took over. Like MAX, the vessels were hand-made, coil-built, flat bottomed and barrel shaped, but their exteriors were grass-wiped and striated, and their rims round and everted (Symonds 2003a: 71). Again, the fabric was shell tempered, although the inclusions were generally smaller than those in MAX. Otherwise the shell temper and clay matrix of ELFS were identical to those of MAX (Young and Vince 2005: 37), suggesting that they were produced in the same area. Young and Vince (2005: 33, 37) have suggested this was the direct forerunner of the later wheel-turned shell tempered wares, such as LKT (see below), and the very similar late tenth-century LFS (see below).

ELFS is uncommon in Lincoln, where it occurs from ASH7 onwards (see below). The total 'urban' assemblage amounts to only 27 vessels. However, on rural sites it is the main type of pottery during this period, and continues to predominate until the early tenth century, when LKT takes over (Young and Vince 2005: 37). Pottery types in this fabric include mostly jars and bowls, but a single pedestal-lamp is known from Goltho (Young and Vince 2005: 37).

17.1.1.3: Local middle Anglo-Saxon fabrics (MSAXLOC)

This group of miscellaneous fabrics is all made with local shell temper, but none belong to either MAX or ELFS (Young and Vince 2005: 34). Their production began at the same time as MAX, in the late seventh century (ASH2; Young and Vince 2005: 11). Pottery forms included mostly wide-mouthed and straight-sided jars, although a single bowl has also been found in Lincoln (Young and Vince 2005: 34).

Within Lincoln, the only examples belonging to this composite group, a total of nine vessels, were found at Flaxengate, in ASH7. As ASH7 does no longer contain MAX, it seems that these miscellaneous local fabrics remained in use longer than MAX, unless they were residual (Young and Vince 2005: 34). Their production centre is unknown, although their geological composition suggests that they were local products (Young and Vince 2005: 34).

17.1.2: Mid/late to late ninth century (Young and Vince AHS7)

This is the earliest ceramic horizon for which there is unequivocal evidence in Lincoln itself. Glazing already occurs from this period onwards, and wares were widely distributed over the East Midlands (Young and Vince 2005: 42). Pottery types that remain in use are the shell-tempered ELFS and possibly MSAXLOC. MAX no longer occurs. The following fabric descriptions are divided into shell-tempered and sand-tempered wares.

17.1.2.1: Shell-tempered wares

17.1.2.1.1: ELFS

See above.

17.1.2.1.2: Lincoln kiln-type ware (LKT)

LKT was produced at Silver Street from the second half of the ninth century onwards, and was the most common Lincoln ware throughout the tenth century. During ASH7 it represented c. 31% of the total assemblage, but this would increase in the course of the tenth century (Vince and Young 2003: 12, 56). Excavations at Silver Street revealed a number of kilns and production waste, which indicated large-scale production (Young and Vince 2005: 54). Analysis of the fabric led to the conclusion that the temper was imported from outside the Lincoln area. The clay, which came from a Jurassic source, could not be provenanced with any precision (Young and Vince 2005: 54).

The fabric was shell tempered, wheel-thrown, and characterised by distinctive interior ridges, which were sometimes smoothed (Symonds 2003a: 90, 99). Some LKT pots were partially glazed, including vessels found at Granta Place, Hungate, Saltergate, Grantham Street and Flaxengate (Young and Vince 2005: 64). Forms were standardised, and included globular jars (sometimes with handles and/or spouts), bowls/dishes, pedestal vessels, bottles and costrels (Symonds 2003a: 99). In the late ninth and early tenth century, LKT was well thrown and well fired, but in the course of the tenth century the quality of production declined. Firing temperatures showed increasing levels of variation, and the production techniques reverted partially back to a mixture between wheel-thrown and handmade, with the bases being coil-built and later added onto the wheel-thrown bodies (Symonds 2003a: 99). Decoration occurred on less than 5% of the vessels, and was most common on the earlier wares (Symonds 2003a: 99).

The high-quality ninth-century wares and the lower quality tenth-century wares were produced in different kilns (the lower quality group being mostly associated with kiln 200). However, the difference was entirely chronological, as both high quality and low quality sherds occurred in the same contexts, and were thus clearly used simultaneously (Symonds 2003a: 99). LKT has been found on almost every site in the entire region that produced late ninth- to tenth-century archaeology (Young and Vince 2005: 47).

Three kilns were excavated at Silver Street in 1973, all of which were tenth-century in date (Miles *et al.* 1989: 183-85). A series of rubbish pits were also found, the earliest of which were contemporary with the kilns (Miles 1989: 185). The latest of the kilns, kiln 200, was a rectangular pit measuring 1.5 x 5.9 m and aligned east-west. It was dug into the Roman street surface, and its walls were lined with unmortared limestone. It had a rough limestone paved floor apart from at the western end, where an extension of 1.2 m was added. A significant quantity of *in situ* firing debris, consisting of LKT wasters, was found (Miles 1989: 186). Kiln 25/55 was truncated, but the two halves probably formed another kiln measuring at least 1.8 m x 3.5+ m. The walls were clay-lined (5 cm thick), with some limestone in places, but it was not as well excavated as the other kiln (Miles 1989: 193). Kiln 35 was cut by kiln 25/55 and by other pits, and seems to have been semi-circular, and contained over 1000 sherds of mid tenth-century LKT (Miles 1989: 194). There is no evidence for any surviving superstructures for the kilns (Miles *et al.* 1989: 199). The rectangular shape of kilns 200 and kilns 25/55 has parallels on the continent from the Merovingian and Carolingian periods (Miles *et al.* 1989: 202). Symonds (2003a: 81) has drawn attention to the development of kiln construction techniques, which developed from simple clay-lined structures to stone-lined structures. In the case of the Silver Street kilns this went hand in hand with a greater output in pottery, and a similar development could be observed in Torksey (Symonds 2003a: 81).

LKT vessels were produced in a diversity of forms, mostly including jars (ranging in size from small vessels, possibly representing beakers, to large ones, possibly used for storage). They were used for cooking, storage and a variety of industrial purposes. They could be adapted to become pitchers through the addition of a spout and/or one or more handles (Young and Vince 2005: 47, 54). Other vessel forms included bowls and dishes, which were made in all shapes and sizes, ranging from extremely small ones used as glassmaking crucibles to larger and highly decorated ones, probably used as tablewares.

Pedestal lamps, pedestal cups, costrels, lids and decorated pitchers that copied continental examples were produced as well (Young and Vince 2005: 54).

17.1.2.1.3: *Lincoln shell-tempered ware (LSH)*

LSH (subdivided into fabrics A, B, C, E and F) was produced at Lincoln between the late ninth and eleventh centuries, and was the only definite Lincoln-produced shelly ware that was produced contemporarily with LKT (Symonds 2003a: 186). Its main difference with LKT was the fact that the majority of the fabrics were produced to so-called 'lower' standards, using slightly less 'advanced' techniques, which led Symonds (2003a: 186) to suggest that it was a lower-quality variation on LKT.

Fabrics A and C consisted of coil-formed pots that were smoothed out on a wheel. The pots belonging to fabric A were typically poorly formed, and reveal little evidence that any efforts were made to create a nice finish for the products (Symonds 2003a: 99). Pots made of fabric B, on the other hand, were typically again of higher quality, and entirely wheel-turned (Symonds 2003a: 99).

According to Symonds (2003a: 186), LSH was not usually found outside the city; however, data retrieved since then in the *North Lincolnshire Pottery Type Series* has revealed a significant number of additional find spots in the north of Lincolnshire, near the Humber (fig. 40). Excavations at the Sessions House and Cathedral Street produced a number of wasters of all fabric types except fabric F. A kiln was eventually discovered at SES97, which contained LSH wasters in the fabric of the furnace, although the kiln itself was backfilled with sand-tempered vessels of type SNLS (Young and Vince 2005: 61-62).

LSH is commonly found on tenth-century sites in the city as well as elsewhere in Lincolnshire, Leicestershire, York and Nottingham, but never in large quantities. In ASH7, the fabrics make up c. 3% of the entire assemblage (Young and Vince 2005: 62). The fabric was produced in a range of forms, including jars, pitchers, bowls and pedestal lamps, as well as glass-making crucibles (only fabric B) (Young and Vince 2005: 56). Jars occurred in a variety of sizes, including large ones used for storage, and smaller ones possibly used as beakers (only fabric E) (Young and Vince 2005: 58). The earliest vessels from fabric E, occurring only in ASH 7-8, have flat bases, but the later ones become more rounded (Young and Vince 2005: 60).

17.1.2.1.4: *Local late Anglo-Saxon fabrics (LSLOC)*

LSLOC is the collective name for a group of late Anglo-Saxon wares that was probably produced in or near Lincoln, on a fairly significant scale, but for which there is no positive production evidence from the excavated kilns in the Lower City and Butwerk (Young and Vince 2005: 42). However, the majority of fabrics were petrologically similar enough to known Lincoln wares to suggest a production centre in Lincoln itself (Young and Vince 2005: 42). They include hand-made and wheel-turned fabrics, and their fabric composition varied significantly. They probably represent unusual fabric mixes and experimentation by established manufacturers, as it is unlikely that so many different production centres were operative within the city and its surroundings (Young and Vince 2005: 65-69).

The different fabrics classed together under LSLOC include fabric a, b, c, f, m and s. Petrological analysis has assigned fabrics 1-c and f to the immediate vicinity of Lincoln (Young and Vince 2005: 65-69). LSLOCb has produced wasters along High Street in Wigford (Young *pers. comm.*). Fabric s has been assigned to the broad area of the Lincoln Edge and the Trent Valley (Young and Vince 2005: 65-69). Only fabric M is clearly distinguishable from other contemporary Lincoln products on petrological grounds, and may be imported into the city from the immediate surrounding area (Young and Vince 2005: 42). This fabric is very similar to MAX, and occurs only in jars and bowls (Young and Vince 2005: 67, 69).

Vessel forms were fairly standardised, and consisted primarily of jars with a height that was 1½ times as large as the diameter, and roller-stamped decoration across the shoulders (Symonds 2003a: 90).² Pitchers also occurred, primarily in fabric B, whilst pedestal lamps occurred in fabrics B and D, and bowls and dishes were produced in all fabrics belonging to LSLOC. Large storage jars were very rare (Young and Vince 2005: 67).

17.1.2.1.5: *Local Saxo-Norman fabrics (SNLOC)*

SNLOC is the collective name for a group of wheel-thrown fabrics, which are very rare in Lincoln itself but are more commonly found on rural sites to the north and east of the city, including 'Goltho' (GM74) (Young and Vince 2005: 81). Examples from Lincoln itself are limited to only 159 examples, only 20 of which are stratified, and could be assigned to

² Roller-stamping or rouletting is the technique of decorating vessels with a wheel that has been carved with geometric patterns, mostly used for the earlier wheel-turned pottery in England. The practice copies continental usage (Haslam 1978: 7).

ceramic horizons ASH7 to ASH14, or the late ninth to early twelfth centuries (Young and Vince 2005: 81).

17.1.2.2: Sand-tempered wares

One of the earliest evidence for pottery production in Lincoln is formed by a pit full of sand-tempered wasters of fabric LG in the earliest layers at Flaxengate, buried underneath the earliest late ninth-century road surface (Young and Vince 2005: 42). The production of this sand-tempered pottery therefore seems to have pre-dated the production of the earliest shell-tempered wares (Young and Vince 2005: 42).

17.1.2.2.1: Lincoln gritty ware (LG)

LG was one of the first sand-tempered wares produced in Lincoln during the late ninth and mid tenth centuries (Vince and Young 2003: 12). During excavations at Flaxengate in the 1940s, a quantity of this fabric was found that included wasters and over-fired sherds, which suggested a production centre nearby. In total, more than 500 sherds have been recognised, all of which came from fourteen sites in the Lower City, with a single additional sherd being recognised at Holmes Grainwarehouse in Wigford (Young and Vince 2005: 44). Vessel forms that occur as LG mostly include rounded jars with roller stamp decoration, and bowls. No pitchers are known in this fabric, although small jars or beakers did occur in small quantities (Young and Vince 2005: 43). The fabric is rarely found outside the city (Young and Vince 2005: 44).

As the name suggests, the fabric has a gritty texture, and the colour is usually grey (Young and Vince 2005: 42). Its production involved the creation of hand-made coil-constructed bases, which were added onto the wheel-thrown sides (Symonds 2003a: 99). Vessels were sometimes decorated with roller-stamping techniques, and both the bases and the rim were shaped with a knife (Symonds 2003a: 108). The majority of vessels consist of globular jars and bowls (Young and Vince 2005: 43). Thin-section analysis revealed that the temper was very different from that of later sand-tempered wares. Although it was probably sourced locally, it showed similarities with tempers used for the York pottery (Young and Vince 2005: 43-44).

17.1.2.2.2: Lincoln late Anglo-Saxon sandy ware (LSLS)

LSLS was produced from the late ninth to the middle of the tenth centuries (Young and Vince 2005: 12). It was produced in three distinctive fabrics, A, B and D, which were well thrown and well finished, and sometimes decorated with roller stamping (Symonds 2003a: 99; Young and Vince 2005: 44-46). The fabrics were usually quite hard, and appeared in various shades of grey (Young and Vince 2005: 44-46). Vessel forms include small to medium sized rounded jars, as well as pitchers and bowls, sometimes with an added spout, as well as occasional small dishes (one of which, found at Hungate (H83), had been used as a crucible for melting glass), pedestal lamps, and bottles (the latter of which occurred only in fabric B) (Young and Vince 2005: 44-46).

Fabric D was previously usually identified as imported continental wares, until thin-section analysis identified them as local products (Young and Vince 2005: 46). None of the LSLS fabrics are commonly found outside Lincoln, but they occur mostly within the eastern part of the Lower City (Symonds 2003a: 186; Young and Vince 2005: 46). They make up c. 46% of the entire ceramic assemblage in Lincoln during ASH7 (Young and Vince 2005: 46).

17.1.2.2.3: Lincoln late Anglo-Saxon pale-bodied sandy ware (LSPLS)

Very similar to LSLS, but made from a lighter clay, is LSPLS. A total of 32 vessels in this fabric survive, 29 of which were found at Flaxengate in ASH7-9 (vessels from ASH 9 probably being residual) (Young and Vince 2005: 46-47). Vessel forms included small to medium jars and large pitchers, with rim types that were more similar to shelly wares such as LKT than to other sandy wares (Young and Vince 2005: 46).

17.1.2.2.4: Early Lincoln glazed ware (ELSW)

ELSW (sometimes referred to as Lincoln glazed sandy ware) was a third late ninth- to mid tenth-century sandy ware, and can be subdivided into fabrics A, B and C. The Lincoln glazed wares often had an additional shell temper, and its production has been linked to that of LKT, which was also occasionally glazed. In order to glaze a vessel successfully, high temperatures are required, and as shell-tempered wares have a tendency to burst at high temperatures, sand-tempered wares are often more suitable for glazing (Young *pers. comm.*); in this case, the decision to add a secondary shell temper may have been made to maintain the visible appearance of the LKT. Both LKT and Lincoln Glazed Sandy ware furthermore employed similar diamond roller-stamp decoration (Symonds 2003a: 108).

Of the 870 vessels from the city, 820 came from the main Flaxengate site (f72), and another eight from other sites along Flaxengate. As some of the vessels from f72 were

wasters, it seems likely that their production centre was located in the immediate vicinity (Young and Vince 2005: 64). Their production was nevertheless very limited, and they never made up more than 3% of the entire pottery assemblage (Young and Vince 2005: 64). Vessel forms included small globular jars or beakers with small tubular spouts similar to those of York Early Glazed ware type 3, found at Coppergate (Young and Vince 2005: 62), as well as flat-based jars or pitchers, some of which displayed similarities in rim types and profile to LKT, with minimal glazing (Young and Vince 2005: 64). A small quantity of late ninth- to tenth-century glass-melting crucibles, the only ones that were made from a sandy fabric, also belong to this fabric type (Symonds 2003a: 108).

17.1.3: Late ninth to early tenth century (Young and Vince AHS8)

No new pottery types are introduced (for fabric descriptions, see above). All locally produced pottery types that were produced during ASH7, the shell-tempered wares ELFS, LKT, LSH and LSLOC as well as the sand-tempered fabrics LG, LSLS, LSPLS and ELSW, remain in use. They are still well produced and often decorated, sometimes with glazing, and produced in a relatively high range of different vessel forms. The production and use of LKT increases significantly, and this ware now takes up 80% (instead of 31%) of the entire pottery assemblage (Young and Vince 2005: 56). The production of LSLS, on the other hand, decreases significantly, and makes up only 6% (instead of 46%) of the ceramic assemblage, whilst fabrics B and D are probably residual by the end of ASH8 (Vince and Young 2003: 46). The relative occurrence of the far less common fabric LSH increases slightly as well, from 3% to 6% (Young and Vince 2005: 62).

17.1.4: Early/mid to mid tenth century (Young and Vince AHS9)

The range of fabrics produced and used in Lincoln decreases significantly. The production and use of all locally produced sand-tempered fabrics comes to an end, as does the production and use of the shell-tempered fabric ELFS (Vince and Young 2003: 13, 46). The only three locally produced wares that belong to this ceramic horizon are LKT, LSH and LSLOC (see above). LKT is the most common fabric, representing 83% of the entire ceramic assemblage (Young and Vince 2005: 56), but decoration and glazing occurs less frequently, whilst some pots are now partially hand-made, and bases become more sagging (Young and Vince 2005: 13). LSH continues to increase slightly, from 6% to 7% (Young and Vince 2005: 62).

17.1.5: Mid to late tenth century (Young and Vince AHS10)

LKT, LSH and LSLOC remain the only locally produced fabrics that occur in Lincoln (Young and Vince 2005: 13). LKT remains the most common fabric, now representing 89% of the entire ceramic assemblage found in Lincoln (Young and Vince 2005: 56). LSH increases slightly, from 7% to 8% (Young and Vince 2005: 62). The quality of vessels declines, and decoration and glazing becomes exceptionally rare (Young and Vince 2005: 13-14).

17.1.6: Late tenth century (Young and Vince AHS11)

This period witnessed the start of the first locally produced sandy ware since ASH8, SNLS, and a new locally produced shell-tempered ware, LFS (Young and Vince 2005: 14, 81). These new wares are no longer produced in the Lower City, but kilns have been excavated at the Sessions House site (ses97) in Butwerk (Young and Vince 2005: 238). The nearby street name Pottergate may date back to this period (Young and Vince 2005: 239). It is generally assumed that there was only one production centre at any one time, because there is no evidence to the contrary (Young and Vince 2005: 239). However, existing shell-tempered wares (LKT, LSH and LSLOC) also remained in use, but the occurrence of LKT declined, both in quality and quantity (Young and Vince 2005: 14).

17.1.6.1: Shell-tempered wares

17.1.6.1.1: Lincoln kiln-type ware (LKT)

LKT now took up 80% (instead of 89%) of the entire ceramic assemblage, but is believed to include a significant amount of residual sherds (Young and Vince 2005: 56). Also see above.

17.1.6.1.2: Lincoln late Anglo-Saxon shelly ware (LSH)

LSH declined significantly, from making up 8% of the entire ceramic assemblage at the beginning of the period, to 3% towards the end (Young and Vince 2005: 62). Also see above.

17.1.6.1.3: Late Anglo-Saxon local wares (LSLOC)

See above.

17.1.6.1.4: Lincolnshire fine-shelled ware (LFS)

LFS, which is believed to have developed out of the earlier ware ELFS, was first produced in the later tenth century. The vessels were again completely hand-made and coil-built, and more cylindrical than globular in form (Symonds 2003a: 99). Their fabric changed over time, but was initially soft and slightly gritty, ranging in colour from light red to red with a grey core (Young and Vince 2005: 81). LFS would eventually supply the majority of cooking vessels in the city, but during ASH11 did not take up more than 0.5% of the entire ceramic assemblage, LKT still being far more common (Young and Vince 2005: 15, 76, 88). This ware was also traded on a regional level, but not to the extent as LKT previously had been (Symonds 2003a: 186). No production centre has been identified to date, but as this ware occurs as far north as Beverley, and as far south as Nottingham, but is more common in Beverley than in Nottingham, it is suggested that this must have been located somewhere between Lincoln and Beverley (Young and Vince 2005: 88).

17.1.6.2: Sand-tempered wares

17.1.6.2.1: Lincoln Saxo-Norman sandy ware (SNLS)

Unlike LFS, the later tenth- and eleventh-century SNLS was wheel-produced, and soon became the only wheel-produced pottery from Lincolnshire, and the only pottery produced in Lincoln itself (Young and Vince 2005: 76). Wasters have been found in small quantities at Flaxengate (f72), possibly at Holmes Grainwarehouse (hg72), and the Sessions House (ses97), where they were used to backfill the kiln, and possibly represent the last load that was fired in the kiln. As stated above, the immediate vicinity also revealed a lot of LSH ware, strengthening the argument that this ware was indeed produced at the Sessions House site (Young and Vince 2005: 77). SNLS is noticeably absent in the western part of the Upper City (Young and Vince 2005: 81), and only rarely found outside the city (Symonds 2003a: 186).

Despite its wheel-produced nature, its quality was poor compared to the earlier wheel-thrown wares (Symonds 2003a: 99). The fabrics are medium hard with a sandy texture, and their colours varied due to inconsistent firing temperatures, ranging from fully reduced (grey) to fully oxidised (red). Decoration and careful finishing is exceptional (Young and Vince 2005: 77). Vessel forms mainly include jars, which copy LKT examples, and bowls, whose form is based on Torksey-ware bowls (Young and Vince 2005: 77).

17.2: Non-local pottery types

17.2.1: Mid to late ninth century (Young and Vince AHS6)

With the exception of IPS, none of the non-local pottery types can be attributed to this phase with any certainty, mainly due to the small quantities of sherds that have been found. It is possible that the continental BLBURN was residual at this stage. Of the five remaining continental fabric types, only one vessel each has been identified, all of which were found in Lincoln, either in residual contexts, or in a context that also contained intrusive pottery, and it is possible therefore that they belonged to a later horizon. It has been suggested that they were imported during the period of Scandinavian settlement in the later ninth century (Vince and Young 2003: 34).

17.2.1.1: Ipswich ware (IPS)

Occurring in Lincolnshire from the middle of the eighth century (ASH4) onwards, IPS was the first post-Roman completely wheel-thrown pottery that was used in the region. It has a sandy grey fabric, and was formed on a slow wheel before being fired in structured kilns. It is characterised by 'sagging' bases that resulted from trimming with a knife prior to firing, and was clearly based on Rhenish and Merovingian forms, although it also incorporated Anglo-Saxon techniques (Symonds 2003a: 71). It was produced in East Anglia, and has been identified, in small amounts, on many sites in Lindsey and southern Lincolnshire, although only a single sherd has been found in Lincoln itself, at Flaxengate, in a residual context (Young and Vince 2005: 34, 39). The one sherds of IPS found in Lincoln belonged to a jar or pitcher, which was the most commonly exported vessel form (Young and Vince 2005: 39).

17.2.1.2: Black-burnished ware (BLBURN)

The wheel-thrown BLBURN pottery represents one of the earliest continental imports from the region, and was probably produced in the Rhine or Meuse area (Young and Vince 2005: 39). It first occurred, in conjunction with MAX, in early to mid ninth-century deposits (ASH5; Young and Vince 2005: 11). Only a single sherd was found in Lincoln, at Flaxengate, but it was also found on other sites in the region that were easily accessible via water, such as Cherry Willingham and Gosberton (Young and Vince 2005: 39-40). It is uncertain whether this type of pottery is residual in ASH6, or whether it was still in use.

17.2.1.3: Grey-burnished ware (GRBURN)

The wheel-thrown GRBURN pottery was also imported from the continent, and so far only one vessel has been identified in all of Lincolnshire, which was found in Lincoln itself, in a residual context (Young and Vince 2005: 40).

17.2.1.4: Brown-burnished wares (BRBURN)

Also wheel-thrown, BRBURN was similar in composition to the BLBURN and GRBURN vessels, suggesting a similar, continental origin. A single pitcher sherd has been found at Flaxengate in Lincoln, in conjunction with the BLBURN vessel (see above) and the ORP and BLSURF wares (see below), in a context that also contained more than 1,000 Roman sherds, a handmade Anglo-Saxon sherd, and five sherds of LSLs (see below), although the latter may be intrusive (Young and Vince 2005: 40).

17.2.1.5: Black-surfaced wares (BLSURF)

A single vessel of this wheel-thrown ware, imported from the continent, has been found at Flaxengate (see above). It represented a jar or a pitcher (Young and Vince 2005: 40-41).

17.2.1.6: Oxidised red-painted wares (ORP)

Although its precise provenance is unknown, the single wheel-thrown sherd of this fabric clearly represents another continental import. It was found at Flaxengate, in the same context as the sherds of BLSURF and BRBURN discussed above (Young and Vince 2005: 41).

17.2.1.7: Mayen-type ware (MAY)

The fabric of Mayen-type ware is brick-coloured and highly fired. Only two sherds have been found, both from residual contexts in Lincoln itself. Their provenance is unknown (Young and Vince 2005: 41).

17.2.2: Mid/late to late ninth century (Young and Vince AHS7)

It is possible that the single vessels of GRBURN, BRBURN, BLSURF, ORP and MAY belong to this horizon, rather than to ASH6. However, based on the incredibly rare occurrence of continental pottery in Lincoln, and the definitive attribution of the continental BLBURN vessel to ASH6, this is probably unlikely.

17.2.2.1: Early Stamford ware (EST)

The earlier work on the Stamford pottery (Kilmurry 1980) classified the Stamford wares per fabric type rather than production centre. This thesis uses the distinction between EST and ST, which is based on the identification of production centres rather than fabric type (chapter 2.4.6). The two approaches have never been fully integrated due to a lack of available funds (chapter 2.4.6). However, it may be worth stating that the fabrics that Kilmurry (1980) has identified, and are relevant in the current context, are fabrics E/F and H (either glazed or unglazed), produced before c. 950, and fabric D, produced between c. 900-1000.

EST or undeveloped Stamford ware was produced at Stamford during the late ninth and tenth centuries (Young and Vince 2005: 71). They were all produced from a source of clay that did not require additional tempering (Symonds 2003a: 84). The kiln where EST was produced, the Castle Kiln, has been identified and excavated (Symonds 2003a: 84). It was elongated, with straight vertical sides (Symonds 2003a: 76-81). The Castle Street pots were high in quality, and often had splashed lead-glaze or iron red paint that was applied with a finger or a brush, the latter of which was unique in England at this time. Sometimes, red paint and glaze were used simultaneously (Symonds 2003a: 84).

Although it has been recognised at some 37 different sites in Lincoln including Flaxengate, EST is very rare, and makes up only 0.5% of the Lincoln ceramic assemblage during ASH7 (Young and Vince 2005: 71). There was little chronological change in the form and fabric types of pottery produced at Stamford in the course of the ninth and tenth centuries (i.e. fabrics EST and ST). Cooking wares remained essentially the same, and amongst the variety of tablewares, the only new introduction was the Kilmurry type 5 glazed spouted pitcher, which first occurred in c. 980 (Kilmurry 1980: 162-63). Consequently, EST is often confused with ST (Stamford ware), which is a later tenth- and eleventh-century fabric (Young and Vince 2005: 95). Prior to petrological analysis of the pottery, both EST and ST were jointly referred to as 'Stamford ware', which renders it impossible to integrate a lot of older studies with material that has been studied more recently (Young *pers. comm.*).

Vessel forms of EST include jars, pitchers, bowls (including two that were red-painted), a globular cup, a large storage vessel, and a glazed pedestal vessel. Of these vessel forms, unglazed jars take up c. 30% of the Lincoln assemblage, whilst 52% consist of glazed pitchers (Young and Vince 2005: 71). Almost all glazed pitchers are decorated (Young and Vince 2005: 71). On the basis of stylistic similarities between the earliest Stamford wares and contemporary northern French wares, as well as similarities in

production technology between both, Kilmurry (1980: 176, 186-90) has argued that the pottery industry was started on the initiative of a potter of continental origin, from the area that is now northern France. There were no identifiable similarities between the earliest Stamford wares and the preceding handmade MAX (Kilmurry 1980: 176). Although the wheel was more widely used in continental Europe, including in a number of production centres in the regions that are now Germany and France, glaze was mostly limited to France (Kilmurry 1980: 178). Red paint was also a continental trait, but went out of use in the tenth century whilst glaze increased in popularity (Kilmurry 1980: 187).

The distribution of Stamford ware is generally greater than that of other contemporary ceramics, and their distribution does not seem to adhere to any cultural or political boundaries, with the possible exception of the western extent of its distribution (Kilmurry 1980: 155-56). Its distribution stretched as far north as Aberdeen, as far west as the Welsh marches (Chester, Hen Domen, Worcester, Hereford), as far south as Gloucester, Bath, Winchester, London, Canterbury and Rivenhall, and as far east as most of East Anglia (Kilmurry 1980: 156). It appeared in Dublin, and possibly Scandinavia, although petrological analysis of the pottery identified as Stamford wares that were found in Denmark revealed that they were local products (Vince 1995). Stamford wares were also copied in Coventry, Leicester and Northampton (Kilmurry 1980: 155), as well as Pontrefact (Roberts and Cumberpath 2009).

Stamford wares (both EST and ST) have been found in both 'urban' and 'rural' contexts. However, whereas ST frequently occurs outside 'urban' contexts, the occurrence of EST in 'rural' contexts, which the *North Lincolnshire Pottery Type Series* only identified for Risby (appendix 2.2.18), Killingholme (appendix 2.3.11), and Habrough (appendix 2.3.17), is much less common.

17.2.4.3: *Torksey-ware (TORK)*

TORK would become the most common regional import in Lincoln in the eleventh century (Young and Vince 2005: 76). However, prior to the eleventh century it occurred only rarely. It first appeared at Flaxengate (f72) in ASH7 in F72, and continues to be found sporadically until ASH11 (the late tenth century), when it finally amounts to 3% of the entire ceramic assemblage in Lincoln (Young and Vince 2005: 90). At least twelve circular kilns were excavated in Torksey. It is unknown whether Torksey was unusual in its sheer numbers of kilns, or whether all towns had so many (Symonds 2003a: 76-81).

The fabric of TORK was sand tempered, made with local clay retrieved from the area between Scunthorpe and Collingham, east of the Trent. The vessels, which were incredibly standardised, were usually hand-made and coil-formed, but finished on a wheel (Symonds 2003a: 90). The colour of the vessels appeared dark grey to black (Coppack 1987: 135).

17.2.2.3: *Late Anglo-Saxon crucible fabrics (LSCRUC)*

LSCRUC is the collective term for the late Anglo-Saxon crucible fabrics, cupels and parting vessels from Lincoln (Young and Vince 2005: 65). Analysis of these fabrics, as well as contemporary similar crucible fabrics from London, has not allowed the identification of the clay source, and it has been suggested that these vessels were transported over long distances (Young and Vince 2005: 65). The majority of LSCRUC was found at Flaxengate (F72), which was also the site that produced the most unequivocal evidence for metalwork production in the shape of scrap-metal and unfinished objects (Young and Vince 2005: 65; chapter 5).

17.2.2.4: *Leicester-type ware (LEST)*

Only five vessels of LEST, all small to medium sized jars produced before the middle of the tenth century, have been found in Lincoln. All came from the Flaxengate site (f72) (Young and Vince 2005: 72-73). Their occurrence is somewhat remarkable, as this pottery is extremely uncommon even within Leicester itself other than at the kiln site (Young and Vince 2005: 73).

17.2.2.5: *Thetford-type ware (THETT)*

Some 600 sherds of THETT have been found in Lincoln in horizons ASH7 to ASH12 (Young and Vince 2005: 99), which makes this East Anglian pottery type far more common than most other contemporary non-local pottery types.

17.2.2.6: *York ware (YW)*

YW has a gritty, sand-tempered fabric, which creates a pimpled surface, and an even, red or buff colour (Mainman 1990: 400, 406-07). The hardness and colour of the fabrics was varied, from very hard with a red brick coloured core with glassy appearance, to a softer, sandier, buff or grey fabric. These differences were partially the result of variations in firing conditions in the kilns (Mainman 1990: 406). The production site(s) of YW has/have never

been established (Mainman 1990: 409), and it is possible that production was not centralised, but spread over a number of different centres within York itself and/or the surrounding region (Mainman 1990: 407, 410).

Most early finds consisted of cooking pots, which was the dominant form (80%+), and were highly standardised and strikingly uniform in appearance throughout the period (Mainman 1990: 400, 402). Other vessel forms included bowls (5-10%), and some storage vessels, pitchers, socketed bowls, lamps and crucibles (Mainman 1990: 402). Most vessels have flat bases, and some may have had wooden lids. Sagging bases occur only occasionally amongst the earlier examples, but becomes more frequent in the later tenth and eleventh centuries, when YW is in decline, gradually being replaced by sandy TORKT wares (Mainman 1990: 402-03).

Like the Lincoln-based LKT, which had the same petrological composition of the preceding MAX wares, YW had the same petrological composition as a preceding local handmade gritty ware (Type 1), leading Mainman (1990: 408) to suggest that YW was a continuation of local traditions, rather than a complete departure of traditional pottery making techniques inspired by continental methods. Mainman (1990: 409) also argues that the adoption of the slow wheel can be seen as an example of 'natural' technological progress; however, this argument is based on ungrounded presumptions about the significance of the concept of 'progress', and cannot be sustained.

The distribution of YW was mostly restricted to York itself (Mainman 1990: 411). The Coppergate dig has confirmed that this was the most important ware in York in this period (Mainman 1990: 400). Mainman (1990: 511) has suggested that York ware and York d ware were never intended for more than local or possibly regional consumption, as it was also found in Beverly, Thwing and Tadcaster. Another west Yorkshire production centre must have been in existence too, whose gritty fabrics were found at Otley and Pontefract (Mainman 1990: 511). Mainman (1990: 512) believes that the wheel-turned York wares developed naturally out of existing local handmade pottery production, without the interference of any immigrant potters (Mainman 1990: 512). Only seven jars of YW have been found in Lincoln to date, all of which came from Flaxengate (f72) (Young and Vince 2005: 74). In addition, a single sherd of early glazed ware of York Type 1 (ESG) was found at Holmes Grainwarehouse (hg72) in Wigford (Young and Vince 2005: 75)

17.2.2.7: Huy-type ware (HUY)

HUY was produced in the Meuse valley. Five different vessels have been found in Lincoln's Lower City, including at Flaxengate (f72) and Saltergate (lin73e), all of which were pitchers (Young and Vince 2005: 76).

17.2.2.8: Non-local late Anglo-Saxon fabrics (LSX)

LSX refers to a group of miscellaneous fabrics that were almost certainly not produced in or near Lincoln. They are subdivided into fabrics A, B, I and L, and occurred only at the Flaxengate site (f72), primarily in ASH7 (Young and Vince 2005: 69-71). Fabric A was thought to come from the Trent Valley, and some of the others from further south (Young and Vince 2005: 70-71). The southern origin is strengthened by the fact that fabric B was found at Crowland and Stow (Young and Vince 2005: 71). Vessel forms included, in fabric A, medium-sized pitchers or jars and larger storage vessels (Young and Vince 2005: 69-70); in fabric B, jars; in fabric I, which was similar to IPS, jars; in fabric L, jars or storage vessels (Young and Vince 2005: 70).

17.2.3: Late ninth to early tenth century (Young and Vince AHS8)

No previously unknown pottery types occur. All imported pottery types produced elsewhere in the Anglo-Saxon realm that first occurred in ASH7, EST, TORK, LSCRUC, LEST, THETT and YW, continue to occur in ASH8. EST increases slightly, and now takes up 1% (as opposed to 0.5%) of the total ceramic assemblage (Young and Vince 2005: 71). The only imported continental ware that first occurred in ASH7, HUY, also continues to occur in ASH8. Finally, it is again also possible that the single vessels of GRBURN, BRBURN, BLSURF, ORP and MAY belong to this horizon, rather than to ASH6 or 7. However, based on the incredibly rare occurrence of continental pottery in Lincoln, and the definitive attribution of the continental BLBURN vessel to ASH6, this is unlikely.

17.2.4: Early/mid to mid tenth century (Young and Vince AHS9)

Like the local pottery types, the range of non-local pottery types also decreases, although a limited number of new imported wares begin to occur. LEST, THETT and YW no longer occur, neither does the continental ware HUY. EST and TORK, on the other hand, continue to take up a small percentage of the ceramic assemblage in Lincoln (Young and Vince 2005: 13, 90), which a single vessel of DERB also occurs in Lincoln (Young and Vince 2005: 92). It is possible that a secondary production centre for TORK (or TORKT) was opened at Newark

(Young and Vince 2005: 90-91), whilst a secondary production centre for LKT was opened in Horncastle, producing a pottery type known as HLKT (Symonds 2003a: 223). The crucible fabrics – previously attributed the generic label LSCRUC based on the fact that their clay source could not be sourced – are now all known to have come from Stamford, and are labelled STCRUC. This horizon also witnesses the first occurrence of the continental ware PING.

17.2.4.1: Early Stamford ware (EST)

The percentage of EST in the ceramic assemblage of ASH9 in Lincoln reduces to c. 0.2% before it goes out of use and is gradually replaced by ST (developed Stamford ware) in ASH10-12 (late tenth to early eleventh centuries) (Young and Vince 2005: 71-72). Also see above.

17.2.4.2: Torksey-ware (TORK)

See above.

17.2.4.3: Torksey-type ware (TORKT)

Some of the vessels found in late ninth- to eleventh-century northern Lincolnshire contexts were visually almost indistinguishable from TORK, but used a slightly different sand temper, and should be attributed to a different production centre (Phillips and Young 1994: 1; Wilkinson and Young 1995b: 6). TORKT occurs from ASH9 to ASH14, but only c. 40 sherds have been identified in Lincoln to date (Young and Vince 2005: 90-91). Torksey-type ware was distributed throughout Lincolnshire, including 'Goltho', and Nottinghamshire (Mainman 1990: 443).

TORKT occurred in more significant numbers in York, where it replaced the local YW as the dominant pottery type in the course of the tenth century, Mainman (1990: 512) has argued that some of these wares were actually produced at York itself, after the final expulsion of Erik Bloodaxe rendered the inhabitants of York more open to southern influences. Alternatively, she (1990: 512) has suggested that a number of Torksey-potters moved to York because they were attracted by the wealth of the settlement, which would contrast with the Lincoln situation, where TORK and TORKT increasingly replaced the local LKT because the latter was in decline (Mainman 1990: 512). Mainman (1990: 513) furthermore has argued that the transition of YW to TORKT went over a period of some two decades, and that the eventual success of the Torksey type wares was mainly due to the greater availability of larger numbers of vessel types as compared to the more restricted number of vessel types available in YW (Mainman 1990: 513). This does not make sense; because there is no reason why the YW potters would not have been able to make different vessel forms in the YW fabric as well.

Excavations in Newark in 1994 produced the first definite archaeological evidence for the production of TORKT, including a number of wasters and a kiln (Phillips and Young 1994: 1; Young and Vince 2005: 90). It remains nevertheless a possibility that the TORKT from York was produced neither at Newark nor Torksey, although no archaeological evidence for a production centre in or near York has ever been identified (Young and Vince 2005: 90).

17.2.4.4: Stamford-ware crucibles (STCRUC)

More than 1000 crucibles of STCRUC have been found on more than 30 sites throughout Lincoln, mostly occurring between ASH9 and MH1 (Medieval Horizon 1, dated to the middle of the twelfth century). Concentrations of STCRUC were found on Flaxengate, Silver Street, Saltergate, Michaelgate Chestnut House and St Paul in the Bail (Young and Vince 2005: 97).

The occurrence of Stamford-ware crucibles *outside* Stamford was initially even more frequent than the occurrence of glazed EST, which suggests that the Stamford industry was set up as a highly specialist industrial enterprise, whose products, unlike most ceramic materials, were transported over substantial distances (Vince 2005: 243). In York, the earliest recognisable Stamford products were crucible sherds, although glazed and unglazed pitchers and cooking pots also occurred (Mainman 1990: 462-63). At Coppergate, they occurred from the earliest Anglo-Scandinavian layers onwards, and subsequently increased steadily. By the middle of the tenth century, the evidence suggests that there was a significant specialist trade in STCRUC between York and Stamford (Mainman 1990: 463). In York, STCRUC was used primarily for glass and silver, and some other metals, including gold and copper-alloys (Mainman 1990: 469). Also see above, under LSCRUC.

17.2.4.5: Derby-type ware (DERB)

The wheel-thrown sand-tempered DERB is similar to TORKT, but lighter brownish in colour, with a grey core (Young and Vince 2005: 91). Only ten vessels, all jars, have been found in Lincoln, none of which was decorated. The earliest of these came from ASH9, but the majority was found in eleventh-century deposits (Young and Vince 2005: 92).

17.2.4.6: Horncastle Lincoln kiln-type ware (HLKT)

There was some pottery production in Horncastle in the tenth century, which was probably set up after the movement of one of the Lincoln LKT potters to Horncastle, which resulted in the production of HLKT. HLKT was widely distributed across Lindsey (Symonds 2003a: 223), but did not occur in Lincoln itself (Young and Vince 2005).

17.2.4.7: Non-local Saxo-Norman fabrics (SNX)

SNX includes a group of wheel-thrown or wheel-finished non-local Saxo-Norman fabrics from an unidentified, non-local production centre. Less than 80 vessels have been identified in Lincoln, but only sixteen of these were non-residual. These sixteen vessels occurred between ASH9 and MH1 (Young and Vince 2005: 91).

17.2.4.8: Pingsdorf-type ware (PING)

A total of 35 vessels of the continental white fabric type PING, produced in the Rhine area, have been found in Lincoln. All came from the Lower City and Wigford, and occurred between ASH9 and MH2 (Medieval Horizon 2, dated to the middle of the twelfth century). The vessels, mostly pitchers and some beakers, were all wheel-thrown, but their fabrics varied between a soft consistency and off-white colours (mostly the earliest vessels) and hard, reddish brown wares (without exception the later vessels). Some revealed traces of red-painted decoration (Young and Vince 2005: 101-02).

17.2.5: Mid to late tenth century (Young and Vince AHS10)

*Non-local pottery types become incredibly rare in Lincoln (Young and Vince 2005: 13-14). **TORK** and **TORKT**, as well as the continental **PING**, continue to take up a small percentage of the ceramic assemblage in Lincoln (Young and Vince 2005: 13, 90), and **STCRUC** probably continues to occur as well. **ST** gradually replaces **EST**, although **EST** does not become completely residual until **ASH12** (Young and Vince 2005: 71-72). Nottingham ware (**NOTS**) also occurs for the first time in Lincoln.*

17.2.5.1: Early Stamford ware (EST)

See above.

17.2.5.2: Stamford ware (ST)

ST was similar to EST, produced from a similar clay source, and examples of EST have frequently been wrongly identified as ST (Young and Vince 2005: 95). However, like in Lincoln, in the late tenth century the centre of the pottery industry in Stamford moved, possibly as the result of the use of a different clay source, from Castle Street to Wharf Street (Symonds 2003a: 84). Wharf Road products were more poorly made than the earlier Castle Street pots (see above), with relatively thick bases and walls. Decoration in the form of rouletting was often applied before the vessel had dried, which resulted in a blurred appearance. Overall, the vessels produced at Wharf Road were more varied in terms of vessel- and rim-form than those produced at Castle Street (Symonds 2003a: 84). A third independent workshop also operated in the later tenth century, which mainly specialised in glazed table wares, in-turned bowls and large storage vessels, and was found mostly outside Stamford, including, in large quantities, at Flaxengate (Symonds 2003a: 84).

In the tenth century as a whole, Stamford wares (including EST and ST) represented c. 10% of the ceramic assemblage in Lincoln, which increased to 20% in the eleventh century (Kilmurry 1980: 156). Similar quantities were found at York (Kilmurry 1980: 158). Outside Lincoln, ST also increased, and was listed in the *North Lincolnshire Pottery Type Series* for Winteringham (appendix 2.2.2); Alkborough (appendix 2.2.3); Walcot (appendix 2.2.4); 'Sawcliffe' (appendix 2.2.17); Risby (appendix 2.2.18); Goxhill (appendix 2.3.4); Habrough (appendix 2.3.17); Melton (Ross) (appendix 2.3.19); (Kettleby) 'Thorpe' (appendix 2.3.28); Caistor (appendix 2.3.46); Nettleton (appendix 2.3.47); Beesby (appendix 2.5.19); Scotter (appendix 2.6.2); Grayingham (appendix 2.6.5); Scotton (appendix 2.6.7); Cockerington (appendix 2.10.23); and Ashby (by Partney) (appendix 2.19.14).

'Rural' sites outside Lindsey listed by Kilmurry (1980: 158-59) that yielded ST included the eleventh- and twelfth-century 'castle' sites of Alstoe Mount and Oakham Castle in Leicestershire, some 10 miles to the west of Stamford; and the eleventh-century rural settlement sites of Buckminster, Leicester (13 miles to the northwest of Stamford) and Kirby Bellars (Leics; 21 miles from Stamford) (Kilmurry 1980: 158-59). It thus seems that even in the immediate environs of Stamford, ST did not start to monopolise the assemblages until the eleventh century (Kilmurry 1980: 162). Finally, Kilmurry also draws the attention to the rural site of Baston, 6 miles northeast of Stamford, which has an unusually high proportion of "shelly ware" compared to sandy Stamford ware. Kilmurry identifies a large proportion of this 'shelly' ware as MAX, and suggests that the settlement identity of Baston continued to adhere to 'Anglo-Saxon' rather than 'Danish' values (Kilmurry 1980: 159).

York, at 150km north of Stamford, was the northernmost limit of organised and regular trade in Stamford ware. More northerly examples were merely indicative of irregular and occasional exchange. The absence of Stamford ware storage vessels, and the occurrence of crucibles and cooking pots in the tenth century, and pitchers in the eleventh century, suggests that this trade was in the pottery itself, not the contents (Mainman 1990: 468).

17.2.5.3: Torksey ware (TORK)

See above.

17.2.5.4: Torksey-type ware (TORKT)

See above.

17.2.5.5: Newark-type ware (NEWS)

The wheel-thrown sandy fabric NEWS is petrologically indistinguishable from TORKT (Young and Vince 2005: 92), which makes sense in the light of the discovery of a kiln that produced TORKT at Newark (see above). Only 23 vessels of NEWS have been found in Lincoln to date, deposited between ASH10 and 13 (Young and Vince 2005: 92).

17.2.5.6: Nottingham-type ware (NOTS)

NOTS has mostly been recognised at Flaxengate (f72), but also on 18 other sites in Lincoln, and only occurs in ASH10 (Nailor 2005: 74). Vessel forms included only rounded jars, with the possible exception of a single handle or spout of a form that has never been recognised amongst waster material in Nottingham itself (Nailor 2005: 74).

17.2.5.7: Winchester-type ware (WINC)

WINCH is the southernmost Anglo-Saxon fabric type to have been identified in Lincoln during this period. Only two vessels were found in Lincoln, both discovered at Flaxengate (f72), from ASH10 and MH2 (Young and Vince 2005: 100).

17.2.5.8: Pingsdorf-type ware (PING)

See above.

17.2.6: Late tenth century (Young and Vince AHS11)

The regional wares of TORK, TORKT, EST, ST and STCRUC continue to occur within ASH11, whilst THETT also reappears. Continental imports of PING continue, whilst HUY reappears, and ANDE and ESG are introduced for the first time (Young and Vince 2005: 14).

17.2.6.1: Andenne-type ware (ANDE)

ANDE can be difficult to distinguish from HUY, because of the proximity of the two production sites (Young and Vince 2005: 100). Colours vary from off-white to orange. Less than 30 vessels have been found in Lincoln in ASH11 to MH3 (Medieval Horizon 3, dated to the late twelfth century), all representing jars or pitchers (Young and Vince 2005: 101).

17.2.6.2: Early glazed ware (ESG)

Only a single sherd of this ware has been found during excavations at Lincoln, at Holmes Grainwarehouse (hg72) in Wigford. Decoration betrays parallels with production in Rouen in France, as well as the Badorf *reliefband amphorae*, but chemical analysis of the sherd also allows for a more local, East Midlands or Yorkshire origin. Similar sherds have been found at York, London and the south coast, but none have been found in Stamford, and only a single sherd in Lincoln, which provides a counter-argument for an east Midlands origin (Young and Vince 2005: 75).

APPENDIX 18: POTTERY CODES (AFTER YOUNG AND VINCE 2005: APP. 1)

Fabric code	Fabric name	Date from	Date to
ANDE	Andenne-type ware	1000	1200
ASSHQ	Anglo-Saxon shell and quartz tempered wares	early Anglo-Saxon	middle Anglo-Saxon
ASQSH	Anglo-Saxon quartz and shell tempered wares	400	850
BLBURN	Black-burnished ware	700	900
BLSURF	Black-surfaced ware	700	900
BRBURN	Brown-burnished ware	700	900
CHARN	Charnwood ware	450	800
DERB	Derby-type ware	940	1080
ECHAF	Chaff-tempered fabrics	400	750
ELFS	Early Lincolnshire fine-shelled ware	820	980
ELSW	Early Lincoln glazed ware	870	920
EMSAX	Early of middle Anglo-Saxon	400	870
ERRA	Erratic	-	-
ESAX	Undiagnostic Anglo-Saxon fabrics	400	700
ESAXLOC	Local Anglo-Saxon fabrics	400	700
ESG	Early glazed ware (York type)	870	1050
ESGS	Early to mid Anglo-Saxon greensand quartz-tempered wares	400	800
EST	Early Stamford ware	870	1010
FE	Ironstone tempered ware	400	800
GRBURN	Grey-burnished ware	700	900
HLKT	Horncastle Lincoln kiln-type ware	late tenth century	eleventh century
HUY	Huy-type ware	830	1130
IPS	Ipswich-type ware	750	870
LEST	Leicester-type ware	870	1010
LFS	Lincolnshire Fine-shelled ware	970	1200
LIM	Oolitic limestone-tempered fabrics	400	1070
LIMES	Limestone	400	750
LG	Lincoln gritty ware	870	880
LKT	Lincoln kiln-type shelly ware	870	1000
LSCRUC	Late Anglo-Saxon crucible fabrics	870	1100
LSH	Lincoln shelly ware	870	1120
LSLOC	Late Saxon Local Fabrics	870	1080
LSLs	Lincoln Late Anglo-Saxon sandy ware	870	920
LSPLS	Lincoln Late Anglo-Saxon pale-bodied sandy ware	870	920
LSX	Non-local late Anglo-Saxon fabrics	870	1080
MAX	Northern Maxey-type ware	670	870
MAY	Mayen-type ware	650	900
MSAXLOC	Local middle Saxon fabrics	650	870
NEWS	Newark-type ware	970	1040
NLFS	North Lincolnshire Fine-Shelled ware	975	1100
NLLSG	North Lincolnshire Late Saxon Grey ware	850	1050
NOTTS	Nottingham-type ware	920	1020
ORP	Oxidised red-painted ware	700	1000
PING	Pingsdorf-type ware	1000	1200
RQCL	Central Lincolnshire early to middle Anglo-Saxon rounded quartz fabric	early Anglo-Saxon	middle Anglo-Saxon
SNLOC	Local Saxo-Norman fabrics	870	1150
SNLS	Lincoln Saxo-Norman sandy ware	970	1080
SNX	Non-local Saxo-Norman fabrics	870	1150
SST	Sandstone-tempered fabrics	400	870
SSTMG	Early Anglo-Saxon sandstone-tempered wares (Carboniferous)	450	800

ST	Stamford Ware	970	1200
STCRUC	Stamford-ware crucibles	870	1150
THETT	Thetford-type ware	870	1150
TORK	Torksey ware	870	1100
TORKT	Torksey-type ware	870	1100
WINC	Winchester-type ware	970	1100
YW	York ware	850	950

**APPENDIX 19: LATE ANGLO-SAXON PRODUCTION SITES AND THEIR FABRICS
(AFTER PHILLIPS AND YOUNG 1994):**

	Late ninth c.	Late ninth to early tenth c.	Early tenth to late tenth c.	Late tenth to mid eleventh c.
STAMFORD				
Fine sandy	X	X	X	X
Glazed	X	X	X	X
LINCOLN				
Gritty	X	-	-	-
Sandy	X	X	-	-
Glazed	X	X	-	-
Shelly	X	X	X	-
Sandy (type 2)	-	-	-	X
TORKSEY				
Sandy	X	X	X	X
LEICESTER				
Sandy	X	X	?	?
NOTTINGHAM				
Sandy	-	-	X	?
HORNCASTLE				
Shelly	-	-	X	-
DERBY				
Sandy	-	-	?	X
NEWARK				
Sandy	-	-	-	X

