

# Supplementary Material C

---

TABLE S13.1 ENVIRONMENTAL STEWARDSHIP SCHEME DETAILS	2
TABLE S13.2 SUMMARY OF SURVEY DISTRIBUTION AND RESPONSES	4
TABLE S13.3 REGIONAL ADVISOR MOBILITY	5
TABLE S13.4 ENVIRONMENTAL STEWARDSHIP ADVISOR EXPERTISE	6
TABLE S13.5 REGIONAL PATTERNS OF ADVISOR EXPERTISE	7
TABLE S13.6 REGIONAL VARIATION IN ADVISOR VIEWS REGARDING CLIENT PERCEPTIONS OF THE SCHEMES THEY WISH TO ENTER AND THEIR UNDERSTANDING OF THE APPLICATION PROCESS	8
TABLE S13.7 EMERGENT THEMES CAPTURING SUPPLEMENTARY COMMENTS (N=108) CONCERNING THE IMPORTANCE OF ADVISOR ADVICE	9
TABLE S13.8 RESPONDENTS' VIEWS CONCERNING NATURAL ENGLAND MODIFICATIONS TO HLS APPLICATIONS (% , N=212)	10
TABLE S13.9 RESPONDENTS' VIEWS REGARDING ENVIRONMENTAL STEWARDSHIP PAYMENT AND COMPLIANCE ISSUES (% , N=251)	11
TABLE S13.10 REGIONAL VARIATIONS IN FARM ADVISOR VIEWS REGARDING PAYMENT AND COMPLIANCE ISSUES	12
FIGURE S13.1 REGIONAL VARIATION IN FARM ADVISORS' VIEWS CONCERNING THEIR CLIENTS' PERCEPTION OF ENVIRONMENTAL STEWARDSHIP SCHEME PAYMENT RATES	13
FIGURE S13.2 REGIONAL VARIATION IN FARM ADVISORS' VIEWS CONCERNING THEIR CLIENTS' PERCEPTION OF ENVIRONMENTAL STEWARDSHIP SCHEME INCOME SUSTAINABILITY AND AGREEMENT SANCTIONS AND PENALTIES	14
SURVEY PROTOCOL	15

**Table S13.1** Environmental Stewardship scheme details

Features	ELS (including Upland ELS)	OELS (including Upland OELS)	HLS
<i>Accessibility</i>	<p>Open to all farmers and land managers</p> <p>Farmers and land managers must have management control of the land under agreement for the duration of the contract.</p>	<p>Funds farmers and land managers with certified organic land, or in land in the process of conversion to organic production</p> <p>Farmers and land managers must have management control of the land under agreement for the duration of the contract.</p>	<p>Negotiated with farmers in key target areas, or outside of those areas by employing core target themes.</p> <p>Farmers and land managers must have management control of the land under agreement for the duration of the contract.</p> <p>Joining ELS/OELS is a prerequisite for making an HLS application</p>
<i>Management Level</i>	<p>Whole farm, all land considered ‘farmed’. Must be registered on the Rural Land Register.</p> <p>Basic management provision: Farmers and land managers select from an environmental management options menu to tailor an Agreement in keeping with their farming practices and environmental priorities.</p> <p>Acceptance is determined by a ‘points per hectares’ calculation across eligible land generating a ‘points target’ for the farm.</p>	<p>Organic form of ELS: Whole farm, all land considered ‘farmed’. Must be registered on the Rural Land Register, and basic management provision.</p> <p>Acceptance is determined by a ‘points per hectares’ calculation across eligible land generating a ‘points target’ for the farm.</p>	<p>Whole farm, all land considered ‘farmed’. Must be registered on the Rural Land Register.</p> <p>High priority. More demanding environmental management measures concentrating on aspects requiring land managers to seek advice and support.</p> <p>Environmental options are grouped under three areas: maintenance, restoration and creation with Natural England’s priorities in that order.</p>
<i>Contract Length</i>	5 years	5 years	10 year agreements (although some options may operate for longer)
<i>Agreement requirements</i>	<p>Preserve Farm Environment Record features; select sufficient options (alongside compulsory requirements) to meet ‘points target’ for the farm; manage land parcels indicated on ELS options map and carry out compulsory requirements on upland SDA land. Finally, adhere to scheme terms and conditions, especially cross-compliance rules.</p>	<p>As for ELS but in addition: keep registration and ensure compliance with a certified Organic Inspection Body whilst land is under agreement; and finish conversion of land parcels attracting conversion aid payments by the fifth anniversary of agreement commencement.</p>	<p>Record farm features in the Farm Environment Record and deliver ELS/OELS options. In addition, deliver HLS management options and any capital works detailed in the agreement, whilst adhering to scheme terms and conditions, especially cross-compliance rules.</p>
<i>Payment levels</i>	<p>Standard ELS rate of £30/ha/yr<sup>-1</sup>, with payments of £8/ha/yr<sup>-1</sup> on parcels greater than 15ha above moorland line. Upland ELS rate of £62/ha/yr<sup>-1</sup>, with payments of £23/ha/yr<sup>-1</sup> on parcels greater than 15ha above moorland</p>	<p>Standard rate of £60/ha/yr<sup>-1</sup></p> <p>Organic conversion aid payments are £175 per ha (improved land : first two years) and £600 per ha (top fruit orchards: first three years). Uplands OELS rate of £92/ha/yr<sup>-1</sup></p>	<p>No set payment amounts, but higher than ELS/OELS. Payments vary according to the scale of work agreed to be undertaken. Payments made in two instalments each representing 50% of the total annual payment</p>

---

	line.		
<i>Coverage</i>	6,040,367 ha	313,046 ha	HLS (alone)
	45,101 agreements	2,110 agreements	139,934 ha
	£167.6 Million (annual value)	£20.3 Million (annual value)	1563 agreements
			£26 Million (annual value)
		For UELS/U(O)ELS	
		1,324,215 ha	HLS (part of ELS/OELS)
		7,959 agreements	1,141,889 ha
		£96.9 Million (annual value)	11,760 agreements
			£185.5 Million (annual value)

---

**Table S13.2** Summary of survey distribution and responses

	<i>n</i>	<i>n</i>	%
<b>Sample – unique entries identified</b>		<b>958</b>	
Less:			
Bounces and non-functioning emails	118		
Subtotal		118	
<b>Survey successfully delivered</b>		<b>840</b>	<b>100</b>
Did not visit the study website		486	57.9
Opted out of survey (qualified but not interested)		29	3.5
Started but did not finish full survey		74	8.8
<b>Finished full survey - completes</b>		<b>251</b>	<b>29.9</b>

**Table S13.3** Regional advisor mobility

Region	Intra-regional working (%)	Cross-regional working (%)			
		Region Alone	One Additional Region	Two Additional Regions	Three Additional Regions
East Midlands	40.0	30.0	15.0	12.5	2.5
West Midlands	64.0	18.0	8.0	8.0	2.0
East of England	65.1	18.6	9.3	4.6	2.3
North East	42.8	19.1	33.3	4.7	0.0
North West	55.5	19.4	19.4	5.6	0.0
South East	50.0	25.0	15.0	7.5	2.5
South West	75.4	11.5	3.3	8.2	1.6
Yorkshire-Humberside	41.8	30.2	13.9	13.9	0.0
<i>Mean</i>	<i>54.3</i>	<i>21.5</i>	<i>14.7</i>	<i>8.1</i>	<i>1.4</i>
<i>Std Dev</i>	<i>12.9</i>	<i>6.5</i>	<i>9.1</i>	<i>3.4</i>	<i>1.2</i>

**Table S13.4** Environmental Stewardship advisor expertise

<b>Level of Expertise (no. of ES Schemes)</b>	<b>Percentage of Advisors (% , <i>n</i>=245)</b>	<b>Type of ES Scheme</b>	<b>Percentage Expertise<sup>a</sup> (% , <i>n</i>=245)</b>
1	12.3	ELS	93.4
2	31.5	HLS	82.7
3	42.2	OELS	48.7
4	14.3	U(O)ELS	34.4

<sup>a</sup> Percentages do not sum to 100 as respondents could select more than one option.

**Table S13.5** Regional patterns of advisor expertise

<b>Region</b>	<b>ES Scheme Combinations (Advisor Frequency)<sup>a</sup></b>
East Midlands	ELS & HLS (7); ELS, OELS & HLS (7); ELS, U(O)ELS & HLS (2)
West Midlands	ELS (4); HLS (3); ELS & HLS (9); ELS & OELS (1); ELS, OELS & HLS (4); ELS, U(O)ELS & HLS (3); ELS, OELS & U(O)ELS (1); ELS, OELS, U(O)ELS & HLS (7)
East of England	HLS (1); ELS & HLS (17); ELS, OELS & HLS (9)
North East	ELS (1); HLS (1); ELS & HLS (2); ELS, U(O)ELS & HLS (5); ELS, OELS, U(O)ELS & HLS (1)
North West	HLS (1); ELS & HLS (2); ELS & U(O)ELS (3); ELS, U(O)ELS & HLS (7); ELS, OELS & U(O)ELS (2); ELS, OELS, U(O)ELS & HLS (5)
South East	HLS (1); ELS & HLS (7); ELS, OELS & HLS (11)
South West	ELS (4); HLS (4); ELS & HLS (5); ELS & OELS (2); ELS & U(O)ELS (1); U(O)ELS & HLS (1); ELS, OELS & HLS (15); ELS, OELS & U(O)ELS (5); ELS, OELS, U(O)ELS & HLS (9)
Yorkshire-Humberside	ELS (3); ELS & HLS (4); U(O)ELS & HLS (1); ELS, U(O)ELS & HLS (5); ELS, OELS & U(O)ELS (1); ELS, OELS, U(O)ELS & HLS (4)

<sup>a</sup> Limited to those ES advisors that work within these regions only

**Table S13.6** Regional variation in advisor views regarding client perceptions of the schemes they wish to enter and their understanding of the application process

Q9. What percentage of clients has a clear idea of the stewardship scheme they wish to choose?

<b>Region</b>	<b>Less than 25%</b>	<b>Between 25% and 50%</b>	<b>Between 50% and 75%</b>	<b>More than 75%</b>	<b>Below 50%</b>	<b>Above 50%</b>
East Midlands (n=16, %)	18.8	25.0	25.0	31.3	<b>43.8</b>	<b>56.3</b>
West Midlands (n=32, %)	9.4	34.4	37.5	18.8	<b>43.8</b>	<b>56.3</b>
East of England (n=28, %)	7.1	25.0	46.4	21.4	<b>32.1</b>	<b>67.9</b>
North East (n=9, %)	0.0	0.0	44.4	55.6	<b>0.0</b>	<b>100.0</b>
North West (n=20, %)	20.0	45.0	20.0	15.0	<b>65.0</b>	<b>35.0</b>
South East (n=20, %)	15.0	35.0	10.0	40.0	<b>50.0</b>	<b>50.0</b>
South West (n=46, %)	15.2	23.9	23.9	37.0	<b>39.1</b>	<b>60.9</b>
Yorkshire/Humberside (n=18, %)	11.1	5.6	33.3	50.0	<b>16.7</b>	<b>83.3</b>

Q10. Of those clients identified in Q9 with a clear idea of the scheme they wish to choose, what percentage understand what these schemes involve (in terms of the application process)?

<b>Region</b>	<b>Less than 25%</b>	<b>Between 25% and 50%</b>	<b>Between 50% and 75%</b>	<b>More than 75%</b>	<b>Below 50%</b>	<b>Above 50%</b>
East Midlands (n=16, %)	37.5	31.3	31.3	0.0	<b>68.8</b>	<b>31.3</b>
West Midlands (n=32, %)	50.0	34.4	12.5	3.1	<b>84.4</b>	<b>15.6</b>
East of England (n=28, %)	35.7	39.3	21.4	3.6	<b>75.0</b>	<b>25.0</b>
North East (n=9, %)	33.3	33.3	33.3	0.0	<b>66.7</b>	<b>33.3</b>
North West (n=20, %)	50.0	40.0	10.0	0.0	<b>90.0</b>	<b>10.0</b>
South East (n=20, %)	30.0	25.0	30.0	15.0	<b>55.0</b>	<b>45.0</b>
South West (n=46, %)	37.0	39.1	17.4	6.5	<b>76.1</b>	<b>23.9</b>
Yorkshire/Humberside (n=18, %)	11.1	50.0	33.3	5.6	<b>61.1</b>	<b>38.9</b>



**Table S13.7** Emergent themes capturing supplementary comments (n=108) concerning the importance of advisor advice

Emergent descriptive themes	(n)
Advice necessary to ensure that farmers and land managers select the most appropriate ES scheme and environmental management options for their farmed environment and implement schemes correctly.	38
Farmers and land managers recognise the need for technical input in applying for an ES scheme (esp. HLS) and appreciate, trust and prefer independent advice.	13
Advice provides a useful input but ultimately farmers and land managers decide (i.e. in relation to agreement content) based on what best suits their needs and fits in with their farming regime.	6
Natural England advice is also important, as is acting as a facilitator between clients and Natural England.	6
Many farmers and land managers are often not aware of the range of environmental management options available under ES that are appropriate for their farming practices.	5
Although my advice is important farmers and land managers tend to be more interested in selecting environmental options that maximise financial benefits rather than environmental gains.	5
Advice important to make farmers and land managers aware of ES scheme contractual requirements and associated restrictions and cross-compliance issues.	4
External factors are more important in influencing farmer decision-making than my advice vis-a-vis determining the type and content of a submitted ES agreement.	4
Advice is essential for getting farmers to participate in ES schemes.	3
Advice has a public benefit by trying to ensure ES agreements secure public goods and use public money wisely.	2
Other	22

**Table S13.8** Respondents' views concerning Natural England modifications to HLS applications (% , n=212)

Statement	Highly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Highly agree	I don't know
I should be involved in discussions which lead to options changes in finalised HLS agreements	1.4	2.8	7.5	27.1	60.7	0.5
It is fine for Natural England advisors to make final option changes to HLS applications without my input	46.7	35.5	7.9	5.6	3.7	0.5
The changes made to HLS applications by Natural England advisors are made in the best interests of my clients	18.2	42.5	28.9	6.5	0.9	2.8
The changes made to HLS applications by Natural England advisors are made to favour the interests of Natural England, which may or may not accord with those of my client	1.4	6.1	21.9	39.3	27.6	3.7

**Table S13.9** Respondents' views regarding Environmental Stewardship payment and compliance issues (% , n=251)

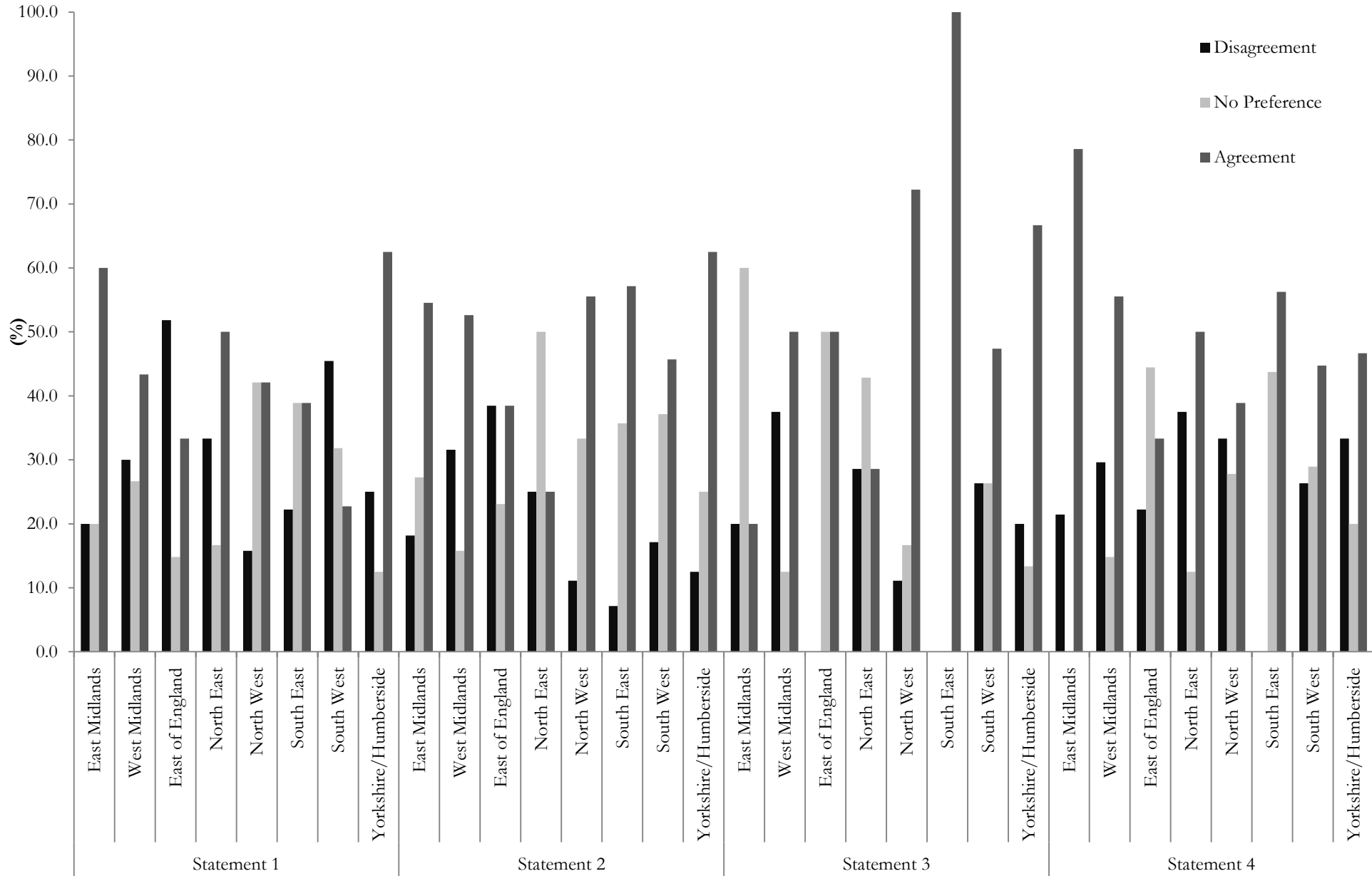
Statement	Highly disagree	Somewhat disagree	Neither Agree nor Disagree	Somewhat agree	Highly agree	I don't know
Your clients are satisfied with a standard ELS payment of £30 ha yr <sup>-1</sup>	9.2	23.5	23.9	32.7	4.0	6.8
Your clients are satisfied with a standard OELS payment of £60 ha yr <sup>-1</sup>	4.8	10.0	18.3	25.9	3.6	37.5
Your clients are satisfied with a standard U(O)ELS payment of £62 ha yr <sup>-1</sup>	3.6	8.0	10.4	21.9	1.6	54.6
Your clients are satisfied with the payment they receive from the HLS scheme	3.2	16.7	23.1	37.5	5.6	13.9
Your clients are satisfied that the payment amounts provided by these stewardship schemes afford an adequate income stream	7.6	28.3	26.3	32.7	3.2	2.0
Your clients are satisfied that payments provided by stewardship schemes adequately match changes in labour and material costs	15.1	41.4	18.3	20.3	0.8	4.0
Your clients understand the extent of the penalties that may be applied if they fail to fully comply with the terms of the agreements	8.8	25.1	12.0	37.8	13.5	2.8
Your clients regard the sanctions that may be applied in instances of non-compliance as entirely reasonable	13.5	31.1	26.7	16.3	3.	8.8

**Table S13.10** Regional variations in farm advisor views regarding payment and compliance issues

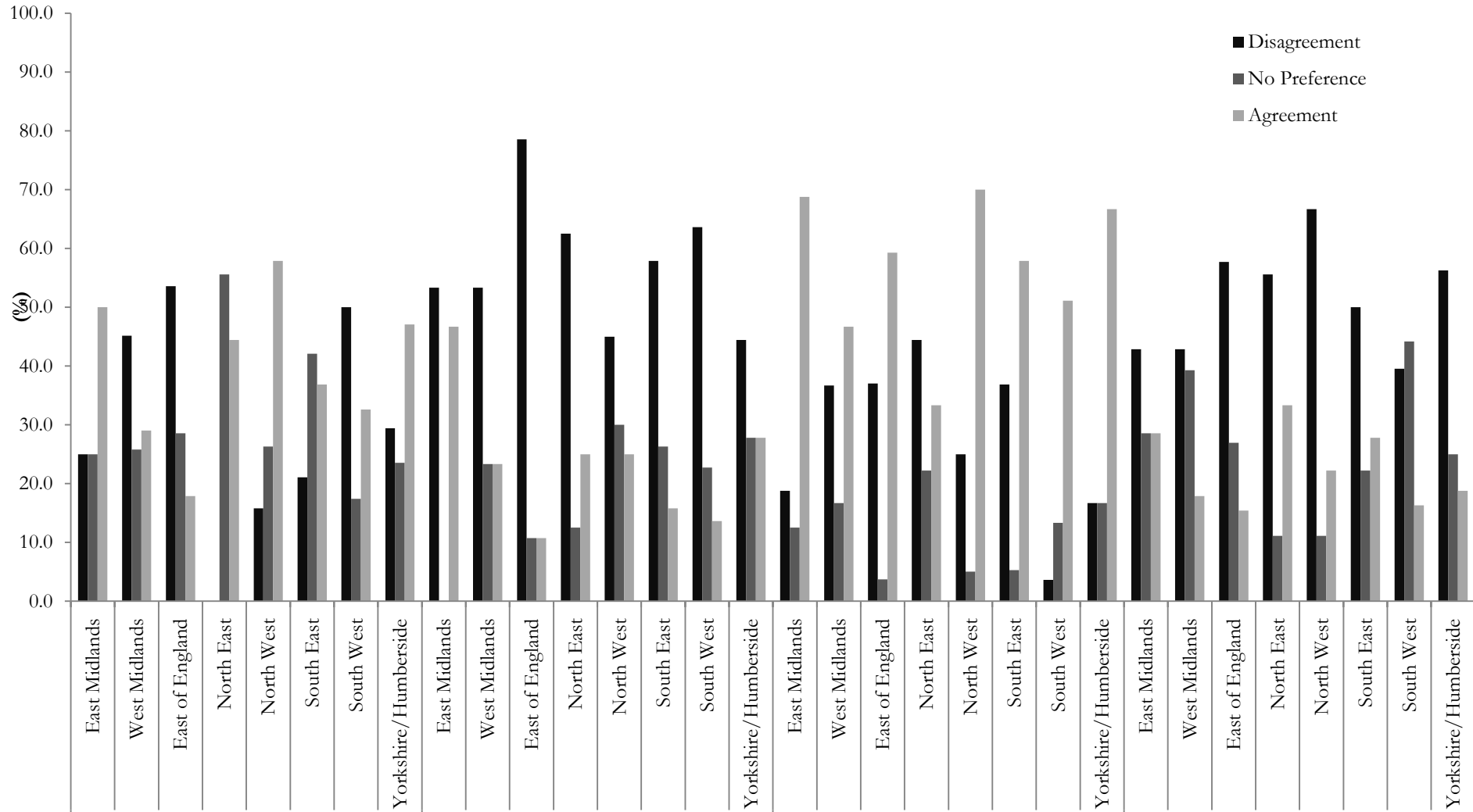
Statement	Regional Heterogeneities
Your clients are satisfied with a standard ELS payment of £30 ha yr <sup>-1</sup>	Distribution of statement responses varies significantly across regions (N=368, df=7, H(2)=28.25, p<0.000)
Your clients are satisfied with a standard OELS payment of £60 ha yr <sup>-1</sup>	Distribution of statement responses varies significantly across regions (N=370, df=7, H(2)=19.75, p=0.006)
Your clients are satisfied with a standard U(O)ELS payment of £62 ha yr <sup>-1</sup>	Distribution of statement responses varies significantly across regions (N=371, df=7, H(2)=134.955, p<0.000)
Your clients are satisfied with the payment they receive from the HLS scheme	Distribution of statement responses varies significantly across regions (N=370, df=7, H(2)=14.78, p=0.039)
Your clients are satisfied that the payment amounts provided by these stewardship schemes afford an adequate income stream	Distribution of statement responses varies significantly across regions (N=367, df=7, H(2)=38.98, p<0.000)
Your clients are satisfied that payments provided by stewardship schemes adequately match changes in labour and material costs	Distribution of statement responses varies significantly across regions (N=370, df=7, H(2)=17.80, p=0.013)

A note about the analysis: Comparisons were made between advisor's who worked in only single regions (189 out of 251 respondents). Due to the variation in the number of advisors between regions, regions were standardised according to the most populous region – the South West – this standardisation (or multiple) was used to equalise the frequency of responses for each statement between regions: producing equal response sizes. Hence the reason why (N) in the above statistic does not equal 189. Kruskal-Wallis Statistics were performed on the data using SPSS version 23. This non-parametric test was employed due to the ordinal nature of the data and its lack of conformity to the standard assumptions underlying parametric statistical tests.

**Figure S13.1** Regional variation in farm advisors' views concerning their clients' perception of Environmental Stewardship scheme payment rates (Q38 see Table S9 tope four statements)



**Figure S13.2** Regional variation in farm advisors' views concerning their clients' perception of Environmental Stewardship scheme income sustainability and agreement sanctions and penalties (Q39 see Table S9 bottom four statements)



## Survey Protocol

Pre-Survey Invitation 08.10.2013

Greetings,

I am emailing you to request your participation in an online-survey regarding Natural England's Stewardship schemes.

This survey intends to investigate the intermediary role played by stewardship advisors in generating stewardship agreements and the way this relates to environmental performance. The views of stewardship advisors have not been considered before, and the role of agreement formation in influencing agri-scheme delivery in general is little studied. This therefore represents a vital area of new research.

This survey forms part of my doctoral research at the University of York and therefore its success depends upon the goodwill and participation of people like you.

The survey will take 20 – 25 minutes to complete but may be completed in more than one sitting. Only those advisors registered with Natural England have been contacted and I am writing in advance because people like to know ahead of time that a survey will be arriving.

If you do not wish to participate please either let me know by email or simply log into the survey when it arrives and opt-out on page 5, you will then be removed from the email distribution list.

If you have any questions regarding the survey then please contact me (Adam Hejnowicz – [aph504@york.ac.uk](mailto:aph504@york.ac.uk)) or my supervisor Dr Murray Rudd ([murray.rudd@york.ac.uk](mailto:murray.rudd@york.ac.uk)).

Many thanks in advance,

Adam P Hejnowicz

Environment Department

University of York

Heslington

York, YO10 5DD

[www.york.ac.uk/environment/](http://www.york.ac.uk/environment/)

Full Survey Invitation 15.10.2013

Greetings,

I am emailing to request your participation in an online survey regarding Natural England's stewardship schemes.

The aim of the survey is to investigate the role stewardship advisors play in facilitating Natural England's stewardship schemes, specifically, from the perspective of agreement formation and the constitution of agreements with regards to environmental performance. This is crucial for us to understand how land management policy strategies geared to the generation of a range of important ecosystem and social services actually work.

The survey is entirely voluntary, but if you could take 20 – 25 minutes of your time to complete it we would be most grateful. We recognise this is a significant investment of time so we use cookies to allow you to complete the survey in more than one sitting should you wish to do so, so please have your browser settings enabled to accept cookies.

To access the survey proceed to the link below:

[[Hyperlink]]

Importantly, all information you supply is located on a secure server and will remain entirely confidential and anonymous and will not be distributed to third parties. Finally, a copy of the research output will be made available to you.

Thank you for taking the time to read this email and, in advance, for accommodating room in a busy schedule to complete this survey.

If you have any further questions regarding this survey please contact me (Adam Hejnowicz – aph504@york.ac.uk) or my supervisor Dr Murray Rudd (murray.rudd@york.ac.uk).

Kindest regards,

Adam P Hejnowicz

PhD Researcher

Environment Department

University of York

Heslington,

York

YO10 5DD

www.york.ac.uk/environment/



First Survey Reminder 22.10.2013

Hello,

Last week we sent you a questionnaire seeking your views on Natural England's stewardship schemes in your role as a stewardship advisor.

If you have already completed and returned the questionnaire please accept our sincere thanks. We are grateful for your help because it is only by asking people like you to share your views that we can understand how stewardship schemes function, as a policy strategy, to provide a range of environmental services.

If you did not receive a questionnaire, or have not yet completed it, you can access the survey at:

[[Hyperlink]]

Thanks again for your participation in this survey.

Sincerely,

Adam P Hejnowicz

PhD Researcher

Environment Department

University of York

Heslington

YO10 5DD

[www.york.ac.uk/environment/](http://www.york.ac.uk/environment/)

Second Survey Reminder 30.10.2013

Greetings,

We recently sent a questionnaire to you asking your opinions regarding Natural England's stewardship schemes from your perspective as a stewardship advisor. To the best of our knowledge it hasn't yet been returned.

The results received so far from stewardship advisors who have recently responded demonstrate an interesting variety of opinions and recommendations. We think that the information will be very useful in helping us understand how stewardship scheme agreements function and deliver programmes that seek to provide a range of important environmental services.

We are writing again because of the importance that your questionnaire has for providing accurate results. It's only by hearing from nearly everyone in the sample that we can be sure the results are truly representative.

To access the survey, you can proceed to the link below:

[[Hyperlink]]

As a reminder your confidentiality and anonymity is paramount to us and all the data you supply is located on a secure server, is seen only by the primary researcher and is not distributed to third parties.

We hope that you will fill out and return the questionnaire soon but if you prefer not to answer it for any reason, please let us know by going to the survey and opting out on page 5. By doing this you will be removed from the email distribution list.

If you have any questions about the survey please contact me (Adam Hejnowicz – [aph504@york.ac.uk](mailto:aph504@york.ac.uk)) or my supervisor Dr Murray Rudd ([murray.rudd@york.ac.uk](mailto:murray.rudd@york.ac.uk)).

Thank you very much,

Adam P Hejnowicz

PhD Researcher

Environment Department

University of York

Heslington

[www.york.ac.uk/environment/](http://www.york.ac.uk/environment/)

Final Survey Reminder 07.11.2013

Greetings,

Since 8th October 2013 we have sent you several emails about a study regarding the role of stewardship advisors in Natural England's stewardship schemes.

The purpose of the survey is to investigate your role (as an intermediary advisor) in determining the functionality and performance of Natural England's Stewardship schemes through the important process of developing agreements in conjunction with your clients.

This study is drawing to a close and will remain open now only for a few more days. This is the last contact that will be made with the sample of Natural England registered stewardship advisors.

We are sending this final contact because of our concern that people who have not responded may have different opinions from those who have. Hearing from stewardship advisors across the country with different experiences and opinions helps ensure that the survey results are as accurate as possible.

We also want to assure you that your response is voluntary and if you prefer not to respond that is fine. It would be very helpful if you could let us know by simply going to the survey site, logging in, and then opting out of the survey on page 5.

You can access the survey at:

[[Hyperlink]]

Finally, we appreciate your willingness to consider our request as we conclude this effort to better understand the role of intermediaries in aiding the performance and delivery of Natural England's stewardship schemes.

Thank you very much,

Adam P Hejnowicz

PhD Researcher

Environment Department

University of York

Heslington

York, YO10 5DD

[www.york.ac.uk/environment/](http://www.york.ac.uk/environment/)