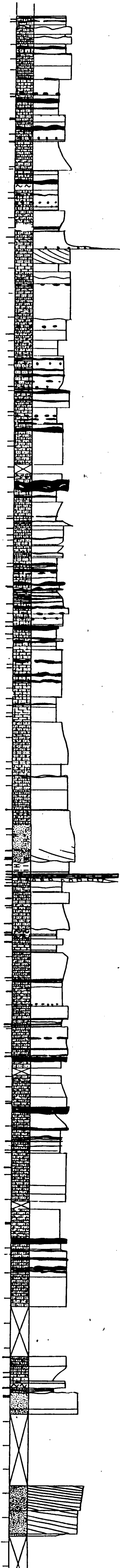
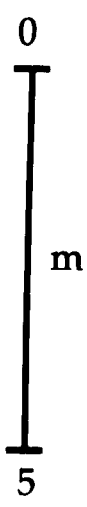


ENCLOSURE 3

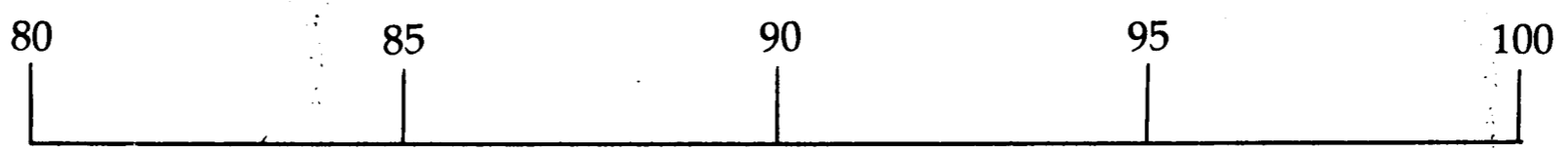
Stratigraphic log of the mid-Carboniferous strata at Arrow Canyon showing positions from where samples were collected.



- ← ACR59
- ← ACR57
- ← ACR54
- ← ACR51
- ← ACR50
- ← ACR49
- ← ACR48b
- ← ACR45
- ← ACR43
- ← ACR42
- ← ACR38
- ← ACR36
- ← ACR35
- ← ACR34
- ← ACR32b
- ← ACR30
- ← ACR29
- ← ACR27
- ← ACR26
- ← ACR25
- ← ACR24
- ← ACR21
- ← ACR19
- ← ACR18
- ← ACR18b
- ← ACR17
- ← ACR16
- ← ACR15
- ← ACR11
- ← ACR10
- ← ACR8 ACR8a
- ← ACR7
- ← ACR5
- ← ACR4
- ← ACR1
- ← AC100b
- ← AC101
- ← AC102
- ← AC103
- ← AC104
- ← AC105
- ← AC106
- ← AC108
- ← AC109
- ← AC110a
- ← AC110b
- ← AC111
- ← AC112b
- ← AC111b
- ← AC113a
- ← AC111c
- ← AC116
- ← AC117
- ← AC119
- ← AC119a
- ← AC121
- ← XAC12
- ← XAC11
- ← XAC9
- ← XAC8
- ← XAC7
- ← XAC6
- ← XAC5
- ← XAC4
- ← XAC3
- ← XAC2
- ← XAC1



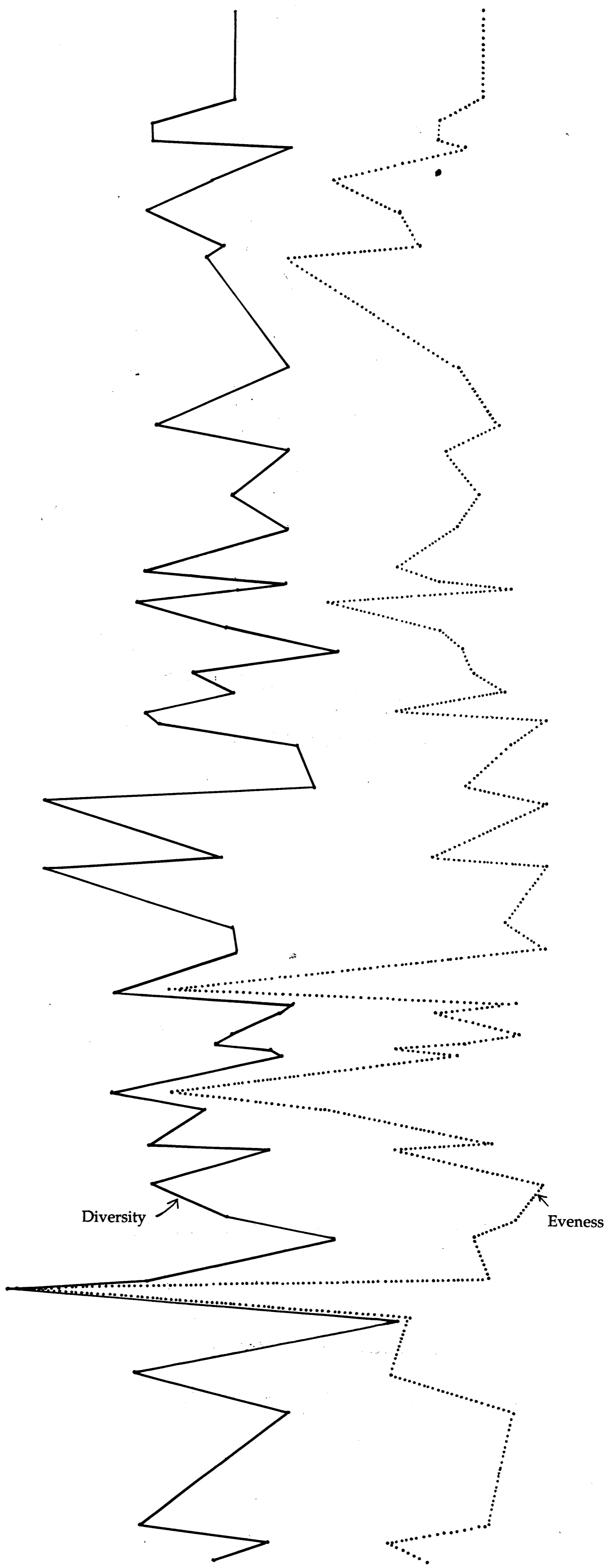
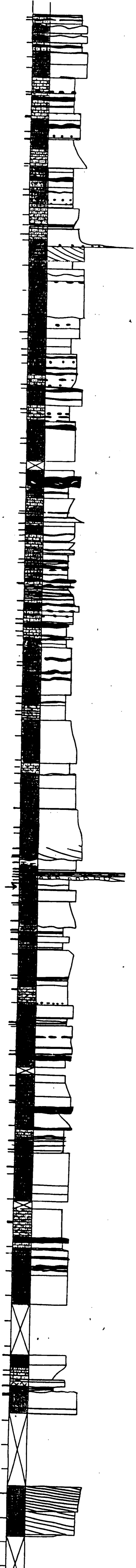
Evenness (%)



Diversity

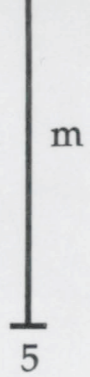
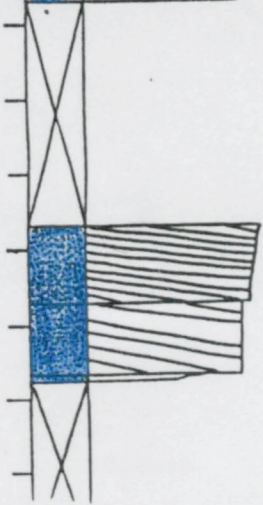


Mid-Carboniferous boundary



Microfacies







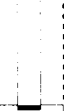








































ENCLOSURE 2

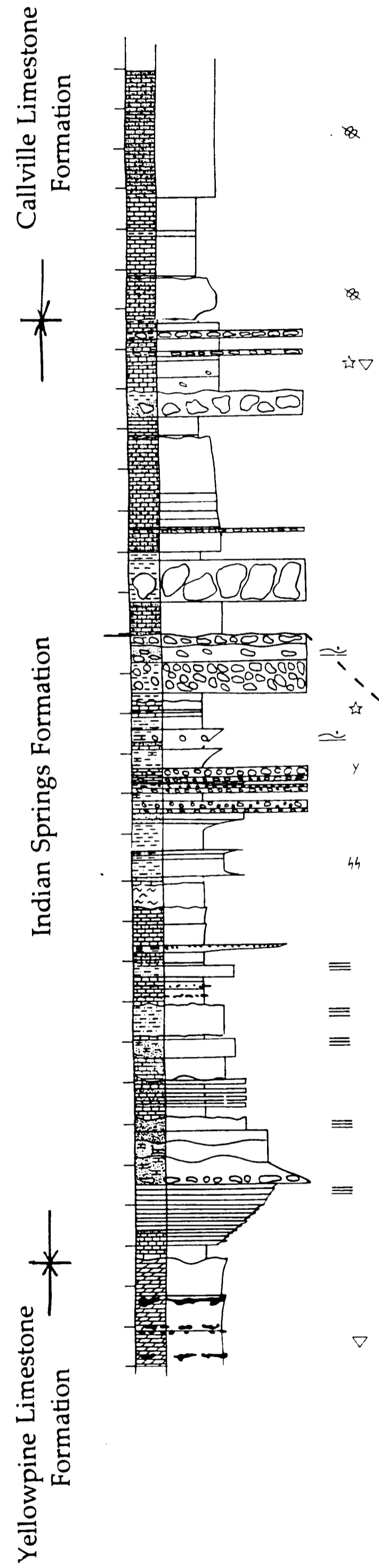
Stratigraphic log of the mid-Carboniferous strata at Arrow Canyon plotted with standard microfacies types and diversity and evenness faunal values.

Microfacies

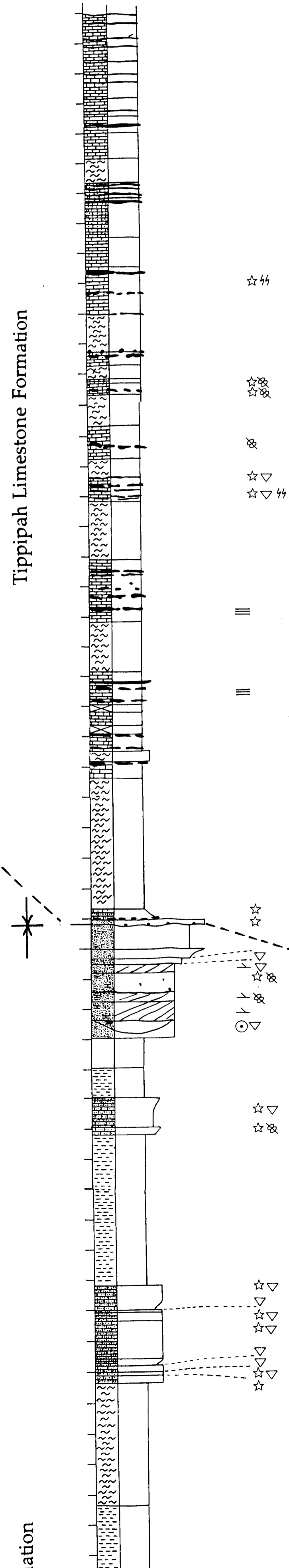


| | | | |
|--|--|--------------------------------|--|
| | | <i>G. coronatum</i> |  |
| | | <i>G. cf. crenellatum</i> |  |
| | | <i>G. crenellatum</i> |  |
| | | <i>G. crenulatum</i> |  |
| | | <i>G. cf. crenulatum</i> |  |
| | | <i>G. lineatum</i> |  |
| | | <i>G. cf. lineatum</i> |  |
| | | <i>G. listeri</i> |  |
| | | <i>G. rufum</i> |  |
| | | <i>G. spina</i> |  |
| | | <i>G. aff. suberatum</i> |  |
| | | <i>G. aff. branygnum</i> |  |
| | | <i>G. sp.</i> |  |
| | | <i>G. branygnum</i> |  |
| | | <i>G. ostium</i> |  |
| | | <i>G. ovalense</i> |  |
| | | <i>G. meskium</i> |  |
| | | <i>G. multicomutum</i> |  |
| | | <i>G. shrockii</i> |  |
| | | <i>G. simplex</i> |  |
| | | <i>G. cf. unita</i> |  |
| | | <i>G. unita</i> |  |
| | | <i>G. uetisense</i> |  |
| | | <i>G. subplicatus</i> |  |
| | | <i>G. beati</i> |  |
| | | <i>G. aff. concentricus</i> |  |
| | | <i>G. cf. concentricus</i> |  |
| | | <i>G. concentrica</i> |  |
| | | <i>G. cresata</i> |  |
| | | <i>G. aff. hudson</i> |  |
| | | <i>G. kühnerensis</i> |  |
| | | <i>G. maximus</i> |  |
| | | <i>G. moorei</i> |  |
| | | <i>G. mucronatus</i> |  |
| | | <i>G. radialis</i> |  |
| | | <i>G. sphaerostriatus</i> |  |
| | | <i>G. aff. sphaerostriatus</i> |  |
| | | <i>G. spinifer</i> |  |
| | | <i>G. cf. striatus</i> |  |
| | | <i>G. striatus</i> |  |
| | | <i>G. strippus</i> |  |
| | | <i>G. cf. uersuolowensis</i> |  |
| | | <i>G. uetrensis</i> |  |

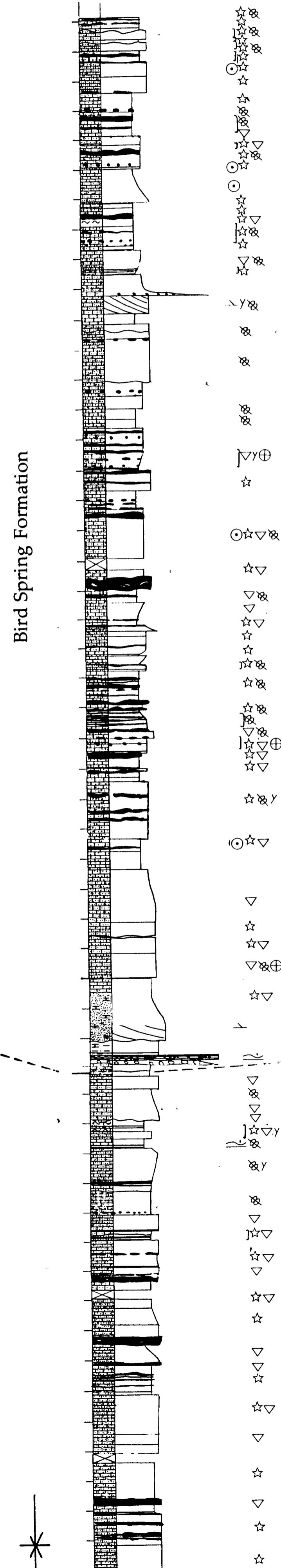
FRENCHMAN MOUNTAIN



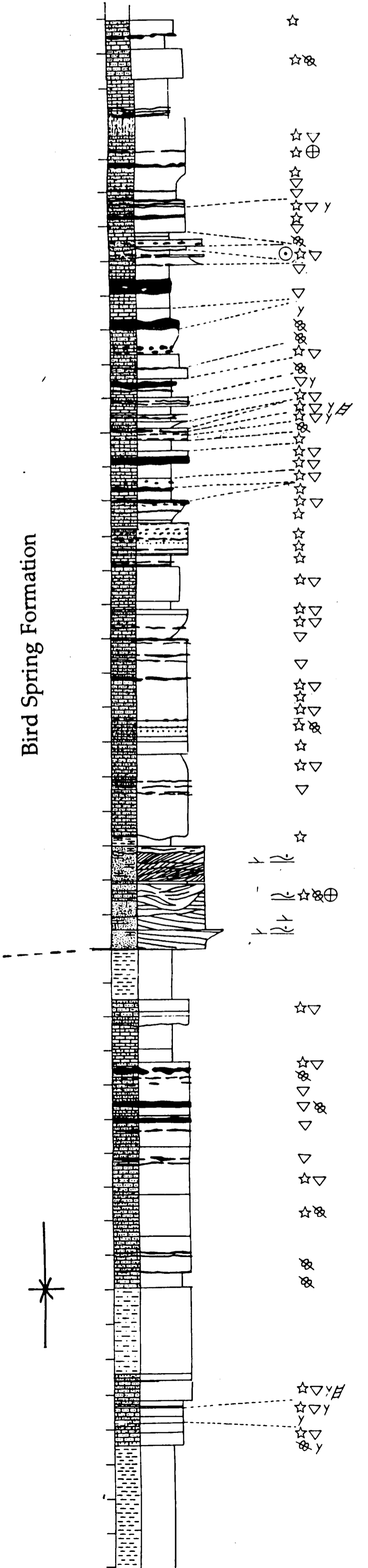
INDIAN SPRINGS



ARROW CANYON



KANE SPRINGS WASH



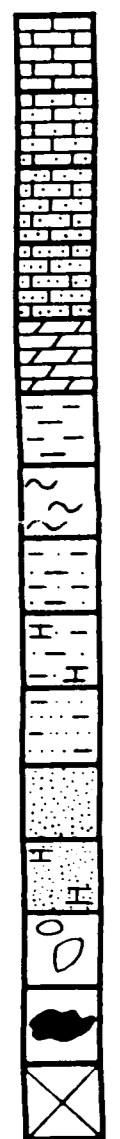
PENNSYLVANIAN
MISSISSIPPIAN

PENNSYLVANIAN
MISSISSIPPIAN

PENNSYLVANIAN
MISSISSIPPIAN

Key

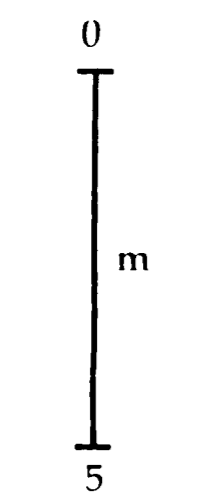
- | | | | |
|--|---------------|--|-------------------------------|
| | Lime mudstone | | Cross-bedding |
| | Wackestone | | Planar bedding |
| | Packstone | | Flaser bedding |
| | Grainstone | | Ripples (symmetrical) |
| | Dolomite | | Hummocky cross-stratification |
| | Shale | | Bioturbation |



- Lime mudstone
- Wackestone
- Packstone
- Grainstone
- Dolomite
- Shale
- Marl
- Siltstone
- Calcareous siltstone
- Silty sandstone
- Sandstone
- Calcareous sandstone
- Conglomerate
- Chert
- Unexposed

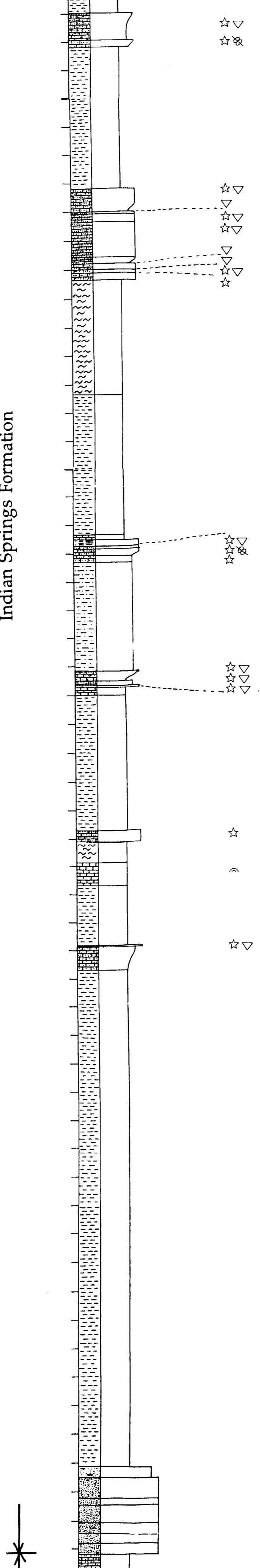
Key

- Cross-bedding
- Planar bedding
- Flaser bedding
- Ripples (symmetrical)
- Hummocky cross-stratification
- Bioturbation
- Ooids
- Crinoids
- Brachiopods
- Shell hash
- Bryozoa
- Coral
- Algae
- Algal mat
- Plant debris
- Stigmaria*

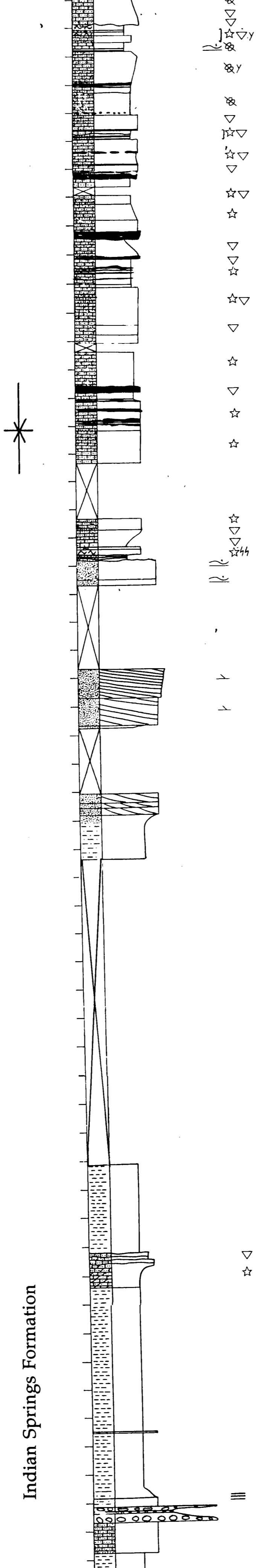


Scale 1:100

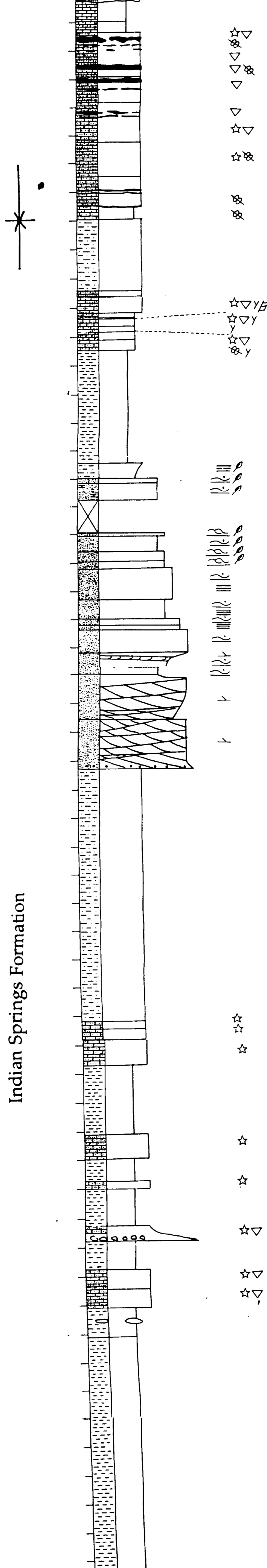
Indian Springs Formation



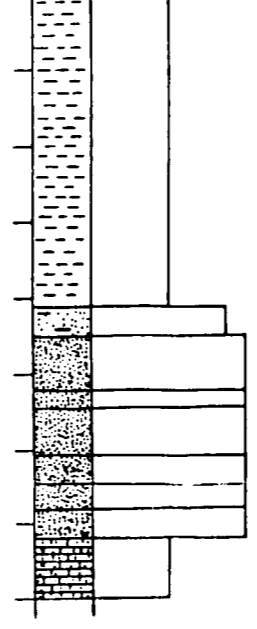
Indian Springs Formation



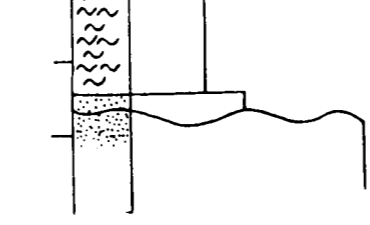
Indian Springs Formation



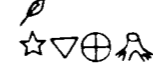
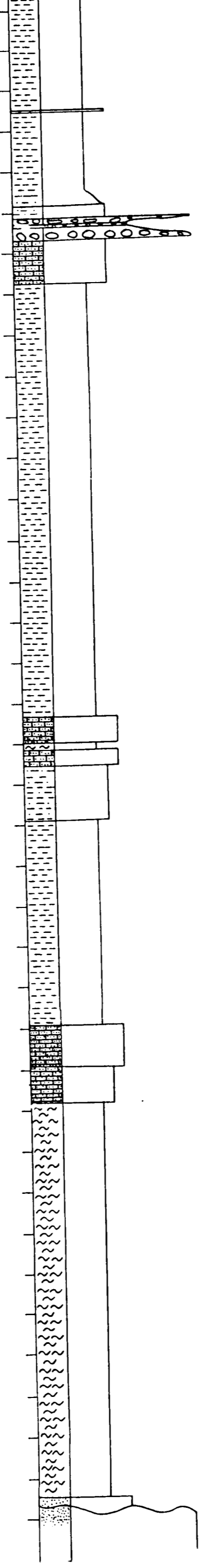
Yellowpine Limestone
Formation



Battleship Wash
Formation



Indian Springs Fc



Chainman Shale Formation

