WESTWARD HO!

THE ANIMAL BONES,

The bone was recovered by hand in the case of the larger fragments, and more frequently from the fine sieving of column samples taken for mollusca. Much of this material was highly fragmented, very small, and in many cases unidentifiable. The measurements were taken according to Jones et al (1976) and are itemised in the appendix.

From the peat the slow worm (<u>Anguis fragilis</u>) was identified from the characteristic bony scales that cover the body. This species prefers well vegetated habitats, with extensive ground cover, often in damp situations, (Arnold and Burton 1978, 175). It is frequently found in certain coastal areas in the south and west of England, (Smith 1969, 173).

Larger mammals from the peat include a fragment of cervid/bovid sized rib, and two burnt fragments. At the transition between the peat and clay the lower third molar of a pig (Sus scrofa), the enamel was burnt, and the length of this tooth (see appendix) indicates this animal was wild (Clason 1967). Also present was the proximal end of a right radius of a red deer (Cervus elaphus).

In the midden more slow worm scales were found, frog (Rana sp) was identified from a maxilla, and the bank vole (Clethrionymys glareolus) from two molars. This animal is typically found in woods, on their edges and in clearings (Hanak 1977, 108). Other small mammal fragments were unidentifiable to species. The distal end of a red deer right humerus and a cervical vertebra were found, and other fragments of ?red deer were suggested by the proximal posterior surface of a metatarsal shaft, the eroded proximal end of a humerus and a lunate. A few pieces of cervid/bovid bone from within the midden were not specifically identifiable, some of these were lightly burnt. Roe deer (Capreolus capreolus) was identified from the distal end of left metacarpal and the proximal end of right humerus.

The most interesting find from the midden was the broken tuber area of a bovid calcaneum, the measurements of this specimen fit within the lower range (female) for <u>Bos primigenius</u>. From the boundary of the midden and clay the distalend of a very eroded bovid radius was measured, this also fitted the lower size range for <u>Bos primigenius</u> (Grigson pers comm). The lower size range for auroch also overlaps with the larger domestic range, but given that these specimens are securely stratified within Mesolithic deposits it is assumed that they belong to <u>Bos primigenius</u>.

Two eroded metapodial fragments were also found, one frag-

ment of the proximal articulation and shaft of a right metatarsal, and a fragment of the posterior surface of the midshaft, both of these bones matched red deer, but they are so fragmentary that these identifications must be tentative. Other bones from the midden included three very small fish vertebrae which may belong to the tail of a single individual. These proved impossible to identifify, but fitted most closely to the gobies (Gobiidae) a shallow water coastal group. If this suggestion is correct these vertebrae may be the the remains of a predators meal caught on the shoreline.

The clay itself contained little material except for a cervid/bovid tooth fragment, a vole incisor and one frog bone. The unstratified bone included a fragment of roe deer metatarsal, and the lightly burnt distal end of metapodial which could also belong to roe deer.

The species identified suggest wooded conditions, with the exception of the frog and fish bones, and both of these could be explained as the food remains of another animal. The slow worm, bank vole and the larger mammals are all found in areas that are at least partly wooded, and bear evidence of man's hunting activities on the pig tooth and other burnt fragments.

No comparison has been made with the animal bone identified from previous excavations at Westward Ho! (Rogers 1946-7 and Churchil) 1965), since there is some doubt about the comparability of the stratigraphy and in one case the identification of Bos longifrons in a mesolithic context must be doubtful.

I should like to thank Dr C Grigson for commenting on the bone and comparing measurements of <u>Bos primigenius</u>, Dr P Armitage for he;ing with comparative material, Mr R Jones for identifying the small mammal bones and Mr A Wheeler for examining the fish bone.

Alison Locker 5:3:84

## REFERENCES

ARNOLD E N. BURTON J A 1978. A Field Guide to the Reptiles and Amphibians. Collins

CHURCHILL D M 1965. The Kitchen Midden Site at Westward Ho! Devon. England: ecology, age, and relation to changes in land and sea level. Proceedings of the Prehistoric Society. pp 74-84

CLASON A 1967 Animals and Man in Holland's Past (An investigation of the Animal World surrounding Man in the Prehistoric and Early Historic times in the provinces of North and South Holland, Vols A & B. JB Walters, Groningen.

HANAK V 1977. A Colour Guide to Familian Mammals. Octopus.

JONES R T, WALL S M, LOCKER A M, COY J, MALTBY 1976 Ancient Monuments Laboratory. DoE. Computer Based Osteometry, Data Capture User Manual (1). Ancient Monuments Laboratory Report No 3342.

ROGERS E H 1946-7 The Raised Beach, Submerged Forest and Kitchen Midden of Westward Ho! and the Submerged Stone Row of Yelland. <u>Proceedings of the Devon Archaeological</u> Society, Vol 3, pp 109-135.

SMITH M 1969 The British Amphibians and Reptiles. The New Naturalist. Collins 4th Edn.

## APPENDIX

Red Deer; Humerus (midden)

1 2 3 4 5 6 7 8 9 10 - - - 49.0 45.0 54.5 - - 38.9

Red Deer; Radius (Peat)

Roe Deer; Metacarpal (Midden)

1 2 3 4 5 6 7 8 - - - - - 22.0 11.9 14.0 9 10 11 12 13 14 15 16 10.9 14.2 10.0 9.8 9.5 21.2 12.8 -

Roe Deer; Humerus (Midden)

1 2 3 4 5 6 7 8 9 10

Pig; Third Molar (Peat)

Total Length = 43 mm

Bos primigenius; Calcaneum (Midden)

1 2 3 4 5 6 108,3 - - 34.8 45,7 -7 8 9 10 11 12

Bos primigenius; Radius (Clay/Midden Boundary)

7 8 9 10 11 12 40.5 - - - (Eroded so measurements Paprroximate)

surements are in Millimetres.