## XI.—REPORT ON THE ANIMAL REMAINS RECOVERED FROM THE SITE OF THE ROMAN FORT AT SOUTH SHIELDS (COUNTY DURHAM)

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The material described consisted of specimens collected direct from the site during the excavation of 1967 and of specimens retrieved during earlier excavations but stored for safe keeping in the Museum of Antiquities at Newcastle upon Tyne University.

## Summary

The bones were identified by direct comparison with museum specimens. The following species were represented: ox, pig, sheep, horse, dog, red deer (represented by *deciduous* tines only). The relative abundance of species present was decided on the *minimum number of animals* of each species present.

The relative abundance of species was in the order listed above. The bones of most species (excluding dog) were broken as if for the extraction of marrow. The *cattle* were apparently of the *Celtic Shorthorn* variety—*Bos taurus longifrons* (Owen). All the cattle bones, except two, fell within the *size ranges* reported for cattle bones recovered from the Roman camp at *Corstopitum* (Hodgson, G. W. I. 1967).<sup>1</sup> The *proximal* width of one *radius* fragment extends the lower limit for *Corstopitum* specimens from 6.3 cm. to 6.2 cm. and the *proximal* width of a *metacarpal* extends the upper *Corstopitum* range from 6.0 cm. to 6.1 cm. On applying Howard's criteria as to sex of animals (Howard, M. M.

<sup>1</sup> Hodgson, G. W. I. (1967), Archaeologia Aeliana, 4th Series, Vol. XLVI.

1962)<sup>2</sup> to eight entire metacarpals it appeared that seven of them belonged to cows while one belonged to a steer. The same criteria applied to eight entire metatarsals indicated that six originated from cows, one from a steer and one from a bull. Horn cores ranged in size from mere scurs to one of basal circumference = 19.7 cm. The sheep bones (Ovis aries. Linn) were nearly all similar to those from the slender legged variety described from Corstopitum. Two sheep bones gave evidence of a larger animal; the distal width of a tibia extends the known Corstopitum distal width range from 2.4 cm. to 2.8 cm.; and the sagittal length of one phalange measures 4.2 cm. compared with the longest Corstopitum phalange of 3.4 cm.

Four left sheep mandibles and five right mandibles were examined as to stage of tooth eruption for age determination at time of death (Ewbank, Phillipson, Whitehouse and Higgs, 1964).<sup>3</sup> One was killed at 16 months (stage "q"), one at seventeen months (stage "r"), two at 24 months (stage "w") and five at an age older than twenty-four months (stages "v-z").

Assuming that the lambing season was the same in Roman times as it is now the data would appear to indicate an ability to husband sheep through at least one winter and in the majority of cases through two winters. The sample is small but may suggest that the animals were raised for lambs and, or wool, rather than to be killed as young lambs for meat. The sample is too small to shed light on the problem of autumn killing.

The *pig* bones were apparently all from *domestic animals* (Sus domesticus Linn) there being no large bones or teeth attributable to wild pig or to a breeding boar. Two scapulae are smaller than any recovered from Corstopitum. Only two horse bones were recovered, they belonged to the small

<sup>&</sup>lt;sup>2</sup> Howard, M. M. (1963), "The metrical determination of the metapodials and skulls of cattle", *Royal Anthropological Institute, Occasional Paper.* <sup>3</sup> Higgs, E. S., Ewbank, J. M., Phillipson, D. W., Whitehouse, R. D. (1964), "Sheep in the Iron Age. A method of Study". *Proceedings of the* Prehistoric Society, pp. 423-426.

type of pony common at Corstopitum being of the species Equus caballus (Linn.). The proximal width of a horse radius measured only 5.8 cm. compared with the smallest specimen from Corstopitum which measured 7.1 cm.

A single dog bone (Canis familiaris Linn), was recovered, this was a right tibia, and had apparently mended after being fractured (Fraser, F. C. 1967).<sup>4</sup>

Eleven tines of Red Deer (Cervus elaphus Linn) were recovered, none of these was associated with bone so there is no evidence here of venison being consumed, in contrast to the report of 1878 (Roberts, T. N.)<sup>5</sup> which specifically mentions "great quantities of red deer bones".

The long bones of birds approximating to modern domestic fowl (Gallus gallus dom.) were recovered as was a number of fragments of Oyster Shells (Ostrea edulis).

There were no indications of wild boar, goat, elk, whale. mussel, winkle, limpet or snails being present.5

The minimum number of animals present from each species was----

Ox (14) based on the proximal ends of left metatarsals Pig (8) based on the right mandibles

Sheep (5) based on the right mandibles

Horse (1)

Dog(1)

- Red Deer (?)
- Bird (?)

Oyster (?)

The detailed metrical data derived from the bones measured is available in the Hancock Museum and will be published elsewhere.

<sup>&</sup>lt;sup>4</sup> Fraser, F. C.—British Museum—Private Communication 27.7.1967. <sup>5</sup> Robert, T. N. and Lyall, G., in "Discovery and Exploration of Roman Remains at South Shields" (Hooppell, R. E., 1878), Nat. Hist. Trans. of North-umberland, Durham and Newcastle on-Tyne, Vol. VII, 1878.

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