

The identification of the animal bones from all three sites has nearly been completed. The samples all consist of over 10,000 fragments and are therefore large enough for detailed analysis. As well as their importance in the understanding of each site, the samples provide an opportunity for detailed inter- and intra-site comparisons.

A. Inter-Site Comparisons

Such studies are obviously of fundamental importance, if we are to obtain the regional picture of animal exploitation and the organisation of food production. However, detailed comparisons of faunal assemblages are rare and, where a general review of a particular area or period has been attempted, the results are often unconvincing both because of the lack of adequate data and sometimes a naive understanding of the variability of faunal material and its causes. Inter-site comparisons between these sites have the following advantages over previous studies:-

- 1) The samples are reasonably large.
- 2) There are similarities in the types of sites and features being investigated. The sites are all multiperiod and have comparable Iron Age occupations. In addition, Balksbury and Old Down Farm are situated close together in the Andover area; Old Down and R17 are sites of similar type and size with sub-rectangular ditches dug in the Early Iron Age; the largest samples from all three sites have been obtained from pits of Middle Iron Age date; both R17 and Balksbury have Romano-British enclosure systems consisting of a series of linear gullies. Analysis of all aspects of the faunal studies will enable comparisons of the character of the assemblages of roughly contemporary deposits from different sites in the same region and broadly comparable locations.
- 3) The animal bones from the sites have all been computer recorded using the same system. Two of them (Balksbury, R17) have been

recorded by me and Old Down Farm by Robert Foot, who worked in close co operation with the F.R.P. This facilitates inter-site comparisons, which in the past have been severely handicapped by the heterogeneity of recording methods.

4) Computer recording has also enabled the bones to be examined in greater detail. In particular, the depth of recording should make possible comparisons of butchery, preservation and fragmentation on the sites. These are important variables of faunal assemblages but have been little studied on British archaeological material and their effects on the nature of the excavated bone sample are poorly understood.

B. Intra-Site Comparisons

1) Preservation: recording of erosion and gnawing on all bones has shown that preservation conditions varied in different features on each site. Preliminary analysis of the Balksbury data has shown that there is a correlation between preservation conditions and the types of fragment recovered. The problem is a complex one and the analysis requires multivariate statistical techniques examining the correlations between variables in the faunal assemblage (including species representation, bone density, survival of epiphyses/shaft fragments, proportion of eroded, gnawed, ivoryed bone etc.) and variability in the archaeological deposits (e.g. feature type, soil type, depth of deposit). If, as I suspect, this analysis reveals significant results, it raises the question of how differentially preserved faunal assemblages can be compared in a meaningful way. It is hoped that this detailed analysis will be able to indicate some guide towards this end.

2) Differential disposal of bone elements: a second major cause of variability in the faunal assemblage is the butchery and disposal of the carcasses. Individual skeletal elements can be treated in

different ways and this can have a significant effect on where the bone is eventually deposited. Questions such as whether the animals were butchered at the site or brought in as dressed carcasses and which bones were broken for marrow or used as raw material for tools etc. can be answered by detailed study of the bones. Of course, variability caused by differential preservation has first to be separated from variability resulting from human agency - e.g. is the fact that there^{0.12} [^] so few cattle phalanges recovered from R17 and Balksbury a reflection of poor preservation conditions (or recovery) or the result of the treatment of cattle carcasses? Although some work has been done on lateral variation in faunal assemblages, no one has yet demonstrated satisfactorily the causes of all the variations. The depth of recording and analysis of these samples may help to clarify the situation, or at least show the complexities involved.

3) Bone densities: this is related to 1) and 2) above and carries on the work of Niall Griffiths on R27. I will be working in co-operation with Peter Fasham on the density of the R17 bone and we'll be comparing this with the pottery densities in the same features.

C. Wider Implications of these Studies

The analysis of these three samples will provide a continuation in the development in the methodology of studying animal bones, which needs rapid improvement in order to answer the more detailed questions being asked of the material. On their own the three sites do not represent an adequate sample of Iron Age sites in Wessex, although the analysis will develop our knowledge of animal husbandry in the area. I suspect, however, that the analysis will raise many new questions. Accordingly, I propose to attempt to synthesise the evidence of Iron Age faunal remains in the light of this work and recent work from other sites in Wessex (Danebury,

Winklebury, Gussage All Saints, R27 etc.) in order to review our present knowledge and the directions we should be taking in the study of Iron Age material.

Mark Maltby

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