

UNCORRECTED ARCHIVE REPORT**APPENDIX 19 – CHARRED PLANTS****By Martin Jones****Approach**

At the start of the project it was felt that Mount Farm could provide a suitable set of data with which to assess whether the inferences drawn at another Upper valley site, the Ashville Trading Estate (Jones 1978a) were more generally applicable. As the project progressed, the site's further potential became apparent; it was clear that occupation refuse from the site spanned a considerable time range (see main report) and that in addition to carbonised material, certain features contained waterlogged material. It therefore became possible to look at changes in agriculture on a single site over a time-span that had hitherto required an examination of individual samples from a very disparate group of sites. Despite the considerable number of sites the Upper Thames valley investigated since the work at Mount Farm, it remains unusual in providing such a long (albeit intermittent and not always prolific) sequence of carbonised plant remains from the early Neolithic to the early Saxon period. It also became possible to explore the relationship between carbonised and waterlogged evidence on a single site. As the central objective was comparison with the Ashville data, it was important to employ a sampling strategy that would allow valid inter-site comparison. This was not difficult as a simple probabilistic strategy had been employed at the Ashville site. A similar probabilistic strategy using the same sample units was employed at Mount Farm.

Method

The strategy adopted was as follows. The subsoil features were subdivided according to feature type, i.e. into pits and ditches. In the case of ditches the sampling positions were selected using random number tables. Random positions were chosen such that an average of one sample was taken every 20 m. In the case of pits, individual pits were selected randomly from the total. A sampling fraction of 50% was considered suitable for the amount of manpower available. In order to pursue objectives relating to the long time-span of the site's occupation, the sampling fraction was increased to 100% with contexts that were immediately identifiable as being of earlier prehistoric date. Three buckets (approximately 40 litres) of sediment was the normal sample size, though with features of less than 40 litres volume, and features recognised as being of Neolithic date, the entire context was processed. In these cases, a correction factor is shown in Tables 1 and 2.

Further considerations of the sampling strategy, which extended to the collection of pottery and bone, are discussed in Jones (1978a).

The collected samples were floated over tap water and the flot collected in sieves with mesh aperture of 500 microns diameter, and processed in the manner described by Jones (1978a).

Results

General

Almost every archaeological sediment yielded seeds of cereal grains chaff fragments and seeds of other plants in varying proportions and quantities. The raw data for economic species and cereal chaff are given in Table A19:1, and for wild plants in Table A19:2. The remains from earlier prehistoric contexts are summarised in Table A19:3. Graphs showing the relative proportions for cereals, weeds and chaff and the proportion of particular weed species are shown in Fig. 47 in the main report.

The results are presented below and are interpreted and discussed in Appendix A1 together with other lines of environmental evidence and are summarised in the main report.

Pottery Impressions of Plant Material

A series of plasticine casts of possible plant material were forwarded to the author by George Lambrick, having been taken in the course of the Iron Age pottery examination, but this did not include the impressions subsequently found on the Roman fired clay slabs.

The great majority of identifiable impressions were from Iron Age contexts, and those attributable to phase are shown in Table A19:4. In addition to these a sherd from Neolithic context 550 included an impression of an immature floret of six-row barley, and one grain of wheat (species unidentifiable), and an impression from middle Iron Age context F505 is probably of a bipinnate form such as bracken, *Pteridium aquilinum*.

The 'dense cleanings' indicated in Table A19:4 were found impressed into pots which had clearly been placed on a surface covered with the debris from crop cleaning while the clay was still wet. The resultant mass of impressions is dominated by *Triticum spelta* glumes and much unidentifiable chaff, and large grass seeds such as *Bromus spp.* The impression from context F661 also contains a number of weed seeds that are probably either *vicia/Lathyrus* or *Galium aparine*. The impression from context F137 includes a clear internode of *Hordeum*.

Two points may be made about the impressions. Compared with the charred plant remains they include a more restricted range of the same main crop species, and clearly show an even stronger 'cereal bias,' with very little weed evidence. While the species present are perfectly compatible with the main cereals represented in the charred remains, there is a far greater representation of chaff and cleaning debris among the grain impressions. Tables A19:1 and Figure 47 indicate that in the charred plant

remains grain is about four to five more common than chaff, whereas on the pottery there is more identifiable chaff than grain and the impressions are dominated by 'dense cleanings' almost entirely consisting of chaff.

It would therefore seem that different products of the same crop are reaching domestic fires and the place of pottery production respectively, and it may well be the case that chaff was specifically collected for use in pottery making as a fuel and to help keep wet pots from sticking to the working surface.

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