ANCIENT MONUMENTS LABORATORY

REPORT

4972

SERIES/No CONSULTANT

AUTHOR Glynis Jones 1982

TITLE Plant remains from Iron Age Groundwell Farm, Wiltshire

unpublished HBMC report

Plant Remains from Iron Age Groundwell Farm, Wiltshire

The secondary fill of the post-holes of an Iron Age four-post structure at Groundwell Farm, Wiltshire were sampled for plant remains. Five kilogram soil samples were processed by flotation using a 0.4 mm. mesh sieve. The samples relate to the abandonment and possible destruction of the building by fire probably in the third century B.C..

The samples were examined and the results of identifications are presented in the Table. By far the most common crops represented in the samples are spelt wheat (Triticum spelta)and hulled barley. The identification of spelt is confirmed by the presence of characteristic glume bases. Small numbers of grains resembling bread wheat (T. cf. aestivum), emmer (T. cf. dicoccum) and rye (cf. Secale cereale) are also present but it is likely that these are merely atypical grains of spelt. Both straight and twisted grains of barley were found, indicating the presence of six-row barley (Hordeum vulgare), but the presence of two-row barley (H. distichion) cannot be ruled out. A single grain of possible oat (cf. Avena sp.) was also recovered as were small numbers of the weeds Bromus (sect. Eubromus) and Rumex sp.

The ratio of spelt glume bases to grains is low (see Table) and is probably an overestimate as many of the indeterminate cereal grains are likely to be of spelt. Grains and glume bases occur in about equal numbers in the spelt plant and so these ratios of less than one suggest that the glume bases (i.e. chaff) have been cleaned out of the crop. The absence of barley internodes is a similar indication. The ratio of weed seeds to grain is also low (see Table) as would be expected in a cleaned crop.

The density of grain in the soil is quite high, which is consistent with the excavator's interpretation of the material as the result

of a single major accident - the destruction of the four-post structure - rather than of repeated activity (cf. Jones 1981). The composition of the samples (in terms of paucity of weed seeds, wheat glume bases and barley internodes) is also consistent with the excavator's interpretation of the material as deriving from grain stored in the four-post structure. It is of interest to note that the grain had been fully threshed and cleaned proir to storage, even though there are advantages in a wet climate to storing wheat as whole spikelets (i.e. with glumes attached - see Hillman 1981).

Both spelt and six-row hulled barley have been commonly found at other Iron Age sites in Wiltshire (see for example Green 1981). At one such site, Tollard Royal, wheat was found mostly in pits and barley in post-holes, suggesting that wheat was stored below and barley above ground (Wainwright 1968, pp. 112, 114). At Groundwell Farm, however, no storage pits have been found and both wheat and barley seem to have been stored in the four-post structure. If the plant material discussed here does indeed derive from the four-post structure, then wheat and barley were being stored there at the same time. The ratio of wheat to barley grains in the four post-holes ranges from about one to about ten suggesting that the crops were stored separately, perhaps in compartments or containers.

Glynis Jones
(submitted 1982)

Table The Plant Remains

	Sample 32	40 (¼)	41 (½)	45 (¼)
Triticum spelta grains	340	184	199	308
" " glume bases	-	47	31	20
T. cf. aestivum grains	16	8	8	8
T. cf. dicoccum grains	-	4	-	7
*Hordeum straight grains	10	17	12	2
" twisted grains	13	14	20	2
" indet. grains	94	123	179	27
cf. Secale cereale	4	0	1	0
cf. Avena sp.	1	0	0	0
indet. cereal	101	102	127	120
Bromus (sect. Eubromus)	1	4	5	0
Rumex sp.	0	0	1	0
ratio spelt glume bases: grain	0	0.26	0.16	0.06
ratio weed seeds:grain	0	0.01	0.01	0
ratio wheat:barley	3.04	1.27	0.98	10.40
no. cereal grains/kg. soil	116	361	218	379

*including Hordeum vulgare ( ) fraction of sample examined

References

Green, F. (1981). in M. Jones and G. Dimbleby The Environment of Man: The Iron Age to Anglo Saxon Periods Oxford.

Hillman, G. (1981). Reconstucting Crop Husbandry Practices from Charred Remains of Crops in R.J. Mercer Farming Practices in British Prehistory Edinburgh.

Jones, G. (1981). The Carbonised Plant Remains in B.J. Orme, J.M. Coles, A.E. Caseldine and G.N. Bailey Meare Village West 1979 in J.M. Coles Somerset Levels Papers 7 Hertford.

Wainwright, G.J. (1968). The Excavation of a Durotrigian Farmstead near Tollard Royal on Cranbourne Chase, Southern England. Proceedings of the Prehistoric Society 34, 102-47.