

ELTHAM PALACE : Report on the Plant Remains

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The samples. Eight samples of floated and sorted carbonised grains and seeds were submitted to the author for identification and analysis. The results of these identifications are listed in Table 1.

The Plant Remains. The remains were recovered from seven different contexts, ranging in type from ground surfaces associated with buildings to beam slots, postholes and midden deposits. Three contexts were of late 12thC date (three surfaces associated with a building), one was of 11thC date (a possible beam slot), and two were of 13thC date (aburnt area and a midden deposit). There were, in addition, two post holes of indeterminate date. All the deposits produced material, though the beam slot and the two post holes produced the least material.

Most of the remains recovered were of carbonised cereal grain fragments. Very little can be said of this material with regard either to context type or date, although it is likely that most of it had accumulated as a result of casual loss and carbonisation of grain intended for domestic use (milling etc.) after storage. This would particularly be the case for the material from the floor layers/ ground surfaces in association with buildings.

The majority of the grains from all three phases taken together would appear to be some form of wheat - Triticum sp. (precise identification was prevented by the deformed state of the grain and general lack of diagnostic features, a common problem where only grain is present). However, in the case of D 191 127 in the fill of the late 12thC building, several wheat grains appeared to bear some similarity to the species Triticum aestivum. The second most significant cereal grain in the samples was Rye (Secale cereale) which appeared both in the late 12thC sample from the building fill mentioned above and in the 13thC sample from the midden layer, D228 135. These grains were characteristically either elongated and bullet shaped with a twist at the embryo and a blunt apex, or rather stubby with a high backed dorsal aspect but again blunted at the apex and slightly twisted at the embryo end.

In addition to these two cereals there were a few grains of Hordeum sativum (the Barleys) and Avena sp. (Oats) which could not be identified to species, in the case of barley because of the absence of rachis and in the case of oats because of the lack of lemma bases. These cereals were found in both the 12 and 13thC samples and in the case of Oats also from the 11thC beam slot, D258. Apart from the cereals the only other cultivar present in the samples was the Field Pea, Pisum sativum, two examples of which were recovered from the 13thC midden deposit.

All the samples contained one or more seeds of weeds of cultivation, but principally Rumex sp. (the Docks) and Vicia sp. (one of the small vetches). From context D202, the layer within a late 12thC building, came one carbonised fragment of a hazel nut, which probably derived from domestic waste like the rest of this collection.

Interpretation. Little can be said of this group of carbonised material with regard to temporal changes as the quantity of items and the number of samples was so small. However, it will be noted that those contexts which contained the largest quantity of material were either floor layers in buildings or midden deposits. This may indicate casual loss and accidental carbonisation during domestic processing into flour subsequent to bulk-storage. The presence of weed seeds in these deposits may again be accidental or may serve to indicate that medieval cropcleaning was not particularly efficient.

The cultivars present in this collection of samples, Bread wheat, Barley, Rye and Peas were, according to both the documentary record and palaeoethnobotanical evidence, common medieval crops (Green pers, com. and forthcoming M.Phil thesis). However, the presence of Rye in these samples is quite significant since as yet there have been few remains of this species found from early medieval contexts, although Rye is often mentioned in the documents, particularly the agricultural returns of the large estates such as the 13th/14th century inventories of the Bishopric of Winchester recently studied by Titow (1972). Rye first came to North West Europe either as a crop in its own right or as a weed of wheat (Hillman 1978). By the Late Roman and Early Dark Age

period it was almost certainly being grown as a crop in its own right (van Zeist 1970). In traditional farming communities today, Rye as a contaminant of wheat <sup>also</sup> is often tolerated in the final, storage product and the flour from the wheat/rye mixture is often thought to produce superior bread (Hillman 1978 and pers. com.).

This collection of carbonised material from Eltham provides useful evidence for the presence of the major crops, but because of its small quantity it is of limited value in assessing the relative importance of each crop present or in giving reliable evidence of crop processing.

#### References:

- Hillman, G. (1978) 'On the origins of domestic Rye',  
Anatolian Studies 28 ( in preparation).
- Titow, J.Z. (1969). Winchester Yields. A study in Medieval Agricultural Activity. Cambridge University Press. Cambridge.
- van Zeist. W. (1968) Prehistoric and Early Historic Food Plants in  
the Netherlands. Palaeohistoria 14, 152-173  
(particularly p 160-161).

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ELTHAM PALACE: Plant Remains

E P 77. D 191 127		Fill of building. Late 12thC.	<u>Nos.</u>	
Triticum sp. (cf. aestivum)	(Wheat)	12	Grains very	
Triticum sp.	( " )	17+9f	battered and	
Triticum sp. (deformed)	( " )	3	deformed.	
cf. Avena sp.	(Oats)	1		
cf. Secale cereale	(Rye)	4		
Legume		1		
Rumex sp.	(Docks)	1		
Compositae cf. centaurea sp.	(cyanus)	1		

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E P 78. D 258 154		Beam slot? of late 11thC building, later recut as a ditch.		
Avena sp.	(Oats)	1		

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E P 77. D 202 128		Layer within a building - occupation Late 12thC.		
cf. Triticum sp. (deformed)	(Wheat)	3+1f		
Hordeum sp.	(Barley)	1		
Avena sp.	(Oats)	1		
Vicia sp. (small)	(Vetch)	1f		
Rumex sp.	(Docks)	1		
Corylus avellana	(Hazel)	1f		
Bromus sp.	(Brome)	1		

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E P 78. D 183 155		Ground surface by building, Late 12thC.		
cf. Triticum sp.	(Wheat)	2f		
cf. Vicia sp.	(Vetch)	1		
Carex sp.	(Sedge)	1		

ELTHAM: Plant Remains (cont.)

E P 78. D 183 157      Burnt area early 13thC.

cf. Triticum sp.	(Wheat)	1f
Avena sp.	(Oats)	1
Vicia cf. sativa	(Common Vetch)	2
Vicia sp. medium-small	(Vetch)	6f
Atriplex sp. Modern		1
Polygonum sp.		1
cf. Polygonum sp.		2f
Plant capsule - indet.		

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E P 77. D 224 134      Remains of a Post from a Post Hole?

cf. Secale cereale	(Rye)	1
Vicia sp.	(Vetch)	1

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E P 77. D 159 107      Post Hole Fill.

cf. Triticum sp.	(Wheat)	1
Cereal grain indet.		1

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E P 77. D 228 135      Midden Layer. Early 13thC.

Triticum sp.	(Wheat)	2
Hordeum sp.	(Barley)	4
Avena sp.	(Oats)	2
cf. Avena sp.	( " )	1
Secale cereale	(Rye)	13
Cereal grain frags.		7+2f
Vicia sp. medium	(Vetch)	5+3f
cf. Vicia sp.	( " )	1
Pisum sativum	(Pea)	2
Fumaria sp.	(Fumitory)	1

f = fragment