ANCIENT MONUMENTS LABORATORY

REPORT

2982

SERIES/No CONTRACTOR

AUTHOR S Colledge Dec 1979

TITLE A report on the plant remains from Riggs Hall, Shrewsbury

Ancient Monuments Laboratory
Report 2982

A REPORT ON THE PLANT REMAINS FROM RIGGS HALL, SHREWSBURY

S COLLEDGE

A Report on the plant remains
from Rigg's Hall, Shrewsbury.

S. Colledge

RIGG'S HALL, SHREWSBURY.

A Report on the botanical remains from the site.

The botanical work concentrated on material from the early features which were cut into the natural sands and clays of the site and were sealed by the 'bank' material. The two pits, F7I and FI24, which were cut by the wattle-lined gully, proved to have fills which had preserved because of the visible charcoal flecks and seeds. organic remains/ F7I was particularly interesting, this was the pit which had the line of stakeholes around one inside edge. The dating of these pits relied on the pottery within the fills. Stafford-type ware was found in the group of features which were cut into the natural sands and clays, which implies a 10th to 11th century date for the pits.

Samples were collected by the excavator as the pits were dug. The different layers within F7I were sampled and one bulk sample was taken from the fill of FI24. Most of the samples consisted of a light, sandy soil, (with some clay lumps) and in all the samples there were charcoal flecks throughout the soil matrix. To separate any charred remains it was necessary to soak the sample in warm water, with gentle agitation and then to pour off the flotant through a 300 micron sieve. The disaggregation of the samples caused no problems and it was sufficient to repeat the washing down process three times. The flotant was dried slowly in an oven and then sorted under a binocular microscope. The residue which was washed through a 500 micron sieve /was checked carefully for small bones and pottery.

All identifications of seeds were made using reference material. The lists of plant species represented by the remains in the pitfills are given in the the table. The numbers of seeds are given for each layer which was sampled. In pit F7I the layers are: 172, 253, 259, 299 and the bulk sample from pit FI24 is from layer 296. In all the samples there was a predominance of Avena sativa, the cultivated oat, was identified by the flower bases which were also preserved and which are quite distinct from the bases of Avena fatua the wild oat. The barley was hulled and the grains were recorded according to whether they were 'straight' or 'twisted'. If the samples contained 6-row barley it would be expected that approximately two thirds of the grains would be assymmetrical (twisted) and that the remainder would be symmetrical. (straight) All the grains in 2-row barley are symmetrical. Unfortunately for these samples the numbers of grains were too low to be able to determine whether the barley was of the 2-row or 6-row variety. Most of the wheat was club wheat, Triticum aestivum L. aestivo-compactum Schiem., this is not a distict species, but represents a continuous interbreeding group. (Schiemann 194 Triticum spelta, spelt wheat was present in smaller quantities than the club wheat. It was found in three of the layers of pit F7I. For many of the wild plants, which were charred with the cereals, it was impossible to identify them to species level, this was because of the poor preservation which often obscured the characteristics of the seeds.

Lists of the plant species represented by the botanical remains found in pit F7I and pit FI24.

		Numbers of seeds present				
		Pit F7I				Pit FI24
CHARRED SEEDS		I72	253	259	295	296
Cultivated plants						
Avena sativa L.	Oats	100	227	7	34	2
-flower bases		x	x	x	x	
Hordeum vulgare L. emend. Lam.	Hulled barley straight	2			5	
	twisted		I	3	6	
cf. Secale cereale L.	Rye	I	5		7	
Triticum aestivum L. var.aestivo- compactum Schiem.	? Club wheat		5	2	II	
Tritioum cf spelta L.	Spelt wheat		I	I		
Wild plants						
cf. Bromus sp.	Brome		2			
Carex sp.	Sedge	3	2			
Galium sp.	Bedstraw		3	I		
Gramineae sp.	Grass	4	3		II	
cf.Galeopsis sp.	Hemp nettle		I		I	
cf. Oenanthe sp.	Dropwort	I6	I7		2	
Prunus spinosa L.	Sloe				I	
Vicia sp.	Vetch		2	I		
Corylus avellana L.	Hazel nut shell fragments	x			x	
Unidentified species		I	I		I	
UNCHARRED SEEDS						
Rubus fruticosus agg.	Bramble	m	m	m	m	m
Sambucus nigra L.	Elder	m	m	m	m	

(x-indicates the presence of,
m-indicates many)

(Approximate volumes of samples which were washed down:-

Pit F7I	layer	I72	3 litres
	"	253	5 litres
	"	259	8 litres
	"	295	20 litres
Pit FI24	"	296	5 litres)

The assemblages from the pits represent crops which were being cultivated at the time, together with some of the weeds of the cornfield. The grasses, brome and vetch would have been common weeds. Godwin (1975) states that club wheat did not become an important 'bread plant' in England until historic times, at Rigg's Hall it is more abundant than the spelt wheat, which was the dominant crop in Roman times. Godwin records oats on Iron Age, Roman, Anglo Saxon, Viking and Medieval sites. Rye became established in the Roman period and thereafter became a common crop. Similar assemblages of cultivated plants have been recorded from Medieval (10th -14th century) Flaxengate in Lincoln and Late Saxon Marefair in Northampton. (Straker 1979) At Flaxengate, from a number of different contexts, there was also a predominance of oats, with club wheat next in abundance, some spelt wheat, barley and rye. The Late Saxon context at Marefair had higher values for club wheat but there were large numbers of oats. At both sites the presence of the horsebean, Vicia faba , was recorded and at Flaxengate a probable cherry stone was found. At Rigg's Hall in layer 295 of pit F7I there was a charred sloe, Prunus spinosa, showing that the fruit pulp as well as the stone had been burnt. The presence of food plants other than cereals in the pitfills emphasizes the 'domestic' nature of the deposits. There is little to distinguish between the plant assemblages in the different layers of pit F7I. As with nearly all charred remains in pits it is impossible to be certain of the cause of burning which led to the preservation of the seeds. There could have been overheating whilst stored crops were being dried and the debris then swept into a convenient pit. For the two pits at Rigg's Hall there were no indications that the burning was of a deliberate,'industrial' nature.

It is interesting to note that at Flaxengate there were also uncharred seeds preserved with the charred cereals and that these were mainly Sambucus nigra, the elder. At Rigg's Hall in pit F7I there were high proportions of uncharred Sambucus nigra and Rubus fruticosus, the bramble which may have been partly mineralised. If these seeds were contemporary with the charred remains it would not have been possible for them to have become preserved by waterlogging, the pits were damp but did not hold much water. It is more probable that the seeds became mineralised, involving the replacement of the organic structure of the seeds by calcium phosphate or calcium carbonate. (Green 1979) A replica of each seed is produced and is resistant to decay. The process of replacement is dependant on the the mineral content in the surrounding soil matrix. Conditions are favorable in hard water areas and if lime is added to the deposits. But at Rigg's Hall there is the possibility that the elder and bramble seeds were contaminant they could have filtered down through old root holes or in pit F7I they could have passed down the stakeholes and this could have taken place at any time after the pits were disused. At Quilter's Vault, Southampton (Green 1978) there was a similar occurrence, with large numbers of elder and bramble seeds in the deposits, it was stated that these were mineralised but also that they could have entered the feature via root holes or natural disturbance subsequent to its filling.

The purpose of the two pits poses another problem. In the discussion of the

Saxo-Norman levels at Waltham Abbey, Essex (Huggins I973) a series of pits were mentioned. Two of these pits had stakeholes in them and one was very similar to pit F7I at Rigg's Hall, with a line of holes around one inside edge. Because of the possibility of structures such as screens or 'horizontal latrine bars' it was suggested that the pits could have been latrines, with such limited evidence the suggestion was obviously tentative. The same must apply to F7I and FI24 where the nature of the preservation of organic remains only allows them to be grouped under the large heading of 'rubbish pits'.

Bibliography

Godwin H. I975 History of the British Flora. Cambridge.

Huggins P.J. & R.M. I973 Excavation of Monastic Forge and Saxo-Norman Enclosure, Waltham Abbey, Essex, I972-73. Essex Archaeology and History 5 I27-I8.

Green F. J. I978 Botanical remains. in Walker J.S.F. Excavations at Quilter's Vault, Southampton. Proc. Hampshire Field Club and Archaeological Society. 35 2I2

Green F.J. I979 Phosphatic mineralisation of seeds from archaeological sites. Journal of Archaeological Science. 6 (III)

Schiemann E. I948 Weizen, Roggen, Gerste. Systematik, Geschichte und Verwendung. Jena.

Straker V. I979 Some Late Saxon plant remains from Marefair, Northampton. Ancient Monuments Laboratory Report.

" I979 Report on some seeds from Flaxengate, Lincoln from the IOth to I4th centuries A.D. Ancient Monuments Laboratory Report no. 28I2

Van Zeist W. I968 Prehistoric and early historic food plants in the Netherlands. Palaeohistoria XIV 42-I73