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| AUTHOR | Marijke van der Veen June 1983 |
| TITLE | The plant remains from Eskmeals, Cumbria |

The plant remains from Eskmeals, Cumbria.

(grid ref : SD 986 917) Excavator : Clive Bonsall
Dept. of Archaeology
Univ. of Edinburgh.

by : Marijke van der Veen

The Eskmeals Archaeological Project is concerned with the mesolithic settlement of the area around the estuary of the river Esk in S.W. Cumbria. Some 40 sites have been discovered here, associated with early postglacial shorelines. The plant remains discussed in this report come from the first two sites that were excavated, that is from Monk Moors 1 and 2.

The sites are defined as major concentrations of flint artefacts within a much larger continuous scatter of material. Monk Moors site 1 (M.M.1) showed an elongated oval arrangement of hearths and stakeholes. Monk Moors 2 (M.M.2) produced a shallow, irregular 'pit', 2.5 m long x 0.6 m wide, but no clearly defined hearths or stake holes.

The C14 dates from Monk Moors site 1 suggest a date for the occupation between 5,000 - 4,500 B.C.

The plant remains were extracted using manual flotation into a 0.5 mm mesh sieve; Table 1 gives the contexts of the different samples, table 2 lists the sample sizes and table 3 gives the results of the analysis.

Very little is known about the importance of plant foods in late Mesolithic societies. With the exception of Star Carr plant remains are rarely found on Mesolithic sites. The only species recovered regularly is hazelnut, Corylus avellana in the form of carbonised nutshell fragments. The association of Mesolithic artefacts with hazelnuts is known in Britain from at least 20 sites. On three of them large quantities of nutshells were found (Mellars 1976). Whether the absence of other plant remains is a real one, or rather a product of recovery techniques (hazelnut shells, unlike most seeds are fairly large) is as yet unknown, as a systematic collection of flotation samples is rarely carried out.

But even when plant remains are found, there is no certainty that they were brought in by man. Many wild plants in Britain are known to have been collected during bad harvests, or for possible medicinal use. However, most of these plants are part of the natural vegetation and could also have arrived on site by natural agents. Only when the seeds or fruits of these plants are found in large quantities, can we be reasonably certain that they were collected on purpose.

A number of sediment samples were still available from the Monk Moors site 1 and 2 excavations, and it was decided to analyse all of them to obtain a first indication of the presence or absence of plant remains in these Mesolithic features. As can be seen in Table 3 ten out of thirteen samples did not contain any seeds or fruits. The other three only contained small numbers. However, the presence of corn spurrey seeds suggests that we might be dealing with a later deposit, and that the ascribed Mesolithic date might not be correct, see below.

Only one small fragment of hazelnut shell was found. This is the only obvious food plant in the samples. Some species of Rumex may have been eaten as well, but unfortunately the seed of Rumex is very badly preserved and cannot be identified to species. The Polygonum seed is only a small fragment, which again prevents a definite identification to species. Polygonum persicaria has no known quality as a food plant; Polygonum lapathifolium, however, is regarded as a 'utility' plant because the seeds contain starch. It was found in small quantities in the stomach content of Tollund man. Plantago lanceolata and Sieglingia decumbens are not known to have been collected as wild food plants. Spergula arvensis, however, is still grown as fodder in continental Europe and was also present in the stomach content of Tollund man (Grigson 1975).

While most of the species present are known to have been part of the original vegetation and are recorded in the various pollen diagrams, the pollen record of Spergula arvensis, corn spurrey, in Britain are all confined to the Sub-Boreal and later, that is to the Neolithic/Bronze Age and later (Godwin 1975). The species is normally associated with other typical weeds of arable cultivation. Records of seed identifications again do not occur before the Neolithic. At the present day corn spurrey is more or less restricted to cultivated ground. In the Iron Age and later periods it is often found as a weed in flax crops (Godwin 1975). The presence of corn spurrey seeds in this Mesolithic context should therefore be treated with great care, especially as Plantago lanceolata and Polygonum pers./lapt. are also commonly associated with arable fields and pasture. In fact, Plantago lanceolata is used as an indicator for deforestation, pasturage and cultivation. We might, therefore, be dealing not with a Mesolithic pit, but with a pit that incorporates some Mesolithic artefacts.

The very small quantity of plant remains found would normally already prevent any detailed interpretation of the results. But as in this case there also seems to be reason to query the suggested date of the context, no attempt will be made to interpret the results.

References:

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Marijke van der Veen
Biological Laboratory
Department of Archaeology
Univ. of Durham.

Table 1Eskmeals - Flotation Samples

| <u>Sample</u> | <u>Year</u> | <u>Site Code</u> | <u>Feature</u> |
|---------------|-------------|------------------|----------------|
| 1 | 1974 | MM1 | F 134, hearth |
| 2 | 1974 | MM1 | F 139, hearth |
| 3 | 1974 | MM1 | F 143, hearth |
| 4 | 1975 | MM1 | F 122, pit |
| 4a | 1976 | MM1 | F 122, pit |
| b | " | " | " " |
| c | " | " | " " |
| d | " | " | " " |
| e | " | " | " " |
| 5 | 1977 | MM2 | F 33 pit |
| 6a | 1977 | MM2 | F 1 pit |
| b | " | " | " " |
| c | " | " | " " |

Table 2Sample Size.

| | | | |
|--------|----|---|-----------------------|
| Sample | 1 | - | 14 litres of sediment |
| | 2 | - | 2 " " " |
| | 3 | - | 2 " " " |
| | 4 | - | 16 " " " |
| | 4a | - | 10.8 " " " |
| | b | - | 4 " " " |
| | c | - | 1.2 " " " |
| | d | - | 2 " " " |
| | e | - | 6 " " " |
| | 5 | - | 13 " " " |
| | 6a | - | 77 " " " |
| | b | - | 9 " " " |
| | c | - | 22.5 " " " |

Table 3. Number of seeds in each sample

| <u>Species:</u> | <u>Sample:</u> | <u>1</u> | <u>2</u> | <u>3</u> | <u>4</u> | <u>4a</u> | <u>4b</u> | <u>4c</u> | <u>4d</u> | <u>4e</u> | <u>5</u> | <u>6a</u> | <u>6b</u> | <u>6c</u> |
|---|----------------|----------|----------|----------|----------|-----------|-----------|-----------|-----------|-----------|----------|-----------|-----------|-----------|
| <i>Spergula arvensis</i> L. (corn spurrey) | | | | | | | | | | | | 2 | | |
| Leguminosae indet | | | | | | | | | | | | 1 | | |
| <i>Polygonum lapathifolium/persicaria</i> (<i>persicaria</i>) | | | | | | | | | | | | 1 | | 1 |
| <i>Rumex</i> sp. | | | | | | | | | | | | | | 1 |
| <i>Corylus avellana</i> L. (hazel) | | | | | | | | | | | 1 | | | |
| <i>Plantago lanceolata</i> L. (ribwort) | | | | | | | | | | | | 3 | | |
| <i>Sieglingia decumbens</i> (L.) Bernh. (heath grass) | | | | | | | | | | | 1 | 1 | | 1 |
| Gramineae indet. (grasses) | | | | | | | | | | | | 1 | | |
| Indet. | | | | | | | | | | | 1 | 1 | | |
| | Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 10 | 0 | 3 |