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ANL Report 2332

Mr. T. Underwood-Hall
13, Avenue Road,
Winchester,
Hants.

Your reference

Our reference

Date 12/8/77

Dear Tim

Please find enclosed your report(s) for the site(s) of

I would be most grateful if you could send me a draft copy of any proposed publication which includes the report(s) or extracts from the report(s).

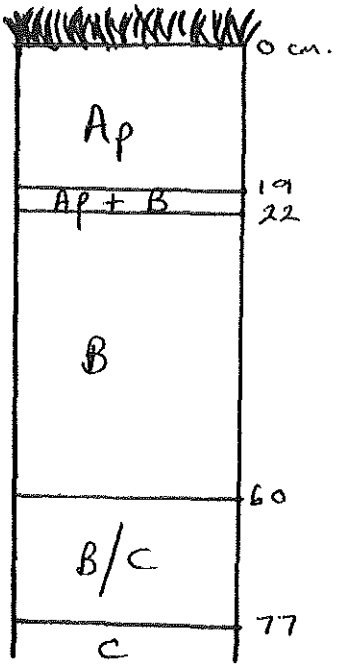
Please acknowledge receipt of this communication.

Yours sincerely,

Helen M Keeley

Follow-up work on soils at Seamer Carr, North Yorkshire

I. The soil profile at the site at which an Iron Age sword was discovered (Site F)



The site was gently sloping, freely drained and the vegetation consisted of weeds (grasses and herbs) following a cereal crop. Earthworms were present throughout the profile.

0-19 cms. The Ap horizon was very dark greyish brown (10YR3/2) friable coarse sandy loam with weak medium angular blocky structure. Roots were abundant medium to fine fibrous; stones common (about 15%) gravel to medium consisting mainly of rounded flints but with occasional weathering sandstone fragments and small charcoal/coal fragments (predominantly coal).

19-22 cms. was an Ap and B (agric) horizon containing many gravel to medium stones (about 30%).

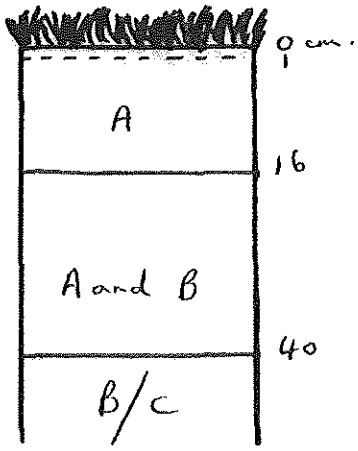
22-60 cms. was dark yellowish brown (10YR4/6) friable coarse loamy sand with weak medium angular blocky structure. Roots were common, medium to fine fibrous and there were many gravel to medium stones (about 25%) - mainly rounded and

angular flints but with some red and yellow fragments of weathering sandstone. Occasional flecks of black charcoal or coal occurred.
60-77 cms. was yellowish brown structureless, moderately friable, coarse sand containing some patches of darker material from above. Stones and roots were absent.

Below 77 cms. was brown (7.5YR5/4) structureless moderately friable coarse sand and gravel with many black patches (probably manganese oxides) and fragments of coal/charcoal. Roots were absent; stones were abundant (about 60%) gravel to medium - mainly rounded and angular flints, but also occasional weathering sandstone fragments.

II. Soil studies on Manham Hill

A profile was studied at the east end of the trench across Manham Hill. The site was level, freely drained and with very varied vegetation (herbaceous species and grasses).



0 to 1 cms. was a root mat.

1-16 cms was dark brown (10YR3/3) friable coarse sandy loam with moderate medium subangular blocky structure. Roots were abundant, medium to fine fibrous; stones few (gravel to medium), consisting of a few rounded quartzite pebbles, occasional coal fragments and various angular stones.

16-40 cms. was yellowish brown (10YR5/8) moderately friable coarse loamy sand with few distinct medium strong brown and dark yellowish brown (10YR4/6) mottles associated with fragments of weathering sandstone. This horizon contained about 30% material from above in worm channels. Structure was weak medium subangular blocky; stones were few (about 50%) gravel to medium, including red and greenish weathering sandstone fragments and gravel size rounded flints. Roots were common, medium to fine fibrous.

Below 40 cms. was dark yellowish brown (10YR4/6) structureless coarse loamy sand (moderately friable) with common medium distinct strong brown mottles (about 5%) associated with patches of weathering sandstone. Roots were few, fine fibrous. There was some manganese oxise staining on stones; some darker material from the A horizon was present, but less than in the 16 to 40 cms. horizon, and a few coal fragments were noted.

Mesolithic flints were found about 8 cms. below the top of the A horizon and it is suggested that the A horizon contains a considerable amount of windblown material which has accumulated since Mesolithic times. This was confirmed by examining a section through the sand island/peat interface - windblown material was found to overlie peat in which Mesolithic structures occurred.

pH in soils on Manham Hill was about 5 and faint traces of phosphate were found, whereas the peat below the hill at the base of the section had a pH of 3.8 and phosphate was absent. This accords well with the discovery of evidence of Bronze Age occupation on Manham Hill.

III Hopper Hill

The pH of the peat below Hooper Hill was 6, probably due to run-off from the soils of the hill which had been limed in the past. Further upslope where the peat was shallow, pH ranged from 6.4 to 6.9 (mean 6.7).

A comparison was made between the Bronze Age ditch fill and the surrounding subsoil. The ditch fill was dark brown (10YR3/3) friable medium sandy loam with weak medium subangular blocky structure. Roots were common, fine fibrous; stones few (gravel to small). The surrounding soil was yellowish brown (10YR5/8) moderately friable coarse sandy clay loam containing some dark brown material from the A horizon. Structure was moderate medium subangular blocky. Roots were common, fine fibrous and stones few, (gravel to small). The A horizon was similar to that at Manham Hill.

The pH of the ditch fill was 7.5, that of the adjacent soil was 7.7 and neither contained phosphate. It was therefore concluded that there was no evidence of occupation debris in the ditch (although Bronze Age pottery was subsequently discovered elsewhere in the ditch) and that the ditch fill was similar to the present topsoil, which could indicate that the period of deposition of windblown material occurred between the Mesolithic and Bronze Age settlement at Seamer Carr.

H C M KEELEY

August 1977