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A BURIED SOIL AT TIVERTON, DEVON.

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Summary

A soil buried beneath a presumed prehistoric Long Barrow was examined during excavations by the CEU in 1985. The barrow appeared to have a turf core. The organic matter of the Ah horizon of the buried soil had been oxidised and the whole profile compressed. It is most likely that the soil was developed under grassland and that the site was open when the barrow was constructed.

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By Helen C.M. Keeley

During the late summer/early autumn of 1985 a presumed prehistoric Long Barrow was excavated by George Smith of the Central Excavation Unit after damage to the monument in the course of housing development. The monument is situated on а slight terrace on the gently-sloping south side of the shallow valley of the River Lowman. It consists of a long, trapezoidal earthen mound, oriented approximately east-west. The larger part of the mound material apparently derives from a deep surrounding ditch. At the base of the mound, in cross-section, were remnants a possible marking-out core of stones and turves all of which of overlaid a thin, sharply defined stone-free horizon of soil, taken to be the "turf-line" of a buried land surface.

The soils in the area have been mapped by the Soil Survey of England and Wales as Crediton Association (Clayden, 1971; Findlay et al, 1984) developed on Permo-triassic sandstones, comprising red breccias and conglomerates. The association consists of very stony typical brown earths of the Crediton and Wrington series and typical argillic brown earths of the Shaldon series. The area forms part of the well-known red land of Devon and the soils are red, very stony, mainly well-drained sandy silt loams or clay loams with weakly differentiated horizons.

The excavations were visited by the author in September, 1985, and 2 sections through the buried soil below the barrow were examined and sampled. The profiles are described below:

Section 1, Soil Pit A

This section was at the mid-point of the mound cross-section.

Sample I was material from the lower part of the mound. Yellowish red (5YR4/6) moderately friable medium sandy loam with moderate medium subangular blocky structure. Common fine fibrous roots; stones 5% gravel to medium angular and sub-rounded.

II came from a stony layer almost at the base of the mound. Reddish brown (5YR4/4) moderately friable coarse sandy loam with moderate medium subangular blocky structure. Common medium to fine fibrous root; stones 40% gravel to large, angular and subrounded.

III was from a layer thought to be turves comprising the base of the mound. It consisted of mixed black (5YR2.5/1) and reddish brown (5YR4/4) friable medium sandy loam (humic in the case of the black material) with moderate medium angular blocky structure, containing a few flecks of charcoal. Few medium to fine fibrous roots; few gravel to medium stones.

IV was from the lower part of the turf layer, possibly incorporating the upper part of the bAh of the buried soil. This was similar to III above but contained less black material.

V was a dark gravelly layer, dark reddish brown (10YR3/4) with patches of black, simliar to layers III and IV, and appeared to be the lower part of the buried topsoil. Rare fine fibrous roots; stones 40% gravel to large, angular and subrounded.

The subsoil (VI) was yellowish red (5YR4/6) with occasional black patches, friable gritty medium sandy loam with moderate medium angular blocky structure. Roots absent; stones 30% gravel to

medium. Manganese mottles and concretions were noted.

Section 2, Soil Pit B

This section was towards the southern edge of the mound cross-section.

Sample I was mound material similar to sample I in Section 1. II was thought to be the bAh of the buried topsoil. Pinkish grey (7.5YR6/2) friable gleyed medium loamy sand with moderate medium subangular blocky structure. 2% fine distinct rusty mottles occurred. Occasional medium to fine fibrous roots; few gravel to small stones. Sharp boundary to III (Iron pan). Reddish brown (5YR4/4)

Sharp boundary to III (Iron pan). Reddish brown (5YR4/4) containing black patches and occasional flecks of charcoal. Roots absent; common gravel to small angular stones. Compacted medium sandy loam.

IV was similar to layer V in Section 1 and V was similar to VI in Section 1.

Comments

Site drainage was moderate to free. The barrow appeared to be situated on top of a bench part way down the hill slope. The mound appeared to have a turf core, overlying a buried soil in which the organic matter of the Ah horizon had been oxidised and the whole profile compressed. In view of the post-depositional changes to the buried soil it is difficult to assign it to a series but soils of the Crediton series would be expected in this area. It is most likely that the soil was developed under grassland and that the site was open at the time the barrow was constructed.

References

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