ANCIENT MONUMENTS LABORATORY

REPORT
2250

SERIES/No.	ENVIRONMENTAL 29/77
AUTHOR	Dr H C M Keeley Apfil 1977
TITLE	NORNOUR, ISLES OF SCILLY THE SOILS

ANL Report 1250.

62

NORNOUR, ISLES OF SCILLY

The Soils

By H C M KEELEY

The presence of a till and an outwash gravel (both containing far - travelled erratics and heavy minerals) along the northern margin of the Isles of Scilly has been established (Mitchell and Orme, 1969). The glacial deposits rest on a Lower Head, raised beach and shore platform, and are overlain by a younger beach and an Upper Head.

Nornour, Great Ganilly, Great Inisvouls and Little Inisvouls form the north-east margins of the group of small islands known as the Eastern Isles. Raised beach has been noted below head and Nornour and Great Inisvouls (Mitchell and Orme, 1967) but foreign stones were not seen on any of the four islands.

On Nornour soil parent material appeared to consist of locally derived head deposits of gravelly loam with variable stone content, overlying granite rock, similar to that found on the granites in Cornwall (Clayden, 1964). The soil buried beneath the regosol derived from blown sand on the south side of Nornour was a ranker with a shallow A/C profile approximately 30 cms in depth, and appeared to be similar to the soil associated with the ancient settlement. The section sampled for pollen analysis is described below:-

The site was 15 metres below the summit of the hill; slope 10° and feeely drained. Vegetation was predominantly Pteridium sp and earthworms were absent from the profile.

0 to 22cms (the F horizon) was a dark brown (10YR3/2) fibrous organic layer containing bluebell corms, bracken roots and undecomposed and decomposing plant debris. Sand grains were present.

22 to 32 cms. was grey (10YR6/2) structureless sand containing roots and small particles of amorphous organic matter, probably washed down from the F horizon.

32 to 42 cms. was structureless sand, stained dark grey to black by eluviated organic matter (10YR3/1), containing bracken roots. There may have been some consolidation of the blown sand at this stage of development.

42 to 62 cms. was light coloured (10YR6/3) wind-blown sand; structureless and containing bracken roots.

62 to 86 cms. was the buried A horizon of the original soil on which the sand was deposited. This layer consisted of black (7.5YR2.5/0) silty sand, with weak crumb structure, containing amorphous organic matter and few roots, and was more compact than layers above.

86-91 cms. (b C horizon) was dark brown (7.5YR3/2) rotted (weathering) granite, containing granite fragments, with coarse loamy sand texture and weak crumb structure. Roots were absent and the organic matter content was much less than in the layer above.

Granite boulders occurred below 91 cms.

References

Mitchell, G.F. and Orme, A.R. (1967), Q. JL. geol. Soc. Lond., 123, 59-92: The Pleistocene deposits of the Isles of Scilly.

Clayden, B. (1964). In: Present Views on Some Aspects of the Geology of Cornwall and Devon. Royal Geological Society of Cornwall. pp. 311-330: Soils of Cornwall.