

ANCIENT MONUMENTS LABORATORY

REPORT

3567

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| SERIES/No | CONTRACTOR | |
| AUTHOR | R. I. Daephall | 1981 |
| TITLE | Soil report on Bradon (Suffolk) Nr. Thetford | |

Soil Report on Brandon (Suffolk), nr. Thetford

During the summer of 1981, excavations were carried out by the Suffolk Archaeological Unit (Field Officer, Bob Carr) at Brandon, where a Saxon village occurs alongside the little Ouse River. Here, in the lowest part of the river valley deep peats, and recent blown sand over Pleistocene sands and gravels occur. Peat soils and ground water gleys are present.

The excavation exposed a section of blown sand over coarse Pleistocene sands. Within the blown sand there appeared to be a buried soil covered by further blown sand capped by the modern turf. The section was described and analysed for loss on ignition and its iron content visually estimated (See Data).

Field description tended to suggest a weakly formed podzol had been buried by further blown sand, although this was mainly based on soil colour; the profile being generally structureless (single grain). However, the analyses tended to suggest that the "bAh" occurs in a gleyed zone from the Bg2 to the Bg4 (bEa) horizon, which is characterised by a depleted iron content. Iron occurs mainly in the topsoil and basal horizons, and so the mottling and low iron content seem to occur in the area of the fluctuating water table, in the centre of the soil. Loss on ignition, as a measure of organic matter could only poorly indicate a buried soil.

Therefore, the whole soil has to be classified as a ground water gley of the Highlodge Series (Corbett, 1973) which is included in the Complex of Highlodge, Isleham, Row (Gleys) and Adventurers (Peat) Series mapped elsewhere in the valley of the Little Ouse River. In fact, the Highlodge Series is noted for having its major gleyed zone at 45-60 cms. depth, correlating with the very pale horizon at Brandon.

Nevertheless, the possibility of a soil being buried at Brandon cannot be fully ruled out, because the present fluctuating water table and mid-profile gleying would tend to obscure any weakly formed soil in a sandy substrate.

References

Corbett, W. M., 1973. Breckland Forest Soils. Special Survey No. 7. Soil Survey, Harpenden.

Data

| Horizon | pH | % loss on ignition |
|-------------|-------|--------------------|
| Ap/Ah | N. D. | 7.86 |
| Bg | N. D. | 1.93 |
| Bg/Bg2 | N. D. | 0.75 |
| Bg2 | N. D. | 1.34 |
| Bg3 (bAh) | 5.2 | 0.79 |
| Bg4 (bEa) | 6.0 | 0.63 |
| Bg5 (bBhs) | 6.1 | 0.93 |
| Bg6 (bB(s)) | 6.3 | 1.03 |
| 2Cg | 6.3 | 0.73 |

Soil Description. Brandon, Norfolk

Near Hut 734, by grid peg 89/55

Site: Valley bottom of Little Ouse River

Parent Material: Recent blown sand over Pleistocene sand

Soil Type and Series: Gound Water Gley, Highlodge Series

horizon, depth, cms.

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| Ap/Ah 0-16 | Black (5YR 2.5/1) loose to very weak medium sand; fine granular; abundant fine roots; humose; gradual, wavy boundary. |
| Bg 16-45 | Dark grey (5YR 4/1) very weak sand, with common medium diffuse mottles; structureless; common fine roots; gradual, wavy boundary. |
| Bg2 45-60 | Reddish grey (5YR 5/2) moderately firm sand, with common medium diffuse mottles; massive; clear smooth boundary. |
| Bg3 (bAh) 60-70 | Dark grey (5YR 4/1) moderately weak sand; structureless; clear, smooth boundary. |
| Bg4 (bEa) 70-80 | Grey to dark grey (5YR 5/1 - 4/1) moderately weak structureless sand; gradual, smooth boundary. |
| Bg5 (bBhs) 80-90 | Dark reddish brown (5YR 3/2) very weak structureless sand; diffuse, wavy boundary. |
| Bg6 (bB(s)) 90-105 | Reddish brown (5YR 4/4) very weak structureless sand; narrow, smooth boundary. |
| 2Cg 105+ | Brown (7.5YR 4/4) very weak, wet, structureless, coarse sands. |