

ANCIENT MONUMENTS LABORATORY

REPORT

3738

SERIES/No	CONTRACTOR	
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TITLE	Soil report; Ockham Common (M25), Surrey	

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Macphail, R I

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During the summer of 1981 ridges on Ockham Common were excavated (Surrey Archaeological Society). In 1982, the M25 extension cut through more of these ridges and these were investigated by a watching brief (Anne Watson, Surrey Archaeological Society and Dr David Bird, Field Officer, Surrey County Council). Ockham Common is a heathland developed on fine and medium sandy Bagshot Beds (Eocene), which may contain thin clay laminae. Local soils are mainly very degraded humo-ferric podzols - often with gleying at depth. These soils have been previously mapped and described in detail (Macphail, 1979).

A section exposing ridges, associated "cart tracks" or "cart ruts" and plough marks was described. Variations in soil material were further identified by the iron content of ignited profiles.

The ridges are clearly artificial and upcast buries original humo-ferric podzols. The overburden has been subsequently leached - or was already iron deficient. Soil may also have eroded back into the furrows. There is some evidence of the furrows being used as cart tracks - overdeepening the furrow. The local plough soils, which are relatively humose and contain some iron, also point to agricultural activity - but again at an unknown date.

It may be conjectured that the ridges relate to late Medieval rural expansion and as they occur running in several directions, may be part of a three field system (David Bird, pers. comm.).

Ref

Macphail, R I 1979. Soil variation on selected Surrey Heaths. Unpub. Ph.D. C.N.A.A. Kingston Polytechnic.

Profile Description

Plough mark Section

Soil Type: Humo-ferric podzol Aspect: North

Parent Material: Bagshot Beds

Vegetation: Pine, Birch scrub, bracken

Horizon, cm.

L, F, H. Pine, Birch and Bracken litter, becoming

4-0 amorphous, dark brown, many roots.

Ah Black to very dark grey (5YR2.5/1-3/1)

0-6 Weak medium sand; weak coarse blocky; many medium roots; humose; clear, wavy boundary.

Ah2 Very dark grey (5YR3/1) weak sand;

6-10(19) Very weak blocky; few medium roots; humose; abrupt, irregular boundary (plough marks)

Ea Reddish grey (5YR5/2) with pinkish white

10(19)-23(25) (7.5YR8/2) mottles; weak structureless sand; abrupt, irregular boundary

Bh Black (5YR2.5/1) firm sand; massive;

23(25)-26(31) few pale mottles; humose; sharp, irregular boundary

Bsg Yellowish red (5YR4/6) firm sand;

26(31)-53+ massive; pale mottles; Bh laminae

Ridge Section

As above.

Horizon, cm.

L, F, H. Pine, Birch, and Bracken litter, becoming

5-0 amorphous, dark brown, many roots.

Ah/Ea Very dark grey to light reddish brown

0-14

0-14 (5YR3/1-6/3) weak medium sand; very weak coarse blocky; few medium roots; moderately humose; clear, smooth boundary

bAh Black to very dark grey (5YR2.5/1-3/1)

14-24 weak sand; weak coarse blocky; many medium roots; humose; gradual, wavy boundary

bEa Reddish grey to dark reddish grey (5YR5/2-4/2) loose structureless

24-44(50) sand; rare roots; gradual, irregular boundary

b Bh & Bhs Black (5YR2.5/1) and dark reddish brown (5YR3/3) firm sand; massive;

44(50)-70+ rare roots; humose; Bsg horizon with depth.