

Whitsome SERIES

A. SOIL MAP UNIT DESCRIPTION

SOIL CLASSIFICATION

SCOT: Brown forest
soils with gleying
SSEW: Cambic
stagnogley soils

SOIL ASSOCIATION

WHITSOME

PARENT MATERIAL

Reddish brown clay loam
or clay till derived from
Lower Carboniferous
sediments and basic lavas,
Upper Old Red Sandstone
Sandstones and Silurian
greywackes.

DRAINAGE CLASS

Imperfect

PERMEABILITY CLASS

Slow

REFERENCES

soil maps —

1:63 360 sheets

25 (Kelso)

26 (Berwick-on-Tweed)

33/34 (Haddington/
Eyemouth)

memoirs —

Soils round Kelso and
Lauder

Soils round Haddington and
Eyemouth

LOCATION AND EXTENT

South-east Scotland. The lower Tweeddale border
lowlands, extending from Kelso to Berwick-on-Tweed and
encompassing the Merse of Berwickshire. 260 sq km.

LANDFORM

Undulating lowlands with gentle slopes.

VEGETATION

Arable; ley pastures.

CLIMATE

<i>av. ann. rainfall, mm</i>	730
<i>accum. temperature</i> <i>(day °C above 0°C Jan-Jun)</i>	1180-1340
<i>maximum PSMD, mm</i>	120-140
<i>growing season, days</i>	220
<i>field capacity</i>	early Nov to early Mar

SOIL DESCRIPTION

	<i>topsoil</i>	<i>subsoil</i>
<i>colour</i>	dark brown to brown	reddish brown to brown
<i>texture</i>	clay loam or sandy silt loam	clay loam
<i>structure</i>	moderate medium subangular blocky	moderate coarse subangular blocky or prismatic
<i>stone content</i>	slightly stony	slightly stony
<i>potential rooting depth</i>	30-35 cm; deeper in dry years, limited by compact and coarse-structured subsoil.	
COMMENT	Compact subsoil restricts rooting depth and water movement. In dry seasons structure cracks widen and the natural drainage is improved.	

SOIL CHEMISTRY

High percentage base saturation and pH values in subsoil.
Generally low total phosphorus below topsoil.

MAP UNIT VARIATION

Locally the subsoil is water-modified material and has a
coarser texture; rooting depths are enhanced and the
natural drainage improved.