

SOIL CLASSIFICATION

SCOT: Noncalcareous
gleys (Brown forest soil
with gleying on early
maps)

SSEW: Cambic
stagnogley soils

SOIL ASSOCIATION

ROWANHILL
(WINTON Association
on Sheet 33/34)

PARENT MATERIAL

Reddish brown or brown,
clay or clay loam till
derived from shales,
sandstones, limestones
and coals of
Carboniferous age.

DRAINAGE CLASS

Imperfect

PERMEABILITY CLASS

Slow

REFERENCES

soil maps —
1:63 360 sheets
24/32 (Peebles/Edinburgh)
33/34/41 (Haddington/
Eyemouth)
40/41 (Kinross/Elie)
48/49 (Perth/Arbroath)

memoirs —
Soils round Perth, Arbroath
and Dundee
Soils round Haddington and
Eyemouth

LOCATION AND EXTENT

The Lothian plain, from Linlithgow in the west to
Penicuik, south of Edinburgh, and to Dunbar in the east,
and East Fife. 230 sq km.

LANDFORM

Undulating lowlands with gentle to strong slopes.

VEGETATION

Arable; ley pastures.

CLIMATE

	<i>Lothian Plain</i>	<i>East Fife</i>
<i>av. ann. rainfall, mm</i>	675-895	740
<i>accum. temperature</i> <i>(day °C above 0°C Jan-Jun)</i>	1230-1390	1210-1370
<i>maximum PSMD, mm</i>	120-160	110-140
<i>growing season, days</i>	225	225
<i>field capacity</i>	mid-Nov to early Mar	early Nov to early Mar

SOIL DESCRIPTION

	<i>topsoil</i>	<i>subsoil</i>
<i>colour</i>	dark greyish brown to brown	brown
<i>texture</i>	sandy silt loam or clay loam	sandy clay loam or clay loam
<i>structure</i>	moderate medium subangular blocky	moderate coarse subangular blocky or prismatic
<i>stone content</i>	slightly stony	slightly or moderately stony
<i>potential rooting depth</i>	30-40 cm, deeper in dry years; limited by compact subsoil	
<i>COMMENT</i>	Compact, moderately fine-textured, coarse-structured subsoil restricts rooting depth and water movement.	

SOIL CHEMISTRY

pH values in the basal horizons range from 4.5 to 8, the
result in part of variation in the amount of limestone in the
parent material. General increase in percentage base
saturation and pH with depth. Generally low
exchangeable potassium and total phosphorus values
below the topsoil.

MAP UNIT VARIATION

Associated with Macmerry Series (coarser-textured
subsoils).