

SOIL CLASSIFICATION

SCOT: Brown forest soils
with gleying
(Noncalcareous gleys on
some maps)

SSEW: Stagnogleyic
brown earths or cambic
stagnogley soils

SOIL ASSOCIATION

ROWANHILL

PARENT MATERIAL

Sandy loam or loamy sand
water-modified material
overlying reddish brown
sandy clay loam or clay
loam till derived from
Carboniferous sediments,
mainly shales and
sandstones.

DRAINAGE CLASS

Imperfect

PERMEABILITY CLASS

Moderate

REFERENCES

soil maps —
1:63 360 sheets
23 (Hamilton)
24/32 (Peebles/Edinburgh)
33/34 (Haddington/
Eyemouth)
48/49 (Perth/Arbroath)

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

LOCATION AND EXTENT

South of Forth estuary between Calder and Dunbar (75 sq km);
throughout Fife (34 sq km); small areas south of Glasgow, near
Lesmahagow, Larkhall and Carstairs (12 sq km). Total 121 sq km.

LANDFORM

Flat or gently undulating lowlands, often contiguous with
alluvial channels or marginal to raised beach or fluvioglacial
deposits.

VEGETATION

Arable; permanent pastures; deciduous woodlands.

CLIMATE

	<i>Fife/Lothian coastal plains</i>	<i>Central Fife</i>	<i>Clyde valley</i>
<i>av. ann. rainfall, mm</i>	650-800	800-1000	800-1000
<i>accum. temperature (day °C above 0°C Jan-Jun)</i>	1210-1390	1240-1410	1090-1370
<i>maximum PSMD, mm</i>	70-110	60-90	55-85
<i>growing season, days</i>	225	225	215-225
<i>field capacity</i>	early Nov to early Mar	mid-Oct to early Mar	mid-Oct to early Mar

SOIL DESCRIPTION

	<i>topsoil</i>	<i>subsoil</i>
<i>colour</i>	dark greyish brown to dark brown	reddish brown to dark brown
<i>texture</i>	sandy loam or sandy silt loam	sandy loam or loamy sand overlying sandy clay loam or clay loam
<i>structure</i>	moderate subangular blocky	weak angular or subangular blocky; massive at depth
<i>stone content</i>	slightly or moderately stony	moderately stony
<i>potential rooting depth</i>	between 70-90 cm depending on depth to finer-textured till	
<i>COMMENT</i>	Water-modified material is generally between 40 to 60 cm in thickness. Underlying finer-textured till restricts rooting depth and water movement.	

SOIL CHEMISTRY

High percentage base saturation, values increasing with depth.
Medium total phosphorus in topsoil with low values in the
subsoil often increasing to medium again in the finer-textured
till.

MAP UNIT VARIATION

Thickness and texture of the water-modified material vary.