

SOIL CLASSIFICATION

SCOT: Brown forest
soils with gleying
SSEW: Stagnogleyic
brown earths

SOIL ASSOCIATION

ETTRICK

PARENT MATERIAL

Clay loam or sandy silt
loam tills and drifts,
generally grey in colour,
derived from Ordovician
and Silurian greywackes
and shales.

DRAINAGE CLASS

Imperfect

PERMEABILITY CLASS

Moderate or slow

REFERENCES

soil maps —
1:63 360 sheets
1/2/3/4 (Stranraer/
Wigtown)
7/8 (Girvan/Carrick)
23 (Hamilton)
24/32 (Peebles/Edinburgh)

memoirs —
Soils round Stranraer and
Wigtown
Soils of Carrick and round
Girvan

Compiled by G. Hudson
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SMUTS 1

LOCATION AND EXTENT

Scattered occurrences throughout south-west Scotland;
concentrated in the valleys of the River Stinchar and
Duisk Water; also in the Tweed valley west of Peebles and
around the Biggar Water near Broughton. *About 50 sq km.*

LANDFORM

Drumlin crests and hill or valley sides with gentle or
moderate slopes. Ranges from 30 m to over 300 m.

VEGETATION

Permanent pastures with some arable; common bent-
fescue grassland.

CLIMATE

	<i>South-west Scotland (below 250 m)</i>	<i>Peebles/Biggar</i>
<i>av. ann. rainfall, mm*</i>	1200-1400	900-1000
<i>accum. temperature*</i> <i>(day °C above 0°C Jan-Jun)</i>	1260-1430	1080-1210
<i>maximum PSMD, mm</i>	ca 100	ca 100
<i>growing season, days*</i>	250	215
<i>field capacity*</i>	early Oct to early Mar	mid-Oct to early Mar

SOIL DESCRIPTION

	<i>topsoil</i>	<i>subsoil</i>
<i>colour</i>	dark greyish brown	greyish brown
<i>texture</i>	sandy silt loam	clay loam
<i>structure</i>	moderate medium subangular blocky	weak medium subangular blocky or massive
<i>stone content</i>	moderately stony	moderately stony
<i>potential rooting depth</i>	30-50 cm, restricted by subsoil induration or compaction	
<i>COMMENT</i>	Water movement and root development commonly impaired by compaction or induration in massive subsoil.	

SOIL CHEMISTRY

Moderate acidity and medium percentage base saturation;
total phosphorus decreases from high in topsoil to
medium in subsoil; all values lower in uncultivated or
neglected soils.

MAP UNIT VARIATION

In the Machars of Wigtownshire soils and parent materials
intergrade to those of the Rhins Association.

*Climate data extracted from Meteorological Office publications *Average Annual Rainfall: Northern Britain* and *Climatological Memorandum No 108* and reproduced by permission of the Controller of HMSO.