

Portpatrick SERIES

A. SOIL MAP UNIT DESCRIPTION

SOIL CLASSIFICATION

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

SOIL ASSOCIATION

RHINS

PARENT MATERIAL

Reddish brown clay loam
till, containing mainly
greywacke stones, having
water-modified surface
layers.

DRAINAGE CLASS

Imperfect

PERMEABILITY CLASS

Moderate

REFERENCES

soil maps —
1:63 360 sheets
1/2/3/4 (Stranraer/
Wigtown)

memoirs —
Soils round Stranraer and
Wigtown

LOCATION AND EXTENT

Wigtownshire; the Rhins of Galloway and near Port
William. About 50 sq km.

LANDFORM

Drumlins and undulating lowlands with gentle or strong
slopes, mainly below 100 m altitude.

VEGETATION

Long ley pastures; some arable.

CLIMATE

<i>av. ann. rainfall, mm</i>	1000-1100
<i>accum. temperature</i> (day °C above 0°C Jan-Jun)	1230-1400
<i>maximum PSMD, mm</i>	ca. 100
<i>growing season, days</i>	250
<i>field capacity</i>	early Oct to early Mar

SOIL DESCRIPTION

	<i>topsoil</i>	<i>subsoil</i>
<i>colour</i>	reddish brown	reddish brown
<i>texture</i>	sandy silt loam	sandy loam over clay loam
<i>structure</i>	moderate medium subangular blocky	weak coarse subangular blocky
<i>stone content</i>	slightly or moderately stony	moderately stony
<i>potential rooting depth</i>	free rooting in surface to about 30 cm, some restricted development to 60 cm, impeded thereafter by compact subsoil.	
<i>COMMENT</i>	Moderate permeability to moisture and penetration by roots in upper subsoil is associated with sandy loam water- modified till.	

SOIL CHEMISTRY

Slightly acid but with high percentage base saturation
throughout; total phosphorus medium in topsoil,
decreasing with depth.

MAP UNIT VARIATION

In the Port William area the soil characteristics intergrade
to those of the Ettrick Association.