

Amlaird SERIES

A. SOIL MAP UNIT DESCRIPTION

SOIL CLASSIFICATION

SCOT: Noncalcareous
gleys
SSEW: Cambic
stagnogley soils

SOIL ASSOCIATION

DARLEITH

PARENT MATERIAL

Clay or clay loam till,
generally reddish brown,
derived from basalts and
allied igneous rocks.

DRAINAGE CLASS

Poor

PERMEABILITY CLASS

Slow

LOCATION AND EXTENT

Locally in the Midland Valley; in north Ayrshire in hills
above Kilbirnie, Dunlop, Drumclog and in the Carron
valley. 52 sq km.

LANDFORM

Undulating uplands and hillsides with gentle and strong
slopes, 100-300 m altitude; low-lying hollows and
channels.

VEGETATION

Ley and permanent pastures; some rush pastures and
sedge mires.

CLIMATE

West Midland Valley East Midland Valley
and Fife

*av. ann. rainfall, mm**

1200-1600

800-1000

*accum. temperature**

no data

1250-1400

(day °C above 0°C Jan-Jun)

maximum PSMD, mm

80-100

100

*growing season, days**

no data

225

*field capacity**

no data

mid-Oct to early
Mar

REFERENCES

soil maps —
1:63 360 sheets
14 (Ayr)
22 (Kilmarnock)
23 (Hamilton)
30 (Glasgow)
31 (Airdrie)
39 (Stirling)
40/41 (Kinross/Elie)
47 (Crieff)

memoirs —
Soils of Carrick and round
Girvan
Soils round Kilmarnock
Soils round Perth and
Arbroath

SOIL DESCRIPTION

topsoil

subsoil

colour

very dark grey

grey or brown

texture

sandy silt loam or
clay loam

clay loam

structure

moderate medium
subangular blocky
or crumb

weak coarse
prismatic, becoming
massive with depth

stone content

very slightly stony

slightly or
moderately stony

potential rooting depth

50 cm restricted by massive structure and
high bulk density

COMMENT

Root development and water movement
restricted by massive structure and high
bulk density in the subsoil.

SOIL CHEMISTRY

Moderately acid, pH and percentage base saturation
increase to high in deep subsoil. Total phosphorus
generally medium, but ranges widely. Risk of high
molybdenum in herbage.

MAP UNIT VARIATION

High content of nickel and exchangeable magnesium in
some soils at Ballantrae/Colmonel.