

Ashgrove SERIES

A. SOIL MAP UNIT DESCRIPTION

SOIL CLASSIFICATION

SCOT: Noncalcareous
gleys
SSEW: Cambic
stagnogley soils

SOIL ASSOCIATION

ASHGROVE

PARENT MATERIAL

Clay till derived from
Carboniferous Limestone
Series shales and
sandstones.

DRAINAGE CLASS

Poor

PERMEABILITY CLASS

Slow

REFERENCES

soil maps —
1:63 360 sheets
14 (Ayr)
22 (Kilmarnock)

memoirs —
Soils round Kilmarnock

Compiled by G. Hudson
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Issued March 1990
SMUDS 1

LOCATION AND EXTENT

North and east of Kilwinning, south-west of Ayr and west of East Kilbride. 88 sq km.

LANDFORM

Undulating, lowland till plain with gentle or moderate slopes.

VEGETATION

Permanent pastures; some rush pastures and sedge mires.

CLIMATE

| | <i>Ayr</i> | <i>Kilwinning</i> | <i>East Kilbride</i> |
|--|---------------------------|---------------------------|----------------------|
| <i>av. ann. rainfall, mm*</i> | 1000 | 1100-1400 | 1150 |
| <i>accum. temperature*</i> (day °C above 0°C Jan-Jun) | 1290-1470 | 1280-1450 | no data |
| <i>maximum PSMD, mm</i> | 120 | 100 | 80 |
| <i>growing season, days*</i> | 255 | 255 | no data |
| <i>field capacity*</i> | early Oct to early Mar | early Oct to early Mar | no data |

SOIL DESCRIPTION

| | <i>topsoil</i> | <i>subsoil</i> |
|--------------------------------|--|--|
| <i>colour</i> | greyish brown | brown or dark brown |
| <i>texture</i> | clay loam | clay |
| <i>structure</i> | weak coarse crumb | weak medium prismatic, becoming massive with depth |
| <i>stone content</i> | very slightly stony | very slightly stony |
| <i>potential rooting depth</i> | moderate rooting potential in topsoil to about 25 cm. Restricted in subsoil | |
| <i>COMMENT</i> | High clay contents and plastic consistence in the subsoils render drainage difficult. Highly weathered shales are common in the till | |

SOIL CHEMISTRY

Gradual increase in pH, exchangeable bases and percent base saturation with depth. pH's reach 7.0 - 8.0 in the parent material. Readily soluble phosphorus is low in topsoils but reaches medium to high levels in parent tills.

MAP UNIT VARIATION

On gently sloping ground in depressions, organic content of topsoils is high, and peaty layers are locally developed. Higher clay contents occur south-east of Glengarnock, where clay textures are common in the topsoil. Sandy loam subsoils occur locally around Kilwinning where water-modified material overlies the clay till.

*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.