

Boyndie SERIES

A. SOIL MAP UNIT DESCRIPTION

SOIL CLASSIFICATION

SCOT: Humus-iron
podzols (Podzols or
iron podzols on early
maps)

SSEW: Humo-ferric
podzols

SOIL ASSOCIATION

BOYNDIE

PARENT MATERIAL

Stratified fluvioglacial,
riverine and raised beach
pale brown sands derived
mainly from acid schists
and granites.

DRAINAGE CLASS

Free, occasionally
excessive

PERMEABILITY CLASS

Rapid

REFERENCES

soil maps —
1:63 360 sheets
43/44 (Mull)
48/49 (Perth/Arbroath)
56 (Blairgowrie)
57 (Forfar)
66/67 (Banchory/Stonehaven)
75 (Tomintoul)
76 (Inverurie)
77 (Aberdeen)
Parts 83/84/93/94 (Black Isle)
84 (Nairn)
85/95 (Roths/Elgin)
87/97 (Peterhead/Fraserburgh)
94 (Cromarty/Invergordon)
96 (Banff)

1:50 000
52 (Ardnamurchan/Morvern)
Orkney-Mainland

memoirs —

Soils round Banff, Huntly and
Turriff
Soils round Aberdeen, Inverurie
and Fraserburgh
Soils round Perth, Arbroath and
Dundee
Soils of the Black Isle

Compiled by A.D. Walker
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SMUDS 1

LOCATION AND EXTENT

Moray Firth lowlands; Buchan; Strathmore and between
Perth and Blairgowrie. 310 sq km.

LANDFORM

Fluvioglacial outwash plains, kames and eskers; river
terraces and deltas; raised beaches.

VEGETATION

Arable; permanent pastures; coniferous woodlands.

CLIMATE

| | <i>Moray Firth and East Strathmore</i> | <i>Buchan and West Strathmore</i> | <i>Elsewhere</i> |
|--|--|---|------------------|
| <i>av. ann. rainfall, mm</i> | <800 | 800-1000 | >1000 |
| <i>accum. temperature (day °C above 0°C Jan-Jun)</i> | 1190-1350 | 900-1250 | no data |
| <i>maximum PSMD, mm</i> | 120-155 | 105-110 | 50-70 |
| <i>growing season, days</i> | 220 | 210-215 | no data |
| <i>field capacity</i> | late Oct/early Nov to early Mar | mid-Oct to early/mid- Mar | no data |

SOIL DESCRIPTION

| | <i>topsoil</i> | <i>subsoil</i> |
|--------------------------------|---|---|
| <i>colour</i> | dark brown | strong brown or dark reddish brown |
| <i>texture</i> | sandy loam | loamy sand or sand |
| <i>structure</i> | weak medium or fine subangular blocky | single grain, structureless or massive and cemented (Moray Pan) |
| <i>stone content</i> | stoneless or very slightly stony | stoneless |
| <i>potential rooting depth</i> | unrestricted in most soils but limited in some by a strongly cemented subsoil (Moray Pan) to between 30 and 45 cm | |

COMMENT Coarse texture, weak structure and rapid permeability
make these soils very prone to drought and windblow. Man-made
topsoils of 50 cm thick or more are common, especially on the raised
beach soils.

SOIL CHEMISTRY

Readily leached and, under natural conditions, very acid soils.
Exchangeable bases are usually very low. Total phosphorus
generally low or very low. Low total copper and cobalt.

MAP UNIT VARIATION

Some inclusions of soils of the Corby Association. Cemented
subsoils (Moray Pan) are widespread around Elgin and
Ardersier. Boyndie Series shown as BY2 on Sheet 96.