

# Gourdie SERIES

## A. SOIL MAP UNIT DESCRIPTION

### SOIL CLASSIFICATION

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

### SOIL ASSOCIATION

GOURDIE

### PARENT MATERIAL

Reddish brown or brown  
sandy silt loam, clay loam  
or sandy clay loam till  
derived from acid  
metamorphic rocks and  
Lower Old Red Sandstone  
sediments and lavas.

### DRAINAGE CLASS

Imperfect

### PERMEABILITY CLASS

Moderate or slow

### REFERENCES

*soil maps* —  
1:63 360 sheets  
47 (Crieff)  
48/49 (Perth/Arbroath)  
56 (Blairgowrie)

*memoirs* —  
Soils round Perth, Arbroath  
and Dundee

### LOCATION AND EXTENT

Along the Highland Boundary Fault Zone from the  
Kirriemuir district in Angus south-west to Glen Artney,  
Central Perthshire (43 sq km).

### LANDFORM

Undulating lowlands and foothills; gentle to strong  
slopes.

### VEGETATION

Arable with some permanent pastures; some broad-leaved  
and coniferous woodlands.

### CLIMATE

	<i>Eastern Perthshire/ Angus</i>	<i>West Perthshire</i>	<i>Loch Lomond/ Arran</i>
<i>av. ann. rainfall, mm</i>	850-900	1100-1500	1500-2000
<i>accum. temperature (day °C above 0°C Jan-Jun)</i>	1120-1250	1250-1420	no data
<i>maximum PSMD, mm</i>	100	100	80
<i>growing season, days</i>	215	225	no data
<i>field capacity</i>	mid-Oct to early Mar	early Oct to early Mar	no data

### SOIL DESCRIPTION

	<i>topsoil</i>	<i>subsoil</i>
<i>colour</i>	dark greyish brown	reddish brown or brown
<i>texture</i>	fine sandy loam or sandy silt loam	clay loam or sandy clay loam
<i>structure</i>	moderate angular blocky	weak angular or subangular blocky; massive at depth
<i>stone content</i>	slightly or moderately stony	moderately stony
<i>potential rooting depth</i>	60-100 cm, depending if water-sorted material is present	
<i>COMMENT</i>	Upper layer of till can be water-sorted with resultant coarser texture. Colour of subsoil depends on whether sandstone or metamorphic rocks predominate.	

### SOIL CHEMISTRY

Percentage base saturation high with values decreasing  
with depth. Medium total phosphorus in topsoil with low  
or medium values in the subsoil. Trace element deficiency  
problems often encountered.

### MAP UNIT VARIATION

A thin veneer of water-sorted material can be present in  
subsoil above the till.