

Carey SERIES

A. SOIL MAP UNIT DESCRIPTION

SOIL CLASSIFICATION

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

SOIL ASSOCIATION

CARPOW

PARENT MATERIAL

Raised beach or river
terrace sands, particularly
fine sands, and silts
derived from Old Red
Sandstone sediments and
acid schists.

DRAINAGE CLASS

Imperfect

PERMEABILITY CLASS

Moderate

REFERENCES

soil maps —
1:63 360 sheets

30 (Glasgow)
39 (Stirling)
47 (Crieff)
48/49 (Perth/Arbroath)
56 (Blairgowrie)

memoirs —

Soils round Perth, Arbroath
and Dundee

Compiled by J.S. Bell
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SMUTS 1

LOCATION AND EXTENT

Throughout the Earn valley, including the Pow Water
(14 sq km); Carse of Gowrie (12 sq km); southern bank of
River Tay (3 sq km); Strathmore (3 sq km); Strathblane
(3 sq km); Forth valley near Arnprior and Thornhill
(1 sq km). Total 36 sq km.

LANDFORM

Flat or gently undulating terraces or old beach levels at
altitudes between 15 and 38 m.

VEGETATION

Arable; permanent pastures; some broad-leaved
woodlands.

CLIMATE

	<i>Earn valley/ East Perthshire</i>	<i>Stratheden</i>	<i>Forth valley</i>
<i>av. ann. rainfall, mm*</i>	700-950	650-700	1100-1300
<i>accum. temperature*</i> (day °C above 0°C Jan-Jun)	1120-1350	1210-1370	no data
<i>maximum PSMD, mm</i>	80-120	100-130	70-100
<i>growing season, days*</i>	215-220	225	no data
<i>field capacity*</i>	mid-Oct to early Mar	early Nov to early Mar	no data

SOIL DESCRIPTION

	<i>topsoil</i>	<i>subsoil</i>
<i>colour</i>	brown to dark brown	brown to reddish brown
<i>texture</i>	fine sandy loam	fine sandy silt loam or silt loam
<i>structure</i>	moderate angular and subangular blocky	moderate angular blocky; massive at depth
<i>stone content</i>	stoneless, occasionally slightly stony	stoneless to slightly stony
<i>potential rooting depth</i>	generally unlimited unless compacted at depth	
COMMENT	Percentage silt fraction (2-50 µm is generally high throughout the profile, resultant fine texture inhibits water movement.	

SOIL CHEMISTRY

High percentage base saturation; values increase with
depth. Total phosphorus is high or high to medium
throughout the profile.

MAP UNIT VARIATION

Some colour and texture differences related to rocks from
which the parent material has been derived.

*Climate data extracted from Meteorological Office publications *Average Annual Rainfall: Northern Britain* and
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