

# Bilbster SERIES

## A. SOIL MAP UNIT DESCRIPTION

### SOIL CLASSIFICATION

SCOT: Podzols  
SSEW: Brown podzolic  
soils

### SOIL ASSOCIATION

THURSO

### PARENT MATERIAL

Stony sandy loam or  
sandy silt loam drift  
derived from sandstones  
and flagstones of Middle  
Old Red Sandstone age.

### DRAINAGE CLASS

Free or imperfect

### PERMEABILITY CLASS

Moderate

### REFERENCES

*soil maps* —  
1:63 360 sheets  
109/115 (Achentoul/Reay)  
110/116 (Latheron/Wick)

1:50 000  
Orkney-Hoy  
Orkney-Mainland  
Orkney-Northern Isles

*memoirs* —  
Soils round Wick

### LOCATION AND EXTENT

Northern Caithness (93 sq. km); Orkney particularly on  
West Mainland and Sanday (165 sq. km.). Total 258 sq. km.

### LANDFORM

Gently sloping lowlands and valley sides; local, very  
occasional, rock outcrops.

### VEGETATION

Arable; permanent pastures.

### CLIMATE

	Orkney	Caithness
<i>av. ann. rainfall, mm</i>	900 - 1100	800 - 1000
<i>accum. temperature</i> <i>(day °C above 0°C Jan-Jun)</i>	no data	1060 - 1230
<i>maximum PSMD, mm</i>	70	110
<i>growing season, days</i>	no data	215
<i>field capacity</i>	no data	mid-Nov to early Mar

### SOIL DESCRIPTION

	<i>topsoil</i>	<i>subsoil</i>
<i>colour</i>	dark greyish brown	yellowish brown or brown
<i>texture</i>	sandy silt loam	sandy loam or sandy silt loam
<i>structure</i>	moderate medium subangular blocky	moderate or strong coarse platy
<i>stone content</i>	very slightly stony; shallow soils are often slightly or moderately stony	moderately to very stony
<i>potential rooting depth</i>	25 - 30 cm; limited by either a compact stony subsoil or bedrock	
COMMENT	An indurated subsoil is a common feature of these soils.	

### SOIL CHEMISTRY

Moderately acid; pH values generally 5 - 6. Levels of  
exchangeable bases generally medium. Total phosphorus  
usually low in subsoil, medium in topsoil and very high in  
deep topsoil.

### MAP UNIT VARIATION

Three phases of the series are recognised: shallow phase  
(depth to bedrock generally less than 30 cm), normal  
phase, and deep phase (depth to bedrock greater than 100  
cm). A deep topsoil phase (>75 cm) is mapped in Orkney.