



AGRICULTURAL LAND CLASSIFICATION
LEEDS UDP
WEST YORKSHIRE
TOPIC 763
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SUMMARY

A detailed Agricultural Land Classification Survey of 72.8 ha of land South of Thorpe on the Hill (ref Leeds UDP Topic 763) was carried out in November 1994.

At the time of the survey, 80% of the site was in agricultural use.

Soils are mostly formed from weathering Carboniferous Sandstone, although an area of shallow, restored soils is found East of Kiddow Springs.

On the unrestored land topsoils and subsoils are typically fine sandy loam or sandy clay loam with bedrock encountered at between 50 and 100 cm depth.

Soils on the restored land are very shallow and stony, typically a sandy clay loam over shale and cinders at 35cm depth.

Grade 2 land (19.1 ha) is limited by slight droughtiness. Topsoils are typically a very slightly stony fine sandy loam or sandy clay loam over a similar textured slightly to moderately stony subsoil. Bedrock is encountered at about 80cm depth.

Subgrade 3a land (26.5 ha) is similar in texture and stoniness to Grade 2 land but bedrock is encountered at about 50cm depth. Droughtiness is more a severe limitation than on the Grade 2 land.

Subgrade 3b land (12.8 ha in total) is limited by slope south of Throstle Carr Beck. East of Kiddow Spring the limitation is soil depth and droughtiness. Subgrade 3b land in the north east of the site is poorly drained and limited by soil wetness.

Non agricultural (0.3 ha), Farm buildings (2.2 ha), Urban (0.2 ha) and Woodland (11.5 ha) we also found on the site.

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AGRICULTURAL LAND CLASSIFICATION REPORT ON LAND SOUTH OF
THORPE ON THE HILL. LEEDS UDP, TOPIC 763.

1. INTRODUCTION AND SITE CHARACTERISTICS

1.1 Location and Survey Methods

The site lies about 6km south of Leeds City Centre to the north of Thorpe on the Hill, and has a total area of 72.8 ha and has a centroid grid reference of SE314269. Survey work was carried out in November 1994 when soils were examined by hand auger boring at 100m intervals at locations predetermined by the National Grid. In addition typical soils profiles were examined in greater detail with soil profile pits. Land quality was assessed using the methods described in "Agricultural Land Classification of England and Wales: Revised guidelines and criteria for grading the quality of agricultural land" (MAFF 1988).

1.2 Land Use and Relief

At the time of survey 80% of the site was in agricultural use growing rhubarb, potatoes, cereals and brassicas. Altitude ranges from 116 m A.O.D. along Middleton Lane to 70 m A.O.D. along Throstle Carr Beck. Slopes are generally not limiting except South of Throstle Carr Beck where they exceed 7° in places. Aspect is variable.

1.3 Climate

Grid Reference	: SE 314 269
Altitude (m)	: 90
Accumulated Temperature above 0°C: (January-June)	: 1318
Average Annual Rainfall (mm)	: 663
Climatic Grade	: 1
Field Capacity Days	: 157
Moisture Deficit (mm) Wheat	: 96
Moisture Deficit (mm) Potatoes	: 85

1.4 Geology, Soils and Drainage

Soils are mostly formed from weathering Carboniferous Sandstone. Drift cover is thin or absent. However East of Kiddow Spring soils are shallow and restored.

Typical profiles on the unrestored soils consist of a well drained (Wetness Class I) fine sandy loam or sandy clay loam topsoil (very slightly stony) over a similiar textured slightly to moderately, stony subsoil. Bedrock is encountered at between 50cm and 100cm depth. Those soils are droughty.

The restored soils are shallow (35cm to shale and cinders) and usually consist of a slightly stony sandy clay loam. Again those soils are droughty.

2. AGRICULTURAL LAND CLASSIFICATION

The ALC grades occurring on this site are as follows:

<u>Grade/Subgrade</u>	<u>Hectares</u>	<u>Percentage of Total Area</u>
1		
2	19.1	26
3a	26.5	36
3b	12.8	18
4		
5		
(Sub total)	(58.4)	(80)
Urban	0.2	<1
Non Agricultural	0.3	<1
Woodland	11.5	16
Agricultural Buildings	2.2	3
Open Water		
Land not surveyed		
Sub total	(14.4)	(20)
Total	<u>72.8</u>	<u>100</u>

2.1 Grade 2

Grade 2 land is found towards the centre of the site, down slope from Thorpe on the Hill. Topsoils and subsoils are typically fine sandy loam or sandy clay loam. Topsoils are very slightly stony and subsoils slightly stony. Bedrock is usually encountered at around 80cm depth. This land is well drained but limited to Grade 2 by slight droughtiness.

2.2 Subgrade 3a

Land in Subgrade 3a is similar to Grade 2 land. Soils are again well drained with fine sandy loam or sandy clay loam top and subsoils being very slightly to slightly stony. However bedrock is exposed at about 50cm depth increasing the droughtiness limitation on this land to Subgrade 3a.

2.3 Subgrade 3b

South of Throstle Carr Beck slopes of 8° limit land to subgrade 3b. In the north east of the site poorly drained soils are limited to 3b by soil wetness. The land in this subgrade East of Kiddow Springs is restored. Soils are stony and very shallow. Droughtiness is limiting.

2.4 Woodland

Four areas of woodland were mapped.

2.5 Urban

This comprises a dwelling house.

2.6 Form Buildings

This includes the complex of buildings at Thorpe Hall .

2.7 Non Agricultural

A small scrub area was included in this category.

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MAP