

REPORT TO ACCOMPANY THE AGRICULTURAL LAND CLASSIFICATION
FOR DALBY ROAD AIRFIELD, NEAR MELTON MOWBRAY

1. BACKGROUND INFORMATION

Introduction

The land at Dalby Road Airfield was visited by a member of the Resource Planning Group in April and May 1989, in order to undertake an Agricultural Land Classification survey of the area. Information was collected in sufficient detail to present the maps at a scale of 1 : 10,000.

Climate

This falls within Agro-Climatic Area 16. Monthly rainfall is fairly evenly distributed throughout the year, although wettest in August and November. Average annual rainfall varies between 630 mm and 655 mm. The number of days at field capacity varies between 135 and 142 days, in a typical year. The growing season is from late March to late November. The mean date of the last frost is in early May.

Altitude and Relief

Altitude varies between 78 metres at Kirby Lane, at the north end of the site, and 117 metres in the southern part of the airfield. The land is almost level in the ease of the site adjoining the disused airfield, but is more undulating around Great Dalby Lodge and Old Guadaloupe. However, nowhere within the site does gradient represent a limiting factor in the final grading of the land.

Geology

The solid geology is of the Jurassic succession, and consists mainly of clay shales, varying slightly in clay and silt content, and more widely, in calcium carbonate. These calcareous beds belong to the lower lias, and contain many bands of limestone.

The drift geology is Boulder Clay over the majority of the site, with limited areas of sand and gravel adjoining the dismantled railway, and to the west of the railway adjoining Kirby Lane.

Soils

The Soil Survey of England and Wales have a published memoir which covers the Dalby Road Airfield. On their map, soils of the Hanslope, Rowsham and Ragdale series are mapped over this site. The Hanslope series, covers gleyed calcareous soils, which have a clayey topsoil. The Rowsham series is typified by fine loamy or clayey soils over Jurassic clay. The Ragdale Series are mapped where gleyed calcareous clay soils occur, but the calcareous nature of these soils is not evident within the topsoil.

Agricultural Land Use

At the time of survey, the land adjoining the airfield was mainly under grass, being grazed by sheep and cattle, with some fields being cut for silage. There was a limited area of oil seed rape and winter cereals.

To the south west of Old Guadaloupe and to the west of the dismantled railway, winter cereals were being grown.

2. AGRICULTURAL LAND CLASSIFICATION

Grade 2 land accounts for 2.17 hecatres and 1.3% of the area surveyed. It occurs in a limited block to the west of the dismantled railway line. The soils are typically sandy loams overlying loamy sands with sand and gravel at depth. Soil draughtiness is the main limitation to the agricultural use of this land.

Sub-grade 3a land accounts for 101.03 hectares and 60.1% of the area surveyed. It is widespread throughout the site, particularly in the centre and north around Old Guadaloupe. The soils are typically heavy clay loams or clays, many of which are calcareous in the topsoil, overlying clay or silty clay at depth. Within this area, where the topsoil is calcareous with a heavy clay loam texture the soils are grade 2, but these areas were of insufficient size to show separately at this scale. Soil wetness is the main limitation to the agricultural use of this land.

Sub-grade 3b land accounts for 48.31 hectares and 28.7% of the area surveyed. In the south-east of the site, and in limited areas near the dismantled railway line, the soils are typically clays overlying clays or silty clays. These soils have a poorer structure than the sub grade 3a land, and the presence of a slowly permeable layer has resulted in gleying, and the allocation of a lower wetness class. Soil wetness is the main limitation to the agricultural use of this land.

Surrounding Great Dalby Lodge the soils are more variable with sandier bands within the clay, along with brick and occasional rubble. This area has undergone some disturbance, containing pockets of better and poorer quality land.

Grade 4 land accounts for 1.82 hectares and 1.1% of the area surveyed. These soils are disturbed, and the presence of concrete and brick rubble within the soil limit the agricultural use of this land.

Non-agricultural land accounts for 0.18 hectares and 8.1% of the area surveyed.

Urban land accounts for 13.70 hectares and 8.1% of the area surveyed.

Agricultural Buildings account for 0.95 hectares and 0.6% of the area surveyed.

3. SUMMARY

Grade	Area (ha)	% of site	% of agric. area
2	2.17	1.3	1.4
3a	101.03	60.1	65.9
3b	48.31	28.7	31.5
4	1.82	1.1	1.2
Urban	13.70	8.1	<u>100.0</u>
Non-agric	0.18	0.1	
Agric. Build	0.95	0.6	
	<u>168.16</u> ha	<u>100.0</u>	

Resource Planning
Group
Wolverhampton
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