IPJ/DLB

AGRICULTURAL LAND CLASSIFICATION REPORT FOR LAND AT PORTWAY, WARWICKSHIRE

Introduction

This 135 ha site lies between the M42 motorway and the A435 (Alcester Road), at Portway at Junction 3. The motorway forms the northern boundary of this triangular piece of land and the A435 the western boundary whilst to the south-east the site adjoins woodland and open countryside. The site is gently undulating with two small streams draining from west to east eventually flowing into the Earleswood Lakes about 2 km to the north-east. Altitude varies is from 152 m in the south-east to the highest point of 165 m in the north-west corner adjoining the motorway junction. The area receives an annual average rainfall of about 740 mm and has a mean accumulated temperature above 0°C, January to June (ATO) of 1318. The rainfall is relatively evenly distributed with a slightly drier period from February to June. The climate is slightly limiting on this site due to the moderate rainfall and the moderate/low temperatures, nowhere capable of being graded higher than Grade 2.

The balance between summer rainfall and evapotranspiration creates a moisture deficit of 86 mm for wheat and 72 mm for potatoes. There is a slight trend towards warmer and drier conditions towards the south and east and it is significant that the 175 field capacity day isoline passes through the centre of the site from Holly Farm in the west to Small Lane in the east.

Soils are derived from a heavy, slightly stony, Boulder Clay which produces slowly permeable soils of the Oak Soil Series. The soils are relatively uniform across the site typically consisting of grey brown clay loam topsoils overlying clay subsoils by between 30-40 cms. In one area an organic-rich topsoil has developed where soil drainage is more impeded than elsewhere. Some land has been reclaimed by tipping from woodland to the north of Little Ladbrook Farm. This land has badly compacted soils and an uneven surface with water filled, rush infested hollows and is the worst quality land on the site.

The site was visited during April 1989 when 74 auger borings were taken. At the time of the survey the whole area was under grass, some of which was not well managed. Some areas had produced cereals in the recent past. There is a substantial area of woodland and other non-agricultural land including the Birmingham Rugby Football Club grounds.

Agricultural Land Classification

Grade 3a land occupies 1.1 ha and accounts for 0.8% of the site. This small parcel of land in the north-west corner occurs on the lightest, best drained soils on the site. These soils typically have a medium clay loam/sandy clay loam topsoil passing into a heavier textured subsoil with clay encountered between 40-60 cms. There is little sign of gleying within 35 cms and the soils are wetness Class III. This level land is used as pony paddocks for stables on Forshaw Heath Lane.

In common with all the land on this site soil wetness is the main limiting factor to the agricultural use of the land but these slightly lighter soils are less wet than most soils on site.

Grade 3b land occupies 58.9 ha and accounts for 43.6% of the site. This is the most widespread grade of land on site and includes some land which very closely approaches Grade 4 quality. The soils typically have a medium or heavy clay loam topsoil which quickly passes into a gleyed greyish brown clay subsoil within 35-40 cms. Some of the heavier land included in Grade 3b in the south of the site

would be graded 4 in the slightly higher, wetter northern part of this site indicating how close some of the land is to Grade 4.

The main limitation to the agricultural use of the land is the poor soil drainage, which places most of the soils in wetness Class IV, allied to the clay loam topsoils. There is restricted opportunity for undertaking mechanical operations on the land without causing structural damage.

Grade 4 land occupies 14.8 ha and accounts for 11% of the site. This land occurs in several small parcels across the site where soil wetness and/or topsoil textures are worse than elsewhere. The largest area of Grade 4 land occurs where there are more than 175 field capacity days (FCD) and includes soils which are in wetness class IV and have a heavy clay loam topsoil. (Note: similar soils in areas with less than 175 FCD are graded 3b). This land occurs on gently sloping land and on a valley bottom land which receives water from upper slopes. A similar piece of low lying, water receiving land on the extreme south-east of the site is also graded 4 for the same reason.

South of Tyler's Grove there is a small area of level ground where impeded soil drainage has allowed an organic topsoil to develop (borings 5 and 15) over a very heavy clay subsoil. These wet soils are accordingly graded 5 on account of being wetness class V.

The remaining area of Grade 4 land corresponds to an area of woodland reclamation by tipping which has resulted in a compacted soil with numerous concrete and metal objects in or near the topsoil which precludes any surface mechanical activity. In places this land approaches Grade 5 in quality.

At the time of survey most of the land was waterlogged and is only really suitable for growing grass.

Non-agricultural land occupies 50.8 ha and accounts for 37.7% of the site. The majority of the non-agricultural land consists of the mature oak woodland of Windmill Naps. There are in addition several smaller areas of woodland scattered throughout the northern part of the site. The other main area of non-agricultural land consists of the playing pitches of the Birmingham Rugby Football Club.

Urban land occupies 9.4 ha and accounts for 6.9% of the site. Most of this land is made up of roads within the survey area though 2.2 ha (1.6%) is made up of dwelling houses and ancillary development.

Summary

There is very little land which qualifies as best and most versatile. On the contrary most of the site is borderline 3b/4 just falling into Grade 3b, with small areas of Grade 4.

ALC Grade	Area (hectares)	% Total Area
3a	1.1	0.8
3b	58.9	43.6
4	14.8	11.0
Non-agricultural	50.8	37.7
Urban	9.4	6.9