

REPORT OF THE MAFF AGRICULTURAL LAND CLASSIFICATION SURVEY -
SAUGHALL ROAD, CHESTER

Summary

The land has been classified following the Agricultural Land Classification (ALC) of England and Wales - revised guidelines and criteria for grading the quality of agricultural land (MAFF 1988). Of the land surveyed 26.8 hectares is classified as Grade 2 and 12.7 hectares as sub grade 3a.

Climatic Limitations

The main parameters used in the assessment of climatic limitations are average annual rainfall (AAR), as a measure of overall wetness and accumulated temperature (ATO), as a measure of the relative warmth of the locality. The figures of AAR and ATO indicate that there are no climatic limitations on this site.

Site Limitations

The assessment of site factors is primarily concerned at the way in which topography influences the use of agricultural machinery and hence the cropping potential of the land. There are no site limitations affecting the use of the land.

Soil Limitations

The main soil properties which affect the cropping potential and management requirements of land are texture, structure, depth, stoniness and chemical fertility. These may act as limitations separately, in combination or through interactions of climate or site factors. The physical limitations which result from these interactions between climate, site and soil are soil wetness, droughtiness and erosion risk.

A soil wetness limitation exists where the soil water regime adversely effects plant growth or imposes restrictions on cultivations or grazing by livestock. For ALC purposes, the soil wetness takes account of :-

1. The climatic regime
2. The soil water regime
3. The texture of the top 25 cms of the soil

Geological Information

The area is mapped as Lower Mottled Sandstone covered with marine or estuarine alluvium deposit (sheet 109, Chester).

Agricultural Land Use

At the time of the survey, April 1991, the land was down to grass.

Agricultural Land Quality (Appendix 1)

Of the site 66% has been classified as Grade 2 land. The soil typically has a sandy silt loam texture overlying either sandy loam, loamy fine sand or fine sand at depth and is stoneless. From observations of the soil profile characteristics, topsoil texture and the 152 field capacity day figure, the soil has been placed in wetness class III and the land is classified as Grade 2.

The remainder of the site has been classified as sub grade 3a land. The soil typically has a medium clay loam or medium silty clay loam texture overlying sandy loam, loamy fine sand or fine sand and is stoneless. Observations of soil profile characteristics, the topsoil texture and the 152 field capacity day figure place the soils in wetness class III and the land is classified as sub grade 3a. The main limitation to the agricultural use of the land is the soil wetness arising from the presence of ground water.

In a small area at the eastern end of the site it was difficult to auger with a hand held auger to below 50 cms.

Agricultural Land Classification - Saughall Road, Chester.

Grade Sub-grade	ha	as % of total area
2	26.8	66
3a	13.6	34
TOTAL	40.4	<u>100</u>

Resource Planning Group, Wolverhampton, April 1991

DESCRIPTION OF THE GRADES AND SUBGRADES

Grade 1 - excellent quality agricultural land

Land with no or very minor limitations to agricultural use. A very wide range of agricultural and horticultural crops can be grown and commonly includes top fruit, soft fruit, salad crops and winter harvested vegetables. Yields are high and less variable than on land of lower quality.

Grade 2 - very good quality agricultural land

Land with minor limitations which affect crop yield, cultivations or harvesting. A wide range of agricultural and horticultural crops can usually be grown but on some land in the grade there may be reduced flexibility due to difficulties with the production of the more demanding crops such as winter harvested vegetables and arable root crops. The level of yield is generally high but may be lower or more variable than Grade 1.

Grade 3 - good to moderate quality agricultural land

Land with moderate limitations which affect the choice of crops, timing and type of cultivation, harvesting or the level of yield. Where more demanding crops are grown yields are generally lower or more variable than on land in Grades 1 and 2.

Subgrade 3a - good quality agricultural land

Land capable of consistently producing moderate to high yields of a narrow range of arable crops, especially cereals, or moderate yields of a wide range of crops including cereals, grass, oilseed rape, potatoes, sugar beet and the less demanding horticultural crops.

Subgrade 3b - moderate quality agricultural land

Land capable of producing moderate yields of a narrow range of crops, principally cereals and grass or lower yields of a wider range of crops or high yields of grass which can be grazed or harvested over most of the year.

Grade 4 - poor quality agricultural land

Land with severe limitations which significantly restrict the range of crops and/or level of yields. It is mainly suited to grass with occasional arable crops (eg cereals and forage crops) the yields of which are variable. In moist climates, yields of grass may be moderate to high but there may be difficulties in utilisation. The grade also includes very droughty arable land.

Grade 5 - very poor quality agricultural land

Land with very severe limitations which restrict use to permanent pasture or rough grazing, except for occasional pioneer forage crops.

Descriptions of other land categories used on ALC maps

Urban

Built-up or 'hard' uses with relatively little potential for a return to agriculture including: housing, industry, commerce, education, transport, religious buildings, cemeteries. Also, hard-surfaced sports facilities, permanent caravan sites and vacant land; all types of derelict land, including mineral workings which are only likely to be reclaimed using derelict land grants.

Non-agricultural

'Soft' uses where most of the land could be returned relatively easily to agriculture, including: golf courses, private parkland, public open spaces, sports fields, allotments and soft-surfaced areas on airport/airfields. Also active mineral workings and refuse tips where restoration conditions to 'soft' after-uses may apply.

Woodland

Includes commercial and non-commercial woodland. A distinction may be made as necessary between farm and non-farm woodland.

Agricultural buildings

Includes the normal range of agricultural buildings as well as other relatively permanent structures such as glasshouses. Temporary structures (eg polythene tunnels erected for lambing) may be ignored.

Open water

Includes lakes, ponds and rivers as map scale permits.

Land not surveyed

Agricultural land which has not been surveyed.

Where the land use includes more than one of the above land cover types, eg buildings in large grounds, and where map scale permits, the cover types may be shown separately. Otherwise, the most extensive cover type will usually be shown.