

Report of the MAFF Agricultural Land Classification Survey (1988) - Little Stanney

1. Summary:

The land has been classified following the Agricultural Land Classification of England and Wales - revised guidelines and criteria for grading the quality of agricultural land (MAFF, 1988). Of the land surveyed % is classified as sub-grade 3a and % as sub-grade 3b (Grid reference 55408745).

2. Climatic Limitations:

The main parameters used in the assessment of the 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.

3. 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.

4. 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 with climate or site factors. The physical limitations which result from interactions between climate, site and soil wetness, droughtiness and erosion. Soil wetness, which expresses the extent to which excess water imposes restrictions on crop growth, is the main interacting limitation affecting the grading on this site. Soil wetness is assessed in the field by identifying the depth to any slowly permeable soil horizon, which is defined in terms of soil texture, structure and gleying and relating this to the texture of the top 25cms. Combining the soil wetness class and the field capacity days (FCD) a land classification grade is arrived at. Reference will be made to this limitation in Section 6.

5. Background Information:

The underlying geology is mapped as Bunter pebble beds covered with Boulder clay (sheet 109, Chester, Geological Survey).

6. Agricultural Land Use:

At the time of the survey, January 1989, land was either under winter cereal, cereal stubble or grass, some used for horse grazing.

7. **Agricultural Land Quality (Appendix 1):**

Sub-grade 3a: the soil typically has either a clay loam texture overlying clay below 43cms or clay loam overlying sandy loam and loamy sand, then clay at 43cms. Observations of gleying and depth to the slowly permeable layer combined with a field capacity day figure of 159 indicate wetness class III and sub-grade 3a.

Soil wetness is the main limitation to the agricultural use of this land.

Sub-grade 3b: the soil typically has a clay loam texture overlying clay below 30cms. Observations of gleying and depth of the slowly permeable layer combined with a field capacity day figure of 159 indicate wetness class IV and sub-grade 3b.

Other Land: includes ponds classified as 'open water'; a playing field classified as 'non-agricultural'; agricultural buildings; 'urban' including housing adjoining Stanney Lane; 'land not surveyed' includes two small areas adjoining Stanney Lane.

**Resource Planning Group
January 1989**

Agricultural Land Classification Summary

Grade sub/grade	ha	as % of total	as % of agricultural land
3a	119.55	77	86
3b	20.05	13	14
(Sub-total	139.6)		(100)
Agricultural buildings	3.36	2	
Playing Field	7.56	5	
Water	2.0	1	
Urban	2.16	1	
Not Surveyed	0.48	1	
TOTAL	155.16	(100)	

DESCRIPTION OF THE GRADES AND SUBGRADES

The ALC grades and subgrades are described below in terms of the types of limitation which can occur, typical cropping range and the expected level and consistency of yield. In practice, the grades are defined by reference to physical characteristics and the grading guidance and cut-offs for limitation factors enable land to be ranked in accordance with these general descriptions. The most productive and flexible land falls into Grades 1 and 2 and Subgrade 3a and collectively comprises about one-third of the agricultural land in England and Wales. About half the land is of moderate quality in Subgrade 3b or poor quality in Grade 4. Although less significant on a national scale such land can be locally valuable to agriculture and the rural economy where poorer farmland predominates. The remainder is very poor quality land in Grade 5, which mostly occurs in the uplands.

Descriptions are also given of other land categories which may be used on ALC maps.

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.

Other land primarily in non-agricultural use -

Non-agricultural - "soft" uses

'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 airports/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.