

AGRICULTURAL LAND CLASSIFICATION

**DORSET MINERALS AND WASTE LOCAL PLAN**  
**SG7 HURN COURT FARM**

REPORT OF SURVEY

1. SUMMARY

The site, an area of 52.6 hectares of land at Hurn Court Farm, near Christchurch, was graded using the Agricultural Land Classification (ALC) system in July 1993. The survey was carried out on behalf of MAFF as part of its statutory role in the preparation of the Dorset Minerals and Waste Local Plan.

The fieldwork was carried out by ADAS (Resource Planning Team, Taunton Statutory Unit) at a scale of 1:10,000. The information is correct at this scale but any enlargement would be misleading. A total of 51 auger borings and 2 soil profile pits were examined.

The distribution of ALC grades identified in the survey area is detailed below and illustrated on the accompanying map.

Distribution of ALC grades: Hurn Court Farm

Grade	Area (ha)	% of Survey Area	% of Agricultural Land
2	37.8	71.9	72.8
3a	14.1	26.8	27.2
Non Agric	0.7	1.3	
TOTAL	52.6	100%	100% (51.9 ha)

All the agricultural land has been assessed as best and most versatile with over two-thirds of the site being Grade 2. Soils are affected by a slight droughtiness limitation due to the coarse textured subsoils and relatively dry climate. There are two small blocks of woodland, one of which has been planted recently.

## 2. INTRODUCTION

The site, an area of 51 hectares of land at Hurn Court Farm, near Christchurch, was graded using the Agricultural Land Classification (ALC) system in July 1993. The survey was carried out on behalf of MAFF as part of its statutory role in the preparation of the Dorset Minerals and Waste Local Plan. Hurn Court Farm (SG7) is a preferred area for sand and gravel extraction.

The fieldwork was carried out by ADAS (Resource Planning Team, Taunton Statutory Unit) at a scale of 1:10,000 (approximately one sample point every hectare). The information is correct at this scale but any enlargement would be misleading. A total of 51 auger borings and two soil profile pits were examined.

The published Provisional 1" to the mile ALC map of this area (MAFF 1973) shows much of the site to be Grade 2 land with small areas of 3 and 4 land to the east and west of the site. The recent survey supersedes this map, having been carried out at a more detailed level and using the Revised Guidelines and Criteria for grading the quality of agricultural land (MAFF 1988).

The ALC provides a framework for classifying land according to the extent to which its physical or chemical characteristics impose long-term limitations on agricultural use. The grading takes account of the top 120 cm of the soil profile. A description of the grades used in the ALC System can be found in Appendix 2.

## 3. CLIMATE

The grade of the land is determined by the most limiting factor present. The overall climate is considered first because it can have an overriding influence on restricting land to lower grades despite other favourable conditions.

Climatic data for the site were interpolated from the Agricultural Climate Dataset ( Meteorological Office 1989). The parameters used for assessing overall climatic limitation are accumulated temperature (a measure of the relative warmth of a locality) and average annual rainfall (a measure of overall wetness). The results shown in Table 1 indicate that there is no overall climatic limitation.

Climatic data on Field Capacity Days (FCD) and Moisture Deficits for wheat (MDW) and potatoes (MDP) are also shown. These data are used in assessing the soil wetness and droughtiness limitations referred to in Section 6. No locally limiting climatic factors such as exposure were noted in the survey area.

Table 1 Climatic interpolations: Hurn Court Farm

Grid Reference	SZ 126 965
Height (m)	135
Accumulated Temperature (day deg)	1565
Average Annual Rainfall (mm)	799
Overall Climatic Grade	1
Field Capacity (Days)	165
Moisture Deficit, Wheat (mm)	115
Potatoes (mm)	111

#### 4. RELIEF AND LANDCOVER

The site occupies a level valley floor position lying approximately 8 m AOD. The present land use is grass ley in all but the north western corner, where land has been set aside and is growing maize.

#### 5. GEOLOGY AND SOILS

The published one inch scale solid and drift geology map, sheet 329 (Geological Survey of England and Wales 1976) shows the entire site to be underlain by valley gravels.

The Soil Survey of England and Wales mapped the soils of the area in 1983, at a reconnaissance scale of 1:250,000. This map shows the soils at the site to comprise the Hucklesbrook Association. This soil is described as well drained coarse loamy and some sandy soils commonly over ground with some similar soils affected by groundwater.

The recent survey identified two different soil types. Much of the site comprises deep medium sandy loam soils which become coarser textured with depth. These profiles are very slightly stony to 70-80 cm (3-4% hard rock) and slightly stony at depth (8-10% hard rock). The southwest corner of the site and a band from the north to the eastern part of the site comprises a stonier and sandier soils than those found on the rest of the site. Slightly stony sandy loam topsoils overlie very stony (52% hard rock at 60 cm depth) sandy loam and loamy sand subsoils. In the northern part of the site there are profiles which comprise loamy medium sand and medium sand subsoils which are almost stone free.

#### 6. AGRICULTURAL LAND CLASSIFICATION

The distribution of ALC grades identified in the survey area is detailed below and illustrated on the accompanying ALC map. The information is correct at the scale shown but any enlargement would be misleading.

**Table 2 Distribution of ALC grades: Hurn Court Farm**

Grade	Area (ha)	% of Survey Area	% of Agricultural Land
2	37.8	71.9	72.8
3a	14.1	26.8	27.2
Non Agric	0.7	1.3	
TOTAL	52.6	100%	100% (51.9 ha)

### **Grade 2**

Over two thirds of the site has been assessed as grade 2 agricultural land. This relates to the first soil type described in section 5. These soils give no indication of drainage impediment and so have been assessed as Wetness Class I. However due to the relatively dry climatic conditions experienced here and the coarse textured soils a slight droughtiness limitation limits the soils to grade 2.

### **Subgrade 3a**

Subgrade 3a land corresponds to the stony soils described in section 5. The high stone content and coarse textures in these soils reduces the available water for plant growth, thus limiting the land quality to subgrade 3a.

### **Non-Agricultural Land**

There are two small blocks of woodland, these are marked on the map as non-agricultural land.

## **APPENDIX 1**

### **REFERENCES**

GEOLOGICAL SURVEY OF ENGLAND AND WALES (1976) Solid and Drift edition. Sheet 329, Bournemouth 1:50,000 scale

MAFF (1979) Agricultural Land Classification Map Sheet 179 Provisional 1:63,360 scale

MAFF (1988) Agricultural Land Classification of England and Wales (revised guidelines and criteria for grading the quality of land) Alnwick

METEOROLOGICAL OFFICE (1989) Published climatic data extracted from the agroclimatic dataset, compiled by the Meteorological Office

SOIL SURVEY OF ENGLAND AND WALES (1983) Sheet 5 Soils of South West England 1:250,000 scale