

**THROSTLE'S NEST FARM  
BURSCOUGH**

**Agricultural Land Classification  
ALC Map and Report  
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**Anya J Spalding  
Resource Planning Team  
Northern Region  
FRCA Wolverhampton**

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## AGRICULTURAL LAND CLASSIFICATION REPORT THROSTLE'S NEST FARM, BURSCOUGH

### INTRODUCTION

1. This report presents the findings of a detailed Agricultural Land Classification (ALC) survey on 19.2 hectares of land. The results of this survey supersede any previous ALC information for this land. The land is located to the west of Burscough and is centred on grid reference SD 415 105. The site is bounded to the north by Pippin Street and Throstle's Nest Farm, to the east and west by agricultural land and to the south by Blackacre Lane and woodland. The survey was in connection with a proposed crematorium and burial ground.
2. The survey was undertaken on behalf of the Ministry of Agriculture, Fisheries and Food (MAFF) in October 1998 by the Resource Planning Team of the Farming and Rural Conservation Agency (FRCA)- Northern region of FRCA.
3. The land has been graded in accordance with the publication "Agricultural Land Classification of England and Wales - Revised guidelines and criteria for grading the quality of agricultural land" (MAFF 1988) .
4. At the time of survey the agricultural land on this site was under sugar beet and stubble following cereal harvest.

### SUMMARY

5. The findings of the survey are shown on the enclosed ALC map. The map has been drawn at a scale of 1:10000 with an average auger boring density of 1 per hectare. The ALC map is only accurate at this base map scale and any enlargement would be misleading.
6. The area and proportions of the ALC grades and subgrades on the surveyed land are summarised in Table 1.

Table 1: Area of grades and other land

| Grade/Other land               | Area (hectares) | % surveyed area | % site area |
|--------------------------------|-----------------|-----------------|-------------|
| 1                              | -               | -               | -           |
| 2                              | -               | -               | -           |
| 3a                             | 14.5            | 77              | 76          |
| 3b                             | 4.3             | 23              | 22          |
| 4                              | -               | -               | -           |
| 5                              | -               | -               | -           |
| Agricultural land not surveyed | -               | -               | -           |
| Other land                     | 0.4             | -               | 2           |
| Total surveyed area            | 18.8            | 100             |             |
| Total site area                | 19.2            |                 | 100         |

7. The agricultural land on this site has been classified as Subgrade 3a (good quality) and Subgrade 3b (moderate quality). The key limitations to the agricultural use of this land are soil droughtiness and soil wetness.

8. The area of good quality land is located in the north of the site and in the centre of the site extending to the southern boundary. In the centre and extending to the south eastern boundary of the site, the soils commonly comprise a medium sandy loam topsoil over either a medium sandy loam or loamy medium sand upper subsoil overlying sand. Occasionally subsoil textures include heavy clay loam, sand and sandy silt loam.

From the centre of the site and extending to the northern and eastern boundaries, the soils commonly comprise either a sandy clay loam, medium clay loam or sandy loam topsoil, passing to clay at depth. Occasionally upper subsoil textures include sandy clay loam, loamy sand or sand and the lower subsoil textures sandy clay loam, sand and clay at depth.

9. The area of moderate land is located in the centre of the site extending from the western boundary to the eastern boundary. A smaller area is located at the south eastern corner of the site. The soils commonly comprise either a sandy clay loam or a medium clay loam topsoil over a clay subsoil. Occasionally a medium clay loam upper subsoil is present.

## FACTORS INFLUENCING ALC GRADE

### Climate

10. Climate affects the grading of land through the assessment of an overall climatic limitation and also through interactions with soil characteristics.

11. The key climatic variables used for grading this site are given in Table 2 and were obtained from the published 5km grid datasets using standard interpolation procedures (Meteorological Office, 1989).

Table 2: Climatic and altitude data

| Factor                     | Units            | Values     |
|----------------------------|------------------|------------|
| Grid reference             | N/A              | SD 415 105 |
| Altitude                   | m, AOD           | 30         |
| Accumulated Temperature    | day°C (Jan-June) | 1415       |
| Average Annual Rainfall    | mm               | 918        |
| Field Capacity Days        | days             | 207        |
| Moisture Deficit, Wheat    | mm               | 80         |
| Moisture Deficit, Potatoes | mm               | 66         |
| Overall climatic grade     | N/A              | Grade 1    |

12. The climatic criteria are considered first when classifying land as climate can be overriding in the sense that severe limitations will restrict land to low grades irrespective of favourable site or soil conditions.

13. The main parameters used in the assessment of an overall climatic limitation are average annual rainfall (AAR), as a measure of overall wetness, and accumulated temperature (ATO, January to June), as a measure of the relative warmth of a locality.

14. The combination of rainfall and temperature at this site means that there is no overall climatic limitation. The site is climatically Grade 1.

### **Site**

15. The site lies at an altitude of 30 metres AOD. The topography of the site is generally flat in nature, gently falling from the centre of the site to the southern boundary.

16. The three site factors of gradient, microrelief and flooding are considered when classifying the land.

17. These factors do not impose any limitations on the agricultural use of this land.

### **Geology and Soils**

18. The solid geology of the area is comprised of Bunter Sandstone - British Geological Survey (1977). This is overlain with deposits of Boulder Clay and Shirdley Hill Sand - British Geological Survey (1950).

19. The soils that have developed on this geology are generally of a medium clay loam topsoil overlying an upper subsoil of clay loam, and lower subsoil of clay. In the southern part of the site the soils have been influenced by sandy geological material and have a sandy texture.

### **Agricultural Land Classification**

20. The details of the classification of the site are shown on the enclosed ALC map and the area statistics of each grade are given in Table 1, page 1.

#### *Subgrade 3a*

21. Land of good quality occupies 14.5 hectares (76%) of the site area and is located in the north of the site and in the centre of the site extending to the southern boundary.

22. In the centre and extending to the south eastern boundary of the site, the soils commonly comprise a medium sandy loam topsoil over either a medium sandy loam or loamy medium sand upper subsoil overlying sand. Occasionally subsoil textures include heavy clay loam, sand and sandy silt loam. The moisture balance places these soils in Subgrade 3a.

23. In the second profile, located in the centre of the site extending to the northern and eastern boundaries of the site, the soils commonly comprise either a sandy clay loam, medium clay loam or sandy loam topsoil, passing to clay at depth. In places throughout the site upper subsoil textures of sandy clay loam, loamy sand or sand overlying clay at depth occur. The depths to gleying and the slowly permeable layer places these soils into either Wetness Class II or III.

24. The main limitations to the agricultural use of this land are soil droughtiness and soil wetness.

*Subgrade 3b*

25. Land of moderate quality occupies 4.3 hectares (22%) of the site area and is located in the centre of the site extending from the western boundary to the eastern boundary.

26. The soils commonly comprise either a sandy clay loam or a medium clay loam topsoil, in places overlying a medium clay loam upper subsoil, and clay lower subsoil. The depths to gleying and the slowly permeable layer place these soils in Wetness Class IV.

27. The main limitation to the agricultural use of this land is soil wetness.

*Other Land*

28. Other land occupies 0.4 hectares (2%) of the site area and is found as a track extending from Throstle's Nest Farm through the centre of the site.

Resource Planning Team  
Northern Region  
FRCA Wolverhampton

## **SOURCES OF REFERENCE**

British Geological Survey (1977) Sheet 84, Wigan, Solid Edition.  
1:50 000 Scale.  
BGS: London.

British Geological Survey (1950) Sheet 84, Wigan, Drift Edition.  
1:63 360 Scale  
BGS: London

Ministry of Agriculture, Fisheries and Food (1988) Agricultural Land Classification of  
England and Wales: Revised guidelines and criteria for grading the quality of agricultural  
land.  
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Meteorological Office (1989) Climatological Data for Agricultural Land Classification.  
Meteorological Office: Bracknell.