

AGRICULTURAL LAND CLASSIFICATION REPORT FOR LAND UNDER CONSIDERATION IN THE WYRE FOREST (BLAKEDOWN) LOCAL PLAN

1. Introduction

Following a request for more detailed information 5 sites totalling 26.7 hectares, were surveyed on the western outskirts of Blakedown in February 1992. This work forms part of the MAFF input to the preparation of the Wyre Forest Local Plan.

The land was augered using a free survey technique to a depth of at least 100 cm or rock and stones if closer to the surface. A total of 44 auger borings and 3 pits were dug on site to give a density of one observation every 0.6 hectares.

The land is underlain by Bunter Sandstones and River Terrace gravels on which light textured slightly stony soils have developed. The land is mapped, mainly as Grade 2 and Subgrade 3a.

2. Site details and Limitations

2.1 Climatic limitations

The main parameters used in the assessment of the climatic limitation are average annual rainfall, as a measure of overall wetness and accumulated temperature, as a measure of the relative warmth of a locality. This area receives an average annual rainfall of approximately 700 mm and has an accumulated temperature (January to June) of 1410°C. Climate is a neutral factor in the classification of the land.

2.2 Location and site limitations

The land lies to the west of Blakedown in 5 separate blocks.

Blocks A, B and E lie to the south of Belbroughton Road and adjacent to each other. They are surrounded by non-agricultural land. The land is gently undulating and gradients are generally non limiting.

Blocks C and D lie immediately north of Belbroughton Road and are almost level.

Blocks G and H straddle the Birmingham Road north of Station Lane with Block G to the east of the road and Block H to the west. These sites are mainly level but in the extreme north of Block H the land falls away to a stream.

Most of the land has an altititude of about 75 m but Block E ranges from 85 m in the north east to 70 m in the south.

2.3 Geology and soil limitations

The area is underlain by Upper Mottled Sandstones of the Bunter formation with river terrace deposits in the north. The resulting soils are typically deep loamy sand or sandy loam topsoils over loamy sand subsoils with sand below 50-70 cm. In Block E the sands are finer textured and soft weathering sandstone was encountered within auger depth, on some isolated knolls to the east of New House Farm and in the south of the site. Soils become more stony in the northern blocks of land and at the northern end of Block H stone contents are greater than 15% and limit the classification of the land.

2.4 Interactive limitations

The physical limitations which result from interactions between climate, site and soil are soil wetness, droughtiness and erosion. Soil wetness is a non-limiting

factor in these sandy soils and they all fall into Wetness Class I.

Droughtiness is the major limiting factor in the classification of this land. The light textured soils and slightly stony nature of the profile reduces the available water capacity making the soil prone to drought in dry years.

The susceptibility to drought is determined by the difference between the amount of water the soils can hold (available water capacity) (AWC) and the median moisture deficit (MD) which has developed by the end of the critical part of the growing season. The moisture balance (MB) that is the difference between these 2 figures indicates the susceptibility to drought of soils in a given area. In this area the median MD for wheat is 99 mm and for potatoes is 88 mm.

2.5 Land use

The majority of the land is in arable use but horses graze permanent pasture at the eastern side of Blocks C and D and grass leys on Block B and the western part of Block E. All of Block A was covered by polythene growing tunnels and glasshouses.

3. **Agricultural Land Classification**

Land quality ranges from Grade 2 to Subgrade 3b.

3.1 Grade 2

This grade accounts for 5.9 ha and 22.1% of the area. It is mapped at the northern end of Block G to include deep (32-35 cm) sandy loam and fine sandy loam soils which overlie loamy fine sand and sand. They are slightly stony throughout. To the south of Belbroughton Road fine sandy

loam or loamy fine sand soils overlie loamy fine sand and fine sand or sandstone. These soils are virtually stoneless. The soils included in this grade have a moisture balance of greater than +5 for wheat and no worse than -10 for potatoes.

3.2 Subgrade 3a

This subgrade is mapped over 17.8 ha and 66.4% of the area, to include soils which have 24-30 cm of loamy sand and occasionally sandy loam topsoils over loamy sand and sand subsoil. In the north the profiles are slightly stony at the surface and often have a moderately stony band in the subsoil. In the south the soils are virtually stoneless below the topsoil. These soils are too droughty for a higher grade having moisture balances of between +5 and -20 for wheat or -10 and -30 for potatoes. On isolated knolls Subgrade 3b occurs within the area mapped as Subgrade 3a because sandstone occurs at about 55cm, making soils more prone to drought; these areas could not be mapped separately at this scale.

3.3 Subgrade 3b

This sub grade is mapped over 1.3 ha and 5.0% of the area, to include moderately stony loamy sand soils, where drought and topsoil stone contents limit the land classification.

3.4 Farm buildings

This classification has been placed over 1.5 ha and 5.7% of the area to include all of Block A.

3.5 0.2 ha and 0.8% of the area was not surveyed because the area is used for schooling horses.

3.6 Summary of Land Classification grades (total area)

<u>Grade</u>	<u>Area (hectares)</u>	<u>%</u>
2	5.9	22.1
3a	17.8	66.4
3b	1.3	5.0
Farm buildings	1.5	5.7
Not surveyed	0.2	0.8
Total	26.7	100

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