

AGRICULTURAL LAND CLASSIFICATION
HOUGHTON PARK, NORFOLK
SET ASIDE SURVEY

1. BACKGROUND

Cropping: Cereals, sugar beet and pigs. The land is part of a large Norfolk Estate situated to the west of Houghton Hall, since shooting is a major interest set aside land comprises mainly game cover strips and is not positioned in relation to the land quality.

2. PHYSICAL FACTORS AFFECTING LAND QUALITY

Climate

2.1	Annual Average Rainfall	:	710-729 mm
	Field Capacity Days	:	151-154
	Moisture Deficit-Wheat	:	98-102 mm
	Moisture Deficit-Potatoes:		87-92 mm

The higher land is limited to grade 2 by slight climate imperfections.

Altitude and Relief

- 2.2 The land is gently sloping and ranges in altitude from 60 to 90 m AOD. Neither gradient or altitude are limitations to the ALC grade.

Geology and Soils

- 2.3 Geology sheet 12, (1912) 1:250,000 scale. The survey area is shown to comprise mainly glacial till with smaller areas of sand and gravel and chalk deposits to the west and east respectively. The current reconnaissance survey identified four main soil types.
- 2.3.1 The majority of the survey area comprises medium sandy loam topsoils over loamy medium sand subsoils which may, at depth, become medium sand. Profiles are typically very slightly or slightly stony throughout, exceptions occur south of Blind Drove and in the vicinity of "The Blackground" where upper subsoils are slightly stony and lower subsoils are moderately stony. Southwest of "The Bylaughs" topsoils are lighter and generally comprise loamy medium sands.
- 2.3.2 In the vicinity of St. James Pond and west of Houghton Hall stonier soils predominate. Profiles typically comprise slightly (or occasionally moderately stony) medium sandy loam topsoils over moderately stony subsoils which variably become stonier at depth.
- 2.3.3 At the higher elevations adjacent to Harpley Common and Town Plantation better bodied soils predominate. Profiles typically comprise medium sandy loam topsoils over slightly stony sandy clay loam or medium sandy loam upper subsoils. At depth soils become better bodied (clays or heavy clay loams) and variably overlies chalky till 75/90cm+.
- 2.3.4 East and West of Brinkley Hole and at the northern most edge of the survey area deep medium sandy loams over loamy medium sands predominate. Topsoils are typically very slightly stony and subsoils slightly stony.

3 AGRICULTURAL LAND CLASSIFICATION

- 3.1 The tables below show the breakdown of the ALC grades in hectares and % terms for the survey area as a whole, for set aside land and for non set-aside land.

TABLE 1 SURVEY AREA

AGRICULTURAL LAND CLASSIFICATION		
Grade	ha	%
2	46.1	16
3a	210.1	74
3b	30.7	9.5
Non Agricultural/ Agricultural Buildings	1.8	0.5
TOTAL	<u>288.7</u>	<u>100</u>

TABLE 2: SET ASIDE LAND

AGRICULTURAL LAND CLASSIFICATION		
Grade	ha	%
2	12.1	21.0
3a	34.0	59.0
3b	11.2	19.5
Non Agricultural	0.2	0.5
TOTAL	<u>57.5</u>	<u>100</u>

TABLE 3: NON SET ASIDE LAND

AGRICULTURAL LAND CLASSIFICATION		
GRADE	ha	%
2	34.0	15.0
3a	176.1	76.0
3b	19.5	8.5
Non Agricultural/ Agricultural Buildings	1.6	0.5
TOTAL	<u>231.2</u>	<u>100</u>

Grade 2

Two main situations occur

- 3.2 To the south, at the higher elevations, land associated with the soils described in paragraph 2.3.3 have been graded 2. Slight climate limitations and occasionally droughtiness preclude this land from a higher grade.
- 3.3 The grade 2 land to the north comprises the soils described in paragraph 2.3.4. Profile available water is slightly limited by the loamy textures and profile stone. Consequently minor droughtiness imperfections restrict the land to grade 2.

Subgrade 3a

- 3.4 The majority of the survey area has been graded 3a. The land is associated with the soils described in paragraph 2.3.1. Variable profile flints and the coarse textures combine to impose moderate droughtiness imperfections. Thus the land is graded 3a (good quality agricultural land).

Subgrade 3b

Two main situations occur.

- 3.5 The majority of the land graded 3b is associated with the stony soils described in paragraph 2.3.2. Profiles are stony throughout and soil textures are coarse. These two factors combine to impose a significant limiting effect on the available moisture capacity of this soil. As a result droughtiness is the major limitation to the ALC grade.
- 3.6 South west of "The Bylaughs" the lighter variant of the soils described in paragraph 2.3.1 has been graded 3b. These light soils hold low reserves of available water for crop growth. Consequently significant droughtiness imperfections restrict the land to subgrade 3b.

Non Agricultural

- 3.7 Small wooded areas and ponds have been mapped as Non Agricultural.

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