FCS 4721

82/93

TEIGNBRIDGE LOCAL PLAN

AGRICULTURAL LAND CLASSIFICATION
REPORT OF SURVEY

Resource Planning Team
Taunton Statutory Unit

November 93

ADAS

TEIGNBRIDGE LOCAL PLAN

AGRICULTURAL LAND CLASSIFICATION

Report of Surveys

1. SUMMARY

Land at eleven settlements in Teignbridge District was surveyed using the Agricultural Land Classification (ALC) System in September 1993. The surveys were carried out on behalf of MAFF as part of its statutory role in the preparation of the Teignbridge Local Plan. Land at the following settlements was surveyed; Bovey Tracey, Chudleigh, Dawlish, Exminster, Ipplepen, Kenton, Kingskerswell, Kingsteignton, Newton Abbot, Starcross and Teignmouth.

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.

The distribution of the ALC grades and categories identified in the survey areas is detailed below and illustrated on the accompanying maps.

Distribution of ALC grades: Bovey Tracey

Grade	Area (ha)	% of Survey Area	% of Agricultural Land
3b	1.7	100	100

All of the land has been downgraded to Subgrade 3b. The soils are poorly drained and variable in slope and microrelief.

Distribution of ALC grades: Chudleigh

Grade	Area (ha)	% of Survey Area	% of Agricultural Land
2	0.3	1.1	1.9
3a	1.0	3.7	6.3
3b	9.1	34.1	56.8
4	5.6	21.0	35.0
Non Agric	5.6	21.0	100% (16ha)
Urban	1.5	5.6	
Not Surveyed	3.6	13.5	
TOTAL	26.7	100%	

Small areas of best and most versatile land were found. The majority of the agricultural land is downgraded on the basis of limiting gradients and poor

drainage. Access to some of the area was not possible and this land was not surveyed.

Distribution of ALC grades: Dawlish

Grade	Area (ha)	% of Survey Area	% of Agricultural Land
1	5.2	28.0	33.7
2	1.4	7.5	9.1
3a	6.3	33.9	40.9
3b	2.2	11.8	14.3
4	0.3	1.6	1.9
Non Agric	2.9	15.6	100% (15.4ha)
Urban	0.3	1.6	
TOTAL	18.6	100%	

The majority of the agricultural land is best and most versatile. The main limitation is droughtiness, caused by light textured stony soils.

Distribution of ALC grades: Exminster

Grade	Area (ha)	% of Survey Area	% of Agricultural Land
2	2.1	8.0	10.7
3b	17.5	66.5	89.3
Non Agric	6.3	24.0	100% (19.6ha)
Urban	0.4	1.5	
TOTAL	26.3	100%	

The main limitation found in the survey area is droughtiness. The soils are light textured in an area with high moisture deficits.

Distribution of ALC grades: Ipplepen

Grade	Area (ha)	% of Survey Area	% of Agricultural Land
3a	6.9	98.6	100%
Urban	0.1	1.4	
TOTAL	7.0	100%	

All the agricultural land surveyed is best and most versatile. The main limitation to these soils is the workability caused by heavy clay loam topsoils in combination with the number of days that the soils are at field capacity.

Distribution of ALC grades: Kenton

Grade	Area (ha)	% of Survey Area	% of Agricultural Land
2	2.5	46.3	48.0
3b	2.7	50.0	51.9
Non Agric	0.2	3.7	100% (5.2ha)
TOTAL	5.4	100%	

Steeper slopes downgrade part of the site to Subgrade 3b, whilst the remaining agricultural land is slightly droughty restricting it to Grade 2.

Distribution of ALC grades: Kingskerswell

Grade	Area (ha)	% of Survey Area	% of Agricultural Land
2	6.7	14.1	14.2
3a	12.7	26.7	26.9
3b	4.6	9.8	9.8
4	23.2	48.8	49.2
Non Agric	0.3	0.6	100% (47.2ha)
TOTAL	47.5	100%	

The best and most versatile land represents nearly half of the agricultural land and the main limitation is the workability of the soil. The remainig land is downgraded primarily on limiting gradients which restrict the versatility of the land.

Distribution of ALC grades: Kingsteignton

Grade	Area (ha)	% of Survey Area	% of Agricultural Land
3a	6.5	35.3	37.1
3b	9.2	0.5	52.6
4	1.8	9.8	10.3
Non Agric	0.1	0.5	100% (17.5ha)
Urban	0.8	4.4	
TOTAL	18.4	100%	

The best and most versatile land has a workability limitation whilst the 3b and 4 land is limited by poor drainage and limiting gradients.

Distribution of ALC grades: Newton Abbot

Grade	Area (ha)	% of Survey Area	% of Agricultural Land
3b	5.4	100%	100%

No best and most versatile land was found at this site.

Distribution of ALC grades: Starcross

Grade	Area (ha)	% of Survey Area	% of Agricultural Land
3a	26.6	66.2	90.5
3b	2.8	6.9	9.5
Non Agric	5.1	12.7	100% (29.4ha)
Urban	5.4	13.4	
TOTAL	40.2	100%	

The best and most versatile land has two types of limitation, wetness and droughtiness. The small area of 3b land has limiting gradients.

Distribution of ALC grades: Teignmouth

Grade	Area (ha)	% of Survey Area	% of Agricultural Land
3a	5.8	40.1	41.7
3b	8.1	56.3	58.3
Non Agric	0.4	2.8	100% (13.9ha)
Farm Bdgs	0.1	0.7	
TOTAL	14.4	100%	

The best and most versatile land has a workability limitation whilst the 3b land is downgraded on the basis of limiting gradients.

2. INTRODUCTION

Land at eleven settlements in Teignbridge District was surveyed using the Agricultural Land Classification (ALC) System in September 1993. The surveys were carried out on behalf of MAFF as part of its statutory role in the preparation of the Teignbridge Local Plan. Land at the following settlements was surveyed; Bovey Tracey, Chudleigh, Dawlish, Exminster, Ipplepen, Kenton, Kingskerswell, Kingsteignton, Newton Abbot, Starcross and Teignmouth.

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. Details of the findings of the surveys and the distribution of grades are detailed below for each settlement.

The recent surveys supersede any previous surveys and were undertaken to provide a more detailed representation of the agricultural land quality using the Revised Guidelines and Criteria for grading the quality of agricultural land (MAFF 1988). These guidelines provide 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 120cm 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 a lower grade despite other favourable conditions.

Estimates of climatic variables were obtained for each site by interpolation from the Agricultural Climate Dataset (Meteorological Office 1989). The data are shown in later sections.

The parameters used for assessing overall climatic limitations are accumulated temperature, (a measure of the relative warmth of a locality) and average annual rainfall, (a measure of overall wetness). 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 later sections.

4. BOVEY TRACEY

4.1 Three hectares of land at Southbrook Lane, Bovey Tracey were surveyed in September 1993. The area had been previously surveyed at 1:25,000 scale, but the level of filedwork was considered inadequate for local plan purposes, and the site has been resurveyed. The recent survey now

supersedes any previous ALC information. No best and most versatile land was identified in the survey area. Two auger sample points were examined.

4.2 Climate

Climatic data for the site was interpolated as described in Section 3. The results are shown in Table 1 and indicate that there is no overall climatic limitation.

Table 1 Climatic Interpolation: Bovey Tracey

Grid Reference	SX 811 787
Altitude (m)	45
Accumulated Temperature (deg days)	1557
Average Annual Rainfall	1087
Overall Climatic Grade	1
Field capacity (Days)	219
Moisture Deficit, Wheat (mm)	88
Potatoes (mm)	78

4.3 Relief and Landcover

The land at Southbrook Lane occupies a sloping grassland site. The southern area has complex microrelief associated with drainage. The northern field was being grazed at the time of the survey whilst the other fields were not. The land is at approximately 45m AOD.

4.4 Geology and Soils

The geology of the site is shown on the published 1:50,000 scale soild and drift geology map, sheet 339 (Geological Survey of England and Wales 1976). Similarly, the soils were mapped by the Soil Survey of England and Wales in 1983 at a reconnaissance scale of 1:250,000.

The survey area lies at the junction of a number of rock types. The bulk of the area is underlain by the Crackington formation grey shales and sandstones. To the west and south west are found river terrace deposits and alluvuim from recent times, whilst to the north and east , rocks associated with the metamorphic aureole surrounding the granite of Dartmoor are found. These are the Black Combe shales to the north and the Teign Cherts and shales to the east.

The soils pattern is considerably more simple that that of the geology. The site is split into two; the southern half is overlain by Teme soils with Manod soils occuring to the north. Teme soils are described as deep stoneless permeable silty soils, with some similar soils variably affected by groundwater and there are some gravelly subsoils. The Manod soils are well drained fine loamy or fine silty soils over rock.

The recent survey found variable soils which is related to the variability described by the two soil associations.

4.5 Agricultural Land Classification

The distribution of ALC grades identified in the survey area is detailed in Table 2 and shown on the accompanying ALC map. The information is correct at the scale shown but any enlargement would be misleading.

Table 2 Distribution of Grades: Bovey Tracey

Grade	Area (ha)	% of Survey Area	% of Agricultural Land
3b	1.7	100	100

Subgrade 3b

All of the survey area has been downgraded to Subgrade 3b. The southern part of the area has limitations imposed by microrelief and steeper slopes. This will limit the versatility of the land. Here the soils are gravelly at depth. Other parts of the site have restricted drainage which puts the soil into Wetness Class IV. The topsoil was found to be medium clay loams and medium silty clay loams.

5. CHUDLEIGH

5.1 Two sites to the north east and south west of Chudleigh were surveyed in September 1993. The only existing ALC information is from the one inch to the mile national ALC map series. The scale of this map is considered inadequate for local plan purposes and the sites have been resurveyed. The recent surveys now supersede any previous ALC information. A small amount of best and versatile land was identified in the north east site. There are two areas that have not been surveyed because access to the land was not possible or *granted. Fifteen auger sample points and two soil profile pits were examined*

5.2 Climate

Climatic data for the site was interpolated as described in Section 3. The results are shown in Table 3 and indicate that there is no overall climatic limitation.

Table 3 Climatic Interpolation: Chudleigh

Grid Reference	SX 872 800	SX 862 790
Altitude (m)	80	45
Accumulated Temperature (deg days)	1515	1556
Average Annual Rainfall	991	988
Overall Climatic Grade	1	1
Field capacity (Days)	202	201
Moisture Deficit, Wheat (mm)	95	98
Potatoes (mm)	84	89

5.3 Relief and Landcover

The land to the north east forms a valley with limiting slopes, restricting part of the site to Subgrade 3b. This land ranges in height from 65m AOD to 95m AOD. The land to the south west is also in a valley with some steeper slopes. Here the range in altitude is 30m AOD to 55m AOD.

At the time of the survey all the agricultural land was in grass . The rest of the survey areas are made up of several blocks of Non Agricultural land and housing.

5.4 Geology and Soils

The geology of the sites is shown on the published 1:50,000 scale solid and drift geology map, sheet 339 (Geological Survey of England and Wales 1976). Similarly, the soils were mapped by the Soil Survey of England and Wales in 1983 at a reconnaissance scale of 1:250,000.

Both sites are underlain by rocks of the Crackington Formation. These are grey shales and sandstones from the Upper Carboniferous. There is a small area of Alluvial drift running along the south east boundary of the the north east site associated with the Kate Brook.

The south west site has been mapped as the Halstow soil association. These are described as slowly permeable clayey soils over shale. The north east site is mainly the Halstow soils but east of New Exeter Road Hallsworth 1 soils have been mapped. These are described as slowly permeable seasonally waterlogged clayey soils.

The recent survey found the soils to be generally poorly drained and heavy in texture.

5.5 Agricultural Land Classification

The distribution of ALC grades identified in the survey area is detailed in Table 4 and shown on the accompanying ALC map. The information is correct at the scale shown but any enlargement would be misleading.

Table 4 Distribution of Grades: Chudleigh

Grade	Area (ha)	% of Survey Area	% of Agricultural Land
2	0.3	1.1	1.9
3a	1.0	3.7	6.3
3b	9.1	34.1	56.8
4	5.6	21.0	35.0
Non Agric	5.6	21.0	100% (16ha)
Urban	1.5	5.6	
Not Surveyed	3.6	13.5	
TOTAL	26.7	100%	

Grade 2

A small area of Grade 2 has been mapped at the corner of New Exeter Road and Colway Lane. This soil shows slight drainage restrictions in the form of gleying. The depth at which this occurs permits the soil to be Wetness Class I. This area has medium clay loam topsoils and so can be classified as Grade 2.

Subgrade 3a

A small area of Subgrade 3a has been mapped at Churchill. Here there is a slight wetness limitation and heavy clay loam topsoil. This heavier topsoil and the wetness downgrades the land to 3a.

Subgrade 3b

The areas mapped as Subgrade 3b are downgraded for two reasons. Some of these areas have slopes with gradients over 7 degrees. This limits the versatility of the land in terms of machinery that can be used. The remaining areas are poorly drained. This is caused by the presence of slowly permeable layers in the subsoils. The depths at which these are found means the soils are mainly Wetness Class III. The combination of this Wetness Class and the heavy clay loam topsoils limits the workability of the soils and they are downgraded.

Grade 4

The Grade 4 areas have a more severe wetness problem than that described above. The slowly permeable layers are found higher in the profile and the soils are Wetness Class IV. The more southern parts of the south west site have clay topsoils, whilst the other areas have heavy clay loam or heavy silty clay loam topsoils. This greater wetness limitation downgrades the soils to Grade 4.

Other land

The areas marked as Non Agricultural are houses and their associated gardens. There are also some allotments near The Old Chapel. In the south west there is the site of a demolished school which has the hardcore still on site and would therefore be difficult to return to agricultural use. This has been mapped as Urban. The area that has not been surveyed near to Heathfield House was inaccessible. The area at Coburg Fields was not surveyed because permission for access was not granted.

6. DAWLISH

6.1 Six small sites were surveyed around Dawlish, amounting to eighteen hectares. One site at Shutterton Lane was surveyed in 1992 whilst the remaining sites were surveyed in September 1993. The only existing ALC information is from the one inch to the mile national ALC map series. The scale of this map is considered inadequate for local plan purposes and the sites have been resurveyed. The recent surveys now supersede any previous ALC information. The majority of the land surveyed at Dawlish is of best and most versatile quality. A total of 18 auger sample points and 2 soil profile pits were examined.

6.2 Climate

Climate data for the site was interpolated as described in Section 3. The results are shown in Table 5 and indicate that there is no overall climatic limitation.

Table 5 Climatic Interpolation: Dawlish

Grid Reference	SX 974 789	SX 965 778
Altitude (m)	10	30
Accumulated Temperature (deg days)	1593	1571
Average Annual Rainfall	859	890
Overall Climatic Grade	1	1
Field capacity (Days)	178	183
Moisture Deficit, Wheat (mm)	108	104
Potatoes (mm)	102	97

Grid Reference	SX 957 771	SX 955 756
Altitude (m)	85	65
Accumulated Temperature (deg days)	1509	1533
Average Annual Rainfall	926	902
Overall Climatic Grade	1	1
Field capacity (Days)	189	189
Moisture Deficit, Wheat (mm)	95	98
Potatoes (mm)	86	89

6.3 Relief and Landcover

All the sites surveyed at Dawlish are gently sloping, except for the land at Meadow Park which is steep and has limiting gradients. Each of the sites is at a different altitude. The average altitudes at the sites are as follows: Shutterton Lane, 10m AOD; Woodhayes, 30m AOD; Gatehouse Farm, 30m; Meadow Park, 90m AOD; South Downs Road, 65m AOD.

All the agricultural land surveyed is in grass except for the land at South Downs Road which has cereal stubble. The remaining land is either in non agricultural use or urban.

6.4 Geology and Soils

The geology of the sites is shown on the published 1:50,000 scale solid and drift geology map, sheet 339 (Geological Survey of England and Wales 1976). Similarly, the soils were mapped by the Soil Survey of England and Wales in 1983 at a reconnaissance scale of 1:250,000.

The sites at Meadow Park and South Down Road are underlain by Teignmouth Breccia, a Permian rock. The other areas are underlain by Dawlish Sandstone.

The soils also follow the same split. The two southern site are mapped as the Crediton Association, described as well drained gritty reddish loamy soils over Breccia. The northern sites are mapped as the Bridgnorth Association. These soils are described as well drained sandy and coarse loamy soils over soft sandstone.

The recent surveys found the soils to be typical of the mapped Associations, with sandier well drained soils in the northern site and heavier soils in the south.

6.5 Agricultural Land Classification

The distribution of ALC grades identified in the survey area is detailed in Table 6 and shown on the accompanying ALC map. The information is correct at the scale shown but any enlargement would be misleading.

Table 6 Distribution of ALC grades: Dawlish

Grade	Area (ha)	% of Survey Area	% of Agricultural Land
1	5.2	28.0	33.7
2	1.4	7.5	9.1
3a	6.3	33.9	40.9
3b	2.2	11.8	14.3
4	0.3	1.6	1.9
Non Agric	2.9	15.6	100% (15.4ha)
Urban	0.3	1 .6	
TOTAL	18.6	100%	

Grade 1

A block of Grade 1 land has been mapped at the west end of Shutterton Lane. These soils are well drained slightly stony and light in texture. The topsoil texture here is a medium sandy loam. The texture of the soil becomes slightly heavier with depth. These soils have sufficient available water for crop growth and can be Grade 1.

Grade 2

A smaller area of Grade 2 has been mapped within the Grade 1 block. These soils are similar but become stonier with depth. This reduces the available water for crops and that available is sufficient for the soils to be Grade 2. These soils have medium sandy loam textures throughout the profile.

Subgrade 3a

The land at South Down Road has been downgraded to Subgrade 3a on the basis of a droughtiness limitation. Here the topsoil texture is a medium clay loam. The texture of the soil has an increasing clay content with depth. All the horizons of the soil are stony. The stones are small (<2cm) in the topsoil, whilst the subsoil has a mixture of sizes. The topsoil stone content was measured as 19% in a soil profile pit. The upper subsoil had 28% stone and the lower subsoil had 49% stone. The soils are Wetness Class I.

The remaining areas of Subgrade 3a have lighter textured soil, but the main limitation is still droughtiness. The stone content is lower in the upper horizons of these soils. The soils are well drained and are Wetness Class I. The topsoil texture is loamy medium sand.

Subgrade 3b and Grade 4

The land at Meadow Park has been downgraded on the basis of limiting gradients. Where the gradient exceeds 7 degrees the land can be no better than Subgrade 3b and where it exceeds 11 degrees it is limited to Grade 4.

These gradients affect the versatility of the land because the type of machinery that can be safely used is limited.

Other land

Much of the land at Woodhayes is not in agricultural use and has been mapped as Non Agricultural. A small part of this site is also in Urban use. There are other small pieces of non agricultural land within the sites surveyed.

7. EXMINSTER

7.1 Three sites at Exminster were surveyed around Exminster, amounting to twenty six hectares. The sites were surveyed in September 1993. Parts of the area had been previously surveyed at 1:5,000 scale in 1986, but this was under the original ALC guidelines. The level of fieldwork was considered insufficient to make an accurate assessment of the Grades present in the area. The recent survey now supersedes any previous ALC information. A small area of best and most versatile land was identified in the northern site. A total of 17 auger sample points and 1 soil profile pit were examined.

7.2 Climate

Climate data for the sites were interpolated as described in Section 3. The results are shown in Table 7 and indicate that there is no overall climatic limitation.

Table 7 Climatic Interpolation: Exminster

Grid Reference	SX 944 882	SX 874 944
Altitude (m)	22	20
Accumulated Temperature (deg days)	1576	1578
Average Annual Rainfall	862	827
Overall Climatic Grade	1	1
Field capacity (Days)	179	175
Moisture Deficit, Wheat (mm)	108	112
Potatoes (mm)	102	106

7.3 Relief and Landcover

The sites are sloping grassland sites. The western site at Exminster Hospital is non agricultural land. The maximum altitude of the sites is 35m AOD, becoming as low as 10m AOD in the south of each site.

7.4 Geology and Soils

The geology of the sites is shown on the published 1:63,360 scale solid and drift geology map, sheet 325 (Geological Survey of England and Wales 1971).

Similarly, the soils were mapped by the Soil Survey of England and Wales in 1983 at a reconnaissance scale of 1:250,000.

The three areas are covered by a central area of Permian sandstone which is surrounded by Conglomerate and Breccia of a similar age. The small area east of the Hospital is entirely sandstone, as is the south western portion of the adjacent larger area. Most of this latter area is composed of Breccia and Conglomerate. The southern area is largely Breccia and Conglomerate, with a narrow band of sandstone on its northern edge and a strip of alluvium on its southern edge.

All the areas have been mapped as the Bridgnorth Association. These are well drained sandy and coarse loamy soils over soft sandstone. There are occasional deeper soils.

The majority of the soils surveyed were found to be light in texture and slightly stony. As a result they experience a droughtiness limitation.

7.5 Agricultural Land Classification

The distribution of ALC grades identified in the survey area is detailed in Table 8 and shown on the accompanying ALC map. The information is correct at the scale shown but any enlargement would be misleading.

Table 8 Distribution of ALC grades: Exminster

Grade	Area (ha)	% of Survey Area	% of Agricultural Land
2	2.1	8.0	10.7
3b	17.5	66.5	89.3
Non Agric	6.3	24.0	100% (19.6ha)
Urban	0.4	1.5	
TOTAL	26.3	100%	

Grade 2

The small area of Grade 2 land has well drained deep light textured soils. The soils are Wetness Class I. The soils are virtually stoneless to depth. These soils qualify for Grade 2. The limitation to these soils is droughtiness.

Subgrade 3b

These soils are well drained and Wetness Class I. The topsoil texture is generally medium sandy loam. These soils are limited by the water available for crop growth. The soil has low stone contents, but is light textured. The parent rock is found within the profile. These factors reduce the available water and therefore the versatility of the land.

Other Land

The area of land at Exminster Hosplital is not in agricultural use and has been mapped as Non Agricultural. The other land so mapped is associated with houses and gardens. The urban land is part of an old quarry and Days Pottles Lane.

8. IPPLEPEN

8.1 Two sites at Ipplepen were surveyed in September 1993. A total of seven hectares were surveyed. The only existing ALC information is from the one inch to the mile national ALC map series. The scale of this map is considered inadequate for local plan purposes and the sites have been resurveyed. The recent surveys now supersede any previous ALC information. All the agricultural land survyed is best and most versatile. Eight auger sample points and one soil profile pit were examined.

8.2 Climate

Climate data for the sites were interpolated as described in Section 3. The results are shown in Table 9 and indicate that there is no overall climatic limitation.

Table 9 Climatic Interpolation: Ipplepen

Grid Reference	SX 840 664	SX 843 668
Altitude (m)	80	75
Accumulated Temperature (deg days)	1522	1528
Average Annual Rainfall	1115	1101
Overall Climatic Grade	1	1
Field capacity (Days)	223	221
Moisture Deficit, Wheat (mm)	87	89
Potatoes (mm)	76	78

8.3 Relief and Landcover

The land at Ipplepen is gently sloping, except for some very small areas of much steeper land in the field next to Blackstone Road. The altitude range is from 65m AOD to 85m AOD. At the time of survey all of the land was under grass.

8.4 Geology and Soils

The geology of the sites is shown on the published 1:50,000 scale solid and drift geology map, sheets 339 and 350 (Geological Survey of England and

Wales 1976). Similarly, the soils were mapped by the Soil Survey of England and Wales in 1983 at a reconnaissance scale of 1:250,000.

The bulk of the southern area is composed of Mid Devonian slates and shales with an intrusion of Schalsteins, Tuff type rocks on the western edge and a northern corner comprising Upper Devonian slates and mudstones. The Northern site is entirely underlain by Whiteway slates .

The two sites have been mapped as the Denbigh 2 Association with Crwbin soils immediately west of the southern site. Denbigh 2 soils are described as well drained fine loamy and fine silty soils over rock, some similar soils with slowly permeable subsoils and slight seasonal waterlogging.

The soils in the recent survey were found to be variable but all of similar versatility. The topsoils were generally of heavy clay loam texture.

8.5 Agricultural Land Classification

The distribution of ALC grades identified in the survey area is detailed in Table 10 and shown on the accompanying ALC map. The information is correct at the scale shown but any enlargement would be misleading.

Table 10 Distribution of ALC grades: Ipplepen

Grade	Area (ha)	% of Survey Area	% of Agricultural Land
3a	6.9	98.6	100%
Urban	0.1	1.4	
TOTAL	7.0	100%	

Subgrade 3a

All of the survey area has been mapped as Subgrade 3a. The soils are well drained and Wetness Class I. The soils are stony. The stone content of the soils was measured in a soil profile pit and found to be 18% in the topsoil and 38% in the subsoil. The parent silty rock was found at a depth of 37cm in the pit. The topsoil texture of these soils was mainly heavy clay loam. This heavy texture restricts the versatility of the land because the opportunity for accessing the land without damaging the soils is reduced. The land can be no better than Subgrade 3a in the local climatic regime.

Other Land

A small area of Urban has been mapped relating to a house and garden.

9. KENTON

9.1 Three hectares of land at Southtown, Kenton were surveyed in September 1993. The only existing ALC information is from the one inch to the mile national ALC map series. The scale of this map is considered inadequate for local plan purposes and the site has been resurveyed. The recent survey now supersedes any previous ALC information. Two auger sample points were examined.

9.2 Climate

Climate data for the sites were interpolated as described in Section 3. The results are shown in Table 11 and indicate that there is no overall climatic limitation.

Table 11 Climatic Interpolation: Kenton

Grid Reference	SX 966 829
Altitude (m)	30
Accumulated Temperature (deg days)	1569
Average Annual Rainfall	857
Overall Climatic Grade	1
Field capacity (Days)	177
Moisture Deficit, Wheat (mm)	107
Potatoes (mm)	101

9.3 Relief and Landcover

The site is gently sloping facing north rising from 15m AOD to 35m AOD. The upper part of the site slopes more steeply and has limiting gradients. At the time of survey the lower part of the site had a crop of linseed whilst the upper part was cereal stubble.

9.4 Geology and Soils

The geology of the site is shown on the published 1:50,000 scale solid and drift geology map, sheet 339 (Geological Survey of England and Wales 1976). Similarly, the soils were mapped by the Soil Survey of England and Wales in 1983 at a reconnaissance scale of 1:250,000.

The site is split into two areas geologically along a NW-SE line. To the north the area is underlain by Dawlish Sandstone whilst to the south the Exe Breccia is prevalent. Both rocks are of Permian age.

The soils have been mapped as the Crediton Association. This is described as a well drained gritty reddish loamy soil over Breccia, which is locally less stony.

The recent survey found soils relating to this Association.

9.5 Agricultural Land Classification

The distribution of ALC grades identified in the survey area is detailed in Table 12 and shown on the accompanying ALC map. The information is correct at the scale shown but any enlargement would be misleading.

Table 12 Distribution of ALC grades: Kenton

Grade	Area (ha)	% of Survey Area	% of Agricultural Land
2	2.5	46.3	48.0
3b	2.7	50.0	51.9
Non Agric	0.2	3.7	100% (5.2ha)
TOTAL	5.4	100%	

Grade 2

The lower part of the site has been mapped as Grade 2. These soils are slightly stony but well drained. The topsoil texture is medium sandy loam. The soils are slightly droughty and are therefore Grade 2.

Subgrade 3b

The area mapped as Subgrade 3b has been downgraded on the basis of limiting slope. The slope was measured as having a gradient of 8 degrees and therefore the versatility of the land is reduced by the types of machinery that can be safely used and it is downgraded.

Other Land

A small area of land not in agricultural use has been mapped as Non Agricultural.

10. KINGSKERSWELL

10.1 Land at Edginswell Lane, Fluder Hill and Willowpark Lane was surveyed in September 1993. A total of 47 hectares were surveyed. The only existing ALC information is from the one inch to the mile national ALC map series. The scale of this map is considered inadequate for local plan purposes and the sites have been resurveyed. The recent surveys now supersede any previous ALC information. Nearly half the agricultural land is of best and most versatile quality. 19 auger sample points and 2 soil profile pits were examined.

10.2 Climate

Climate data for the sites were interpolated as described in Section 3. The results are shown in Table 13 and indicate that there is no overall climatic limitation.

Table 13 Climatic Interpolation: Kingskerswell

Grid Reference	SX 879 672	SX 892 671
Altitude (m)	27	104
Accumulated Temperature (deg days)	1581	1493
Average Annual Rainfall	951	1045
Overall Climatic Grade	1	1
Field capacity (Days)	197	210
Moisture Deficit, Wheat (mm)	103	88
Potatoes (mm)	96	77

10.3 Relief and Landcover

The site west of the railway is gently sloping and at an average altitude of 30m AOD. This site was entirely under permanent grass at the time of survey. The other two sites form part of a dissected hill with a complicated pattern of dry valleys. Many of the slopes are steep and limiting to agricultural use. There are some flater areas. At the time of survey these were being used for cereal production whilst the rest of the land was in grass. The altitude range is from 35m AOD to 104m AOD.

10.4 Geology and Soils

The geology of the site is shown on the published 1:50,000 scale solid and drift geology map, sheet 339 (Geological Survey of England and Wales 1976). Similarly, the soils were mapped by the Soil Survey of England and Wales in 1983 at a reconnaissance scale of 1:250,000.

The eastern sites and most of the the western site are underlain by Watcombe Breccia, a coarse angular grained sedimentary rock made from rock fragments. Running parallel to the eastern edge of the Edginswell Lane site there is an area of river alluvium which also covers the southern extension of the site. In the north of this site there is an outcrop of East Ogwell Limestone, at Colstray Farm.

All the sites have been mapped as the Crediton Association. These soils are described as well drained gritty reddish loamy soils over breccia, which can be locally less stony.

The soils in the higher parts of the site are well drained but stony with sandy clay loam topsoils. The soils found in the western site have heavy clay loam topsoils and are also free drainig except for the southern end.

10.5 Agricultural Land Classification

The distribution of ALC grades identified in the survey area is detailed in Table 14 and shown on the accompanying ALC map. The information is correct at the scale shown but any enlargement would be misleading.

Table 14 Distribution of ALC grades: Kingskerswell

Grade	Area (ha)	% of Survey Area	% of Agricultural Land
2	6.7	14.1	14.2
3a	12.7	26.7	26.9
3b	4.6	9.8	9.8
4	23.2	48.8	49.2
Non Agric	0.3	0.6	100% (47.2ha)
TOTAL	47.5	100%	

Grade 2

The higher land to the east of the railway which has gradients less then 7 degrees has been mapped as Grade 2. These soils are free draining and are Wetness Class I. They have sandy clay loam topsoils with 18% hard stone. The stone content of the soils was measured in a soil profile pit. The subsoil was found to have 23% hard stone. Despite these stone contents the soil is not droughty. The main limitation to this soil is the workability. The combination of topsoil texture and the number of days at which the area is at field capacity limits the time available to access the land without causing damage to the soil.

Subgrade 3a

The lower land on both sides of the railway has heavier topsoils than that soil described above. Here the soils are also well drained and Wetness Class I, but the topsoil texture is heavy clay loam. The workability limitation is therefore slightly worse and the soils can be no better than 3a. The soils are also less stony than the higher land, with a maximum content measured to be 16% in the lower subsoil. These soils also become heavier with depth.

Subgrade 3b

The small area of Subgrade 3b land to the west of the railway has been downgraded on the basis of a wetness limitation. The soils are gleyed caused by the presence of a slowly permeable layer at depth. The soils are Wetness Class III and with a heavy clay loam topsoil can be no better tha 3b.

The areas of 3b to the east of the railway are limited by steep gradients. This land has gradients over 7 degrees but not over 11 degrees. The versatility of

the land is reduced because the types of machinery that can be safely used is limited.

Grade 4

Large areas of the eastern sites have been downgraded to Grade 4 on the basis of steep gradients. The gradients were measured to be over 11 degrees. The range of machinery that could be used on these slopes is greatly reduced.

Other land

A farm track has been mapped as Non Agricultural.

11. KINGSTEIGNTON

11.1 Land at Penns Mount, Kingsteignton, amounting to eighteen hectares was surveyed in September 1993. The only existing ALC information is from the one inch to the mile national ALC map series. The scale of this map is considered inadequate for local plan purposes and the site has been resurveyed. The recent survey now supersedes any previous ALC information. Over one third of the site is best and most versatile. Eleven auger sample points were examined.

11.2 Climate

Climate data for the sites were interpolated as described in Section 3. The results are shown in Table 15 and indicate that there is no overall climatic limitation.

Table 15 Climatic Interpolation: Kingsteignton

Grid Reference	SX 877 727
Altitude (m)	27
Accumulated Temperature (deg days)	1579
Average Annual Rainfall	958
Overall Climatic Grade	1
Field capacity (Days)	197
Moisture Deficit, Wheat (mm)	102
Potatoes (mm)	94

11.3 Relief and Landcover

Penns Mount is a hill with land sloping away in all directions. The summit is at 46m AOD. The lowest part of the site is at 5m AOD. At the time of survey all the agricultural land was under grass.

11.4 Geology and Soils

The geology of the site is shown on the published 1:50,000 scale solid and drift geology map, sheet 339 (Geological Survey of England and Wales 1976). Similarly, the soils were mapped by the Soil Survey of England and Wales in 1983 at a reconnaissance scale of 1:250,000.

The heart of the site is composed of Upper Greensand which is surrounded to the north and east by the Whiteway slates. On the east there is a long strip of recent river alluvium.

The whole site has been mapped as the Withnell 1 Association. These soils are described as well drained loamy soils over sandstone, usually on steep slopes. There may also be some fine loamy soils with slowly permeable subsoils and slight seasonal waterlogging.

The soils found in the survey were mainly well drained except in the east. The soils were heavy, with heavy clay loam topsoils. The soils were also stony.

11.5 Agricultural Land Classification

The distribution of ALC grades identified in the survey area is detailed in Table 16 and shown on the accompanying ALC map. The information is correct at the scale shown but any enlargement would be misleading.

Table 16 Distribution of ALC grades: Kingsteignton

Grade	Area (ha)	% of Survey Area	% of Agricultural Land
3a	6.5	35.3	37.1
3b	9.2	0.5	52.6
4	1.8	9.8	10.3
Non Agric	0.1	0.5	100% (17.5ha)
Urban	0.8	4.4	
TOTAL	18.4	100%	

Subgrade 3a

Over a third of the survey area has been mapped as Subgrade 3a. These soils are well drained but stony. They are Wetness Class I. The main limitation to agricultural versatility is the workability of the soils. The soils have heavy clay loam topsoil, which in combination with the number of days at which the land is at field capacity in the area, reduces the versatility of the land. This is because the number of days when cultivation and grazing can occur without damaging the soil structure is limited.

Subgrade 3b

Some of the land mapped as 3b has poor drainage. These soils are Wetness Classes II and III depending on the extent of the wetness found. A small area of Wetness Class IV was also found but this has been included in this unit. These soils also have heavy clay loam topsoils.

The remaining land in this mapping unit is land with restricting gradients. The gradients were found to exceed 7 degrees. This reduces the versatility of the land because the range of machinery that can be used safely is limited.

Grade 4

Two small areas of Grade 4 have been mapped. Here the gradients exceed 11 degrees. The versatility of this land is therefore further reduced than that described above and is downgraded.

Other Land

Areas associated with houses, roads and land not in agricultural use have been mapped as Urban and Non Agricultural.

12. NEWTON ABBOT

12.1 Five hectares of land at Mile End, Newton Abbot were surveyed in September 1993. The only existing ALC information is from the one inch to the mile national ALC map series. The scale of this map is considered inadequate for local plan purposes and the site has been resurveyed. The recent survey now supersedes any previous ALC information. No best and most versatile land was found. Seven auger sample points and one soil profile pit were examined.

12.2 Climate

Climate data for the sites were interpolated as described in Section 3. The results are shown in Table 17 and indicate that there is no overall climatic limitation.

Table 17 Climatic Interpolation: Mile End, Newton Abbot

Grid Reference	SX 839 722
Altitude (m)	45
Accumulated Temperature (deg days)	1559
Average Annual Rainfall	1041
Overall Climatic Grade	1
Field capacity (Days)	211
Moisture Deficit, Wheat (mm)	95
Potatoes (mm)	85

12.3 Relief and Landcover

The survey area forms the two gently sloping sides to a valley running east west through the middle of the site. The altitude range is from 40m AOD to 55m AOD. At the time of survey the site was entirely permenant grassland.

12.4 Geology and Soils

The geology of the site is shown on the published 1:50,000 scale solid and drift geology map, sheet 339 (Geological Survey of England and Wales 1976). Similarly, the soils were mapped by the Soil Survey of England and Wales in 1983 at a reconnaissance scale of 1:250,000.

The site is underlain entirely by Upper Devonian Gurrington Slate.

The Soil Survey have mapped part of the site as Urban, whilst in the north west the Wickham 1 Association is mapped and in the north east, the Denbigh 1 Association is mapped. Denbigh 1 is a well drained fine loamy and fine silty soil over rock. The Wickham 1 soil is slowly permeable and seasonally waterlogged fine silts over clayey soils.

The soils found in the survey were well drained but stoney. The soils are heavy in texture being clays.

12.5 Agricultural Land Classification

The distribution of ALC grades identified in the survey area is detailed in Table 18 and shown on the accompanying ALC map. The information is correct at the scale shown but any enlargement would be misleading.

Table 18 Distribution of ALC grades: Newton Abbot

Grade	Area (ha)	% of Survey Area	% of Agricultural Land
3b	5.4	100%	100%

Subgrade 3b

The whole site has been mapped as Subgrade 3b. These soils are well drained and are Wetness Class I. The soils are stony and in a soil profile pit the parent rock was at a depth of 40cm, with stone contents of 15% in the topsoil and 52% in the subsoil. Droughtiness caused by high stone contents is not the main limitation. The main limitation to agricultural versatility is the workability of the soil. The soils have clay topsoils, which in combination with the high number of days when the soil is at field capacity limits the versatility of the land in terms of cultivation timings.

13. STARCROSS

13.1 Two sites at Starcross amounting to forty hectares were surveyed in September 1993. The only existing ALC information is from the one inch to the mile national ALC map series. The scale of this map is considered inadequate for local plan purposes and the site has been resurveyed. The recent survey now supersedes any previous ALC information. The majority of the agricultural land is best and most versatile. Twenty seven auger sample point and one soil profile pit were examined.

13.2 Climate

Climate data for the sites were interpolated as described in Section 3. The results are shown in Table 19 and indicate that there is no overall climatic limitation.

Table 19 Climatic Interpolation: Starcross

Grid Reference	SX 970 815
Altitude (m)	10
Accumulated Temperature (deg days)	1592
Average Annual Rainfall	854
Overall Climatic Grade	1
Field capacity (Days)	177
Moisture Deficit, Wheat (mm)	109
Potatoes (mm)	104

13.3 Relief and Landcover

The survey areas are gently sloping except the land down to the Staplake Brook which is steeper. The altitude is between 3m AOD and 15m AOD, At the time of survey the northern land and that south of Staplake Lane was in grass. West of the allotments there were field beans, with cereal stubble in the centre block, except for grass in its northern part.

13.4 Geology and Soils

The geology of the site is shown on the published 1:50,000 scale solid and drift geology map, sheet 339 (Geological Survey of England and Wales 1976). Similarly, the soils were mapped by the Soil Survey of England and Wales in 1983 at a reconnaissance scale of 1:250,000.

Most of the area is underlain by Pleistocene and Recent river terrace deposits and alluvium. The exceptions are the western third of the larger area which is composed of Exe Breccia. This rock also occurs along the southern edge of this area.

Except for a band of the Crediton Association on the southern edge of the larger area, the soils have been mapped as the Newnham Association. Newnham soils are described as well drained, reddish coarse and fine loamy soils over gravel, which may be locally deep and may be affected by groundwater. Crediton soils are well drained gritty reddish loamy soils over Breccia.

The soils in the recent survey were found to be generally well drained with light textures. The main limitation to the soils is droughtiness.

13.5 Agricultural Land Classification

The distribution of ALC grades identified in the survey area is detailed in Table 20 and shown on the accompanying ALC map. The information is correct at the scale shown but any enlargement would be misleading.

Table 20 Distribution of ALC grades: Starcross

Grade	Area (ha)	% of Survey Area	% of Agricultural Land
3a	26.6	66.2	90.5
3b	2.8	6.9	9.5
Non Agric	5.1	12.7	100% (29.4ha)
Urban	5.4	13.4	
TOTAL	40.2	100%	

Subgrade 3a

The majority of the site has been mapped as Subgrade 3a. In the northern block the soils show some evidence of restricted drainage. These soils are Wetness Class II. There are both heavy and medium clay loam topsoils in this area, but both qualify for Subgrade 3a. In the larger block the soils are well drained and are Wetness Class I. These soils have been downgraded on the basis of a droughtiness limitation. Ths soils are light textured and stony in the upper subsoil. In a soil pit the stone contents were measured to be 2% in the

topsoil and 43% in the subsoil. At depth the profile became stonefree but loamy medium sand in texture.

Subgrade 3b

There is a small area of land in the south where the gradient exceeds 7 degrees and so the land is downgraded.

Other Land

Parts of the site have been mapped as urban where there are roads and housing. The allotment gardens and the derelict land at Staplake House along with extensive gardens in the south have been mapped as Non Agricultural. The agricultural buildings have been so mapped.

14. TEIGNMOUTH

14.1 Land in the north west and north east of Teignmouth was surveyed in September 1993. The land to the north west had been previously surveyed in 1980, but the level of fieldwork was considered inadequate for local plan purposes, and the sites have been resurveyed. The recent survey now supersedes any previous ALC information. Nearly half of the land is best and most versatile. A total of fourteen hectares were surveyed and nine auger sample points were examined.

14.2 Climate

Climate data for the sites were interpolated as described in Section 3. The results are shown in Table 21 and indicate that there is no overall climatic limitation.

Table 21 Climatic Interpolation: Teignmouth

Grid Reference	SX 930 746	SX 945 744
Altitude (m)	85	120
Accumulated Temperature (deg days)	1511	1470
Average Annual Rainfall	930	942
Overall Climatic Grade	1	1
Field capacity (Days)	191	192
Moisture Deficit, Wheat (mm)	95	90
Potatoes (mm)	86	79

14.3 Relief and Landcover

All the land surveyed is sloping, but only parts of it has limiting gradients. The altitude range of the land is from 65m AOD to 155m AOD. At the time of survey

the western sites were under grass whilst the western part of the other site was in set aside and the east in potatoes.

14.4 Geology and Soils

The geology of the site is shown on the published 1:50,000 scale solid and drift geology map, sheet 339 (Geological Survey of England and Wales 1976). Similarly, the soils were mapped by the Soil Survey of England and Wales in 1983 at a reconnaissance scale of 1:250,000.

The sites are underlain by Teignmouth Breccia of Permian age.

The soils have been mapped as the Crediton Association. These are well drained gritty reddish loamy soils over Breccia, locally less stony.

The soils found in the recent survey were mainly well drained but stony.

14.5 Agricultural Land Classification

The distribution of ALC grades identified in the survey area is detailed in Table 22 and shown on the accompanying ALC map. The information is correct at the scale shown but any enlargement would be misleading.

Table 22 Distribution of ALC grades: Teignmouth

Grade	Area (ha)	% of Survey Area	% of Agricultural Land
3a	5.8	40.1	41.7
3b	8.1	56.3	58.3
Non Agric	0.4	2.8	100% (13.9ha)
Farm Bdgs	0.1	0.7	
TOTAL	14.4	100%	

Subgrade 3a

The areas mapped as Subgrade 3a have free draining stony soils which are Wetness Class I. The main limitation to these soils is the workability. This means that the combination of the heavy clay loam topsoil texture and the number of days that the fields are at field capacity limits the time available when the land can be accessed without damaging the soil structure.

Subgrade 3b

The majority of the land mapped as 3b has a slope limitation. The gradient of the land was measured to be over 7 degrees. In places the gradient exceeded 11 degrees but 3b represents the overall slope in this area. This limits the machinery that can be safely used and thus the versatility of the land. There is

APPENDIX 1

REFERENCES

GEOLOGICAL SURVEY OF ENGLAND AND WALES (1971) Solid and drift edition. Sheet 325 Exeter, 1:63,360 scale

GEOLOGICAL SURVEY OF ENGLAND AND WALES (1976) Solid and drift edition. Sheet 339 Newton Abbot, 1:50,000 scale

GEOLOGICAL SURVEY OF ENGLAND AND WALES (1976) Solid and drift edition. Sheet 350 Torquay, 1:63,360 scale

MAFF (1988) Agricultural Land Classification of England and Wales (Revised guidelines and criteria for grading the quality of agricultural 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

APPENDIX 3

DEFINITION OF SOIL WETNESS CLASSES

Wetness Class I

The soil profile is not wet within 70cm depth for more than 30 days in most years.

Wetness Class II

The soil profile is wet within 70cm depth for 31-90 days in most years or, if there is no slowly permeable layer within 80cm depth, it is wet within 70cm for more than 90 days, but not wet within 40cm depth for more than 30 days in most years.

Wetness Class III

The soil profile is wet within 70cm depth for 91-180 days in most years or, if there is no slowly permeable layer within 80cm depth, it is wet within 70cm for more than 180 days, but only wet within 40cm depth for between 31 and 90 days in most years.

Wetness Class IV

The soil profile is wet within 70cm depth for more than 180 days but not within 40cm depth for more than 210 days in most years or, if there is no slowly permeable layer within 80cm depth, it is wet within 40cm depth for 91-210 days in most years.

Wetness Class V

The soil profile is wet within 40cm depth for 211-335 days in most years.

Wetness Class VI

The soil profile is wet within 40cm depth for more than 335 days in most years.

Notes: The number of days specified is not necessarily a continuous period. 'In most years' is defined as more than 10 out of 20 years.

Source: Hodgson, J M (in preparation) Soil Survey Field Handbook (revised edition).

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.

Source: MAFF (1988) Agricultural Land Classification of England and Wales (Revised guidelines and criteria for grading the quality of agricultural land) Alnwick.

APPENDIX 2

DESCRIPTION OF THE GRADES AND SUBGRADES

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 include 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 Gradeá1.

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 most 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.

Non-agricultural

'Soft' uses where most of the land could be returned relatively easily to agriculture, including: private park land, 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.

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.