

Natural area: 59. Cornish Killas and Granite

Lowland Grassland Significance: **SOME**

Description:

A rolling plateau area dissected by deep river valleys and fringed by rocky coast to the north and south. The area consists of slates and sandstones of Devonian age intruded by granite masses.

The solid geology gives rise to acid podzolic and peaty soils which support heathland, acid grassland, mire and acid fen meadow communities except where traditional management for hay with occasional use of lime and farmyard manure has produced neutral grassland. Small areas of semi-improved wet grassland sometimes occur in association with estuaries such as the Tamar and Camel.

Key Grassland Types:

1. Dry neutral grassland (MG5)
2. Acid grassland (U4)
3. Fen meadow/rush pasture (M23, M25)

Nationally Rare & Scarce Grassland Plant Species:

Chamaemelum nobile, Crassula tillaea, Dianthus armeria, Hypericum undulatum

Key sites:

Associated interests:

1. Semi-improved/reverted wet neutral grassland/coastal grazing marsh and its associated breeding and wintering bird communities and rare/scarce vascular plant species
2. Greater horseshoe bats partly associated with permanent pasture including improved/semi-improved swards

Key Issues:

- Lack of grazing/undergrazing
- Hydrology - maintenance / restoration of water tables
- Pressure for agricultural intensification
- Lack of knowledge of the grassland resource
- Opportunities for grassland creation on farmland

Key Objectives:

- Maintain the current extent of semi-natural grassland in favourable conservation status
- Restore semi-natural grassland in sub-optimal condition to optimal condition
- Seek opportunities to expand the grassland resource
- Consider instigation of targeted grassland survey

Natural area: 60. The Lizard

Lowland Grassland Significance: **SOME**

Description:

The Lizard peninsula is the most southerly part of the English mainland and comprises a complex of ancient igneous and metamorphic rocks including serpentine and gabbro. Most of the area lies between 60 and 90m and is demarcated on three sides by rocky coastal cliffs. The soils are variable in terms of their base status and drainage characteristics which reflects the nature of the underlying geology or superficial deposits (loess). The Lizard is internationally important for its heathland and maritime cliff and grassland communities which also support a number of nationally rare and scarce plant species. However, there is very little non-maritime lowland grassland.

Key Grassland Types:

1. Acid grassland (U3) occurring in a mosaic with dry heath

Nationally Rare & Scarce Grassland Plant Species:

Key sites:

The Lizard

Associated interests:

1. Dry dwarf shrub heath (H4, H5, H6, H7)

Key Issues:

- Lack of grazing/undergrazing
- Pressure for agricultural intensification

Key Objectives:

- Maintain the current extent of semi-natural grassland in favourable conservation status
- Restore semi-natural grassland in sub-optimal condition to optimal condition

Natural area: 61. Dartmoor

Lowland Grassland Significance: **CONSIDERABLE**

Description:

Dartmoor, situated in south Devon, consists of a Granite massif which gives rise to undulating country rising to 610m and cut by rivers such as the Dart and Teign. The unenclosed upland 'moor' area is dominated by semi-natural vegetation which includes blanket mire, dwarf shrub heath, acid grassland and valley mire.

Enclosed areas supports small areas of neutral hay meadows and dry acid grassland while poorly-drained valley bottoms contain important concentrations of acid wet 'Rhos' pasture.

Key Grassland Types:

1. **Fen meadow/rush pasture (Rhos pasture) (M23a, M24c, M25c)**
2. Neutral grassland (MG5)
3. Acid grassland (U3, U4)

Nationally Rare & Scarce Grassland Plant Species:

Carex montana, *Chamaemelum nobile*, *Euphrasia virgusii*, *Viola lactea*

Key sites:

Associated interests:

1. Invertebrates associated with fen meadow/rush pasture
2. Greater horseshoe bat partly associated with unimproved/semi-improved/improved pasture

Key Issues:

- Pressure for agricultural intensification including overgrazing and change from hay to silage
- Lack of grazing/undergrazing
- Invasion of bracken into dry neutral/acid pastures
- Opportunities for grassland restoration/creation on enclosed farmland
- Ensuring appropriate management for priority invertebrates especially Fritillary butterflies

Key Objectives:

- Maintain the current extent of semi-natural grassland in favourable conservation status
- Restore semi-natural grassland in sub-optimal condition to optimal condition
- Seek opportunities to expand the grassland resource

Description:

This Natural Area situated in north Devon and Cornwall, conforms with the outcrop of the Carboniferous Culm measures which consist of shales and sandstones. The landscape of relatively low-lying plateaux, between 150m and 250m, with many remaining hedges, is deeply cut by river valleys and terminates on the north coast with its rugged cliffs. The soils are mostly acidic clays, loams or peat based often with impeded drainage.

The key grassland type here are the wet acid grasslands 'Culm grasslands' which are a mixture of rush pastures and fen meadows.

Key Grassland Types:

1. **Fen meadow/rush pasture (Culm grassland) (M23a,b, M24c, M25a,b,c, M27a)**

Nationally Rare & Scarce Grassland Plant Species:

Chamaemelum nobile, Dianthus armeria, Hypericum undulatum

Key sites:

Culm Grasslands pSAC (includes Dunsdon Farm)

Associated interests:

1. Breeding birds associated with Culm grassland
2. Invertebrates associated with Culm grassland especially *Eurodryas aurinia*
3. Breeding and wintering birds of fen meadow/rush pasture
4. Wet heath (M16b)

Key Issues:

- Pressure for agricultural intensification
- Lack of grazing/undergrazing
- Opportunities for grassland restoration/creation and reversal of habitat fragmentation

Key Objectives:

- Maintain the current extent of semi-natural grassland in favourable conservation status
- Restore semi-natural grassland in sub-optimal condition to optimal condition
- Seek opportunities to expand the grassland resource

Natural area: 63. Exmoor and the Quantocks

Lowland Grassland Significance: **SOME**

Description:

Exmoor and the Quantocks form smoothly molded hills rising to 520m and dissected by steep-sided, often wooded, valleys. The rocks are of Devonian age and consist principally of sandstones and slates. The area is dominated by unenclosed rough hill 'pasture' comprising upland dwarf shrub heath, blanket mire, valley mire and acid grassland. The coast forms the northern boundary of the area and this consists of cliffs and bays. Lowland habitats, principally heathland and woodland, are confined to coastal areas and river valleys. Only very small areas of lowland enclosed grassland occur.

Key Grassland Types:

1. Fen meadow/rush pasture (M23a,b, M24c, M25)
2. Dry/wet neutral grassland (MG5, MG11, MG13)
2. Acid grassland (U3, U4)

Nationally Rare & Scarce Grassland Plant Species:

Dianthus armeria, *Sedum forsterianum*, *Gastridium ventricosum*, *Scilla autumnalis*

Key sites:

Associated interests:

1. Invertebrates associated with fen meadow/rush pasture (eg *Eurodryas aurinia*)
2. Greater horseshoe bat partly associated with unimproved/semi-improved/improved permanent pasture

Key Issues:

- Lack of grazing/undergrazing
- Pressure for agricultural intensification
- Opportunities for grassland creation on farmland

Key Objectives:

- Maintain the current extent of semi-natural grassland in favourable conservation status
- Restore semi-natural grassland in sub-optimal condition to optimal condition
- Seek opportunities to expand the grassland resource

Natural area: 64. Vale of Taunton

Lowland Grassland Significance: **SOME**

Description:

An area of low-lying intensively managed pastoral farmland but with a network of hedges. The area surrounds the Quantocks and is flanked by the Brendon Hills to the west, the Blackdowns to the south and merges into the Somerset Levels to the east. The area is largely underlain by Triassic Mercia mudstones. Small areas of grassland of various types remain, especially neutral grassland. The coast consists of cliffs formed of Jurassic Lias shales, mudstones and limestones, occasionally giving rise to small areas of calcareous grassland.

Key Grassland Types:

1. Dry neutral grassland (MG5)
2. Fen meadow/rush pasture (M22, M23, M24)
3. Calcareous grassland (CG2)

Nationally Rare & Scarce Grassland Plant Species:

Althaea hirsuta, *Gastrium ventricosum*, *Gentianella anglica*

Key sites:

Associated interests:

Key Issues:

- Pressure for agricultural intensification
- Lack of grazing/undergrazing
- Opportunities for grassland creation on farmland

Key Objectives:

- Maintain the current extent of semi-natural grassland in favourable conservation status
- Restore semi-natural grassland in sub-optimal condition to optimal condition
- Seek opportunities to expand the grassland resource

Natural area: 65. Mid Somerset Hills

Lowland Grassland Significance: **SOME**

Description:

The mid-Somerset Hills rise out of the Somerset Plain as a series of low hills and ridges rising to c.100m. These consist of both Jurassic and Permo-Triassic limestones, mudstones and shales.

The proportion of the landscape supporting semi-natural habitats and non-cropped land remains high. The calcareous grasslands, associated with the limestones, mudstones and shales, are the principal grassland interest of this Natural Area.

Key Grassland Types:

1. Calcareous (Jurassic limestone) grassland (CG2, CG3, MG5b)

Nationally Rare & Scarce Grassland Plant Species:

Althaea hirsuta, *Gastidium ventricosum*, *Gentianella anglica*

Key sites:

Associated interests:

1. Calcareous scrub
2. Invertebrates associated with calcareous grassland and scrub

Key Issues:

- Lack of grazing/ undergrazing (including scrub invasion)
- Opportunities for restoration/creation of grassland

Key Objectives:

- Maintain the current extent of semi-natural grassland in favourable conservation status
- Restore semi-natural grassland in sub-optimal condition to optimal condition
- Seek opportunities to expand the grassland resource

Natural area: 66. Mendips

Lowland Grassland Significance: **OUTSTANDING**

Description:

A Carboniferous limestone plateau averaging 250 m in height with typical karst scenery including crags, gorges and solution features the latter including swallow holes and caves. Localised outcrops of Devonian Old Red Sandstone also occur. The area extends roughly west-east from the cliffs of Brean Down, near Weston-super-Mare, inland to Frome.

The Mendips are of particular interest for the presence of the nationally rare CG1 (*Festuca ovina-Carlina vulgaris*) limestone grassland type.

Key Grassland Types:

1. **Calcareous (Carboniferous limestone) grassland (CG1a,c (Mendips are the only UK locality for these sub-communities), e, CG2a,c,d, CG3c, CG5a,CG7a)**
2. Dry neutral grassland (MG5a,c)
3. Metalliferous (Calaminarian) grassland associated with lead mine spoil (OV37)

Nationally Rare & Scarce Grassland Plant Species:

Aster linosyris, Carex humilis, C. montana, Cerastium pumilum, Galium pumilum, Helianthemum appeninum, Hornungia petraea, Koeleria vallesiana, Minuartia hybrida, M. verna, Potentilla neumanniana, Sedum forsterianum, Thlaspi caerulescens, Trinia glauca

Key sites:

Brean Down & Uphill Cliff, Crook Peak, Dolebury Warren

Associated interests:

1. Breeding birds associated with calcareous grassland and scrub
2. Invertebrates associated with calcareous grassland and scrub
3. Limestone rock/cliff/scree habitats with associated rare/scarce vascular plant species
4. Limestone heath
5. Unimproved/semi-improved/improved permanent pasture used as feeding areas by greater horseshoe bats

Key Issues:

- Lack of grazing/undergrazing
- Pressure for agricultural intensification
- Pressure for industrial development especially mineral extraction
- Opportunities for grassland creation on farmland

Key Objectives:

- Maintain the current extent of semi-natural grassland in favourable conservation status
- Restore semi-natural grassland in sub-optimal condition to optimal condition
- Seek opportunities to expand the grassland resource
- Seek to ensure that strong policies for grassland conservation appear in development/structure plans

Natural area: 67. Somerset Levels and Moors

Lowland Grassland Significance: **OUTSTANDING**

Description:

The Somerset Levels and Moors consists of an extensive low-lying area underlain by thick estuarine alluvium and peat bounded by the Mendips to the north, the mid-Somerset hills to the south and east and the Vale of Taunton to the west. It is the largest remaining area of wet grassland in England and it supports principally beef and dairy farming enterprises. It is of considerable importance for nature conservation due to the presence of a rich variety of grassland, heath, swamp and mire communities and their associated bird and invertebrate faunas.

The area is of particular importance for its unimproved wet grassland communities, especially the MG8 *Cynosurus cristatus-Caltha palustris* community and related vegetation.

Key Grassland Types:

1. **Wet neutral grassland (MG4-related vegetation, MG8 and related vegetation (*Senecioni-Brometum racemosi*), MG11, MG13)**
2. **Fen meadow/rush pasture (M22b, M23a, M24a,b,c, M25a,b, c, M27)**
3. 'Dry' neutral grassland (MG5a,c)

Nationally Rare & Scarce Grassland Plant Species:

Peucedanum palustre

Key sites:

North Somerset Levels, Kings Sedgemoor and Moorlinch, Northmoor & Southlake Moor

Associated interests:

1. Semi-improved/reverted wet grassland including coastal grazing marsh (MG6, MG7, MG9, MG10)
2. Swamp communities
3. Rare & scarce plant species associated with ditches and grazing marsh
4. Breeding and wintering birds of wet grassland
5. Invertebrates associated with ditch systems
6. Invertebrates associated with wet grassland and ditches
7. Otters

Key Issues:

- Hydrology - maintenance of water tables and flooding regimes including impacts of raised water levels on key grassland communities
- Opportunities for grassland restoration/creation on farmland
- Control of 'agricultural weed species' in grassland eg *Senecio aquaticus*, *Juncus* spp.
- Pressure for agricultural intensification
- Balancing different farming practices with multiple nature conservation interests

Key Objectives:

- Maintain the current extent of semi-natural grassland in favourable conservation status
- Restore semi-natural grassland in sub-optimal condition to optimal condition
- Seek opportunities to expand the grassland resource

Description:

This area lies to the north of the Mendips, and is bounded to the east by Cotswolds and to the north and west by the Severn valley and the Bristol Channel.

The great scenic diversity of this area is due to the range of rock types of different eras and the complex history of erosion and earth movements. Rock types include sandstones, mudstones, clays, limestones and shales.

Historically, this region is likely to have supported a range of grassland types but the current resource is small largely due to ploughing and agricultural improvement. However, Avon Gorge retains small areas of limestone grassland and is a key site for rare and scarce species of vascular plant and the Gordano Valley supports an important concentration of fen meadow vegetation.

Key Grassland Types:

1. Calcareous grassland (CG1e, CG2, CG3, CG7)
2. Fen meadow/rush pasture (M22, M23, M24)
3. Dry neutral grassland (MG5a,b,c)

Nationally Rare & Scarce Grassland Plant Species:

Arabis scabra, Carex humilis, Cerastium pumilum, Gastridium ventricosum, Hornungia petraea, Minuartia hybrida, Scilla autumnalis, Sedum forsterianum, Trinia glauca, Veronica spicata subsp hybrida, Potentilla neumanniana, Thlaspi caerulescens

Key sites:

Gordano Valley

Associated interests:

1. Limestone rock/scree and associated rare/scarce vascular plants
2. Unimproved/semi-improved/improved permanent pasture used as feeding areas by greater horseshoe bats

Key Issues:

- Lack of grazing/undergrazing
- Hydrology - maintenance of water tables
- Pressure for agricultural intensification

Key Objectives:

- Maintain the current extent of semi-natural grassland in favourable conservation status
- Restore semi-natural grassland in sub-optimal condition to optimal condition
- Seek opportunities to expand the grassland resource

Description:

The Cotswolds consist of a range of hills, principally of Jurassic Oolite limestone, stretching from Bath to western Northamptonshire some 120km to the north-east. The general altitude lies between 120m and 250m reaching a maximum of 300m. The principal land uses are mixed farming and forestry. The shallow brown calcareous soils on the limestone support calcareous and neutral grassland communities where there has been a continuation of low intensity pastoral management.

This Natural Area supports a large proportion of the England resource of *Bromus erectus-Brachypodium pinnatum* calcareous grassland (CG5).

Key Grassland Types:

1. **Calcareous (Jurassic limestone) grassland (CG2a, CG3a,b,c, CG4a,b,c, CG5a, MG5b on limestone)**
2. **Dry neutral grassland (MG5a,b,c)**

Nationally Rare & Scarce Grassland Plant Species:

Aceras anthropophorum, Carex tomentosa, Cerastium pumilum, Euphrasia pseudokernerii, Galium pumilum, Gentianella anglica, Herminium monorchis, Minuartia hybrida, Orchis ustulata, Pulsatilla vulgaris, Rhinanthus angustifolius, Salvia pratensis, Tephoseris integrifolia, Teucrium botrys, Thesium humifusum, Vulpia unilateralis

Key sites:

Barnsley Warren, Brassey, Cleeve Common, Cotswolds Commons & Beechwoods, Draycote Meadows, Hornsleasow Roughs, Minchinhampton Common, Rodborough Common (pSAC), Selsley Common, Yarley Meadow.

Associated interests:

1. Rare/scarce plant species associated with open areas (scree, bare ground etc) which form a mosaic with grassland
2. Invertebrates associated with calcareous grassland
3. Unimproved/semi-improved/improved pasture used as feeding areas by greater horseshoe bats

Key Issues:

- Lack of grazing/undergrazing
- Pressure for agricultural intensification
- Opportunities for grassland creation on farmland
- Ensuring positive management of grassland on Common land

Key Objectives:

- Maintain the current extent of semi-natural grassland in favourable conservation status
- Restore semi-natural grassland in sub-optimal condition to optimal condition
- Seek opportunities to expand the grassland resource

Natural area: 70. Severn Valley

Lowland Grassland Significance: **CONSIDERABLE**

Description:

A low-lying plain underlain by Triassic Mercia Mudstones and Jurassic Lias clay which give rise to heavy fertile soils. The area includes the Vales of Evesham and Gloucester. The area is traversed by two major rivers, the Severn and Avon and is predominantly pastoral in terms of agricultural land use.

The Natural Area is of considerable importance for its unimproved neutral grasslands, particularly old meadow and pasture (MG5 *Cynosurus cristatus-Centaurea nigra*). Also of importance are wet meadows and pastures associated with the river systems.

Key Grassland Types:

1. **Dry neutral grassland (MG5a,b,c)**
2. **Wet neutral grassland (MG4)**

Nationally Rare & Scarce Grassland Plant Species:

Dianthus armeria, Oenanthe silaifolia

Key sites:

Worcestershire neutral meadows complex including Fosters Green Meadows, Upton Ham

Associated interests:

1. Breeding birds associated with wet neutral grassland

Key Issues:

- Lack of aftermath grazing of meadows
- Overgrazing by horses
- Pressure for agricultural intensification including conversion from hay to silage and conversion to arable/improved grassland
- Pressure for urban/industrial development
- Opportunities for grassland creation on farmland
- Hydrology - maintenance of flooding regimes

Key Objectives:

- Maintain the current extent of semi-natural grassland in favourable conservation status
- Restore semi-natural grassland in sub-optimal condition to optimal condition
- Seek opportunities to expand the grassland resource
- Seek to ensure that strong policies for grassland conservation appear in development/structure plans

Natural area: 71. Malvern Hills and Teme Valley

Lowland Grassland Significance: **SOME**

Description:

The Malvern Hills comprise a north-south orientated range largely composed of ancient Pre-Cambrian rocks. They rise from the Worcestershire and Herefordshire Plains to a maximum elevation of 300m. The Hills support largely unenclosed acid grassland and dwarf shrub heath which are here deemed to be upland vegetation communities. The west Worcestershire hills extend north-westwards from the Malverns and are dissected by the Teme valley. This area is underlain by Devonian sandstones and Silurian limestones and shales.

The natural area supports a few small areas of neutral and calcareous grassland. Very little calcareous grassland now survives on the English Silurian outcrops and thus the small remnants that do remain are of some significance.

Key Grassland Types:

1. Dry neutral grassland (MG5)
2. Calcareous (Silurian limestone) grassland (CG3)

Nationally Rare & Scarce Grassland Plant Species:

Vulpia unilateralis

Key sites:

Associated interests:

Key Issues:

- Lack of grazing/undergrazing
- Pressure for agricultural intensification
- Opportunities for restoration and creation of grasslands on farmland

Key Objectives:

- Maintain the current extent of semi-natural grassland in favourable conservation status
- Restore semi-natural grassland in sub-optimal condition to optimal condition
- Seek opportunities to expand the grassland resource

Description:

Lying between the Hereford Plain to the north and the Severn valley to the south and east, the Dean Plateau and the Wye valley consists of Carboniferous rocks occupying a basin surrounded by Devonian Old Red Sandstone. Alluvial deposits are associated with the floodplains of the rivers Wye and Severn. The rock types consist principally of limestone and sandstone. The River Wye flows through a deep gorge along much of its course. The landscape is undulating and is characterised by mixed farming, horticulture and forestry.

The varied geology and soils gives rise to a range of grassland types although generally the resource is quite small with neutral grasslands being the most significant of the communities present.

Key Grassland Types:

1. **Dry neutral grassland (MG5a,b,c)**
2. Acid grassland (U1e, U4a,b,c)
3. Calcareous (limestone) grassland (CG1e, CG3a,b, c, CG7e)
4. Fen meadow/rush pasture (M23 a,b, M25, M27)

Nationally Rare & Scarce Grassland Plant Species:

Allium schoenoprasum, *Carex humilis*, *C. montana*, *Clinopodium calamintha*, *Hornungia petraea*, *Sedum forsterianum*.

Key sites:**Associated interests:**

1. Permanent pasture (including semi-improved/improved) used as feeding areas for greater horseshoe bats

Key Issues:

- Lack of grazing/undergrazing including aftermath grazing of meadows
- Opportunities for grassland creation on farmland
- Pressure for agricultural intensification

Key Objectives:

- Maintain the current extent of semi-natural grassland in favourable conservation status
- Restore semi-natural grassland in sub-optimal condition to optimal condition
- Seek opportunities to expand the grassland resource

Natural area: 73. Black Mountains and Golden Valley

Lowland Grassland Significance: **SOME**

Description:

The Black Mountains are an upland area composed of Devonian Old Red Sandstone which form an easterly extension of the Brecon Beacons and rise to over 600m. The higher ground in the west consists of unenclosed upland vegetation of dwarf shrub heath and acid grassland.

Small areas of unimproved neutral meadows remain in the valleys and these are of particular interest in that they appear, in their botanical composition, to be intermediate between lowland types (MG5) and more montane meadows (MG3) characteristic of the northern Pennines.

Key Grassland Types:

1. Dry neutral grassland (MG5 but with upland elements)
2. Acid grassland (enclosed) (U4)

Nationally Rare & Scarce Grassland Plant Species:

Key sites:

Ceirion Meadow

Associated interests:

Key Issues:

- Pressure for agricultural intensification
- Cessation of traditional farming management such as liming of meadows
- Lack of knowledge of the meadow resource
- Opportunities for grassland creation on farmland

Key Objectives:

- Maintain the current extent of semi-natural grassland in favourable conservation status
- Restore semi-natural grassland in sub-optimal condition to optimal condition
- Seek opportunities to expand the grassland resource
- Consider instigation of targeted survey of enclosed grassland

Natural area: 74. Hereford Plain

Lowland Grassland Significance: **SOME**

Description:

This undulating area is underlain by Devonian Old Red Sandstone which gives rise to rich red soils. The Plain is traversed by two major rivers, the Wye and Lugg. The Plain is predominantly pastoral in character but, despite this, only small fragments of neutral grassland and fen meadow now remain.

Key Grassland Types:

1. Dry neutral grassland (MG5)
2. Wet neutral grassland (MG4)
3. Fen meadow/rush pasture (M22, M23, M24)

Nationally Rare & Scarce Grassland Plant Species:

Fritillaria meleagris, *Oenanthe silaifolia*

Key sites:

The Flits

Associated interests:

1. Breeding birds of wet grassland/fen meadow/rush pasture

Key Issues:

- Lack of grazing/undergrazing including lack of aftermath grazing of meadows
- Hydrology - maintenance of water tables and flooding regimes
- Pressure for urban/industrial development especially mineral extraction and new roads
- Lack of knowledge of the grassland resource
- Opportunities for grassland creation on farmland

Key Objectives:

- Maintain the current extent of semi-natural grassland in favourable conservation status
- Restore semi-natural grassland in sub-optimal condition to optimal condition
- Seek opportunities to expand the grassland resource
- Seek to ensure that strong policies for grassland conservation appear in development/structure plans
- Consider instigation of targeted survey of neutral grassland

Natural area: 75. Midlands Plateau

Lowland Grassland Significance: **NOTABLE**

Description:

The greater part of the Midlands Plateau area is made up of Permo-Triassic New Red Sandstone rocks and Carboniferous Coal Measures, the latter consisting of clays and shales. Small outcrops of ancient rocks also occur. The landscape is undulating and rarely rises above 150m. The Plateau is dissected by a number of rivers including the Severn, Blythe and Stour. Urban conurbations and heavy industry are a feature of parts of the area such as the West Midlands.

The key grassland type is dry neutral grassland with the Wyre Forest area supporting an important concentration. There are also, however, a few important concentrations of acid grassland (eg Sutton Park, near Birmingham) and scattered areas of wet grassland and fen meadow/rush pasture communities.

Key Grassland Types:

1. **Dry neutral grassland (MG5a,b,c)**
2. Acid grassland (U1, U2, U4)
3. Fen meadow/rush pasture (M22, M23,M25, M27)
3. Wet neutral grassland (MG4, MG13)

Nationally Rare & Scarce Grassland Plant Species:

Carex montana, Dianthus deltoides, Hypochaeris glabra, Minuartia hybrida, Silene conica

Key sites:

Chaddesley-Randan Woods (Feckenham Forest), Worcestershire Meadows complex including Wyre Forest, Sutton Park

Associated interests:

Key Issues:

- Lack of grazing/undergrazing
- Overgrazing of meadows especially by horses
- Pressure for urban/industrial development
- Opportunities for grassland creation on farmland

Key Objectives:

- Maintain the current extent of semi-natural grassland in favourable conservation status
- Restore semi-natural grassland in sub-optimal condition to optimal condition
- Seek opportunities to expand the grassland resource
- Seek to ensure that strong policies for grassland conservation appear in development/structure plans

Natural area: 76. Shropshire Hills

Lowland Grassland Significance: **NOTABLE**

Description:

The diversity of geology in south Shropshire has produced a landscape of great variety. Slates, sandstones, shales, limestones and volcanic rocks of different eras (Pre-Cambrian, Cambrian, Ordovician, Silurian and Carboniferous) outcrop in this Natural Area and their structure and subsequent erosion and earth movements have produced a landscape of hills, scarps and valleys .

The higher hill areas support unenclosed upland vegetation including extensive tracts of dwarf shrub heath together with acid grassland and mire, all of which are utilised for hill grazing.

On lower slopes, some enclosed species-rich neutral hay meadow and pasture occur, the main concentrations being located on the western flanks of The Stiperstones and around the southern margins of the Clee Hills. Wenlock Edge supports a few small areas of calcareous grassland on the Silurian limestone.

Key Grassland Types:

1. **Dry neutral grassland (MG5a,c)**
2. Calcareous (Silurian limestone) grassland (CG3)

Nationally Rare & Scarce Grassland Plant Species:

Dianthus deltoides, *Euphrasia rostkoviana subsp rostkoviana*, *Sedum forsterianum*

Key sites:

Pennerley Meadows

Associated interests:

Key Issues:

- Pressure for agricultural intensification
- Lack of grazing/undergrazing including lack of aftermath grazing of meadows
- Lack of grassland management expertise amongst new landowners
- Damage to unimproved meadows due to overgrazing by horses
- Lack of knowledge of the semi-natural grassland resource
- Opportunities for grassland creation on farmland

Key Objectives:

- Maintain the current extent of semi-natural grassland in favourable conservation status
- Restore semi-natural grassland in sub-optimal condition to optimal condition
- Seek opportunities to expand the grassland resource
- Consider instigation of targeted grassland survey

Natural area: 77. Central Marches

Lowland Grassland Significance: **SOME**

Description:

The Central Marches is an area of varied geology and topography which rise to a maximum altitude of c.400m in the Clun Forest area. The geology is dominated by rocks of Silurian age including siltstones, mudstones, shales, sandstones and limestones. The area is dissected by the rivers such as the Teme, Lugg, Clun and Onny. The area is principally pastoral in character but aside from agriculture there are substantial areas of coniferous plantation.

The area is not of great significance for its lowland grassland resource but small areas of dry neutral grassland and wet grassland/fen meadow do occur. Some of the river valley grasslands, although often semi-improved, support breeding populations of wading birds.

Key Grassland Types:

1. Dry neutral grassland (MG5a,c)
2. Fen meadow/rush pasture (M23, M25, M27)

Nationally Rare & Scarce Grassland Plant Species:

Dianthus deltoides, *Sedum forsterianum*, *Veronica spicata subsp hybrida*

Key sites:

Associated interests:

1. Breeding waders associated with wet grassland/fen meadow/rush pasture

Key Issues:

- Lack of grazing/undergrazing
- Pressure for agricultural intensification
- Hydrology - maintenance of water tables and water quality
- Opportunities for grassland creation on farmland
- Lack of knowledge of the semi-natural grassland resource

Key Objectives:

- Maintain the current extent of semi-natural grassland in favourable conservation status
- Restore semi-natural grassland in sub-optimal condition to optimal condition
- Seek opportunities to expand the grassland resource
- Seek to ensure that strong policies for grassland conservation appear in development/structure plan
- Instigate targeted survey of neutral/wet grasslands

Natural area: 78. Oswestry Uplands

Lowland Grassland Significance: **SOME**

Description:

The area comprises Carboniferous rocks including limestones, sandstones and shales much of which is overlain by glacial boulder clay. The landscape is hilly and undulating in character and rises to c.400m. The principal grassland interest is limestone grassland which has been reduced in extent in the past by agricultural improvement and quarrying.

Key Grassland Types:

1. Carboniferous limestone grassland (CG2, CG7, MG5b)
2. Fen meadow/rush pasture(M22,23)
3. Neutral grassland (MG5, MG8)

Nationally Rare & Scarce Grassland Plant Species:

Potentilla neumanniana, *Sedum forsterianum*

Key sites:

Associated interests:

1. Breeding birds associated with limestone grassland and associated habitats

Key Issues:

- Lack of grazing/undergrazing
- Pressure for agricultural intensification
- Hydrology - maintenance/restoration of water tables
- Opportunities for grassland restoration on farmland and in disused quarries by natural colonisation
- Pressure for industrial development especially mineral extraction

Key Objectives:

- Maintain the current extent of semi-natural grassland in favourable conservation status
- Restore semi-natural grassland in sub-optimal condition to optimal condition
- Seek opportunities to expand the grassland resource
- Seek to ensure that strong policies for grassland (habitat) conservation appear in development/structure plans

Natural area: 79. Meres and Mosses

Lowland Grassland Significance: **SOME**

Description:

This area covers a substantial part of Cheshire and North Shropshire and consists of two low-lying Plains underlain by Triassic Mercia mudstones (red marl), mostly covered by glacial drift but separated by a ridge of Triassic Keuper Sandstones.

The area is principally noted for its waterbodies (meres) formed in natural depressions stemming from the Pleistocene period together with associated mire, fen, and swamp communities.

Generally an intensively farmed with terrestrial semi-natural habitats forming a small proportion of the area. Lowland grassland is relatively scarce with small areas of wet/marshy grassland communities occurring in association with the 'meres and mosses' and scattered pockets of neutral and acid grassland occurring in other parts of the Plain.

Key Grassland Types:

1. Wet neutral grassland/fen meadow /rush pasture (MG8, MG13, M22, M23a,b, M27)
2. Dry neutral grassland (MG5a,c)
3. Acid grassland (U1,U4)

Nationally Rare & Scarce Grassland Plant Species:

Dianthus deltoides.

Key sites:

Aqualate Mere

Associated interests:

1. Breeding birds associated with wet grassland/fen meadow and associated habitats

Key Issues:

- Lack of grazing/undergrazing including availability of appropriate livestock type
- Opportunities for grassland creation on farmland
- Hydrology - maintenance of water tables
- Pressure for agricultural intensification
- Tree planting on semi-natural grassland
- Creation of new waterbodies on wet grassland/fen meadow

Key Objectives:

- Maintain the current extent of semi-natural grassland in favourable conservation status
- Restore semi-natural grassland in sub-optimal condition to optimal condition
- Seek opportunities to expand the grassland resource
- Seek to ensure forestry/woodland strategies/subject plans and appropriate authorities recognise the importance of semi-natural grassland

Natural area: 80. Staffordshire Uplands

Lowland Grassland Significance: **SOME**

Description:

The Staffordshire uplands lie to the west of the Cheshire Plain and ostensibly form an outlying part of the Pennine uplands. The underlying geology is dominated by gritstones, sandstones and shales of the Carboniferous Coal Measures but Triassic sandstones also outcrop in some areas.

The rolling landscape, which rises to over 300m in places, is cut by well-wooded steep-sided valleys. Semi-natural grassland is not particularly extensive or widespread but there are some concentrations either within the river valleys or enclosed fields on higher ground.

Key Grassland Types:

1. Fen meadow/rush pasture (M23, M24, M27)
2. Neutral grassland (MG5a,c, MG8)
3. Acid grassland (U4)

Nationally Rare & Scarce Grassland Plant Species:

Key sites:

Associated interests:

1. Breeding waders of wet neutral grassland
2. Wintering birds associated with improved grassland

Key Issues:

- Lack of grazing/undergrazing and maintenance of traditional hay cutting/aftermath grazing regimes
- Hydrology - maintenance/restoration of water tables/flooding regimes
- Opportunities for grassland creation on farmland

Key Objectives:

- Maintain the current extent of semi-natural grassland in favourable conservation status
- Restore semi-natural grassland in sub-optimal condition to optimal condition
- Seek opportunities to expand the grassland resource

Natural area: 81. Upper Trent Valley

Lowland Grassland Significance: **NOTABLE**

Description:

The area is underlain by Triassic sandstones and mudstones which in turn are overlain by glacial drift deposits of boulder clay, sands and gravels and locally, riverine alluvium. The area largely consists of low-lying, intensive mixed and arable farming with much of the remaining grassland interest being associated with the River Trent and its tributaries.

Key Grassland Types:

1. **Wet neutral grassland (MG4, MG8, MG11)**
2. Fen meadow/rush pasture (M22, M23, M24, M25, M27)
3. Dry neutral grassland (MG5)

Nationally Rare & Scarce Grassland Plant Species:

Fritillaria meleagris

Key sites:

Mottey Meadows

Associated interests:

1. The area includes the only remaining area of semi-natural inland saltmarsh
2. Breeding waders associated with wet grassland

Key Issues:

- Lack of grazing/undergrazing including lack of aftermath grazing of meadows
- Pressure for agricultural intensification
- Hydrology - maintenance/restoration of water tables/flooding regimes
- Opportunities for grassland creation on farmland

Key Objectives:

- Maintain the current extent of semi-natural grassland in favourable conservation status
- Restore semi-natural grassland in sub-optimal condition to optimal condition
- Seek opportunities to expand the grassland resource

Natural area: 82. The Derwent Valley

Lowland Grassland Significance: **NEGLIGIBLE**

Description:

The area centred on the Derbyshire River Derwent and lying to the east and south of the White Peak, consists of Carboniferous shales and thin limestones, with the river following the softer shales. The geology gives rise to neutral to moderately acid soils. The area is generally low-lying and in places, well- wooded.

Formerly this area would have appeared to have supported much neutral grassland but due to gradual agricultural improvement very little of this resource remains. There are a few small areas of fen meadow/ rush pasture and neutral grassland but generally the grassland interest is negligible although the extent of semi-improved grassland suggests much potential for restoration.

Key Grassland Types:

1. Fen meadow/rush pasture (M22,23)
2. Neutral grassland (MG4, MG5a,c)

Nationally Rare & Scarce Grassland Plant Species:

Oenanthe silaifolia

Key sites:

Associated interests:

Key Issues:

- Lack of grazing/undergrazing
- Pressure for agricultural intensification
- Opportunities for grassland creation on farm land
- Hydrology - maintenance of water tables

Key Objectives:

- Maintain the current extent of semi-natural grassland in favourable conservation status
- Restore semi-natural grassland in sub-optimal condition to optimal condition
- Seek opportunities to expand the grassland resource

Description:

The White Peak consists of a Carboniferous limestone Plateau dissected by steep-sided dales and gorges forming the most southerly part of the Pennines. Between the deeply cut valleys the limestone hills reach a height of c.300m.

Although often considered as an upland area many aspects of the agriculture and ecology probably have greater affinities with lowland areas.

The White Peak is of outstanding importance for its grassland communities particularly the limestone grassland (CG2), the latter which is intermediate floristically between southern and northern calcareous grasslands. The Derbyshire Dales sites often exhibit a mosaic of calcareous, neutral tall-herb, acid grassland communities and scrub communities which reflect differences in soils, management and microclimate. Former Lead and Zinc mining areas sometimes support metalliferous grassland communities.

Key Grassland Types:

1. **Calcareous (Carboniferous limestone) grassland (CG2c,d, CG7, MG5b,)**
2. **Neutral "tall-herb" grassland on limestone (MG1e, MG2a,b)**
3. **Neutral grassland (MG5a,b,c)**
4. **Metalliferous (Calaminarian) grassland (OV37)**
5. **Acid grassland (U1e, U2, U4c*)**

(*largely restricted the Derbyshire Dales on leached brown earth soils derived from superficial deposits overlying Carboniferous limestone)

Nationally Rare & Scarce Grassland Plant Species:

Carex ornithopoda, Dianthus deltoides, Epipactis atrorubens, Hornungia petraea, Minuartia hybrida, M. verna, Polemonium caeruleum, Potentilla neumanniana, Sesleria caerulea, Silene nutans, Thlaspi caerulescens

Key sites:

Derbyshire Dales grasslands including Peak District Dales pSAC, Gang Mine (pSAC), Hamps & Manifold Valleys

Associated interests:

1. Limestone scrub communities and woodland-grassland transitions
2. Limestone scree/rock communities
3. Lichen assemblages of Calaminarian grassland

Key Issues:

- Lack of grazing/undergrazing, lack of mowing/traditional hay meadow management
- Pressure for agricultural intensification
- Pressure for industrial development especially mineral extraction and including re-working of lead mine spoil
- Need to determine appropriate management regimes for tall herb/scrub margin communities
- Opportunities for grassland creation on farmland

Key Objectives:

- Maintain the current extent of semi-natural grassland in favourable conservation status
- Restore semi-natural grassland in sub-optimal condition to optimal condition
- Seek opportunities to expand the grassland resource
- Research historical/ecological management in relation to tall herb communities and implement revised management
- Seek to ensure strong policies for grassland conservation appear in structure/development plans

Natural area: 84. South West Peak

Lowland Grassland Significance: **SOME**

Description:

This area forms the south-westerly sector of the Peak District and is part of the Pennine moorlands. The area is underlain by acid Carboniferous rocks, principally Millstone Grit and shales of the Coal Measures. The unenclosed moorland is utilised for hill grazing and consists of dwarf-shrub heath, acid grassland and blanket mire. Some of the enclosed fields support neutral and acid grassland and rush pasture but overall this area is of principal interest for its upland vegetation and associated fauna.

Key Grassland Types:

1. Neutral grassland (MG5)
2. Enclosed acid grassland (U4)
3. Rush pasture (M23)

Nationally Rare & Scarce Grassland Plant Species:

Key sites:

Associated interests:

1. Breeding birds of enclosed grassland

Key Issues:

- Pressure for agricultural intensification including conversion from hay to silage
- Opportunities for grassland restoration/creation on enclosed farmland

Key Objectives:

- Maintain the current extent of semi-natural grassland in favourable conservation status
- Restore semi-natural grassland in sub-optimal condition to optimal condition
- Seek opportunities to expand the grassland resource

Natural area: 85. Dark Peak

Lowland Grassland Significance: **SOME**

Description:

An extensive area of upland rising to c. 600m and forming part of the Southern Pennines. Acid Carboniferous rocks predominate, principally grits, shales, sandstones and mudstones of the Millstone Grit series.

The upland vegetation consists predominantly of unenclosed dwarf shrub heath, acid grassland and blanket mire utilised for hill grazing and grouse shooting.

Very little of the enclosed valley land supports semi-natural grassland and the overall resource is small.

Key Grassland Types and EN priority:

1. Neutral grassland (MG5)
2. Rush pasture (M23, M25)
3. Enclosed acid grassland (U4)

Nationally Rare & Scarce Grassland Plant Species:

Key sites:

Associated interests:

1. Breeding birds of enclosed pastures

Key Issues:

- Pressure for agricultural intensification
- Opportunities for grassland restoration/creation on enclosed farmland

Key Objectives:

- Maintain the current extent of semi-natural grassland in favourable conservation status
- Restore semi-natural grassland in sub-optimal condition to optimal condition
- Seek opportunities to expand the grassland resource

Natural area: 86. Urban Mersey Basin

Lowland Grassland Significance: **SOME**

Description:

A low-lying, densely populated industrialised area including the cities of Manchester and Liverpool. The area is underlain by Triassic sandstones and mudstones and rocks of the Carboniferous Coal Measures. However much of the area is covered by superficial deposits including glacial drift and, locally, river alluvium.

Only very small areas of semi-natural grassland remain and there are a few recent calcareous swards developed on alkali wastes. Semi-improved damp neutral grassland occurs in some areas but is primarily of interest for birds.

Key Grassland Types:

1. Dry neutral grassland (MG5)
2. Fen meadow/rush pasture (M23)
3. Wet neutral grassland (MG13)

Nationally Rare & Scarce Grassland Plant Species:

Rhinanthus angustifolius

Key sites:

Associated interests:

1. Breeding and wintering birds associated with wet grassland including semi-improved/reverted wet neutral grassland (MG10)

Key Issues:

- Pressure for urban/industrial development
- Lack of grazing/undergrazing
- Pressure for agricultural intensification
- Opportunities for grassland creation on farmland and in urban areas
- Recreational disturbance inhibiting positive management

Key Objectives:

- Maintain the current extent of semi-natural grassland in favourable conservation status
- Restore semi-natural grassland in sub-optimal condition to optimal condition
- Seek opportunities to expand the grassland resource
- Seek to ensure that strong policies for grassland conservation appear in development/structure/subject plans

Natural area: 87. Lancashire Plain and Valleys

Lowland Grassland Significance: **SOME**

Description:

A generally low-lying intensively farmed area but with an emphasis on livestock farming. The Triassic sandstones and mudstones are largely covered by glacial and post-glacial deposits which include sands, gravels, clays and alluvium.

Small pockets of neutral grassland remain but the area is not of great significance for its semi-natural grassland. However, there are tracts of semi-improved neutral damp grassland in river valleys and associated with estuaries which are of importance for birds and invertebrates.

Key Grassland Types:

1. Dry neutral grassland (MG5, MG12)
2. Wet neutral grassland (MG11)

Nationally Rare & Scarce Grassland Plant Species:

Key sites:

Associated interests:

1. Breeding and wintering birds of wet grassland including semi-improved/reverted swards (MG6)
2. Invertebrates of wet grassland

Key Issues:

- Lack of grazing/undergrazing and cessation of traditional hay meadow management
- Pressure for agricultural intensification
- Opportunities for grassland creation on farmland

Key Objectives:

- Maintain the current extent of semi-natural grassland in favourable conservation status
- Restore semi-natural grassland in sub-optimal condition to optimal condition
- Seek opportunities to expand the grassland resource

Natural area: 88. Forest of Bowland

Lowland Grassland Significance: **NOTABLE**

Description:

An upland outlier of the Pennines mostly exceeding 250 m and rising to c.560m in altitude. Much of the area consists of Carboniferous Millstone Grit and the unenclosed land supports vegetation of acid grassland, dwarf-shrub heath, and blanket mire, which is utilised for hill grazing and grouse shooting. The Millstone Grit is underlain by limestone and shales which outcrop giving rise to small areas of calcareous vegetation.

The principal grassland interest relates to the enclosed northern hay meadows associated with the valleys and the limestone grassland associated with the reef knolls of the Ribble Valley.

Key Grassland Types:

1. **Dry neutral grassland (hay meadows) (MG3, MG5)**
2. **Calcareous (Carboniferous limestone) grassland (CG2d, CG9b, CG10a)**
3. Rush pasture (M23)

Nationally Rare & Scarce Grassland Plant Species:

Euphrasia rostkoviana subsp. rostkoviana, *Sesleria albicans*

Key sites:

North Pennine Dales Meadows pSAC

Associated interests:

1. Breeding waders associated with enclosed "in-bye and allotment" pasture (rush pasture semi-improved neutral grassland)

Key Issues:

- Pressure for agricultural intensification
- Opportunities for grassland creation on enclosed farmland

Key Objectives:

- Maintain the current extent of semi-natural grassland in favourable conservation status
- Restore semi-natural grassland in sub-optimal condition to optimal condition
- Seek opportunities to expand the grassland resource

Description:

The Cumbrian Fells and Dales is an extremely varied area comprising a wide range of upland and lowland habitats reflecting the complexity of geology, soils, altitude and climate and land use. The geology is dominated by older strata and includes sedimentary slates, sandstones, limestones and igneous rocks. The vegetation ranges from high altitude montane communities through upland communities such as blanket mires and heaths to more lowland types on the periphery of the fells and around Morecambe Bay. Key land uses include hill livestock rearing, forestry, grouse shooting, water supply and recreation.

The key lowland grassland types are the neutral hay meadows and the limestone grassland in the Morecambe Bay area.

Key Grassland Types:

1. **Carboniferous limestone grassland (CG2a,d, CG9a,b)**
2. **Dry neutral grassland (MG3, MG5)**
3. Fen meadow/rush pasture/ wet neutral grassland (MG8, M23, M25, M26)
4. Acid grassland (U4)

Nationally Rare & Scarce Grassland Plant Species:

A. schoenoprasum, Aster linosyris, Bartsia alpina, Carex ericetorum, C. ornithopoda, Crepis mollis, Dianthus deltooides, Epipactis atrorubens, Euphrasia rostkoviana subsp montana, E. rostkoviana subsp rostkoviana, Gentiana pneumonanthe, Helianthemum canum, Hornungia petraea, Hypochaeris maculata, Meum athamanticum, Minuartia verna, Polygala amarella, Potentilla neumanniana, Primula farinosa, Sesleria albicans, Veronica spicata subsp hybrida

Key sites:

Arnside Knott & Warton Crag, Crosby Gill, High Leys, Humphrey Head, Morecambe Bay Pavements pSAC (including Farleton Knott, Gait Barrows, High Leys, Hutton Roof Crag & Farleton Knott, Whitbarrow Scar) North Pennine Dales Meadows pSAC, Orton Meadows, Scout & Cunswick Scars,

Associated interests:

1. Breeding birds of semi-natural and semi-improved (MG6, MG 9, MG10) neutral enclosed pasture.
2. Limestone pavement/scree/rock communities

Key Issues:

- Pressure for agricultural intensification
- Lack of grazing/undergrazing (especially limestone grassland)
- Hydrology - maintenance/restoration of water tables
- Lack of availability of farmyard manure for meadow management resulting in pressure to use slurry/artificial fertilisers

Key Objectives:

- Maintain the current extent of semi-natural grassland in favourable conservation status
- Restore semi-natural grassland in sub-optimal condition to optimal condition
- Seek opportunities to expand the grassland resource
- Lobby for agricultural policies which favour the retention of traditional winter housing of cattle

Natural area: 90. Eden Valley

Lowland Grassland Significance: **SOME**

Description:

The Eden Valley lies between the Northern Pennines to the East and the Lake District fells to the west. The low-lying vale occupied by the River Eden and its tributaries is underlain by sandstone which in turn is covered by a thick layer of glacial drift. It is an open rolling fertile landscape of mixed farm enterprises. Previous glacial action has given rise to a range of depositional features such as drumlins, kames and eskers.

There are a few areas of semi-natural grassland including northern neutral hay meadows and areas of fen meadow/rush pasture, the latter which are often associated with lowland mires.

Key Grassland Types:

1. Fen meadow/rush pasture (M23, M25, M26, M27)
2. Neutral Grassland (MG5)

Nationally Rare & Scarce Grassland Plant Species:

Key sites:

North Pennine Dales Meadows pSAC

Associated interests:

1. Breeding waders of wet grassland (semi-improved communities: MG6, MG9, MG10) and fen meadow/rush pasture
2. Invertebrates associated with fen meadow/rush pasture especially *Eurodryas aurinia*

Key Issues:

- Lack of grazing/undergrazing
- Hydrology - maintenance/restoration of water tables
- Opportunities for grassland creation on farmland
- Pressure for agricultural intensification

Key Objectives:

- Maintain the current extent of semi-natural grassland in favourable conservation status
- Restore semi-natural grassland in sub-optimal condition to optimal condition
- Seek opportunities for the restoration of semi-improved grassland to increase their biodiversity

Natural area: 91. West Cumbria Coastal Plain

Lowland Grassland Significance: **SOME**

Description:

The coastal Plain bordering the Lakeland fells in West Cumbria consists of Triassic sandstones and mudstones from St Bees Head southwards to Barrow-in-Furness and Carboniferous rocks of the Coal Measures northwards to Workington.

A gently rolling intensively farmed area with pockets of heavy industry associated with the coalfield and iron ore deposits.

Coastal habitats are of particular importance and the area is not of great significance for its lowland grassland communities.

Key Grassland Types:

1. Wet neutral grassland/fen meadow/rush pasture (MG11, MG13, M23, M25)
2. Dry neutral grassland (MG5)
3. Acid grassland (U1, U4)

Nationally Rare & Scarce Grassland Plant Species:

Key sites:

Associated interests:

1. Breeding birds of wet grassland including semi-improved/reverted swards and fen meadow/rush pasture

Key Issues:

- Pressure for agricultural intensification
- Lack of grazing/undergrazing
- Hydrology - maintenance/restoration of water tables
- Opportunities for grassland creation on farmland
- Pressure for urban/industrial development

Key Objectives:

- Maintain the current extent of semi-natural grassland in favourable conservation status
- Restore semi-natural grassland in sub-optimal condition to optimal condition
- Seek opportunities to expand the grassland resource
- Seek to ensure that strong policies for grassland conservation appear in development/structure plans

Natural area: 92. Solway Basin

Lowland Grassland Significance: **SOME**

Description:

A flat low-lying intensively farmed area underlain by Triassic sandstones and mudstones mostly covered by superficial deposits of glacial and marine origin, the latter around the Solway Estuary.

In nature conservation terms the area is of principal interest for the coastal habitats associated with the Solway estuary and the raised mires of the Plain. There are a few small areas of species-rich neutral grassland and fen meadow/rush pasture the latter normally associated with the margins of the mires.

Key Grassland Types:

1. Dry neutral grassland (MG5)
2. Fen meadow/rush pasture (M23, M25, M27)

Nationally Rare & Scarce Grassland Plant Species:

Dianthus deltoides, *Euphrasia rostkoviana subsp rostkoviana*

Key sites:

Associated interests:

Key Issues:

- Pressure for agricultural intensification
- Lack of grazing/undergrazing
- Hydrology - maintenance/restoration of water tables/water quality
- Opportunities for grassland creation on farmland

Key Objectives:

- Maintain the current extent of semi-natural grassland in favourable conservation status
- Restore semi-natural grassland in sub-optimal condition to optimal condition
- Seek opportunities to expand the grassland resource