Natural area: 27. Fenland	Lowland Grassland Significance: **CONSIDERABLE**

Description:
A very distinctive flat, low-lying basin made up of post-glacial peat, clay and silt deposits crossed by the rivers Welland, Nene, Ouse, Witham and Glen and their tributaries which drain into the Wash. The landscape has been considerably influenced by man, particularly over the last 300 years, with the successful drainage of the area which has resulted in the current dominance of intensive arable cropping.

The two key remaining areas of grassland are the Ouse and Nene Washes which were created during the draining of the fen. These now support large tracts of wet neutral grassland and swamp communities. Small areas of fen meadow occur in association with some of the remaining fen complexes.

Key Grassland Types:
1. **Wet neutral grassland (MG11, MG13).**
2. Fen meadow (M22, M24)

Nationally Rare & Scarce Grassland Plant Species:
Selinum carvifolia

Key sites:
Chippenham Fen (part of Fenland pSAC), Nene Washes, Ouse Washes

Associated interests:
1. Semi-improved/reverted wet neutral grassland (including coastal grazing marsh) and associated rare/scarce plant species
2. Swamp and fen communities which occur in a mosaic with wet grassland.
3. Breeding and wintering waders and wildfowl associated with wet grassland ('washes')

Key Issues:
- Hydrology - maintenance of water tables and 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: 28. East Anglian Southern Chalk	Lowland Grassland Significance: **NOTABLE**

Description:
In contrast to other chalk areas, the chalk in East Anglia is very low, rising to little over 200m, with much being covered by glacial drift.

The gently rolling landscape consists mostly of intensive arable farmland and, with the exception of Newmarket and Therfield Heaths, only fragments of chalk grassland remain on steep slopes and on roadsides, green lanes and churchyards.

Small areas of fen meadow occur in association with springs emanating from the base of the chalk.

Key Grassland Types:
1. **Calcareous (Chalk) grassland (CG2c, CG3a,b,c,d, CG5a, CG6,CG7a,d, MG5b on chalk)**
2. Fen Meadow (M22)

Nationally Rare & Scarce Grassland Plant Species:
Ajuga chamaepitys, Bunium bulbocastanum, Cirsium tuberosum, Clinopodium calamintha, Dianthus deltoides, Euphrasia pseudokerneri, Himantoglossum hircinum, Hypochaeris maculata, Iberis amara, Linum perenne subsp anglicum, Medicago sativa subsp falcata, Orchis ustulata, Phleum phleoides, Potentilla neumanniana, Pulsatilla vulgaris, Seseli libanotis, Tephroseris integrifolia, Thesium humifusum, Trifolium ochroleucon, Veronica spicata subsp spicata.

Key sites:
Newmarket Heath, Therfield Heath

Associated interests:
1. Breeding and wintering birds of dry grassland.
2. Chalk scrub
3. Chalk heath
4. Invertebrates associated with chalk grassland/scrub

Key Issues:
- Lack of grazing/undergrazing
- Opportunities for grassland creation on farmland
- Hydrology - maintenance of water tables
- Recreational pressure/constraints on certain chalk grassland sites

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: 29. Breckland	Lowland Grassland Significance: **OUTSTANDING**

Description:
An extensive, low-lying area of low rainfall and continental type climate with significant remaining areas of dry 'grass-heath' developed on glacial sands and gravels overlying the Cretaceous Chalk. Predominantly an arable farming area with substantial tracts of coniferous plantation woodland. Soils vary from shallow calcareous rendzinas where the chalk is exposed to acid podzols on superficial sands. Locally, valley springs give rise to impeded drainage and these support fen meadow and rush pasture communities.

An area of outstanding interest for its semi-natural calcareous and acid grasslands which include sub-communities found nowhere else in England.

Key Grassland Types:
1. **Calcareous grassland (CG2,a,c, CG3b,c, CG6a, CG7a,b, c & d, MG5b)**
2. **Acid grassland (U1a,b,c,d,e,f, U2a) / Inland 'Sand dune' grassland (SD8a,b, SD10b)**
3. Fen meadow (M22, M24, M27)

Nationally Rare & Scarce Grassland Plant Species:
Ajuga chamaepitys, Alyssum alyssoides, Artemisia campestris, Carex ericetorum, Clinopodium calamintha, Crassula tillaea, Dianthus deltoides, Euphrasia pseudokerneri, Festuca longifolia, Hypochaeris glabra, H. maculata, Linum perenne subsp anglicum, Medicago sativa subsp falcata, Minuartia hybrida, Muscari atlanticum, Peucedanum palustre, Phleum phleoides, Orchis militaris, Thesium humifusum, Thymus serpyllum, Trifolium suffocatum, Veronica spicata subsp spicata, V. verna, Vulpia unilateralis, Scleranthus perennis, Silene conica, S. otites

Key sites:
Breckland pSAC (includes Barnham Heath, Icklingham Heaths, Foulden Common, Foxhole Heath, Lakenheath - Elvedon Heaths, Maidcross Hill, Rex Graham Reserve pSAC, Stanford - Wretham Heaths, Thetford Warren, Thetford Heath, Thompson Common, Weeting Heath).

Associated interests:
1. Dry lowland heathland (H1) occurs in a mosaic with acid and calcareous grassland.
2. Breeding and wintering birds associated with dry grassland and heathland
3. Invertebrates associated with the suite of "Breck" grasslands
4. Assemblages of rare/scarce bryophytes and lichens associated with acid/calcareous grassland

Key Issues:
- Lack of grazing/undergrazing
- Hydrology - maintenance of water tables/water quality
- Opportunities for grassland creation on farmland
- Breckland ESA especially need to increase attractiveness of re-creation tier

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
- Advocate to MAFF the need to review ESA payments for grass/heath creation

Natural area: 30. North Norfolk	Lowland Grassland Significance: **SOME**

Description:
A low-lying, gently rolling area underlain by Cretaceous chalk, Pleistocene Crag deposits and a small area of Greensand which are, in turn, mostly covered by glacial sands, gravels and clays. The area is largely arable farmland and the principal areas of semi-natural habitat occur on the coast. Small fragments of calcareous, acid grassland and fen meadow/rush pasture do, however occur inland.

Key Grassland Types:
1. Calcareous (Chalk) grassland (CG2a, CG7, MG5b on chalk)
2. Fen meadow/rush pasture (M22, M24, M25, M27)
3. Acid grassland (U1)

Nationally Rare & Scarce Grassland Plant Species:
Clinopodium calamintha, Crassula tillaea, Euphrasia pseudokerneri, Hypochaeris glabra, Minuartia hybrida, Silene conica

Key sites:

Associated interests:
1. Semi-improved wet neutral grassland (including coastal grazing marsh) and associated rare/scarce plant species
2. Breeding and wintering birds associated with wet neutral grassland
3. Invertebrates associated with ditch systems of wet neutral grassland

Key Issues:
- Lack of grazing/undergrazing
- Pressure for agricultural intensification
- Opportunities for grassland creation on farmland
- Hydrology - maintenance of water tables
- Lack of knowledge of the grassland resource, particularly acid 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 including in relation to coastal management planning
- Consider instigation of targeted grassland survey

Natural area: 31. Broadland	Lowland Grassland Significance: **SIGNIFICANT**

Description:
A low-lying flat area containing extensive tracts of freshwater wetland habitat in areas of former peat cutting in the valleys of rivers such as the Waveney, Bure and Yare. The Broads has historically been utilised for pasturage and other wetland products such as reed, fish, game and peat for fuel. Principal semi-natural habitats include fens/mires, wet grassland, reedbed and open water.

The area is of outstanding importance for nature conservation given the range and extent of habitats. The fen meadow and rush pasture communities are the key unimproved grassland types and there are large tracts of semi-improved wet grassland of importance for birds.

Key Grassland Types:
1. **Fen meadow/rush pasture (M22c,d, M23, M24)**
2. Wet neutral grassland (MG8, MG13))
3. Acid grassland (U1)

Nationally Rare & Scarce Grassland Plant Species:
Lathyrus palustris, Peucedanum palustre.

Key sites:
Hickling Broad & Marshes

Associated interests:
1. Semi-improved/reverted wet neutral grassland (MG6, MG9, MG10)) with its constituent breeding and wintering birds and rare/scarce plant species (the latter often occur where there is a brackish influence)
2. Swamp, fen, mire, carr and open water habitats
3. Invertebrates and rare/scarce vascular plants associated with ditches

Key Issues:
- Lack of grazing/mowing and undergrazing
- Hydrology - maintenance and raising of water tables
- Maintenance and improvement of water quality
- Maintenance of sea defences to maintain freshwater habitats
- Opportunities for the enhancement/restoration of semi-improved grassland and reversion of arable to 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: 32. Suffolk Coast and Heaths	Lowland Grassland Significance: **NOTABLE**

Description:
This area lies between Kessingland and Harwich on the Suffolk coast and runs approximately 15km inland. The Pleistocene Crag deposits are partly covered by superficial sands and gravel which give rise to light acid sandy soils.

Inland fragments of heathland and acid grassland occur in a matrix of intensive arable land and afforested areas. The estuaries and shingle of the coast support a major concentration of maritime and para-maritime habitats including wet grassland the latter being primarily of importance for breeding and wintering birds.

Key Grassland Types:
1. **Acid grassland (U1)**
2. **Fen meadow/rush pasture (M22, M23, M25)**
3. Neutral grassland (MG5)

Nationally Rare & Scarce Grassland Plant Species:
Alyssum alyssoides, Crassula tillaea,Hypochaeris glabra, Muscari atalanticum, Medicago sativa subsp falcata, Minuartia hybrida, Peucedanum palustre Trifolium ochroleucon.

Key sites:
Minsmere/Westleton Heaths & Marshes

Associated interests:
1. Lowland heathland (H1) ('Sandling heaths') occurs in a mosaic with acid grassland.
2. Breeding birds associated with acid grassland/heath
3. Rare/scarce vascular plants associated with semi-improved/ reverted wet neutral grassland (MG6,MG7, MG9, MG10) and associated ditches
4. Wintering birds of wet neutral grassland/grazing marshes
5. Invertebrates associated with grazing marsh ditches

Key Issues:
- Lack of grazing/undergrazing
- Opportunities for grassland creation on farmland
- Hydrology - maintenance /restoration 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

Natural area: 33. East Anglian Plain	Lowland Grassland Significance: **NOTABLE**

Description:
A low-lying undulating area rarely exceeding 100m and underlain by Tertiary Clay and Cretaceous Chalk which is in turn mostly overlain by glacial drift. An intensively farmed but "ancient" landscape often composed of small fields and boundary features such as old hedgerows and veteran trees. The area retains many surviving fragments of semi-natural habitat including ancient woodland, fen and grassland.

The area is of particular note for the remaining areas of species-rich neutral grassland and fen meadow.

Key Grassland Types:
1. **Neutral grassland (MG4, MG5)**
2. **Fen meadows (M22,M24,M27)**
3. Acid grassland (U1)
4. Calcareous (Chalk) grassland (CG2, CG7)

Nationally Rare & Scarce Grassland Plant Species:
Aceras anthropophorum,Chamaemelum nobile,Clinopodium calamintha, Fritillaria meleagris,Gastridium ventrocosum,Oenanthe silaifolia, Peucedanum palustre, Trifolium ochroleucon, T. suffocatum, Vulpia unilateralis.

Key sites:
Monewden Meadows, Waveney & Little Ouse Valley Fens pSAC (includes Redgrave-South Lopham Fen)

Associated interests:
1. Transition from fen meadow to fen and mire communities
2. Wet grassland (much is semi-improved/reverted wet neutral grassland) of interest for breeding and wintering birds and invertebrates
3. Veteran trees bordering grassland with associated invertebrates and lichens

Key Issues:
- Lack of grazing/mowing and undergrazing including decline in aftermath grazing of hay meadows
- Pressure for agricultural intensification
- Hydrology - maintenance/restoration of water tables
- Opportunities for grassland creation on farmland
- Part of MG5 resource confined to non agricultural situations such as roadside verges and churchyards
- Lack of knowledge of the 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
- Consider instigation of targeted grassland survey

Natural area: 34. Chilterns	Lowland Grassland Significance: **SIGNIFICANT**

Description:
A range of chalk hills dissected by dry valleys with a prominent west and north-west facing scarp slope and bounded to the north and south by low-lying vales. The Chilterns rise to c.260m and decline in height from west to east. The landscape is well-wooded with beechwoods being especially prominent but nonetheless much of the area is intensively cultivated and there are a number of substantial urban settlements including Luton. Patches of superficial deposits including clay with flints and gravels occur over the chalk and the chalk grassland tends to occur on the steeper slopes with thin soils.

The area is of note for its calcareous grassland communities which support a range of rare and scarce vascular plant species.

Key Grassland Types:

1. **Calcareous (Chalk) grassland (CG2a,c,d CG3a,b,c,d, CG4a,b,c, CG5a,b, CG6a,b, CG7a,d**

Nationally Rare & Scarce Grassland Plant Species:
Aceras anthropophorum, Ajuga chamaepitys,Bunium bulbocastanum, Clinopodium calamintha, Dianthus armeria, D. deltoides, Euphrasia pseudokerneri, Galium pumilum,Gentianella anglica, G. ciliata, G. germanica, Herminium monorchis,Iberis amara, Orchis militaris, O. simia, O. ustulata, Pulsatilla vulgaris, Salvia pratensis, Seseli libanotis, Tephroseris integrifolia, Thesium humifusum, Vulpia unilateralis

Key sites:
Aston Rowant, Barton Hills, Coombe Hill, Ellesborough & Kimble Warrens, Grangelands & Pulpit Hill, Ivinghoe Hills, Steps Hill & Pitstone Hill, Knocking Hoe

Associated interests:
1. Breeding birds of calcareous grassland and scrub
2. Invertebrates of calcareous grassland and scrub
3. Bryophyte & lichen assemblages of Chalk grassland

Key Issues:
- Lack of grazing/undergrazing
- Opportunities for creation of chalk grassland on farmland
- Rabbit 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

Natural area: 35. Oxford Clay Vales	Lowland Grassland Significance: **CONSIDERABLE**

Description:
An area of intensively farmed low-lying vale extending from north Wiltshire through Oxfordshire into Buckinghamshire. The vale is almost completely surrounded by calcareous rocks but is underlain by Jurassic clays which are partly covered by glacial deposits. The landscape consists of a mosaic of pasture and arable land often bounded by species-rich hedgerows together with a network of ditches and small streams.

The flood plains of the Upper Thames and its tributaries support exceptionally important concentrations of wet neutral grasslands with the concentration of alluvial flood meadows being of special significance. Drier neutral grasslands are also of significance in the clay vale.

Key Grassland Types:
1. **Wet neutral grassland (MG4, MG13)**
2. Dry neutral grassland (MG5)
2. Fen meadow (M22)

Nationally Rare & Scarce Grassland Plant Species:
Apium repens, Carex filiformis, Fritillaria meleagris, Oenanthe silaifolia

Key sites:
Chimney Meadows, North Meadow & Clattinger Farm pSAC (includes Clattinger Farm, Oaksey and North Meadow, Cricklade), Pike Corner, Oxford Meadows pSAC (includes Pixey & Yarnton Meads & Port Meadow), Wendlebury Meads.

Associated interests:
1. Breeding birds of wet neutral grassland

Key Issues:
- Lack of mowing/grazing including aftermath grazing of meadows
- Hydrology - lowered water tables and reduced frequency of flooding
- Pressure for agricultural intensification
- Overgrazing by horses on selected sites
- Pressure for development particularly gravel 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
- Ensure strong policies for grassland conservation appear in structure/development plans

Natural area: 36. Oxford Heights	Lowland Grassland Significance: **NOTABLE**

Description:
The clay vale of Wiltshire and Oxfordshire is interrupted by a discontinuous ridge of Jurassic Corallian rocks, including limestone and sandstones, which form a low escarpment, rarely exceeding 100m, and often known as the Oxford Heights. The ridge is intensively farmed but is relatively well-wooded. The area contains notable areas of neutral grassland and fen meadow together with smaller fragments of calcareous and acid grassland.

Key Grassland Types:
1. **Neutral grassland (MG5)**
2. **Fen meadow (M24)**
3. Acid grassland (U1)
4. Calcareous (Jurassic limestone) grassland (CG3)

Nationally Rare & Scarce Grassland Plant Species:
Dianthus deltoides, Hypochaeris glabra, Minuartia hybrida, Silene conica, Vulpia unilateralis

Key sites:
Cothill Fen & Parsonage Moor

Associated interests:
1. Acid grassland occurs in a mosaic with H1 heathland
2. Invertebrate fauna of 'grass-heath' and fen meadows

Key Issues:
- Lack of grazing/undergrazing
- Hydrology- water abstraction leading to lowered water tables
- Pressure for agricultural intensification
- Overgrazing by horses
- Opportunities for grassland creation on farmland
- ensuring positive management of semi-natural grasslands situated within golf courses

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: 37. Wessex Downs	Lowland Grassland Significance: **SIGNIFICANT**

Description:
The rolling chalk downs in North-east Wiltshire, Berkshire and south-west Oxfordshire are separated from the Chiltern Hills to the east by the Goring Gap and from the South Wessex Downs to the south by the Vale of Pewsey. The area consists primarily of intensive farmed arable land although there are some substantial blocks of woodland, wood pasture and grassland.

The calcareous grasslands are the principal interest of the area although the nationally rare neutral flood pasture/meadow associated with chalk rivers such as the Lambourn and Kennet is also of significance.

Key Grassland Types:
1. **Calcareous (Chalk) grassland (CG2a,b, c, CG3a,b,c,d, CG4a,b, CG5a, MG5b on chalk)**
2. Wet neutral grassland (MG8)

Nationally Rare & Scarce Grassland Plant Species:
Cerastium pumilum, Cirsium tuberosum, Euphrasia pseudokerneri, Gentianella anglica, G. germanica, Herminium monorchis, Iberis amara, Orchis ustulata, Phyteuma orbiculare, Pulsatilla vulgaris, Salvia pratensis,Tephroseris integrifolia, Teucrium botrys, Thesium humifusum

Key sites:
Aston Upthorpe Downs, Pewsey Downs (pSAC)

Associated interests:
1. Invertebrates associated with chalk grassland including rare Lepidoptera and Orthoptera
2. Breeding waders of wet grassland
3. Breeding and wintering birds of dry grassland

Key Issues:
- Lack of grazing/undergrazing
- Pressure for development especially road schemes
- Hydrology - maintenance of water tables and flooding regimes
- Pressure for agricultural intensification
- Recreational pressure inhibiting chalk grassland 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 strong policies for grassland conservation appear in development/structure/subject plans

Natural area: 38. London Basin	Lowland Grassland Significance: **NOTABLE**

Description:
An expanse of low-lying terrain extending some 100km west of London to Newbury and bounded to the north and south by chalk hills. It is drained by the river Thames and its tributaries. The area is underlain mostly by Tertiary London Clay although other rocks including sands and gravels also occur. Glacial drift obscures the Tertiary rocks in Essex. This large area exhibits great variety of scenery which reflects the variation in soils, geology, hydrology and past land use and it also includes densely populated urban and industrial areas.

The area supports a range of grassland types but is of particular importance for wet and acid grasslands.

Key Grassland Types:
1. **Wet neutral grassland (MG4, MG11)**
2. Fen meadow (M22, M23, M25)
3. Acid grassland (U1, U2, U4)
4. Dry neutral grassland (MG5a, b)

Nationally Rare & Scarce Grassland Plant Species:
Carex filiformis, C. montana, Chamaemelum nobile, Clinopodium calamintha, Crassula tillaea, Dianthus deltoides, Fritillaria meleagris, Gastridium ventrocosum, Oenanthe silaifolia

Key sites:

Associated interests:
1. Wet neutral grassland (including semi-improved/reverted wet neutral grassland) of interest for breeding birds

Key Issues:
- Pressure for industrial/urban development
- Agricultural intensification
- Lack of grazing/undergrazing
- Hydrology - maintenance of water tables and flooding regimes
- Opportunities for grassland creation on farmland and in urban centres

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: 39. Thames Marshes (now forms part of the Landguard Point to Whitstable Maritime Natural Area (M9))	Lowland Grassland Significance: **SOME**

Description:
This low-lying area underlain by marine alluvium and London Clay, flanks the Thames, Medway and Swale Estuaries and the Essex Coast.

The principal habitats include salt marsh, river channels and wet grassland or grazing marsh with the associated network of drainage ditches. The latter are of particular importance for breeding and wintering waders and wildfowl and invertebrates and vascular plants associated with the ditches. The grazing marshes are largely semi-improved or reverted grassland and thus are not of particular interest from a grassland community perspective.

Key Grassland Types:
1. Wet neutral grassland

Nationally Rare & Scarce Grassland Plant Species:

Key sites:

Associated interests:
1. Wet neutral grassland/grazing marsh (mostly semi-improved/reverted MG6, MG7, MG9, MG10) of importance for breeding birds and roosting and wintering waterfowl and scarce vascular plants
2. Invertebrates associated with ditches

Key Issues:
- pressure for agricultural intensification
- pressure for industrial/urban development
- lack of grazing/undergrazing
- relative sea level rise
- 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: 40. North Kent Plain	Lowland Grassland Significance: **SOME**

Description:
An area with a diverse landscape and including soft and hard coastal cliffs, sand dunes, low-lying marshy terrain associated with the river Stour valley and estuary and rolling inland countryside which includes the Blean Woods complex. The area includes the coastal towns of Margate and Herne Bay. The altitude ranges from sea level to c. 60m. The solid geology of the area consists of Tertiary clays, sands and gravels and Cretaceous chalk.

Key habitats in the area include saltmarsh, sand dune, maritime grassland and cliff communities, swamps and broad-leaved woodland. While wet grassland is extensive, much is semi-improved, and its importance stems mainly from its bird and invertebrate assemblages.

Key Grassland Types:
1. Wet neutral grassland

Nationally Rare & Scarce Grassland Plant Species:
Cerastium pumilum, Clinopodium calamintha, Dianthus armeria, Minuartia hybrida

Key sites:

Associated interests:
1. Semi-improved/reverted wet neutral grassland including coastal grazing marsh (MG6, MG7) and associated rare/scarce vascular plants
2. Breeding and wintering birds of wet grassland
3. Invertebrates of wet grassland ditches
4. Wetland plant communities including swamps and reedbeds

Key Issues:
- pressure for agricultural intensification
- hydrology - maintenance of water tables and flooding regimes
- pressure for urban/industrial development including roads
- 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: 41. North Downs	Lowland Grassland Significance: **SIGNIFICANT**

Description:
The North Downs consist of a range of chalk hills of varying altitude and width separating the London basin and the Greensand. The eastern end of the Downs are marked by the cliffs in the Dover area. In places superficial deposits overlay the chalk. The escarpment is cut by a number of rivers including the Mole, Wey, Stour, Darent and Medway.

The Downs are intensively cultivated and the remaining chalk grassland is highly fragmented and often suffers from undergrazing. The remaining resource is significant in a national context and provides a locus for rare calcicolous vascular plants .

Key Grassland Types:
1. **Calcareous (Chalk) grassland (CG2a,c, CG3a,b,c,d, CG4a,b,c, CG5a,b, CG6a, CG7c,d, MG5b on chalk)**

Nationally Rare & Scarce Grassland Plant Species:
Aceras anthropophorum, Ajuga chamaepitys, Althaea hirsuta, Cerastium pumilum, Clinopodium calamintha, Dianthus armeria, D. deltoides, Euphrasia pseudokerneri, Galium pumilum, Gentianella anglica, Herminium monorchis, Iberis amara, Minuartia hybrida, Ophrys holoserica, O. sphegodes, Orchis simia, Orchis ustulata, Orobanche artemisae-campestris, O. caryopyllacea, Phyteuma orbiculare, Polygala amarella, Rhinanthus angustifolius, Salvia pratensis, Tephroseris integrifolia, Teucrium botrys, Thesium humifusum, Vulpia unilateralis

Key sites:
Folkestone-Etchinghall Escarpment (pSAC), Hackhurst And White Downs, Halling-Trottiscliffe, Lydden & Temple Ewell Downs (pSAC), Mole Gap to Reigate Escarpment, Purple Hill & Queendown Warren (pSAC), White Downs, Wouldam-Detling Escarpment, Wye Downs

Associated interests:
1. Invertebrates of calcareous grassland and scrub
2. Scrub communities on Chalk including *Buxus sempervirens* scrub
3. Breeding birds of calcareous grassland and scrub

Key Issues:
- Lack of grazing/undergrazing
- 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 especially on arable land which was formerly chalk grassland
- Seek to ensure that strong policies for grassland conservation appear in development/structure plans

Natural area: 42. Romney Marsh	Lowland Grassland Significance: **SOME**

Description:
A low-lying, flat tract of land traversed by slow-flowing watercourses and underlain by clays and silts which are in turn overlain with alluvium. The area has been substantially drained but remains primarily pastoral in character.

The area includes Dungeness, the largest accumulation of coastal shingle in England, which forms a distinctive foreland.

Much of the remaining wet grassland is semi-improved and this and associated wetland communities are primarily of interest for their breeding and wintering birds.

Key Grassland Types:
1. Wet neutral grassland

Nationally Rare & Scarce Grassland Plant Species:

Key sites:

Associated interests:
1. Semi-improved/reverted wet grassland (grazing marsh) with associated rare/scarce vascular plants
1. Breeding waders, wintering wildfowl and raptors associated with wet grassland
2. Invertebrates and vascular plants associated with ditches on wet grassland/grazing marsh

Key Issues:

- Pressure for agricultural intensification
- Pressure for urban/industrial development
- Lack of grazing/undergrazing
- Hydrology - maintenance/restoration of water tables
- 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: 43. Low Weald	Lowland Grassland Significance: **SOME**

Description:
A largely low-lying, gently undulating area underlain by Lower Cretaceous Wealden Clays and Sandstones which gives rise to mildly acidic 'heavy' soils. The area is traversed by rivers such the Adur, Arun, Mole and Way. An intensively farmed area with arable and dairy enterprises being predominant. However, the area retains a wooded feel with the presence of hedged fields and hedgerow trees.

Small areas of unimproved grassland do occur but are generally scarce and form a highly fragmented resource.

Key Grassland Types:
1. Dry Neutral grassland (MG5a,c)
2. Acid grassland (U1, U2)
3. Fen meadow/rush pasture (M22a, M23a, M24a,c)

Nationally Rare & Scarce Grassland Plant Species:
Chamaemelum nobile, Gastridium ventrocosum,Oenanthe silaifolia

Key sites:

Associated interests:
1. Breeding birds associated with unimproved/semi-improved wet neutral grassland and fen meadow/rush pasture

Key Issues:
- Pressure for agricultural intensification
- Hydrology - maintenance of water tables
- Lack of appropriate agricultural management especially aftermath grazing of meadows
- Opportunities for grassland creation on farmland including 'buffering' of existing sites

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: 44. High Weald	Lowland Grassland Significance: **NOTABLE**

Description:
A well-wooded rolling landscape cut by steep-side valleys rising to c.240 metres. It is composed of Cretaceous sandstones and siltstones which give rise to largely acid sandy soils.

A mixed farming area which supports a variety of semi-natural habitats including broad-leaved woodland, lowland heathland and grassland. The area includes the Pevensey Levels an extensive area of coastal grazing marsh which, despite its ornithological and entomological interest does not contain much semi-natural grassland. The key interest from a grassland perspective are the remaining fragments of neutral grassland and fen meadow.

Key Grassland Types:
1. **Dry neutral grassland MG5a,c**
2. **Fen meadow (M24, M25)**
3. Dry acid grassland (U1a, U2, U4)

Nationally Rare & Scarce Grassland Plant Species:
Chamaemelum nobile,Clinopodium calamintha, Peucedanum palustre

Key sites:

Associated interests:
1. Semi-improved wet grassland (including grazing marsh) of importance for breeding and wintering birds and rare/scarce vascular plants.
2. Breeding birds associated with acid grassland/ heathland mosaics

Key Issues:
- Pressure for agricultural intensification including conversion from hay to silage
- Overgrazing by horses
- Lack of grazing/undergrazing including lack of aftermath grazing of meadows
- Hydrology - maintenance of water tables
- 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: 45. South Downs	Lowland Grassland Significance: **CONSIDERABLE**

Description:
The South Downs form the eastern end of the Cretaceous chalk outcrop which extends from Wiltshire (Wessex Downs) through Hampshire into Sussex where it forms a prominent escarpment rising to 253 metres. The chalk is dissected by the valleys of the Ouse, Adur, Arun and Cuckmere rivers which support areas of wetland vegetation. The Downs support important concentrations of chalk grassland and scrub on rendzina soils. The agriculture consists of mixed farming on an intensive scale with sheep and cereal cropping being the dominant enterprises.

Key Grassland Types:
1. **Calcareous (chalk) grassland (CG1c, CG2 a,b,c, CG3 a,b,c, CG4a,b, CG5a, MG5b**
2. Acid grassland (U1, U4)

Nationally Rare & Scarce Grassland Plant Species:
Aceras anthropophorum, Bupleureum baldense, Carex divisa, Dianthus armeria, Euphrasia pseudokerneri, Gentianella anglica, Herminium monorchis, Minuartia hybrida, Ophrys sphegodes, Orchis ustulata, Phyteuma orbiculare, Seseli libanotis, Silene nutans, Tephroseris integrifolia, Thesium humifusum

Key sites:
Cuckmere Haven-Beachy Head, Fulking Escarpment-Newtimber Hill, Castle Hill (pSAC), Harting Downs, Heyshott Down, Kingley Vale, Lewes Downs (pSAC), Lullington Heath & Deep Dean

Associated interests:
1. Chalk scrub
2. Chalk Heath (H8c)
3. Lichen and bryophyte assemblages of selected chalk grassland sites (eg Heyshott Down, Treyford to Bepton Down (not NCR))
4. Lowland semi-improved/reverted wet neutral grassland (grazing marsh) and associated rare/scarce plant species
5. Invertebrates associated with chalk grassland/scrub
6. Breeding birds of chalk grassland/scrub and lowland wet grassland

Key Issues:
- Lack of grazing/undergrazing
- Recreational pressure on selected chalk grassland sites
- Opportunities for grassland creation on farmland
- Reconciling rare species management with 'community '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
- Produce site objective statements and management briefs for sites where there is a potential conflict between community and species management and implement as a priority

Natural area: 46. Greensand	Lowland Grassland Significance: **SOME**

Description:
The Greensand area consists of a well-wooded steep escarpment in Surrey and Kent culminating in Leith Hill which rises to c.300m above sea level. The Lower Cretaceous beds consist of sandstones and clays. The sandy beds give rise to mostly well-drained acid soils with much heathland, broad-leaved woodland and some acid grassland. The area is cut by a number of rivers including the Arun, Medway, Mole and Wey whose flood plains support a range of wetland habitats including some grassland.

Key Grassland Types:
1. Acid grassland (U1b, U4)

Nationally Rare & Scarce Grassland Plant Species:
Chamaemelum nobile, Clinopodium calamintha, Crassula tillaea, Hypochaeris glabra

Key sites:

Associated interests:
1. Acid grassland often occurs in a mosaic with lowland heath
2. Breeding birds of heath/acid grassland.
3. Semi-improved/reverted wet neutral grassland of importance for rare/scarce plants and invertebrates (mostly associated with integral ditch systems)

Key Issues:
- Pressure for agricultural intensification
- Lack of grazing/undergrazing
- Incompatible recreational activity
- 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: 47. Hampshire Chalk	Lowland Grassland Significance: **CONSIDERABLE**

Description:
The Hampshire Chalk forms part of the extensive chalk outcrop of central southern England. An intensively farmed, rolling area still supporting many remaining areas of unimproved chalk grassland remaining especially on steeper slopes over rendzina soils. The rivers Test, Itchen and Meon rise in the area and flow in a southerly direction towards the Solent, the gap formed by the latter separates the Hampshire chalk from the South Downs to the east. Some small areas of wet neutral grassland and fen meadows occur in the river valleys.

Key Grassland Types:
1. **Calcareous chalk grassland (CG2a,b,c, CG3a,b,c,d,, CG6a)**
2. Wet neutral grassland and fen meadow (MG8, M22, M24, M25)

Nationally Rare & Scarce Grassland Plant Species:
Aceras anthropophorum, Ajuga chamaepitys, Carex humilis, Euphrasia pseudokerneri, Galium pumilum, Gentianella anglica, G. germanica, Herminium monorchis, Minuartia hybrida, Phyteuma orbiculare, Potentilla neumanniana, Orchis ustulata, Tephroseris integrifolia, Teucrium botrys, Thesium humifusum, Vulpia unilateralis

Key sites:
Beacon Hill, Bransbury Common, Burghclere Beacon, Martin & Tidpit Downs, Noar Hill, Old Winchester Hill, Rushmore Down, Stockbridge Down

Associated interests:
1. Lichen assemblages of selected chalk grassland sites
2. Chalk heath (H8c)
3. Breeding birds of chalk grassland/scrub
4. Breeding birds of lowland wet grassland/fen meadow
5. Invertebrates associated with chalk grassland and scrub

Key Issues:
- Pressure for agricultural intensification
- Lack of grazing/undergrazing
- Hydrology - maintenance of water tables and 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: 48. South Coast Plain	Lowland Grassland Significance: **SOME**

Description:
This area of low relief, which forms part of the Hampshire basin, is underlain by Tertiary deposits of sands and clays and in the east outcrops of Cretaceous Chalk occur which form higher ground such as at Portsdown. Inland from the coast, the area is mostly arable farmland with remnants of semi-natural habitat including woodland, grassland and mire

The coast includes a number of estuarine basins and estuaries associated with the rivers such as the Adur which support a range of habitats such as mudflats , saltmarsh, swamp and wet grassland. While the latter habitats are the most importance for nature conservation in the Natural Area, there are fragments of unimproved neutral and calcareous grassland and fen meadow.

Key Grassland Types:
1. Calcareous chalk grassland (CG1e, CG2a,b,c, CG3a,b,d, CG4a,b, CG5a)
2. Fen meadow/rush pasture (M22, M23)
3. Dry neutral grassland (MG5)

Nationally Rare & Scarce Grassland Plant Species:
Crassula tillaea, Dianthus armeria, D. deltoides, Euphrasia pseudokerneri, Minuartia hybrida, Ophrys sphegodes, Phyteuma orbiculare, Thesium humifusum,

Key sites:
The Moors, Bishop Waltham

Associated interests:
1. Breeding and wintering birds of calcareous grassland
2. Rare/scarce vascular plants associated with semi-improved/reverted wet neutral grassland including coastal grazing marsh
3. Breeding and wintering birds associated with wet neutral grassland

Key Issues:
- Pressure for urban/industrial development
- Pressure from recreational demands
- Lack of grazing/undergrazing
- Hydrology - maintenance 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 to expand the grassland resource
- Seek to ensure that strong policies for grassland conservation appear in development/structure/subject plans

Natural area: 49. Isle of Wight	Lowland Grassland Significance: **SIGNIFICANT**

Description:
The Isle of Wight consists of varied geology but the dominating feature as far as grasslands are concerned is the outcrop of the chalk, particularly the central ridge from the Needles to Culver Cliff in the east. To the north and south of this escarpment, the low lying plains consist of sands and clays. In the south there is an outlier of Chalk which supports calcareous grassland on steep slopes but acid grassland and heathland occur locally where the Greensand overlies the Chalk.

The principal grassland interest relates to the unimproved calcareous grassland on the Chalk although a few neutral grasslands survive on the northern plain and there are also areas of coastal grazing marsh, primarily of importance for breeding and wintering birds.

Key Grassland Types:
1. **Calcareous (Chalk) grassland (CG1c, CG2a,b,c, CG3a, CG6a,b)**
2. Dry neutral grassland (MG5)

Nationally Rare & Scarce Grassland Plant Species:
Aceras anthropophorum, Cerastium pumilum, Gentianella anglica, Oenanthe silaifolia, Orchis ustulata, Orobanche artemisae-campestris, Thesium humifusum.

Key sites:
Isle of Wight Downs pSAC including Compton Down and Tennyson Down

Associated interests:
1. Semi-improved/reverted wet neutral grassland including coastal grazing marsh of importance for breeding/wintering birds and rare/scarce vascular plants
2. Invertebrates associated with calcareous grassland and scrub
3. Breeding and wintering birds associated with chalk grassland/scrub
4. Lichen assemblages of selected chalk grassland sites

Key Issues:
- Lack of grazing/undergrazing
- Pressure for agricultural intensification including conversion from hay to silage
- 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: 50. New Forest	Lowland Grassland Significance: **OUTSTANDING**

Description:
An area dominated by the sandy soils of the Hampshire basin which overlie Tertiary deposits. The New Forest area has an outstanding complex of semi-natural habitats on a large scale, including heathland, valley mire, woodland and grassland. The area is an extensive pastoral system maintenance of which is necessary for conserving the Forest's considerable nature conservation interest. As far as grasslands are concerned, the key communities are wet and dry acid and neutral grasslands, the 'lawns' and the fen meadows and rush pastures. Areas of wet neutral grassland/grazing marsh also occur along the River Avon and on the coast.

Key Grassland Types:
1. **Acid grassland (U1d,e,f, U2, U3, U4)**
2. **New Forest lawns (undetermined in terms of NVC: mixture of neutral grassland/fen meadow/mire)**
3. **Fen meadow/rush pasture (M23, M24c, M25)**
4. Wet & Dry neutral grassland (MG5, MG8, MG13)

Nationally Rare & Scarce Grassland Plant Species:
Chamaemelum nobile, Crassula tillaea, Dianthus armeria, Gastridium ventrocosum, Hypochaeris glabra.

Key sites:
New Forest

Associated interests:
1. Breeding & wintering birds of wet neutral grassland including grazing marsh.
2. Breeding birds associated with acid grassland/heath
3. Invertebrate interest of grassland communities

Key Issues:
- Lack of grazing/undergrazing
- Hydrology - maintenance of water tables
- Pressure for recreational development
- 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: 51. South Wessex Downs	Lowland Grassland Significance: **OUTSTANDING**

Description:
The rolling countryside of the South Wessex Downs forms part of the outcrop of the Cretaceous Chalk in Southern England. Whilst much of the area is intensively farmed, a substantial resource of calcareous grassland remains.

Salisbury Plain alone is one of the largest remaining areas of calcareous grassland in North-west Europe and Porton Down supports a large area of chalk grassland including rare and unusual communities.

The flood plains of the river Avon and its tributaries, which cut through the Downs, contain areas of wet neutral grassland including both working and defunct water meadows. The areas of unimproved wet neutral grassland (NVC MG8) are of particular significance as this is a nationally rare grassland type.

Key Grassland Types:
1. **Calcareous (Chalk) grassland (CG2a,b,c, CG3a,b,c,d, CG4a,b,c, CG5a, CG6a,b, CG7b,c,d,e, MG5b**
2. Wet neutral grassland including water meadows (MG6, MG7, MG8)

Nationally Rare & Scarce Grassland Plant Species:
Carex humilis, Cerastium pumilum, Cirsium tuberosum, Dianthus deltoides, Euphrasia pseudokerneri, Galium pumilum, Gentianella anglica, Herminium monorchis, Iberis amara, Minuartia hybrida, Orchis ustulata, Phyteuma orbiculare, Salvia pratensis, Silene nutans, Teucrium botrys, Tephroseris integrifolia, Thesium humifusum.

Key sites:
Bowerchalke Downs, Calstone & Cherhill Downs, Eggardon Hill, Haydon & Askerwell Downs, Fontwell & Melbury Downs pSAC, Hod & Hambledon Hills, Homington, Odstock & Clearbury Downs, Knighton Down, Lower Woodford Water Meadows, Park Bottom, Higher Houghton, Pincombe Down, Prescombe Down p SAC Salisbury Plain pSAC (includes Bulford Down, Parsonage Down and Porton Down), Scratchbury & Cotley Hills, Steeple Langford, Cow Down & Clifford Bottom, Throope Down, Wylye Down.

Associated interests:
1. Mixed Chalk scrub (W21) and Chalk heath
2. Lichen assemblages of chalk grassland especially Porton Down
3. Breeding and wintering birds of calcareous grassland/scrub
4. Invertebrates associated with chalk grassland/scrub
5. Unimproved/semi-improved/improved permanent pasture used as feeding areas by greater horseshoe bats

Key Issues:
- Pressure for agricultural intensification
- Lack of grazing/undergrazing
- Pressure for development especially road schemes
- Hydrology - maintenance/restoration of water tables/flooding regimes
- Re-instatement of water meadows
- 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 and re-instate defunct water meadows
- Seek opportunities to expand the grassland resource
- Seek to ensure that strong policies for grassland conservation appear in development/structure plans

Natural area: 52. Dorset Heaths	Lowland Grassland Significance: **NOTABLE**

Description:
A low-lying area with acid soils overlying Tertiary sands and gravels supporting important tracts of lowland heathland. Acid grassland often occurs in association with the heath. Small isolated areas of rush pasture and dry and wet neutral grassland also occur, the latter in the river valleys such as the Frome. Along the coast there are important areas of habitat including saltmarsh and grazing marsh.

Key Grassland Types:
1. **Acid grassland (U1b,d,f, U3)**
2. Dry neutral grassland (MG5a,c)
3. Lowland wet neutral grassland (MG8, MG11, MG13)
4. Fen meadow/rush pasture (M23b, M24, M25)

Nationally Rare & Scarce Grassland Plant Species:
Crassula tillaea, Hypochaeris glabra, Oenanthe silaifolia, Scorzonera humilis

Key sites:

Associated interests:
1. Lowland heath
2. Breeding birds associated with acid grassland/heath mosaic
3. Semi-improved/reverted wet neutral grassland including grazing marsh of importance for breeding birds and scarce vascular plants

Key Issues:

- Lack of grazing/undergrazing
- Pressure for agricultural intensification
- Opportunities for habitat creation on farmland
- Pressure for urban/industrial development
- Hydrology - maintenance of water tables/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: 53. Isles of Portland and Purbeck	Lowland Grassland Significance: **CONSIDERABLE**

Description:
The Isles of Portland and Purbeck consist of rocks of Cretaceous (Chalk, Greensand and Gault clay) and Jurassic (limestone, clays and shales) age. This tract of country is of variable elevation but rises to c. 200m and is bounded by cliffs to the east and south, the chalk escarpment to the north east but tapers gradually in the west. The physical nature of the rock types strongly influences the topography, land use and vegetation with the coastal bays marking the outcrop of softer rocks such as clays and shales. Calcareous grasslands associated with the chalk and limestone are the principal interest of this Natural Area although small areas of acid grassland survive on sandstones and where superficial deposits (Clay-with-Flints) overlie calcareous rocks.

Key Grassland Types:
1. **Calcareous (Chalk & Limestone) grassland (CG2a,c, CG4a, MG5b)**
2. Acid grassland (U1f, U3, U4c)

Nationally Rare & Scarce Grassland Plant Species:
Cerastium pumilum, Gastridium ventrocosum, Gentianella anglica, Ophrys sphegodes, Sedum forsterianum, Silene nutans, Tephoseris integrifolia, Thesium humifusum, Vulpia unilateralis

Key sites:
South Dorset Coast (encompasses St Albans Head to Durlston Head pSAC)

Associated interests:
1. Lichen assemblages associated with coastal chalk grassland
2. Invertebrates of chalk & limestone grassland
3. Maritime cliff grassland

Key Issues:
- 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: 54. Wessex Vales	Lowland Grassland Significance: **NOTABLE**

Description:
The Wessex Vales consist of intensively farmed, low-lying but undulating terrain on soils derived from a variety of rocks of Jurassic age and superficial deposits. It lies between the Dorset chalk to the east, the Somerset Hills to the West and the Oxford Clay Vale to the north. The sea cliffs and shingle ridges of the Dorset Coast form the southern boundary. The rock types include clays, sandstones, limestones and shales. The majority of the remaining area of dry neutral grassland in Dorset occurs in the Vales whilst important concentrations of acid grassland occur on acidic soils overlying the Greensand and superficial deposits

Key Grassland Types:
1. **Dry neutral grassland (MG5a,b,c)**
2. **Acid grassland (U1b,f, U2a, U3, U4a,b)**
3. Calcareous (Chalk) grassland (CG2, CG3, CG4)
4. Fen Meadow/Rush pasture (M22a,b, M23a, M24c, M27)
5. Wet neutral grassland (MG11a, MG12, MG13)

Nationally Rare & Scarce Grassland Plant Species:
Crassula tillaea, Dianthus armeria.

Key sites:

Associated interests:
1. Invertebrate interest of fen meadow vegetation
2. Dartford warbler (*Sylvia undata*) population associated with acid grassland
3. Semi-improved/reverted wet neutral grassland of importance for breeding birds and rare/scarce vascular plant species

Key Issues:
- Lack of grazing/undergrazing including lack of aftermath grazing of meadows
- Pressure for agricultural intensification
- Hydrology - maintenance of water tables/water quality
- Tree planting on semi-natural grassland
- 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 and forestry/woodland strategies and appropriate authorities recognise the importance of semi-natural grassland

Natural area: 55. Blackdowns	Lowland Grassland Significance: **SOME**

Description:
This Natural Area consists of a range of hills and coombes straddling the counties of Devon, Somerset and Dorset. The area rises to an altitude of c. 270 m. The geology consists of sandstones, mudstones, shales and limestones of various eras and these give rise to a range of soil types. Despite the fact that the area is principally pastoral, the unimproved grassland resource is comparatively small. A high proportion of the wetter grasslands are associated with the springline between the Cretaceous Greensand and the Triassic Mercia Mudstone ("Keuper Marl").

The Cretaceous Chalk outcrops along the coast between Lyme Regis and Sidmouth giving rise to small areas of calcareous grassland.

Key Grassland Types:
1. Fen meadow/rush pasture (M22, M23, M24, M25, M27)
2. Dry neutral grassland (MG5a,b,c)
3. Acid grassland (U1, U2, U3, U4)
4. Calcareous grassland (CG1c, CG2a,b,c, CG4, CG7a, MG5b)

Nationally Rare & Scarce Grassland Plant Species:
Euphrasia pseudokerneri, Gentianella anglica, Lobelia urens, Silene nutans

Key sites:

Associated interests:
1. Invertebrates associated with fen meadows and calcareous grassland

Key Issues:

- Pressure for agricultural intensification
- Lack of grazing/undergrazing
- Opportunities for grassland creation on farmland
- Hydrology - maintenance of water tables
- Maintenance of water quality
- ESA & AONB implementation/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 plan policies
- Maximise opportunities for conservation offered by ESA and AONB status

Natural area: 56. Devon Redland	Lowland Grassland Significance: **SOME**

Description:
Gently undulating countryside supporting mixed farming and dissected by the Rivers Exe and Otter. The area is underlain by rocks of the Permo-Triassic era which include mudstones, sandstones and breccias. Only small areas of unimproved grassland remain although there are areas of semi-improved wet grassland (grazing marsh) associated with the river valleys and the Exe Estuary.

Key Grassland Types:
1. Dry neutral grassland (MG5a,c)
2. Fen meadow (M24)
3. Wet neutral grassland/grazing marsh (MG11)

Nationally Rare & Scarce Grassland Plant Species:
Gastridium ventrocosum

Key sites:

Associated interests:
1. Breeding and wintering birds associated with wet neutral grassland

Key Issues:
- Lack of grazing/undergrazing
- Pressure for agricultural intensification
- Pressure for industrial/urban development including 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 plan

Natural area: 57. South Devon	Lowland Grassland Significance: **SIGNIFICANT**

Description:
The principal interest of this Natural Area for lowland grasslands is the calcareous grassland associated with the Devonian limestone. This outcrops on the coast in the Torquay area where it forms projecting headlands whereas the Slates and Sandstones have been carved into small bays.

Inland the low-lying landscape of mixed farming enterprises consists of Devonian rocks, principally sandstones, siltstones and slates, which give rise to relatively acidic soils. Very little unimproved grassland appears to remain inland.

Key Grassland Types:
1. **Calcareous (Devonian limestone) grassland (CG1b - the only UK locality for this sub-community., CG2a, CG7d)**
2. Dry neutral grassland (MG5c)

Nationally Rare & Scarce Grassland Plant Species:
Aster linosyris, Bupleureum baldense, Cerastium pumilum, Crassula tillaea, Dianthus armeria, Euphorbia portlandica, Gastridium ventricosum, Helianthemum appeninum, Lobelia urens, Scilla autumnalis, Sedum forsterianum, Trinia glauca

Key Sites:
Berry Head

Associated interests:
1. Semi-improved/reverted wet neutral grassland (including grazing marsh) and associated rare/scarce vascular plants
2. Maritime grassland and cliff vegetation
3. 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
- Recreational pressure on coastal grassland
- Fragmentation and isolation of the 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/subject plans

Natural area: 58. Bodmin Moor	Lowland Grassland Significance: **SOME**

Description:
Bodmin Moor consists of a granite dome mostly lying above 250m and rising to c. 420m situated in eastern Cornwall. It is the most south westerly upland area in England. The landscape consists of rolling hills and flat topped ridges which are interrupted by tors and scree slopes. The granite gives rise to acid, mostly podzolic soils which in turn support a variety of acid vegetation communities including grassland, dwarf shrub-heath and mire. Unimproved lowland grassland is scarce as the enclosed inbye land has mostly been agriculturally improved. However remnants of enclosed acid grassland and rush pasture do occasionally occur.

Key Grassland Types:
1. Acid grassland (U3, U4)
2. Fen meadow/rush pasture (M23, M25)

Nationally Rare & Scarce Grassland Plant Species:
Chamaemelum nobile

Key sites:

Associated interests:
1. Wintering waders associated with improved pastures

Key Issues:

- Pressure for agricultural intensification including overgrazing
- Pressure for development especially mineral working
- 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
- Seek to ensure that strong policies for grassland conservation appear in development/structure plans