European Site Conservation Objectives: supplementary advice on conserving and restoring site features

Mottey Meadows Special Area of Conservation (SAC)
Site code: UK0030051

Natural England, 2008

Date of Publication: 16 October 2018

About this document

This document provides Natural England's supplementary advice about the European Site Conservation Objectives relating to Mottey Meadows SAC. This advice should therefore be read together with the SAC Conservation Objectives available here.

You should use the Conservation Objectives, this Supplementary Advice and any case-specific advice given by Natural England, when developing, proposing or assessing an activity, plan or project that may affect this site.

This Supplementary Advice to the Conservation Objectives presents attributes which are ecological characteristics of the designated species and habitats within a site. The listed attributes are considered to be those that best describe the site's ecological integrity and which, if safeguarded, will enable achievement of the Conservation Objectives. Each attribute has a target which is either quantified or qualitative depending on the available evidence. The target identifies as far as possible the desired state to be achieved for the attribute.

The tables provided below bring together the findings of the best available scientific evidence relating to the site's qualifying features, which may be updated or supplemented in further publications from Natural England and other sources. The local evidence used in preparing this supplementary advice has been cited. The references to the national evidence used are available on request. Where evidence and references have not been indicated, Natural England has applied ecological knowledge and expert judgement. You may decide to use other additional sources of information.

In many cases, the attribute targets shown in the tables indicate whether the current objective is to 'maintain' or 'restore' the attribute. This is based on the best available information, including that gathered during monitoring of the feature's current condition. As new information on feature condition becomes available, this will be added so that the advice remains up to date.

The targets given for each attribute do not represent thresholds to assess the significance of any given impact in Habitats Regulations Assessments. You will need to assess this on a case-by-case basis using the most current information available.

Some, but not all, of these attributes can also be used for regular monitoring of the actual condition of the designated features. The attributes selected for monitoring the features, and the standards used to assess their condition, are listed in separate monitoring documents, which will be available from Natural England.

These tables do not give advice about SSSI features or other legally protected species which may also be present within the European Site.

If you have any comments or queries about this Supplementary Advice document please contact your local Natural England adviser or email
HDIRConservationObjectivesNE@naturalengland.org.uk

About this site

European Site information

Name of European Site	Mottey Meadows Special Area of Conservation (SAC)
Location	Staffordshire
Site Maps	The designated boundary of this site can be viewed here on the MAGIC website
Designation Date	1 April 2005
Qualifying Features	See section below
Designation Area	43.69 ha
Designation Changes	
Feature Condition Status	Details of the feature condition assessments made at this site can be found using Natural England's Designated Sites System
Names of component Sites of Special Scientific Interest (SSSIs)	Mottey Meadows SSSI.
Relationship with other European or International Site designations	NA

Site background and geography

Mottey Meadows consists of a series of agriculturally-unimproved and seasonally-inundated meadows near the village of Wheaton Aston in Staffordshire. These 'flood meadows' lie within the Shropshire, Cheshire and Staffordshire Plain National Character Area (NCA) , an expanse of flat or gently undulating, lush, pastoral farmland that comprises most of the county of Cheshire, the northern half of Shropshire and a large part of north-west Staffordshire. The meadows have been managed for hay making for many centuries.

Mottey Meadows represents lowland hay meadows in the English Midlands, and holds a relatively large area of the habitat (approximately 40 ha). The site contains damp species-rich grassland with limited influence of agricultural intensification and so demonstrates good conservation of structure and function. There are valuable transitions to other dry and wet grassland types. The site is important for a range of rare meadow species, including the fritillary *Fritillaria meleagris* at its most northerly native locality.

The SAC is also managed as a National Nature Reserve.

About the qualifying features of the SAC

The following section gives you additional, site-specific information about this SAC's qualifying features. These are the natural habitats and/or species for which this SAC has been designated.

Qualifying habitats:

- **H6510 Lowland Hay Meadows (*Alopecurus pratensis, Sanguisorba officinalis*)**

This Annex I type comprises species-rich hay meadows on moderately fertile soils of river and tributary floodplains. Most examples are cut annually for hay, with light aftermath grazing by livestock. Seasonal flooding maintains an input of nutrients.

In the UK, this habitat corresponds to NVC type MG4 *Alopecurus pratensis – Sanguisorba officinalis* grassland. This community is characterised by species-rich swards containing frequent red fescue *Festuca rubra*, crested dog's-tail *Cynosurus cristatus*, meadow foxtail *Alopecurus pratensis*, great burnet *Sanguisorba officinalis*, meadowsweet *Filipendula ulmaria* and meadow buttercup *Ranunculus acris*. It provides the main habitat in the UK for fritillary *Fritillaria meleagris*.

This grassland type is rare in the UK and is now confined almost entirely to central and southern England, with a few outlying fragments along the Welsh borders. It is estimated to cover less than 1,500 hectares in total, and survives at scattered and mostly small sites.

This SAC has one of the largest surviving areas of H6510 Lowland Hay Meadow in the UK and shows a high degree of conservation of structure and function associated with stable patterns of traditional low-intensity management. The SAC series encompasses the range of ecological variation shown by the habitat type, particularly those variations supporting important populations of rare and scarce meadow species, and also covers the geographical distribution of the habitat type in the UK.

Qualifying Species:

N/A

Table 1: Supplementary Advice for Qualifying Features: H6510. Lowland hay meadows (*Alopecurus pratensis, Sanguisorba officinalis*)

Attributes		Targets	Supporting and Explanatory Notes	Sources of site-based evidence (where available)
Extent and distribution of the feature	**Extent of the feature within the site**	Maintain the total extent of the H6510 feature to 34.4ha.	There should be no measurable reduction (excluding any trivial loss) in the extent and area of this feature, and in some cases, the full extent of the feature may need to be restored.. The baseline-value of extent given has been generated using data gathered from the listed site-based surveys. Area measurements given may be approximate depending on the methods, age and accuracy of data collection, and as a result this value may be updated in future to reflect more accurate information. The extent of an Annex I habitat feature covers the sum extent of all of the component vegetation communities present and may include transitions and mosaics with other closely-associated habitat features. Where a feature is susceptible to natural dynamic processes, there may be acceptable variations in its extent through natural fluctuations. Where a reduction in the extent of a feature is considered necessary to meet the Conservation Objective for another Annex I feature, Natural England will advise on this on a case-by-case basis. For this feature, there will be year to year fluctuations in climate resulting in variable flooding regimes. This may mean that there will need to be make some allowance for reversible shifts in vegetation types between MG4 (H6510) and wetter vegetation types such as inundation grasslands (e.g. MG13, MG7c) and MG8 and related vegetation depending on the flood cycle	NATURE CONSERVANCY COUNCIL, 1981. Vegetation survey of Mottey Meadow. NATURAL ENGLAND, 2014. Long-term Monitoring Network survey. FLOODPLAIN MEADOWS PARTNERSHIP, 2011. Vegetation survey of Mottey Meadow. ENGLISH NATURE, 2005. Vegetation map – Mottey Meadows.
	Spatial distribution of the feature within the site	Maintain the distribution and configuration of the H6510 feature, including where applicable its component vegetation types, across the site	A contraction in the range, or geographic spread, of the feature (and its component vegetation and typical species, plus transitional communities) across the site will reduce its overall area, the local diversity and variations in its structure and composition, and may undermine its resilience to adapt to future environmental changes. This may also reduce and break up the continuity of a habitat within a site and how well its typical species are able to move around the site to occupy and use habitat. Such fragmentation can impact on their viability and the wider ecological composition of the Annex I habitat. Smaller fragments of habitat can typically support smaller and more isolated populations which are more vulnerable to extinction. These fragments also have a greater amount of open edge habitat which will differ in the amount of light, temperature, wind, and even noise that it receives compared to its interior. These conditions may not be suitable for some of the typical and more specialist species associated with the Annex I habitat feature.	

Attributes		Targets	Supporting and Explanatory Notes	Sources of site-based evidence (where available)
Structure and function (including its typical species)	**Vegetation community composition**	Ensure the component vegetation communities of the H6510 feature are broadly referable to and characterised by the following National Vegetation Classification type: MG4 *Alopecurus pratensis - Sanguisorba officinalis* grassland.	This habitat feature will comprise a number of associated semi-natural vegetation types and their transitional zones, reflecting the geographical location of the site, altitude, aspect, soil conditions (especially base-status and drainage) and vegetation management. In the UK these have been categorised by the National Vegetation Classification (NVC). Maintaining or restoring these characteristic and distinctive vegetation types, and the range of types as appropriate, will be important to sustaining the overall habitat feature. This will also help to conserve their typical plant species (i.e. the constant and preferential species of a community), and therefore that of the SAC feature, at appropriate levels (recognising natural fluctuations). Some small areas of the MG4 at Mottey has affinities to (and might be considered intermediate with) MG8 *Cynosurus cristatus-Caltha palustris* grassland; M24 *Molinia caerulea-Cirsium dissectum* fen meadow; M22 *Juncus subnodulosus-Cirsium palustre* fen-meadow; and MG5 *Cynosurus cristatus-Centaurea nigra* grassland. For the purposes of this document, they should be considered variants of MG4 and part of the SAC feature. A map showing the distribution of the small areas of grassland that have affinities to (and might be considered intermediate with) MG8 *Cynosurus cristatus-Caltha palustris* grassland; M24 *Molinia caerulea-Cirsium dissectum* fen meadow; M22 *Juncus subnodulosus-Cirsium palustre* fen-meadow; and MG5 *Cynosurus cristatus-Centaurea nigra* grassland is available from Natural England on request. The map is reproduced at the end of the document.	
	Undesirable species	Maintain or restore the frequency/cover of the following undesirable species to within acceptable levels and prevent changes in surface condition, soils, nutrient levels or hydrology which may encourage their spread: *Anthriscus sylvestris, Cirsium arvense, Cirsium vulgare,*	Undesirable non-woody and woody vascular plants species may require active management to avert an unwanted succession to a different and less desirable state. Often they may be indicative of a negative trend relating to another aspect of a site's structure and function. These species will vary depending on the nature of the particular feature, and in some cases these species may be natural/acceptable components or even dominants.	

Attributes		Targets	Supporting and Explanatory Notes	Sources of site-based evidence (where available)
		Epilobium hirsutum, Galium aparine, Plantago major, Rumex crispus, Rumex obtusifolius, Senecio jacobaea, Urtica dioica, Equisetum arvense) *Lolium perenne, Phleum pratense, Bromus hordeaceus, Holcus lanatus, Trifolium repens*) *Arrhenatherum* and *Dactylis* glomerata Large *Carex* species*;* large grasses such as *Glyceria maxima, Phalaris arundinacea* and *Phragmites australis;* and coarse *Juncus* species, particularly *J. effusus, J. conglomeratus*) Woody species and bracken		
Structure and function (including its typical species)	**Vegetation community transitions**	Restore the natural pattern of vegetation zonations and transitions.	Transitions/zonations between adjacent but different vegetation communities are usually related to naturally-occurring changes in soil, aspect or slope. Such 'ecotones' retain characteristics of each bordering community and can add value in often containing species not found in the adjacent communities. Retaining such transitions can provide further diversity to the habitat feature, and support additional flora and fauna. Spring-lines are thought to arise along the gentle slope to higher ground along the eastern	WATER MANAGEMENT CONSULTANTS LTD FOR EA, 1998. Hydrological Assessment of Mottey Meadows. AMEC, 2013. Mottey

Attributes		Targets	Supporting and Explanatory Notes	Sources of site-based evidence (where available)
			edge of the SAC/SSSI producing areas of MG4 vegetation that have affinities to M22 and M24. Restoration is necessary because the hydrology has been impacted by drainage (on and off-site) and eutrophication (sourced from the catchment).	Meadows NNR: Wetland eco-hydrological characterisation, nutrient budget and water management plan.
Structure and function (including its typical species)	**Soils, substrate and nutrient cycling**	Maintain the properties of the underlying soil types, including structure, bulk density, total carbon, pH, soil nutrient status and fungal:bacterial ratio, to within typical values for the H6510 habitat. For this feature soil P index should typically be between index 0-1 (< 9 mg l -1)	Soil is the foundation of basic ecosystem function and a vital part of the natural environment. Its properties strongly influence the colonisation, growth and distribution of those plant species which together form vegetation types, and therefore provides a habitat used by a wide range of organisms. Soil biodiversity has a vital role to recycle organic matter. Changes to natural soil properties may therefore affect the ecological structure, function and processes associated with this Annex I feature.	
	Water quality	Restore water quality and quantity to a standard which provides the necessary conditions to support the H6510 feature.	For many SAC features which are dependent on wetland habitats supported by surface and/or ground water, maintaining the quality and quantity of water supply will be critical, especially at certain times of year. Poor water quality and inadequate quantities of water can adversely affect the structure and function of this habitat type. Typically, meeting the surface water and groundwater environmental standards set out by the Water Framework Directive (WFD 2000/60/EC) will also be sufficient to support the achievement of SAC Conservation Objectives but in some cases more stringent standards may be needed. Further site-specific investigations may be required to establish appropriate water quality standards for the SAC. Surface water from the catchment is enriched by diffuse pollution sourced mainly from agriculture. At the moment most, but not all, of it is directed through the site by a system of ditches and drains to try and minimise its impact on the SAC/SSSI's vegetation. Restoration of a cleaner surface water supply is required to safeguard the site and before a more natural or more typical hydrological regime can be restored.	

Attributes		Targets	Supporting and Explanatory Notes	Sources of site-based evidence (where available)
			Spring-lines are thought to arise along the gentle slope to higher ground along the eastern edge of the SAC/SSSI. The degree to which these are also impacted by eutrophication is not known. More work is needed to better understand the eco-hydrology of the site; the interactions of surface and groundwater; the trophic status and distribution of the SAC/SSSI water supplies; and what opportunities there might be for restoration of more natural processes.	
Structure and function (including its typical species)	**Hydrology: Water table**	Restore a hydrological regime which provides a consistently near-surface water table which typically averages depths of 35 cm (winter), 45cm (spring), 70cm (summer) and 60cm (autumn) below ground level	Defining and maintaining the appropriate hydrological regime is a key step in moving towards achieving the conservation objectives for this site and sustaining this feature.. Changes in source, depth, duration, frequency, magnitude and timing of water supply can have significant implications for the assemblage of characteristic plants and animals present. This target is generic and further site-specific investigations may be required to fully inform conservation measures and/or the likelihood of impacts. For this feature sub-surface water table levels during the year should be at levels consistent with published guidance. There are at least two relevant reports into the hydrology of the SAC. More work is needed, to better understand the eco-hydrology of the site; the interactions of surface and groundwater; the trophic status and distribution of the SAC/SSSI water supplies; and what opportunities there might be for restoration of more natural processes**.**	WATER MANAGEMENT CONSULTANTS LTD FOR EA, 1998. Hydrological Assessment of Mottey Meadows. AMEC, 2013. Mottey Meadows NNR: Wetland eco-hydrological characterisation, nutrient budget and water management plan.
	Hydrology: Flooding regime	Restore a hydrological regime which provides a cumulative duration of annual surface flooding which is typically less than 10 days between December-February and less than 3 days between September-November, with no inundations during March – August, subject to natural changes	Defining and maintaining the appropriate hydrological regime is a key step in moving towards achieving the conservation objectives for this site and sustaining this feature. Changes in source, depth, duration, frequency, magnitude and timing of water supply can have significant implications for the assemblage of characteristic plants and animals present. This target is generic and further site-specific investigations may be required to fully inform conservation measures and/or the likelihood of impacts. For this feature, the timing, frequency, extent and duration of surface flooding should be commensurate with maintenance of the feature at this site. A non-optimal flooding regime can result in a shift from H6510 to other vegetation types (such as inundation grassland, swamps). Too little flooding may compromise the necessary conservation/agricultural management due to reduced nutrient inputs which will reduce hay yields making hay management less viable and sustainable. At the moment, surface water from the catchment is enriched by diffuse pollution sourced mainly from agriculture. At the moment most, but not all, of it is directed through the site	

Attributes		Targets	Supporting and Explanatory Notes	Sources of site-based evidence (where available)
			by a system of ditches and drains to try and minimise its impact on the SAC/SSSI's vegetation. Flooding (winter and summer) is discouraged. Restoration of a cleaner surface water supply is required to safeguard the site and before a more natural or more typical hydrological regime can be restored. The 1981 NCC survey identifies 10ha of semi-improved or improved grassland within the SAC/SSSI.	
Structure and function (including its typical species)	**Hydrology**	At a site, unit and/or catchment level (as necessary), restore natural hydrological processes to provide the conditions necessary to sustain the H6510 feature within the site	Defining and maintaining the appropriate hydrological regime is a key step in moving towards achieving the conservation objectives for this site and sustaining this feature.. Changes in source, depth, duration, frequency, magnitude and timing of water supply can have significant implications for the assemblage of characteristic plants and animals present. This target is generic and further site-specific investigations may be required to fully inform conservation measures and/or the likelihood of impacts. For this feature surface flooding regime and sub-surface irrigation via gravel aquifers can be affected by land use change, water abstraction, flood alleviation, development and mineral extraction in the catchment. At the moment surface water from the catchment is enriched by diffuse pollution sourced mainly from agriculture. Restoration of a cleaner surface water supply is required before a more natural or more typical hydrological regime can be restored. Spring-lines are thought to arise along the gentle slope to higher ground along the eastern edge of the SAC/SSSI. The degree to which these are also impacted by eutrophication is not known. More work is needed, to better understand the eco-hydrology of the site; the interactions of surface and groundwater; the trophic status and distribution of the SAC/SSSI water supplies; and what opportunities there might be for restoration of more natural processes.	
	Functional connectivity with wider landscape	Restore the overall extent, quality and function of any supporting features within the local landscape which provide a critical functional connection	This recognises the potential need at this site to maintain or restore the connectivity of the site to its wider landscape in order to meet the conservation objectives. These connections may take the form of landscape features, such as habitat patches, hedges, watercourses and verges, outside of the designated site boundary which are either important for the migration, dispersal and genetic exchange of those typical species closely associated with qualifying Annex I habitat features of the site. These features may also be important to the operation of the supporting ecological processes on which the designated site and its features may rely. In most cases increasing actual and functional landscape-scale	

Attributes		Targets	Supporting and Explanatory Notes	Sources of site-based evidence (where available)
		with the H6510 feature of the site	connectivity would be beneficial. Where there is a lack of detailed knowledge of the connectivity requirements of the qualifying feature, Natural England will advise as to whether these are applicable on a case by case basis. Apart from a network of linear habitat features (such as hedges and canals), Mottey Meadows SAC/SSSI is relatively isolated and somewhat marooned within a landscape of intensive dairy and arable farmland. Otherwise the nearest fen, mire and wet grassland habitat is the tiny one hectare of M24 at Allimore Green SSSI, three miles to the north. Five miles to the north bigger areas of mire and fen can be found at Aqualate and Doley Common SSSI. This fragmentation might account for the disappearance of breeding snipe from lowland Staffordshire (including from Mottey Meadows SSSI).	
Structure and function (including its typical species)	**Adaptation and resilience**	Restore the feature's ability, and that of its supporting processes, to adapt or evolve to wider environmental change, either within or external to the site	This recognises the increasing likelihood of natural habitat features to absorb or adapt to wider environmental changes. Resilience may be described as the ability of an ecological system to cope with, and adapt to environmental stress and change whilst retaining the same basic structure and ways of functioning. Such environmental changes may include changes in sea levels, precipitation and temperature for example, which are likely to affect the extent, distribution, composition and functioning of a feature within a site. The vulnerability and response of features to such changes will vary. Using best available information, any necessary or likely adaptation or adjustment by the feature and its management in response to actual or expected climatic change should be allowed for, as far as practicable, in order to ensure the feature's long-term viability. The overall vulnerability of this SAC to climate change has been assessed by Natural England (2015) as being high, taking into account the sensitivity, fragmentation, topography and management of its habitats. This means that this site is considered to be the most vulnerable sites overall and are likely to require the most adaptation action, most urgently. A site based assessment should be carried out as a priority. This means that action to address specific issues is likely, such as reducing habitat fragmentation, creating more habitat to buffer the site or expand the habitat into more varied landscapes and addressing particular management and condition issues. Individual species may be more or less vulnerable than their habitat itself. In many cases, change will be inevitable so appropriate monitoring would be advisable.	NATURAL ENGLAND, 2015. Climate Change Theme Plan and supporting National Biodiversity Climate Change Vulnerability assessments ('NBCCVAs') for SACs and SPAs in England [Available at http://publications.naturalengland.org.uk/publication/4954594591375360].
Supporting processes (on which the feature relies)	**Air quality**	Restore as necessary the concentrations and deposition of air pollutants to within the site-relevant Critical Load or Level	This habitat type is considered sensitive to changes in air quality. Exceedance of these critical values for air pollutants may modify the chemical status of its substrate, accelerating or damaging plant growth, altering its vegetation structure and composition and causing the loss of sensitive typical species associated with it. Critical Loads and Levels are recognised thresholds below which such harmful effects on sensitive UK habitats will not occur to a significant level, according to current levels of	More information about site-relevant Critical Loads and Levels for this SAC is available by using the 'search by site' tool on the Air

Attributes		Targets	Supporting and Explanatory Notes	Sources of site-based evidence (where available)
		values given for this feature of the site on the Air Pollution Information System (www.apis.ac.uk).	scientific understanding. There are critical levels for ammonia (NH3), oxides of nitrogen (NOx) and sulphur dioxide (SO2), and critical loads for nutrient nitrogen deposition and acid deposition. There are currently no critical loads or levels for other pollutants such as Halogens, Heavy Metals, POPs, VOCs or Dusts. These should be considered as appropriate on a case-by-case basis. Ground level ozone is regionally important as a toxic air pollutant but flux-based critical levels for the protection of semi-natural habitats are still under development. It is recognised that achieving this target may be subject to the development, availability and effectiveness of abatement technology and measures to tackle diffuse air pollution, within realistic timescales. According to the APIS website, the SAC is currently exceeded the Critical Load/Level thresholds for ammonia and nitrogen. The website measures Mottey against the neutral grassland threshold. It should be noted that MG4 is wet grassland with affinities and eco-hydrological characteristics of fen and mire. At Mottey this is evident in the occurrence of vegetation that has affinities to M22 and M24. Rich fen is given a threshold of 15-30kg N/ha/yr, which would suggest the risk for exceedance is higher than suggested by treating the SAC as neutral grassland.	Pollution Information System (www.apis.ac.uk).
Supporting processes (on which the feature relies)	**Conservation measures**	Maintain the management measures (either within and/or outside the site boundary as appropriate) which are necessary to maintain the structure, functions and supporting processes associated with the H6510 feature	Active and ongoing conservation management is needed to protect, maintain or restore this feature at this site. Further details about the necessary conservation measures for this site can be provided by contacting Natural England. This information will typically be found within, where applicable, supporting documents such as Natura 2000 Site Improvement Plan, Site Management Strategies or Plans, the Views about Management Statement for the underpinning SSSI and/or management agreements. Conservation measures for this feature will typically include grazing, cutting, scrub management, weed control, recreation/visitor management. Also covered is maintenance of surface drainage features such as grips, gutters and foot drains. Retention of suitable land use infrastructure/patterns to enable site management e.g. pastoral livestock farming The site has been consistently managed by a regime of hay-making and aftermath grazing with cattle. Recently sheep have been used to graze the aftermath (instead of, or as well of, cattle). The effectiveness of sheep-grazing grazing compared to cattle-grazing might need monitoring.	NATURAL ENGLAND, 2014. Site Improvement Plan: Mottey Meadows (SIP143) ENGLISH NATURE, 2005. Views about the management of Mottey Meadows SSSI; https://designatedsites.naturalengland.org.uk/PDFsForWeb/VAM/1002612.pdf
Structure and function (including	**Key structural, influential**	Maintain the abundance of the species listed to	Some plant or animal species (or related groups of such species) make a particularly important contribution to the necessary structure, function and/or quality of an Annex I habitat feature at a particular site.	

Attributes		Targets	Supporting and Explanatory Notes	Sources of site-based evidence (where available)
its typical species)	**and distinctive species**	enable each of them to be a viable component of the H6510 feature; Constant and preferential species of the MG4 vegetation type, including great burnet *Sanguisorba officinalis* and meadow foxtail *Alopecurus pratensis* Populations of Snake's-head fritillary *Fritillaria mealegaris,* saw-wort *Serratula tinctoria* and meadow thistle *Cirsium dissectum*	These species will include; • *Structural* species which form a key part of the Annex I habitat's structure or help to define that habitat on a particular SAC (see also the attribute for 'vegetation community composition'). • *Influential* species which are likely to have a key role affecting the structure and function of the habitat (such as bioturbators (mixers of soil/sediment), grazers, surface borers, predators or other species with a significant functional role linked to the habitat) • *Site-distinctive* species which are considered to be a particularly special and distinguishing component of an Annex I habitat on a particular SAC. There may be natural fluctuations in the frequency and cover of each of these species. The relative contribution made by them to the overall ecological integrity of a site may vary, and Natural England will provide bespoke advice on this as necessary. The list of species given here for this Annex I habitat feature at this SAC is not necessarily exhaustive. The list may evolve, and species may be added or deleted, as new information about this site becomes available.	
Version Control Advice last updated: n/a				
Variations from national feature-framework of integrity-guidance: n/a				

Mottey Meadows SAC Vegetation Map (from English Nature, 2005)