

Habitat Action Plan: Lowland Meadow



1. Introduction

Lowland meadows include most forms of unimproved neutral grassland across the enclosed lowland landscapes of the UK.

It is estimated that by 1984 in lowland England and Wales, semi-natural grassland had declined by 97% over the previous 50 years to approximately 0.2million ha. Losses have continued during the 1980s and 1990s, and have been recorded at 2 -10% per annum in some parts of England. This loss is almost entirely due to changing agricultural practice.

Flowering plants of lowland meadows include fritillary, dyer`s greenweed, green-winged orchid, greater butterfly orchid, pepper saxifrage and wood bitter vetch. Lowland meadows and pastures are also important habitats for skylark and a number of other farmland birds.

The overall outcome of habitat change is that the main community (Cynosurus Centaurea grassland) of unimproved hay meadows and pastures are now highly localised, fragmented and in small stands.



Wimbleball Lake

2. Current status

2.1 National

Recent estimates for cover in England and Wales indicate that there is 5000-10,000 ha of this community in total. Agricultural intensification has led to the extensive development of nutrient-demanding, productive *Lolium perenne* grasslands. These are managed for grazing and also silage production which has widely replaced traditional hay-making. Where fertiliser input is relaxed or in swards which have only been partially

improved, *Lolium - Cynosurus* grassland is common; in many respects this is intermediate between improved and unimproved lowland neutral grasslands but has few uncommon species and is generally of low botanical value. Particularly important areas include Worcestershire, Somerset, Dorset and Wiltshire.

2.2 Local

In terms of the NVC the only lowland meadows found in Cornwall are MG5 and probably MG8. Outside the farmed landscape such grasslands may be found on recreational sites, churchyards, roadside verges and other localities, but they are very rare in Cornwall. The exact extent and distribution of remaining unimproved lowland grassland in Cornwall is currently unquantified the remaining resource is now localised, fragmented and characterised by small stands.

2.3 SWLT

Sites that host lowland meadow habitat	Designations
Gammaton Reservoirs	County Wildlife Site
Upper & Lower Tamar Lakes	County Wildlife Site
Melbury Reservoir	County Wildlife Site
Wimbleball Lake	Exmoor National Park

3. Legal status

In England, there are approximately 400 SSSIs with *Cynosurus - Centaurea* grassland. Lowland hay meadows are included in Annex 1 of the EC Habitats Directive. Within Cornwall there are a number of SSSIs designated on account of their unimproved neutral grassland communities, including Loggan's Moor, Sylvia's Meadow, and Redlake Meadows and Hogg's Moor. A number of other SSSIs support unimproved neutral grassland communities.

4. Current factors affecting the habitat

The factors currently affecting lowland meadows reduce the quality and decrease the quantity of the habitat; its fragmentation brings increased risk of species extinction in the small remnant areas.

- Agricultural improvement through, drainage, ploughing, re-seeding, fertiliser treatment, slurry application, conversion to arable and a shift from hay-making to silage production.
- Decline in the perceived agricultural value of species-rich pasture and hay in farming regimes.
- Abandonment leading to rank over-growth bracken and scrub encroachment.
- Supplementary stock feeding associated with increased stocking levels, which can lead to eutrophication as well as localised poaching.
- Application of herbicides and other pesticides.
- Atmospheric pollution and climate change, the influence of which is not fully assessed.
- Floristic impoverishment due to heavy grazing pressure and changes in stock species and breeds.

5. SWLT action plan objectives and targets

Objectives

- Obtain quantitative data on the extent of lowland meadow on all known SWLT sites
- Undertake National Vegetation Classification (NVC) surveys of SWLT sites that host lowland meadow and have SSSI and/or SAC status and monitor
- Protect the existing resource
- Promote the agricultural value of lowland meadows
- Promote the cultural and biodiversity benefits of lowland meadows
- Disseminate information of good management practice of lowland meadows
- Halt the degradation of biodiversity value of lowland meadows due to change in farming practises by liaising with partners and land owners to establish agri-environmental schemes

Targets

- Undertake Phase 1 habitat surveys of all known sites that host lowland meadow habitats
- Initiate restoration management of all lowland meadow known sites, especially where sites are LNRs, SSSIs and/or SACs
- Achieve favourable condition, or recovering condition of lowland meadow habitats on all significant sites by 2010, *i.e.* Upper Tamar Lake and Lower Tamar Lakes, Devon and Cornwall; Wimbleball Lake, Somerset.
- Encourage appropriate management regimes intended to achieve favourable condition on all sites outside of SSSI and SAC designations by 2010

Current action

- Lowland Meadow is one of the habitats covered by the Trust's Biodiversity Project
- Habitat at Wimbleball and Tamar Lakes is currently being assessed and management regimes reviewed

6. SWLT action plan

Action	Potential Partners	Target Date
Policy & Legislation		
1. Recognise lowland meadow within agri-environmental schemes.		On-going
2. Ensure that the conservation requirements of lowland meadows are taken into account in the application of agri-environment schemes.		On-going
Site Safeguard & Management		
1. Undertake Phase 1 habitat surveys of all known sites that host lowland meadow habitats.		2010
Advisory		
1. Offer advice and promote best practise on restoration of lowland meadow.		On-going
Future Research & Monitoring		
1. Obtain quantitative data on the extent of lowland meadow condition and assessment, of all known sites and work towards setting targets relevant to national and regional objectives.		2010
2. Undertake National Vegetation Classification (NVC) surveys of SWLT sites that host lowland meadow and have SSSI and/or SAC status and		2010

monitor.		
3. Provide an inventory of lowland meadow and make available through Environmental Records Centres.	SWW, DWT, CWT, SWT	2010
Communications & Publicity		
1. Produce educational material on lowland meadow habitats. Highlight the importance of these habitats through education, the media and general public awareness.	DNPA, DCC, CC, SCC, SWW, ENPA	2010

7. Links with other action plans

- Standing open water
- Pennyroyal
- Skylark
- Linnet
- Tree sparrow
- Bullfinch
- European otter
- Pipistrelle bat

8. Useful links

UK Biodiversity Action Plan for Lowland Meadows:
<http://www.ukbap.org.uk/UKPlans.aspx?ID=10>

Regional, District, National Park and Local BAPs:
http://www.swbiodiversity.org.uk/Home_LBAP.htm

South West Regional Biodiversity Partnership:
<http://www.swbiodiversity.org.uk/index.htm>

Status of Species and Habitat Report for Lowland Meadows:
http://www.ukbap.org.uk/library/Reporting_pdfs/UKListID10_2002.pdf