



Hardwick Dene, Stockton © TVWT



Lowland meadow Habitat Action Plan 2010-2014

Plan Lead Organisation	Wildflower Ark
Plan Coordinator	Helen Herring
Action Group	Rural
Associated Plans	Hedgerows, broad leaved semi-natural woodland
Latest version	January 2010

Description

Lowland meadows, as defined by the UK BAP, are species rich grasslands on neutral soils, usually below 250m in altitude. They are characterised by low nutrient inputs and are usually managed either as hay meadows or grazed as permanent pasture. Most are found in rural farmed landscapes but the definition also encompasses fragmented unimproved species rich grassland in non-agricultural settings such as churchyards and roadside verges.

The National Vegetation Classification (NVC) of plant communities is used to describe grasslands in the UK. Lowland meadows are primarily classified as crested dogs-tail/knapweed grassland, meadow fox-tail/greater burnet floodplain meadow and crested dogs-tail/marsh marigold floodplain pasture.

Unimproved neutral grassland habitat has undergone a dramatic decline in the 20th century, almost entirely due to changing agricultural practice. The UK Biodiversity partnership estimates 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. Recent conservation survey findings in Britain and Northern Ireland reveal that the impact has been pervasive, and an estimated extent of less than 15,000 ha of species-rich neutral grassland surviving today in the UK is given in the Habitat Statement.

In the Tees Valley most examples of unimproved or semi-improved grassland are lowland meadows. This plan does not include the grassland communities on brownfields such as the characteristic "slag grasslands" that have developed on post industrial land. These are covered in the Brownfields habitat Action Plan. Calcareous and coastal grassland and covered in a separate plan and wet grasslands are covered by the Grazing Marsh Habitat Action Plan.

Current factors causing loss and decline

The factors currently affecting lowland meadows are complete loss of habitat and reduction in the habitat, and its fragmentation brings increased risk of species extinctions in the small remnant areas.

- ◆ Loss due to agricultural improvements through ploughing, drainage, re-seeding, and the application of inorganic fertilizers and slurry.
- ◆ Abandonment and lack of management of grasslands leads to a reversion to rank grassland, and eventually to the development of scrub or secondary woodland.
- ◆ Supplementary stock feeding associated with increased stocking levels, which can lead to eutrophication as well as localised poaching.
- ◆ Floristic impoverishment due to heavy grazing pressure and changes in stock species and breeds.
- ◆ A lack of awareness of the value of old meadows and pastures for their complex associations of plants, invertebrates, fungi.

Conservation Status

Lowland Meadows are a UK BAP priority habitat.

Some sites are protected by site designations depending on quality (e.g. NNR, SSSI, Local Wildlife Site)

The Habitat in the Tees Valley

Lowland meadows are still found scattered through the Tees Valley. Most of these occur as small remnants on slopes. In East Cleveland they are located on steep sided beck valleys and associated with ancient woodlands and species rich hedges as part of a connected landscape of semi-natural habitats. The meadows are predominantly permanent pasture, rather than hay meadows and many contain species of national interest such as pepper-saxifrage (*Silaum silaus*) and dyer's greenweed (*Genista tinctoria*) and species of regional interest such as saw-wort (*Serratula tinctoria*).

Current Activity in the Tees Valley

In 2008/9 the Wildflower Ark, assisted by local volunteers, conducted the "Hunt for Lost Meadows" project, which was funded by the Lottery Heritage Lottery Fund. The project which located flower-rich meadows in eastern Cleveland has provided a valuable inventory of lowland meadows, their location, character, extent and condition. Of the 69 sites visited, 39 were found to contain species rich grassland. Most of these were tiny fragments on steep-sided slopes where it had not been possible to either plough or to spray with fertilizer. Due to their national rarity, the Wildflower Ark is working with other members of the Tees Valley Biodiversity Partnership to develop practical measures to ensure the survival of these special sites. Many of the meadows are under threat from the encroachment of scrub, such as gorse and bramble. The Tees Valley Wildlife Trust has now started a programme of scrub removal work on some key sites.

The Tees Valley Biodiversity Partnership implemented a two year urban meadows project (2006-8) with funds from the SITA Trust's Enriching Nature Fund. This restored the management on eleven meadows in urban

Further Information

Crofts A. & Jefferson R.G. (1999). The lowland grassland management handbook- second edition. English Nature & the Wildlife Trusts. Peterborough.

Hopkins, J.J. (1990). British meadows and pastures. British Wildlife, 1, 202-13.

Jefferson, R.G. & Robertson, H.J. (1996). Lowland grassland - wildlife value and conservation status. English Nature Research Report No.169, Peterborough.

Vision Statement

To ensure the survival of remaining examples of species rich lowland meadow and work to restore meadow sites currently in unfavourable condition through appropriate management.

Targets

- LM.T1 Produce an inventory of known extent and character of lowland meadows in each of the four unitary authorities in the Tees Valley.
- LM.T2 Increase knowledge on location, characteristics and condition of lowland meadows across Tees Valley.
Goal: Carry out a full grassland survey (with NVC classification) on 10 sites per year.
- LM.T3 Increase the area of lowland meadow in favourable management.
Goal: Ensure that 50 ha hectares of lowland meadow are in favourable management.
- LM T4 Increase the area of herb-rich grassland of wildlife value across the Lower Tees Valley
Goal: Create 10 Ha of herb-rich grassland of wildlife value

Actions

Code	Action	Organisational lead	Action contact	Partners	End date
LM.A1	Designate lowland meadows as Local Wildlife Sites.	Tees Valley Wildlife Trust	Jeremy Garside	Hartlepool Borough Council, Middlesbrough Council, Stockton Borough Council, Redcar & Cleveland Borough Council	2010
LM.A2	Restore management of 3 lowland meadow sites	Redcar & Cleveland Council	David Spencer	Wildflower Ark	2010
LM.A3	Develop, in partnership with the Grassland Trust, an agri-environment consortium with ten landowners for lowland meadow management.	Wildflower Ark	Helen Herring	Grassland Trust Natural England	2011
LM.A4	Create and promote a directory of demonstration sites of best practice in grassland management.	Tees Valley Biodiversity Partnership	Sue Antrobus	Wildflower Ark Natural England	2010
LM.A5	Work with the North East Grazing Officer on the development, funding and implementation of a new Flexi-graze system in the Tees Valley.	Tees Valley Biodiversity Partnership	Sue Antrobus	Northumberland Wildlife Trust, Wildflower Ark	2011
LM.A6	Produce a leaflet of a self-guided walk informing on public access for observation and enjoyment of lowland meadows. 2009	Wildflower Ark	Helen Herring		2011
LM.A7	Produce additional published material detailing public access to lowland meadow sites.	Wildflower Ark	Helen Herring	Tees Valley Wildlife Trust	2011
LM A8	Create 10 Ha of herb-rich grassland from arable or improved grassland using locally sourced seed and maintaining local character. Write and implement a management plan to allow the grassland to develop into lowland meadow.	Stockton Council	David Askey	Wildflower Ark	2012