



LOWLAND NEUTRAL GRASSLAND

1. INTRODUCTION

Unimproved neutral grassland is associated with neutral clays and alluvial soils, which has not been subject to alteration through the use of fertilizers, slurry and herbicides. Characteristically, it is botanically species-rich and supports many birds and insects.

The grasslands are managed either as hay meadows or pastures. Intensive agricultural practices are the main threat to this habitat. It is estimated that only 12000ha of this habitat left in England and Wales and the sub-region is likely to have lost in excess of 95% of this habitat resource over the past 100 years.



Lady's Bedstraw © Natural England

This plan includes most forms of unimproved neutral grassland across the enclosed lowland landscapes; also semi-improved grasslands i.e. those that have had some improvement, but still retain a suite of old grassland species (a frequent situation in our area). In terms of National Vegetation Classification plant communities, local examples comprise mainly *crested dog's-tail – common knapweed* (MG 5) grassland, *meadow foxtail – greater burnet* (MG 4) floodplain meadow and *crested dog's-tail – marsh-marigold* (MG 8) flood-pasture.

In non-agricultural settings, neutral grasslands are less frequent, but additional examples may be found in old industrial sites, quarries and spoilheaps, urban green-space, churchyards, roadside verges and a variety of other localities.

Important plants of this habitat category in the sub-region include dyer's greenweed, green-winged orchid, pepper saxifrage, saw-wort and adder's-tongue. Lowland meadows and pastures are important habitats for a number of farmland birds including skylark, meadow pipit and linnet. Characteristic butterflies include common blue, orange tip and meadow brown. Many sorts of bees, flies, wasps, beetles, bugs and moths need neutral grassland, though the fauna will vary according to the management and history of a site and whether it lies close to other habitats such as wetlands or woodlands.

Flood plain meadow and flood pasture habitats are particularly important for the number of waders such as snipe, lapwing and curlew they support. These habitats are much scarcer in Warwickshire, Coventry and Solihull, and are mainly confined to the valleys of the rivers Avon, Anker, Blythe and Tame.

2.	OUR OBJECTIVES & TARGETS	Target
A.	To maintain the current extent of all neutral grassland above 0.5ha.	2002 - 2015
B.	To improve the condition of all neutral grassland above 0.5ha, that is currently in unfavourable condition to favourable or improving.	2002 - 2015
C.	To increase the extent of the habitat by creating an additional 100ha of neutral grassland, including 4 sites of at least 5ha, preferably adjacent to existing grassland .	by 2010
D.	To promote good management practice and to share knowledge.	2002-2015
E.	To enhance public appreciation of neutral grassland.	2002-2015
F.	To update the Habitat Biodiversity Audit with all known neutral grassland sites.	2002-2015

ASSOCIATED HABITAT PLANS

- Lowland Calcareous Grassland
- Quarries & Gravel Pits
- Roadside Verges
- Disused Industrial & Railway Land

ASSOCIATED SPECIES PLANS

- Snipe
- Lapwing
- Rare Bumblebees
- Black Poplar
- Bloody-Nosed Beetle

3. NATIONAL BAP OBJECTIVES AND TARGETS

- *Arrest the depletion of unimproved lowland meadow throughout the UK.*
- *Within SSSIs and ASSIs, initiate rehabilitation management for all significant stands of unimproved lowland meadow in unfavourable condition by 2005.*
- *Wherever biologically feasible achieve favourable status of all significant stands of unimproved lowland meadow within SSSIs and ASSIs by 2010.*
- *For stands outside SSSIs and ASSIs, secure favourable condition over 30% of the resource by 2005.*
- *For stands outside SSSIs and ASSIs, wherever biologically feasible, secure favourable condition over 100% of the resource by 2015.*
- *Attempt to re-establish 500ha of lowland meadow of wildlife value at carefully targeted sites by 2010. **Revised***

4. CURRENT STATUS

Although once widespread in lowland Britain, the traditional hay meadow has been the grassland community most affected by modern farming practices. It is estimated that by 1984 such semi-natural grassland had declined in the UK by 97% over the previous 50 years to less than 200000ha, mainly through the ploughing, re-seeding and fertilising of old grasslands. Losses have continued during the 1980s and 1990s, at a national rate of between 2–10% per annum. Unimproved seasonally-flooded grasslands are less widely distributed nationally and have lower overall cover but there are still a few quite large stands. MG4 flood-meadow has a total cover of <1500ha and is found in scattered sites from the Thames valley through the Midlands and Welsh borders to the Ouse catchment in Yorkshire. Flood-pasture (MG8) is also now scarce and localised, with probably <1000ha cover in England and Wales. The Habitat Statement in the UK Steering Group Report on Biodiversity estimates that less than 15000ha of species-rich neutral grassland survives in the UK today. The Habitat Biodiversity Audit Project suggests that about 185ha of unimproved/good semi-improved neutral grassland currently exists in Warwickshire, Coventry and Solihull. These meadows are usually small (1-3ha) and occur singly, or in small groups, where they may be separated by established hedgerows, in an otherwise intensively farmed landscape. Most are traditionally cut for hay in late June or early July with the aftermath grazed in the autumn.

The dryer MG5 hay meadow community is found scattered across the Natural Areas of Warwickshire, but there are particular concentrations in the Arden landscape of the Midlands Plateau Natural area. In sub-urban areas and on the urban fringes, more farms have remained outside mainstream agriculture and have become hobby farms or gone into horse paddocks, so the grassland has survived. The meadows are scarce, whereas at the end of the Second World War they were ubiquitous in the Midlands. The largest known concentration is near Birmingham airport, although the area at Rugby Radio Mast may be bigger this site needs further investigation.

The MG4 and MG8 flood meadow and pasture communities are very much scarcer, having been lost, mainly to agricultural improvement or mineral extraction. They are found on alluvial soils in river valleys of the Blythe, Anker and Avon. The largest concentrations are on the Sherbourne Brook near Warwick, on the Blythe in Solihull and on the Anker near Polesworth.

Table 1. Natural England estimates of Neutral Grassland on SSSIs in Warwickshire, Coventry & Solihull.

SSSI	Area(ha)	Grassland types	District	Natural area
Bickenhill Meadows (4 fields)	5.53	Flood meadow & Hay meadow	Solihull	Midlands Plateau
Birches Barn Meadows (2 fields)	10.74	Flood meadow	North Warwickshire	Trent Valley & Rises
Brook Meadow	1.73	Flood meadow	Warwick	Midlands Plateau
Calcutt Locks Meadows (3 fields)	4.4	Hay meadow	Stratford	Midland Clay Pastures
Draycote Meadows (2 fields)	5.9	Hay meadow	Rugby	Midland Clay Pastures
Drybank Meadow	5.33	Hay meadow	Stratford	Cotswolds
Lobbington Hall Farm Meadow	4.68	Hay meadow	Stratford	Midland Clay Pastures
Loxley Church Meadow	3.1	Hay meadow	Stratford	Midland Clay Pastures
Merriman's Hill Farm Meadows (2 fields)	2.9	Hay meadow	Stratford	Midlands Plateau
Midsummer Meadow	2.9	Hay meadow	Stratford	Midland Clay Pastures
Monkspath Meadow	1.2	Hay meadow	Solihull	Midlands Plateau
Oak Tree Farm Meadows (2 fields)	3.02	Flood meadow, Hay meadow	Stratford/Warwick	Midlands Plateau
Racecourse Meadow	1.65	Flood meadow	Stratford	Severn & Avon Vales
Railway Meadow, Langley	1.87	Flood meadow	Stratford	Midlands Plateau
Sherbourne Meadows (8 fields)	21.53	Flood meadow, Hay meadow	Stratford	Midlands Plateau
Ullenhall Meadows (2 fields)	2.7	Hay meadow	Stratford	Midlands Plateau
Welford Field	2.13	Flood meadow	Stratford	Severn & Avon Vales
Total area	81.31			

4.1 Legal and Policy Status

There are 22 meadow SSSIs, with a total of 81ha of grassland. These are often single fields or in twos and threes, or occasionally larger groups as at Sherbourne. Work within the LBAP area is currently underway to classify other neutral grasslands as Sites of Importance for Nature Conservation (SINCs) and has already been achieved in Coventry and much of Solihull.

Outside the SSSI series, the neutral grassland picture of scattered isolated small fields is the same, with three noteworthy exceptions. In Solihull, there are two large concentrations, one on the River Blythe near Dorridge, and the other near Birmingham Airport, and in Warwickshire there is a large area near Bishop's Itchington. Neutral grasslands have been identified as a priority habitat for sustainable management in the Midlands Plateau, Midland Clay Pastures, Severn & Avon Vales, Trent Valley & Rises Natural Areas.

4.2 Current Factors Affecting The Habitat

In the past neutral grassland was lost across England primarily to agriculture, and to a lesser extent development. The factors currently affecting neutral grasslands, as detailed below, reduce the quality and decrease the quantity of the habitat, and its fragmentation brings increased risk of species extinction in small remnant areas. Research (ADAS 1992) in Worcestershire indicated that people aged over 60 owned 46.5% of the grassland type. Experience shows that when land changes hands, it is under greatest threat from loss or damage by one or more of the factors listed below. The main factors affecting the habitat in our area at present are:

- **Agricultural improvement.** Agricultural operations such as intensive fertilizer application, herbicide application and inappropriate grazing management.
- **Changes in management from cutting to year round grazing** (often by ponies or horses) resulting in floristic change, over grazing and poaching. As a consequence sites may become invaded by weed species such as ragwort, dock and thistles.
- **Abandonment and neglect** leading to a reversion to rank grassland (e.g. with over-dominant tufted hair-grass) and scrub.
- **Built development and road construction** leading to isolation and the removal of sites from agricultural management.
- **Small, isolated character of sites over a large number of small holdings** in the county make sites ineligible for current agri-environment incentive schemes which are designed to cover larger farm areas with combined objectives of wildlife, history and landscape.
- **Lack of recognition of the MG5 type grassland in the EC Habitats Directive.**
- **Decline in the agricultural value** of species-rich pasture and hay in farming regimes, as perceived by the farmer.

5. CURRENT LOCAL ACTION

The existing management of most SSSIs is known; however, information on SINCs is less complete.

- The principal action on the various SSSIs is currently the scrub control programmes supported by English Nature.
- The Natural England Grazing Animals Project (GAP) is to be extended into the Midlands, including Warwickshire, to support grazing for conservation. This brings together graziers in search of keep and land owners needing sites grazed.
- The Environmental Stewardship Scheme targets old meadows and pastures, including neutral grassland as part of larger farm schemes meeting the combined objectives of wildlife, history and landscape.
- In the past some road verges have been identified to the County Council highways division for special treatment.
- The River Leam Project has a target to try to appropriately manage, enhance and recreate damp unimproved meadows in the floodplain of the rivers Leam and Itchen. A similar project is starting on the rivers Blythe, Anker and Tame in 2002.
- Recent species surveying has included work by HBA and Wildlife Sites Projects, staff of Warwickshire and Coventry Museums and amateur recorders such as the Flora 2000 volunteers, Butterfly Conservation etc .

6. PROPOSED LOCAL ACTIONS (some dates amended – Core Steering Group – Feb 2008)

ACTION	Lead	Partners	By	Meets objective
Policy & Legislation				
PL1. Ensure that all relevant habitat policy is included in Local Planning Documents (see ODPM Planning Policy Statement PPS9)	LBAPSG	LAs	2002-2015	A
PL2. Ensure that any site meeting the relevant criteria is considered for designation as an SSSI.	NE	WWT WM	2002-2015	A, B

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PL3. Review and select all qualifying neutral grassland sites >0.25ha as SINCs and enter onto habitat database and Habitat Biodiversity Audit.	WSP	NE LAs	2010	A, F
Site / Species Safeguard & Management				
SM1. Actively promote the appropriate management of all neutral grassland sites over 0.25ha. to maintain condition or improve to good condition.	WWT	NE WBRC LOs	2002- 2015	B
SM2. Continue neutral grassland restoration at the SSSIs.	NE	LOs	2005	B
SM3. Identify sites for potential expansion of neutral grassland .	NE	WWT WM FWAG	2004- 2015	B, C
SM4. Identify sites for restoration of water meadows.	NE	WWT WM FWAG	2004- 2015	B, C
SM5. Establish neutral grassland restoration on 25ha by 2005 and further 75ha by 2010, including at least one flood meadow or flood pasture.	NE	WWT WM WCC	2005 – 2010	C
SM6. Actively recommend measures to increase the extent of connectivity and maintain options to expand area of habitat.	LBAPSG	WCC LAs WWT NE	2008- 2015	C
Advisory				
A1. Inform landowners of their neutral grassland resource and provide advice on management, sources of machinery etc. within 6 months of SINC designation.	WSP	NE FWAG WWT	2005- 2015	B, D
A2. Provide Best Practice Guidelines to appropriate landowners.	NE	FWAG WWT	2004- 2015	B, D
Research & Monitoring				
RM1. Define area of current neutral grassland and update Habitat Biodiversity audit.	HBA	NE WWT	2003- 2015	F
RM2. Re-assess current condition of all neutral grassland.	HBA	NE WWT	2005- 2015	A, B
RM3. Continue monitoring key species of plants and animals.	WM	WWT NE	2002- 2015	A

Communication, Education & Publicity				
CP1. Increase public awareness of the importance of, and threats to, neutral grasslands.	WWT	NE FWAG	2004- 2015	E
CP2. Organise and deliver neutral grassland management training days to Neutral grassland owners in order to illustrate best management techniques. Produce associated information	FWAG	WWT LOs	2003- 2015	D

Abbreviations:– Natural England, FWAG – Farming & Wildlife Advisory Group, HBA – Habitat Biodiversity Audit, LA – Local Authority, LBAPSG – Local Biodiversity Action Plan Steering Group, LO – Landowner, WCC – Warwickshire County Council, IWBRC – Warwickshire Biological /record Centre, WM – Warwickshire Museum, WSP – Wildlife Sites Project, WWT – Warwickshire Wildlife Trust,

7. REFERENCES

8. FURTHER INFORMATION (see separate **Links** web page for links to web sites)

UK Lowland Meadows Biodiversity Action Plan no.10:

Buglife (2004) Information on the habitat-management requirements of key invertebrates . CD-Rom £34.99 from Beverley Doyle by email at:
beverley.doyle@buglife.org.uk

Flora Locale (2005) '*Bringing back the Meadows*' series of free advisory leaflets .
Tel. 01488 680458. Email: info@floralocale.org

Natural England (2005) *The Importance of Livestock Grazing for Wildlife Conservation*. Leaflet from 01733 455100 or email:
enquiries@naturalengland.org.uk. Also see www.grazinganimalsproject.org.uk

9. CONTACT

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