

LOWLAND DERBYSHIRE
LOCAL BIODIVERSITY ACTION PLAN

Final Draft
FLOODPLAIN GRAZING MARSH
HABITAT ACTION PLAN
2005 - 2010



Picture courtesy of the Landscape Character of Derbyshire

Prepared by the Lowland Derbyshire Wetland Action Group.



Final Draft August 2005.

FLOODPLAIN GRAZING MARSH HABITAT ACTION PLAN

TREND IN LOWLAND DERBYSHIRE: The amount of floodplain grazing marsh in lowland Derbyshire has declined in recent years due to development and mineral extraction. The quality of the remaining grassland has declined due to agricultural improvement or neglect of management.

ESTIMATED EXTENT IN LOWLAND DERBYSHIRE: The exact amount of floodplain grazing marsh in Lowland Derbyshire is unknown. An estimate of 549ha is provided by English Nature's lowland wet grassland inventory¹ but that only includes sites over 10ha in extent.

NATIONAL BAP HABITATS: Coastal and floodplain grazing marsh.

ASSOCIATED NATIONAL BAP PRIORITY SPECIES:

Species which occur in Derbyshire: Otter, great crested newt, water vole, bittern (not breeding) and reed bunting.

ASSOCIATED LOWLAND DERBYSHIRE BAP AUDITS: None to date.

SPECIES FOR WHICH FLOODPLAIN GRAZING MARSH IN LOWLAND DERBYSHIRE IS A KEY HABITAT: See Appendix 1 of the document 'Wetland habitats in Lowland Derbyshire'

A vision for the future of floodplain grazing marsh in Lowland Derbyshire

A landscape where rivers and streams are able to flood over their natural floodplain, unhindered by unnecessary manmade features. The grazing marsh is grazed by appropriate animals and

¹ Dargie, T.C. (1993) *The Distribution of lowland wet grassland in England*. English Nature Research Report 149.

1. INTRODUCTION

Background information on floodplain grazing marsh and its distribution in Lowland Derbyshire can be found in the document ‘Wetland habitats in Lowland Derbyshire’.

2. FACTORS WHICH HAVE AN ADVERSE IMPACT ON FLOODPLAIN GRAZING MARSH.

An impact ✓ *A significant impact* ✓ ✓

	Historic	Current
Land Management		
Land drainage and flood defence works leading to loss of habitat and a disruption to the hydrological continuity.	✓✓	✓
Agricultural intensification, including conversion to arable and grassland improvement through fertilizer application.	✓✓	✓
Overgrazing cattle and sheep, leading to increased disturbance to soil structure and disturbance to breeding birds.	✓✓	✓✓
Lack of management and undergrazing leading to succession to wet woodland	✓	✓✓
Inappropriate ditch management		✓✓
Pollution, Climate Change		
Water pollution, diffuse or point specific. <ul style="list-style-type: none"> • Organic pollution as a result of agriculture (e.g. silage effluent, slurry, dairy washings) leading to eutrophication affecting flora and fauna. • Toxic pollution (e.g. pesticides, sheep dip or metals in mine water) which may poison flora and fauna directly. • Sewage effluent from private discharges, sewage works and sewer overflows at times of storm water flow from storm drains. • Industrial effluent. • Physical pollution such as silt, the result of soil erosion, can smother invertebrate and fish habitat or reduce plant growth. 	<ul style="list-style-type: none"> ✓✓ ✓✓ ✓✓ ✓✓ ✓ 	<ul style="list-style-type: none"> ✓✓ ✓ ✓✓ ✓ ✓
Climate change, leading to increased instances of drought and severe flooding.		✓
Invasive species		
Increase in non-native invasive species such as Himalayan balsam, giant hogweed, Japanese knotweed, signal crayfish, and others.		✓
Others		
Over abstraction of surface and ground water for water supply or use in industry or agriculture	✓	✓
Floodplain development and recreational pressures.	✓	✓✓
Public misconception. Lack of understanding of the value of floodplain grasslands.	✓	✓
Aggregate extraction	✓✓	✓

3. CURRENT ACTION

3.1 Designated Sites

Mercaston Marsh and Mugginton Bottoms SSSI and Moss Valley Meadows SSSI contain a range of habitats some of which constitute the generic term wet grassland. In addition there is wet grassland within Hilton Gravel Pits SSSI, a Derbyshire Wildlife Trust reserve, Ogston Reservoir SSSI, Hollinhill and Markland Grips SSSI

In addition a number of Wildlife Sites support floodplain grazing marsh. Wildlife Sites are afforded a degree of protection through planning policies set out in Regional and Local Plans.

There are also a number of Local Nature Reserves (LNRs) which have small areas of floodplain grazing marsh Pewit Carr, Brearley Park LNR, Elvaston Castle LNR, Trowell Marsh LNR and Red River LNR.

3.2 Current Initiatives

- The Environment Agency (EA) consents activities that may have an impact on the water environment. These include;
 - Abstraction from surface and ground water
 - Discharge onto land and into water
 - Fish introduction and removal
 - Herbicide use near water
 - Waste management and transfer
 - Works affecting watercourses (which includes bank reinforcement, diversion, and loss of floodplain, bridge or culvert construction.)

The EA has a duty under Section 7 of the Environment Act (1995) when carrying out its functions to “Further the Conservation and enhancement of Natural beauty and the conservation of flora, fauna and geological or physiographical features of special interest”. In addition there are internal policies relating to operations such as culverting or gravel removal. The general policy is against culverting and promoting the removal of existing culverts.

- The Wildlife Sites initiative and the Water for Wildlife Project run by Derbyshire Wildlife Trust aim to survey a proportion of floodplain grazing marsh sites each year. Management advice and where possible assistance is provided to Wildlife Site owners.
- The Farming and Wildlife Advisory Group (FWAG) also provide management advice to owners of land.
- Severn Trent Water have recently safeguarded areas of wet grassland around various sites.
- The OnTrent Initiative aims to conserve and enhance the natural and historic environment of the Trent Valley. It is a partnership project involving a wide range public, statutory, voluntary and commercial organisations working along the River Trent between Stoke-On-Trent and the Humber Estuary.
- The River Rother Wildlife Strategy, written in 1994 is an initiative recognising the value of the landscapes and wildlife of the River Rother catchment throughout Bolsover, Chesterfield, Sheffield and parts of Rotherham. The valley has a concentration of small areas of floodplain grazing marsh.
- The Landscape Character of Derbyshire¹ has identified a number of different character types including riverside meadows in Derbyshire. The riverside meadow character type area is shown on Map 1 and covers over 10,000ha. This shows the potential for the creation/restoration of floodplain grazing marsh in Lowland Derbyshire.

3.3 New initiatives

- A number of large mineral restoration schemes which have planning permission and agreed restoration schemes but are yet to be fully implemented include areas of floodplain grazing marsh including Witches Oak Water, Elvaston Pit, and Barrow on Trent.
- EMDA are working with the Environment Agency to naturalise the River Rother and create associated areas of floodplain grazing marsh
- Derbyshire Wildlife Trust is currently negotiating management agreements on two large sites, Willington wetlands and Drakelow Nature Reserve in the Trent Valley both of which have areas of floodplain grazing marsh.
- The new Environmental Stewardship Scheme has payments for managing, restoring and creating floodplain grazing marsh and for managing areas important for waders and wildfowl.
- Recent Local Plan policies encourage the retention of existing wetlands, where they are not covered by the Wildlife Sites system, and their management. They also encourage the creation of additional wetlands.
- The Environment Agency are currently preparing Catchment Abstraction Strategy’s (CAMS) for the area. These which will look at the issues of over abstraction of water courses by agriculture

¹ Derbyshire County Council (2003) *The Landscape Character of Derbyshire*. Derbyshire County Council

and industry and will provide a consistent and structured approach to local water resource management.

- The Environment Agency are currently preparing a Catchment Flood Management Strategy (CFMS) for the River Dove. This will look at the possible options for defending those communities where flood defences are currently inadequate.

3.4 Land management by LBAP partners

- **Derbyshire Wildlife Trust** have a number of existing reserves which have areas of floodplain grazing marsh including Carr Vale Flash, Carvers Rocks, Erewash Meadows, Hilton Gravel Pits, Derwentside, North Wingfield, Risley Glebe, Wyver Lane and Golden Brook Storage Lagoon.
- **Derbyshire County Council** has a number of countryside sites with areas of floodplain grazing marsh including Pewit Carr LNR, Peter Fidler Reserve, and Elvaston Castle LNR
- **Chesterfield Borough Council** own a number of sites with floodplain grazing marsh interest including Poolsbrook Country Park, Mastin Moor Flash and Brearley Wetland LNR
- **Erewash Borough Council** own Trowell Marsh LNR which has a floodplain grazing marsh interest
- **Amber Valley Borough Council** own Red River LNR which has a floodplain grazing marsh interest.
- **Derby City Council** own a number of countryside sites with floodplain grazing marsh including Markeaton Park, Nutwood and Darley Tip, The Sanctuary at Pride Park, Darley Park.
- **Severn Trent Water** have areas of floodplain grazing marsh associated with Ogston Reservoir, Carsington Water, Staunton Harold, Foremark Reservoirs and a number of small water treatment works adjacent to main rivers.
- **National Trust** own estates at Calke Abbey, Kedleston and Hardwick Hall, small areas of wet grassland, are associated with the lakes and streams within the estates.

3.5 Research

- The RSPB produced a Wet Grassland Guide in 1997

4 ACTION PLAN OBJECTIVES AND TARGETS

4.1 National Targets

- Maintain the existing habitat extent (300,000ha).
- Maintain the quality of existing habitat (300,000ha).
- Rehabilitate 10,000 ha of grazing marsh habitat which has become too dry, or is intensively managed, by the year 2000. This would comprise 5,000 ha already targeted in ESAs, with an additional 5,000 ha.
- Begin creating 2,500 ha of grazing marsh from arable land in targeted areas, in addition to that which will be achieved by existing ESA schemes, with the aim of completing as much as possible by the year 2000.

4.2 Regional targets

Regional Planning Guidance for the East Midlands (RPG8) sets the following targets.

- In addition to any existing management agreements, manage 5,000ha of existing grazing marsh by 2005
- Create 800ha of new grazing marsh.

4.3 National Forest Targets

- Recreate grazing marsh on at least 50ha by 2010 on suitable soils and conditions
- Create/manage 100ha of wet grassland in the National Forest by 2010.

4.4 Lowland Derbyshire

Objective 1

To maintain the current extent and distribution of floodplain grazing marsh resource in the LBAP area and bring it into favourable condition.

Targets

- Ensure that the best examples are protected through the SSSI process.
- To bring 250ha of floodplain grazing marsh into appropriate land management by 2010.

Objective 2

To improve linkages between areas of existing floodplain grazing marsh.

Target

- To create/restore 50ha of floodplain grazing marsh by 2010.

4.5 Main factors likely to affect achievement of targets

Resources and Land management

- A lot of sites in private ownership.
- Lack of or inappropriate management of existing floodplain grazing marsh leading to poaching or succession to woodland.

Lack of knowledge

- We do not necessarily know where the entire resource of floodplain grazing marsh is in the LBAP area.
- We do not know the condition of much of the resource.

Planning and Regulations

- The Civil Aviation Authority have issues concerned with bird strikes associated with East Midlands Airport. This has led to their objection to schemes which create habitats likely to encourage large numbers of birds including floodplain grazing marsh. This has had and will have implications of large restoration schemes within part of the Trent Valley.

Conflicts with other Conservation priorities

- Resolution of conflicts between other habitats of high value.
- Conflicts with archaeological or landscape character priorities.

Practical difficulties

- Floodplain grazing marsh is perceived as being difficult to manage
- Inadequate survey/base data for many areas of floodplain grazing marsh and the species it supports.

Pollution and climate change

- Enrichment or hypertrophication resulting in changing plant communities.
- Climate change

Others.

- Draining of wetlands for agricultural use.
- Abstraction affecting the natural water level of the natural ground water.

5. ACTIONS

LDWAG= Lowland Derbyshire Wetland Action group (All of the below)

EN = English Nature, EA = Environment Agency, DEFRA = Dept. of Food and Rural affairs, DWT = Derbyshire Wildlife Trust, NT = National Trust, LA = Local authorities, FWAG = Farming and Wildlife Advisory Group, ST = Severn Trent Water, BW = British Waterways, GEV = Groundwork Erewash Valley

	ACTIONS	TIME-SCALE	LEAD AGENCY & Partners
	DATA COLLATION		
FGM1	Collate existing information on the distribution of floodplain grazing marsh and produce a register and or GIS layer and disseminate to partners. (objective 1)	By 2006	DWT with assistance for LDWAG
FGM2	Identify gaps in knowledge (objective 1)	By 2006	DWT with assistance from LDWAG
FGM3	Compile a register/GIS layer of appropriate sites suitable for habitat extension (All objectives)	By 2006	DWT/EA
FGM4	Compile a register /GIS layer of appropriate sites suitable for habitat creation (objective 1)	By 2006 then ongoing	DWT/EA
	SURVEY		
FGM5	Survey floodplain grazing marsh Wildlife Sites and SSSIs on a rolling programme of at least once every 10 years (Objective 1)	Ongoing	EN, DWT with assistance from the LDWAG
FGM6	Survey potential floodplain grazing marsh Wildlife Sites and assess them against the WS Selection guidelines and designate if appropriate. (objective 1)	Ongoing	DWT
	EVALUATING THE IMPORTANCE AND CONDITION OF SITES		
FGM7	Agree methodology for defining favourable condition on floodplain grazing marsh (objective 1)	By 2005	LDWAG
	MANAGEMENT AND CREATION ADVICE		
FGM8	Agree management options for floodplain grazing marsh so all organisations are giving and using same advice (All objectives)	By 2006	LDWAG
FGM9	Publish a management booklet / leaflet for owners and managers of floodplain grazing marsh (All objectives)	By 2007	LDWAG
FGM10	Publish a leaflet or booklet on restoration/creation of floodplain grazing marsh for use by land managers, and developers etc. (Objective 2)	By 2007	LDWAG
	RESEARCH		
FGM11	Support national research programmes to investigate management techniques and other research associated with floodplain grazing marsh. Use results of research in work towards achieving LBAP targets (All objectives)	Ongoing	LDWAG
	HABITAT MANAGEMENT		
FGM12	Manage floodplain grazing marsh in LDWAG's estates to achieve favourable conservation status and use opportunities to extend and create new habitat (All objectives)	Ongoing	LDWAG
FGM13	Encourage other land managers to manage habitats to achieve favourable conservation status through promotion of Environmental Stewardship Scheme (All	Ongoing	FWAG and DWT

	objectives)		
FGM14	Encourage other land managers to manage habitats to achieve favourable conservation status through advice and negotiation of management agreements (All objectives)	Ongoing	DWT, EN and FWAG
	EXTENSION OF EXISTING HABITATS		
FGM15	Using the GIS layer showing potential to extend floodplain grazing marsh, take forward some of these sites by talking to owners and agreeing extensions by habitats management and creation. (Objective 2)	Start 2006	LDWAG
	CREATION OF NEW HABITATS		
FGM16	Being opportunistic, such as using the planning system to achieve new areas for floodplain grazing marsh (Objective 2)	Ongoing	LDWAG
	AWARENESS RAISING		
FGM17	Share information on wildlife importance and management needs of key conservation, restoration and re-creation sites, with the landowners/managers, including feedback from surveys. (All objectives)	Ongoing	LDWAG
FGM18	Consider establishment of demonstration site(s) as a focus for discussion of best practice management, restoration, and re-creation. (All objectives)	By 2007	LDWAG
FGM19	Have a public event raising awareness of floodplain grazing marsh eg public walk, demonstration day etc. (All objectives)	By 2010	LDWAG
	PLANNING		
FGM20	Ensure all planning applications and General Development Orders are adequately assessed in relation to their impact on floodplain grazing marsh and that opportunities for enhancement and creation are considered in relevant planning decisions (Objective 2)	Ongoing	LAs/EN/DWT/EA
FGM21	Ensure policy documents, including Local Development Frameworks include appropriate guidelines for the safeguard, enhancement of wetland habitats. (All objectives)	Ongoing	LAs and LDWAG

6. RESOURCES

Additional resources will be required to:

- To aid in the production and maintenance of the proposed registers/GIS layers, by carrying out the background work including site survey and administration (2005 onwards)
- To implement effective monitoring (2005 onwards).
- Provide financial incentives for the conservation, enhancement and restoration of floodplain grazing marsh.
- Enhance management of sites in the ownership of conservation organisations.
- To host a public event
- To carry out the habitat creation and extension work