

Prepared by the Lowland Derbyshire Biodiversity Partnership



This document is part of the Lowland Biodiversity Action Plan 2011-2020

Erewash Valley Area

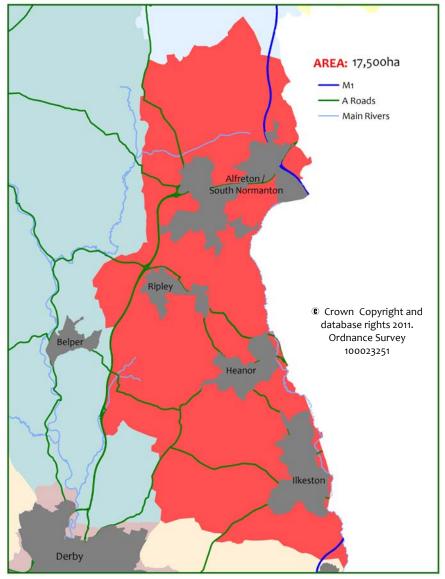
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4. Erewash Valley Area - ACTION PLAN -



Map of Erewash Valley Action Area

For further detail see Maps section

4.1 Area Description:

The Erewash valley and catchment forms the southern part of the North Derbyshire Coalfield having a diversity of habitat types associated with the underlying geology and human influences. The area is predominantly characterised by mixed farming with remnant habitats associated with river valleys, meadows and woodlands. Woodland cover is variable, associated with former estate woodlands, more recent plantations and occasional semi natural woodland including some ancient woodland in the south of the area. The presence of other trees is variable with occasional scattered mature hedgerow trees and veteran trees in areas of historic parkland. There are large urban areas including Heanor and Ilkeston. The Erewash valley supports important wetland

habitats including reedbeds, fen and marsh. There are nine Local Nature Reserves, 3 RIGS, 126 Local Wildlife Sites and more than 20 potential Local Wildlife Sites.

The Erewash Valley area comprises five Derbyshire Landscape Character

- Sandstone Slopes & Heaths
- Coalfield Estatelands
- Lowland Village Farmlands
- Riverside Meadows
- Estate Farmlands

Use the Derbyshire County Council online mapping system to view Landscape Character Types within this Lowland Derbyshire LBAP area. www.derbyshire.gov.uk/maps

This Action Area includes the settlements of Tibshelf, South Normanton, Alfreton, Ripley, Somercotes, Heanor, Kilburn, West Hallam, Ilkeston, Kirk Hallam.

4.2 Vision

A rich diversity of wetland habitats linked by a river channel restored to a more natural condition, and flanked by farmland rich in wildlife.

4.3 The Challenges and Opportunities

This is a landscape heavily influenced by its history of mining, with a number of former opencast sites restored, or in the process of restoration for farmland and/or nature conservation. Former industrial development has left a number of disused large sites, some of which contain open mosaic habitats.

While opencast has the potential to destroy priority habitats, agreed restoration schemes at sites such as Lodge House will deliver significant new areas. The legacy of deep mining includes land subsidence, which has created wetland flashes in some places which are of significant value for wildlife.

The industrial past, urbanisation and the growth of more intensive agriculture have led to the extensive loss and fragmentation of habitats, notably ancient woodland and semi-natural grassland. The valley is important for its hedgerows, although the network is increasingly fragmented and many have declined in ecological interest through intensive management.

The River Erewash itself has been modified in many places as a result of mining activities and urbanisation. However, significant stretches of unmodified river remain and the difficulty in draining the floodplain for agriculture has meant that areas of wetland and pasture have survived, in addition to those created by subsidence. Urbanisation and industrial development mean that these areas are often isolated and declining ecologically through lack of management. Land ownership issues in the valley are often complex.

There is continuing demand for development in the area for industry and housing, and this presents both threats and opportunities. Policies aimed at protecting and enhancing Green Infrastructure are likely to be increasingly significant in delivering biodiversity benefits. Areas of semi-improved habitat associated with previous land restoration schemes present significant opportunities for habitat restoration and creation.

Canals are a significant feature, including the Erewash Canal. The Cromford Canal, which in this area is disused, has been lost along much of its line through industrial activities and development. Many stretches of canal are now Local Wildlife Sites. Proposals to restore the Cromford canal could benefit biodiversity in some areas if done sensitively, but in others could result in negative impacts. It is important that any decision to restore is made on the basis of a detailed impact assessment. The River Erewash forms the boundary with Nottinghamshire for much of its length, meaning that there is a need to work strategically across administrative areas.

The area includes 126 Local Wildlife Sites, 49 of which (39%) are in favourable or recovering condition. The main reasons for unfavourable condition are associated with lack of appropriate management, especially of grassland, and recreational pressure and anti-social behaviour on some urban fringe sites. See section 4.3.3 for a list of key sites in the Erewash Valley Action Area.

4.3.1 Existing initiatives and projects

The **Erewash Valley Trail Project** is a partnership initiative, the primary aim of which is to create a walking and cycling trail. Under the project Derbyshire and Nottinghamshire Wildlife Trusts are delivering biodiversity improvements on a selection of key sites, and contributing to efforts to raise public awareness of the ecological importance of the valley.

The Erewash Valley is a Derbyshire and Nottinghamshire Wildlife Trust Living Landscape Area. The Trusts aim to work together and with others to develop a project aimed at delivering a functioning network of priority habitats.

Groundwork Derby and Derbyshire has built up a good network of community groups, mostly associated with Local Nature Reserves. The **Community Wildspaces** initiative has had a number of external grants to maintain this support.

Greenprint documents, as mini-biodiversity documents, have been produced for the North East Derbyshire and Erewash areas. The Bolsover Greenprint relates to the entire District of Bolsover, although only a part of it lies within this Action Area.

4.3.2 Main landowning bodies

Local authorities own many sites in the area, some of which are designated as Local Nature Reserves, others are associated with trail networks. UK Coal owns a number of sites in the area associated with former mineral extraction. The Locko estate is one of the largest private landowning estates in this area.

4.3.3 Key Sites

The key sites in Erewash Valley Action Area are:

- LNRs: Carr Wood LNR, Hammersmith Meadows LNR, Oakerthorpe LNR, Pennytown Ponds LNR, Pewitt Carr LNR, Pioneer Meadows LNR, Red River LNR, Trowell Marsh LNR, Stanton Gate LNR.
- Others: Aldercar Flashes, Bennerley Flash, Brinsley Meadows Erewash Canal, Erewash Meadows Nature Reserve, Forge Waste Complex, Kirk Hallam Lake and Meadows, Mapperley Nature Reserve, New Eastwood Meadows, Nutbrook Canal, Shipley Country Park, Shipley Nature Reserve, Strelley Wood and Waingroves Wood.



Hammersmith Meadows Local Nature Reserve Credit: Groundwork Derby and Derbyshire

4.4 KEY ACTIONS for the Erewash Valley area.

- 1. The **primary habitat objective** within the Erewash Valley area is the maintenance, restoration and expansion of wetlands including floodplain grazing marsh, lowland meadow, reedbed, woodland, wet woodland, ponds, swamp and fen, to achieve targets in Table 4.1.
- 2. The **secondary objective** is to increase connectivity of semi-natural habitats to create larger habitat complexes using priority habitats wherever possible. New hedgerows and in particular management of watercourses will be key to achieving this objective.
- 3. Develop a project to engage with land managers with the aim of creating a strategic network of functionally linked priority habitats.
- 4. Target renewing Entry Level Stewardship agreement holders to include appropriate actions for hedgerows.

Full targets for all Priority Habitats and Species are listed in Tables 4.1 and 4.2 All actions listed in the separate **Generic Action Plan** also apply to this area.

4.5 KEY TARGETS for the Erewash Valley area.

4.5.1 Targets for UK BAP PRIORITY HABITATS

Table 4.1 below lists the specific habitat targets for the Erewash Valley area. The requirements of UK BAP reporting mean that our own LBAP targets need to be presented as cumulative figures. The meaning of each column is explained below the table. See Maps section for the distribution of primary habitat features within this Action Area.

	(1) Current Extent	Targets for 2011-2020		
UK BAP Priority Habitat	at 2011 (i.e. Maintenance* Target to 2020)	(2) Manage [*]	(3) Restore [*]	(4) Expand [*]
Primary feature:				
Floodplain Grazing marsh	47 ha	30 ha	10 ha	2 ha
Lakes and Canals	10 sites	10 sites	n/a	n/a
Lowland mixed deciduous woodland	690 ha	450 ha	n/a	40 ha
Lowland meadow	50 ha	42 ha	70 ha	20 ha
Wet woodland	28 ha	21 ha	n/a	5 ha
Ponds	>250 ponds	72 ponds	5 ponds	15 ponds
Secondary feature:				
Reedbed	3 ha	2 ha	n/a	1 ha
Wood-pastures and Parkland	11 sites	5 sites	n/a	n/a
Open mosaic habitats	Unknown [∞]			
Field margins	unknown 50 ha#			
Localised feature:				

Lowland dry acid grassland	1.3 ha	1.3 ha	12 ha	5 ha
Heathland	1 ha	1 ha	o ha	2 ha
Lowland calcareous grassland	o ha	o ha	6 ha	o ha
Traditional orchard	35 sites	15 sites	n/a	5 sites
Hedgerows	unknown	additional 10km	n/a	10 km
Lowland Swamp	37	19	0	1
Lowland Fen	3	3	0	1

Table 4.1 Targets for the Erewash Valley Action Area 2011-2020.

Terminology and measurements are the same as those used in the UK Biodiversity Action Plan (UK BAP). These are:

- (1) 'Maintenance'—this is the current 2011 resource of each Priority Habitat, irrespective of condition and management that we must, at the very least, keep and carry forward into the next plan period after 2020. (i.e. no net loss.)
- (2) 'Manage' The amount of Priority Habitat in (1) that we want to be under appropriate management to maintain in 'favourable' condition. This is a cumulative target, continuing on from the previous plan period.
- (3) 'Restore' Habitat which is not in a 'favourable' condition, but which is under restorative management to bring it up to that condition. This is a cumulative target, continuing on from the previous plan period.
- (4) **'Expand'** New habitat created from scratch. This could be on a new site or an extension to an existing one. The target is for this Plan Period, though some habitats, such as woodland take far longer to fully develop.

Notes to accompany Table 4.1

[∞] Open mosaic habitats the distribution of this habitat is not well understood at the start of this Plan Period (see Generic Action Plan). Its presence is, however, important in this area. It should be maintained in situ wherever possible, especially where it contributes to a wider network linking key habitats

Field Margins It is not possible to set separate targets for management, restoration or expansion. A single overall target for simply increasing this resource is provided. Figures can only be based on Entry Level Stewardship monitoring. Further habitat may also be provided through Living Bird Table initiatives.

^{*}Table explanation:

4.5.2 Targets for UK BAP PRIORITY SPECIES

There are 78 UK BAP Priority Species recorded within the Erewash Valley Action Area since 2000. The distribution and status of many of these species is not currently well known, and consequently it is not possible to set meaningful targets for them. However, there are other species about which we do know enough to be able to set targets, monitor and assess their success. These are shown below in Table 4.2

The full list of UK BAP Species for the Erewash Valley area is given in Table 4.3 (see Section 4.6.2)

UK BAP Priority Species	Range targets to 2020 (1km²)	Range expansion targets 2011-2020 (1km²)	Method
Grass-wrack pondweed	3	maintain current range only	
Dingy skipper	19	1	Appropriate habitat enhancement
Great-crested newt	16	1	Targeted pond creation
Otter	1	2	Appropriate habitat enhancement
Water Vole	42	maintain current range only	Mink control and appropriate habitat enhancement
White-clawed crayfish	11	1	Creation of 1 ark site

Table 4.1 Targets for UK BAP Species within the Erewash Valley Action Area.

Since 1990 otters have begun to be recorded along the lower reaches of the River Erewash. There are records in two grid squares ($2 \times 1 \text{ km}^2$)since 1990. Target: Increase range by two 1 km² by 2020.

Water Voles have been recorded in 42 grid squares (42 x 1 km²) since 2000, but have suffered a drastic decline and populations are now few and far between in this area, confined primarily to small watercourses and along canals. **Target:** Maintain 2011 range by 2020.

Great-crested newts have been recorded in 16 grid squares (16 x 1 km²) since 1990 **Target:** Increase range by one 1 km² by 2020.

The areas of open habitats associated with land restoration make ideal habitat for **Dingy skippers**, which have recorded in 19 grid squares (19 x 1 km 2) since 2000. **Target:** Increase range by one 1 km 2 by 2020.

Grass-wrack pondweed has been recorded in three grid squares (3 x 1 km²) since 2000, due to its location the population is under increased pressure from recreational activities. **Target:** Maintain 2011 range by 2020.



Grass-wrack pondweed.
Credit: Debbie Alston

4.6 Current Biodiversity Resources

This list of resources within the Erewash Valley Action Area has been divided into three parts:

4.6.1. UK BAP Priority Habitat Resources

4.6.2 UK BAP Priority Species Resources

4.6.3 Organisational and Manpower Resources

4.6.1 UK BAP Priority Habitat Resources

The figures below show the total amount of each Priority Habitat known to exist in the Erewash Valley area at the start of this Plan Period in 2011. Figures for sub-priority and newly created habitats are given if known.

Brief notes on their distribution within the area then follow.



Total area of the Erewash Valley area = 17,580 ha

Total area of Priority biodiversity resource at start of Plan Period = 932.2 ha

Percentage of Erewash Valley containing this biodiversity resource = 5.3%

Lowland Mixed Deciduous Woodland:	
Ancient Semi-Natural Woodland =	120 ha
Plantation on Ancient Woodland Sites =	29 ha
Secondary =	244 ha
Plantation =	269 ha
Wet Woodland:	28 ha
Wood pasture and parkland: (11 sites)	26 ha
Traditional orchard: (35 sites)	8 ha
Lowland Meadow:	50 ha
(Plus 210 ha of sub-priority and 47 ha of newly created)	
Lowland Dry Acid Grassland:	1.2 ha
(Plus 31 ha of sub-priority)	
Lowland Calcareous Grassland: (6ha of sub-priority grassland)	
Floodplain Grazing Marsh:	75 ha
Heathland:	
(1.1ha of sub-priority heathland)	
Wetland:	
>250 ponds	
5 lakes and 5 sections of canal	33 ha
Reedbed:	3 ha
Swamp:	37 ha
Fen:	9 ha

Location of Priority Habitats in the Landscape: Primary features:

Rivers/streams: The main river is the Erewash with its tributaries Normanton brook, Stanley brook, Nutbrook and Golden Brook.

Floodplain grazing marsh: Particularly in areas between the River Erewash and other lines features such as the railway, roads or the Erewash canal and at the lower reaches of the River Erewash.

Standing open water and ponds: Some large lakes associated with water storage and many ponds around the edges of towns which are fished.

Lowland meadow: Sparse habitat, main concentrations around Blackwell and Horsley Woodhouse.

Hedgerows: Widespread throughout the area.

Veteran trees: Relatively sparse in the area outside main parkland areas. Lowland mixed deciduous woodland: Mostly secondary and plantation woodlands associated with coal extraction sites, some ancient woodlands on steep slopes.

Wet woodland: Associated with river corridor habitat.

Secondary features:

Reedbed: Largely confined to river corridors.

Field margins: Widespread on farmland habitat throughout area.

Wood-pasture and parkland: A few small areas associated with small estates. Open Mosaic: Occurs on brownfield sites, areas known on the former Stanton Ironworks site.

Localised features:

Lowland calcareous grassland: Along former railway lines.

Lowland dry acid grassland and heathland: On the sandstone ridge between Sandiacre and Little Eaton.

Note: The terms Primary, Secondary or Localised feature used above are synonymous with 'Primary Habitat' etc. used in the Landscape Character of Derbyshire (2003) see www.derbyshire.gov.uk/landscape. These describe how noticeable and distinctive each habitat is within the landscape itself. Only Primary Features are shown in the detailed map of each Action Area in the Maps section.

4.6.2 UK BAP Priority Species Resources

Group	English Name	
Plant *	Grass-wrack Pondweed	
Plant *	Tubular Water Dropwort	
Amphibian	Great crested newt	
Amphibian	Common toad	
Reptile	Common lizard	
Reptile	Grass snake	
Reptile	Slow worm	
Bird	Bullfinch	
Bird	Dunnock	
Bird		
Bird	Grey partridge	
	Herring gull	
Bird	House sparrow	
Bird	Lapwing	
Bird	Lesser spotted woodpecker	
Bird	Linnet	
Bird	Marsh tit	
Bird	Reed bunting	
Bird	Skylark	
Bird	Song thrush	
Bird	Spotted flycatcher	
Bird	Starling	
Bird	Tree pipit	
Bird	Tree sparrow	
Bird	Twite (non breeding)	
Bird	Turtle Dove	
Bird	Willow tit	
Bird	Wood warbler	
Bird	Yellowhammer	
Bird	Yellow wagtail	
Mammal	Brown hare	
Mammal	Brown long-eared bat	
Mammal	Harvest mouse	
Mammal	Hedgehog	
Mammal	Noctule	
Mammal	Polecat	
Mammal	Soprano pipistrelle	
Mammal	Water vole	
Butterfly	Dingy skipper	
Butterfly	Small heath	

Group	English Name
Butterfly	Wall
Butterfly	White letter hairstreak
Crustacean	White-clawed crayfish
Moth	Autumnal rustic
Moth	Beaded chestnut
Moth	Blood-vein
Moth	Brindled beauty
Moth	Broom moth
Moth	Brown-spot pinion
Moth	Buff ermine
Moth	Centre-barred sallow
Moth	Dark-barred twin-spot carpet
Moth	Deep-brown dart
Moth	Dot moth
Moth	Dusky brocade
Moth	Dusky thorn
Moth	Figure of eight
Moth	Garden dart
Moth	Ghost moth
Moth	Green-brindled crescent
Moth	Knot grass
Moth	Latticed heath
Moth	Mouse moth
Moth	Oak hook-tip
Moth	Powdered quaker
Moth	Rosy minor
Moth	Rosy rustic
Moth	Shaded broad-bar
Moth	Shoulder-striped wainscot
Moth	Small emerald
Moth	Small phoenix
Moth	Small square-spot
Moth	The cinnabar
Moth	The rustic
Moth	The sallow
Moth	The spinach
Moth	The sprawler
Moth	The streak
Moth	White ermine

Table 4.3 UK BAP Priority Species known to be present within the Erewash Valley area since 2000 (78 species)

^{*}Note: Marsh Stitchwort has been recorded at sites in this Action Area in the 1990s.

4.6.3 Organisational and Manpower Resources

Below is a list of organisations that are key to delivering the actions and targets in the Erewash Valley area. Reference should also be made to the table in the Generic Action Plan.

Statutory Agencies

Environment Agency* Forestry Commission* Natural England *

Voluntary organisations

BTCV*

Derbyshire Wildlife Trust *

FWAG *

Groundwork Creswell, Ashfield and

Mansfield *

Groundwork Derby and Derbyshire *

RSPB*

Local and Community Groups

Denby Footpaths Group *

Friends of Carr Wood and Hammersmith

Meadows

Friends of Kirk Hallam Lake and

Meadows *

Friends of Pennytown Ponds

Friends of Red River *

Friends of Shipley Country Park

Stanley & Stanley Common Wildlife Group

Waingroves Wood Group

Local Authorities (including Town and Parish Councils)

Derbyshire County Council *

Amber Valley Borough Council *

Bolsover District Council *

Erewash Borough Council *

North East Derbyshire District

Council *

Aldercar and Langley Mill Parish Council

Alfreton Town Parish Council

Ault Hucknall Parish Council

Belper Town Parish Council

Blackwell Parish Council

Codnor Parish Council

Dale Abbey Parish Council

Denby Parish Council

Heanor and Loscoe Town Council

Holbrook Parish Council

Horsley Parish Council

Horsley Woodhouse Parish Council

Ironville Parish Council*

Kilburn Parish Council

Mapperley Parish Council*

Morley Parish Council

Morton Parish Council

Pentrich Parish Council

Pilsley Parish Council

Pinxton Parish Council

Ripley Parish Council*

Sandiacre Parish Council

Shipley Parish Council

Shirland and Higham Parish Council

Smalley Parish Council*

Somercotes Parish Council

South Normanton Parish Council

South Wingfield Parish Council

Stanley and Stanley Common Parish

Council*

Stanton by Dale Parish Council

Swanwick Parish Council

Tibshelf Parish Council*

West Hallam Parish Council

Other Landowning bodies

Locko Estate

Network Rail

Private landowners and farmers

Severn Trent Water *

UK Coal

Homeowners (for UK BAP species in gardens)

Updated: Nov 2011

^{*} indicates Lowland Derbyshire Biodiversity Partnership member. If your group or organisation would like to join the Partnership, go to www.derbyshirebiodiversity.org.uk

4.7 Achievements to Date in Erewash Valley area

Figures are based on Nov 2011 data and rounded to nearest hectare

Woodland



300 ha (66 % of the target) of priority Mixed Deciduous Woodland was considered to be under management (in an agrienvironmental scheme or assessed as favourable or recovering condition)

Wet Woodland



15 ha (71 % of the target) of priority Wet Woodland was considered to be under management (in an agri-environmental scheme or assessed as favourable or recovering condition)

Wood pasture and parkland



1 wood-pasture and parkland site (20 % of the area resource) was considered to be under management (in an agri-environmental scheme or assessed as favourable or recovering condition)

Lowland meadow



32 ha (76% of the target) of priority Lowland Meadow was considered to be under management (in an agri-environmental scheme or assessed as favourable or recovering condition)



51 ha (73% of the target) of sub-priority Lowland Meadow was considered to be under restoration (in an agri-environmental scheme or assessed as 'favourable' or 'recovering' condition), looking to bring the habitat condition up to priority status.

Lowland dry acid grassland



1.3 ha (100% of the target) of priority Dry Acid Grassland was considered to be under management (in an agri-environmental scheme or assessed as favourable or recovering condition)



6 ha (50% of the target) of sub-priority Dry Acid Grassland was considered to be under restoration (in an agri-environmental scheme or assessed as 'favourable' or 'recovering' condition), looking to bring the habitat condition up to priority status.

Wetland



35 ponds (49% of the target) are currently under management



8 lakes and canals (80% of the target) are currently under management.



0.3 ha of reedbed (15% of the target) are currently under management.



5 ha of swamp (26% of the target) are currently under management.



3 ha of fen (100% of the target) are currently under management.

Current Agri-environment Schemes:

1 Higher Level Stewardship Scheme 7 Countryside Stewardship Schemes

Updated: Nov 2011

Erewash Valley Action Area - Priority Habitats Map

