

6

Derby Area Action Plan

Lowland Derbyshire LBAP



Weir on the River Derwent near Borrowash. Credit: Debbie Alston

Prepared by the Lowland Derbyshire Biodiversity Partnership



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

Derby Area

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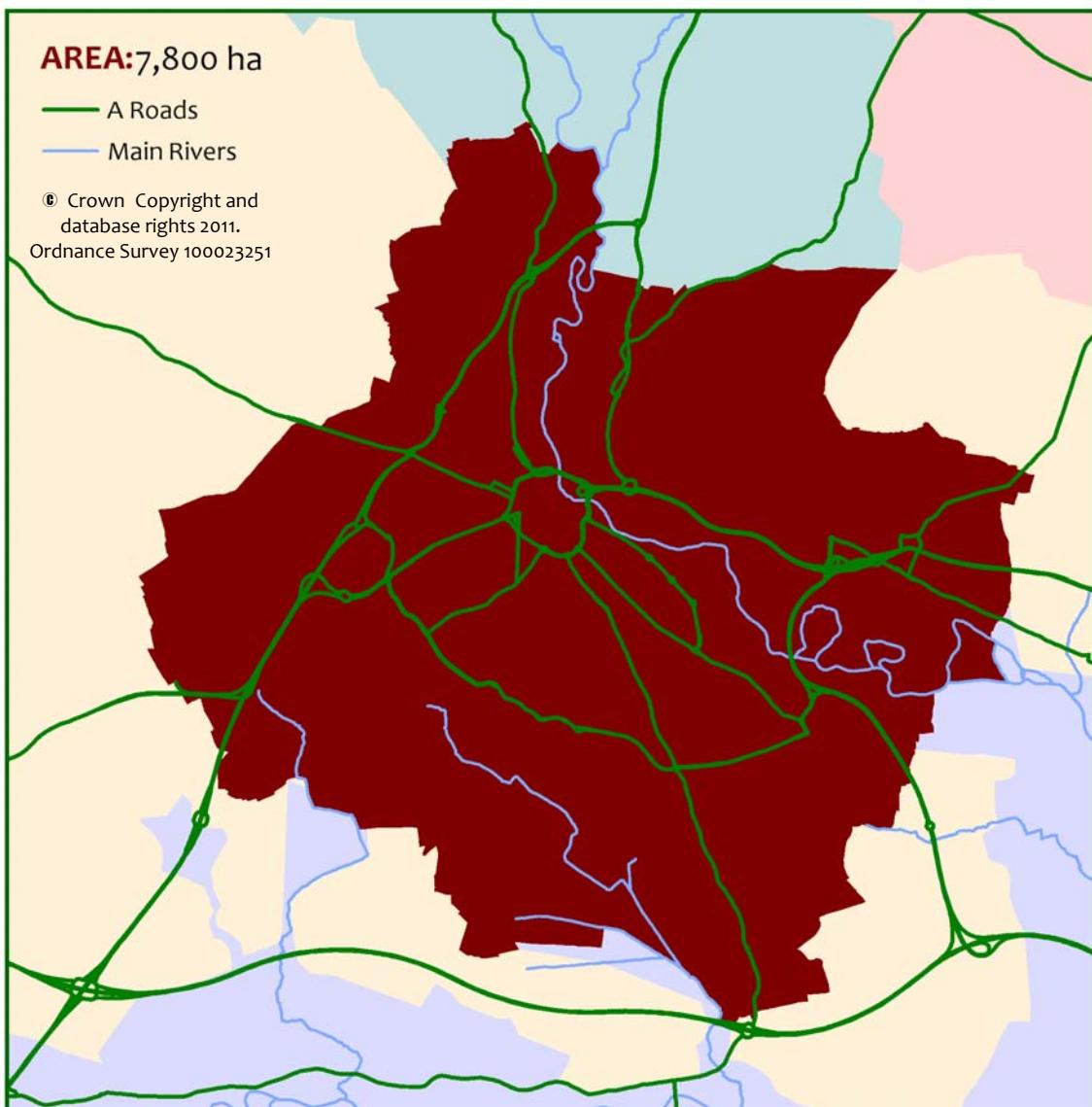
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6. Derby Area - ACTION PLAN -



Map of Derby Action Area

For further detail see Maps section

6.1 Area Description:

Three quarters of this area is covered by built development. Derby City is located at the junction of a number of landscape character areas and as a result maintains many remnant habitats throughout its green wedges and open spaces. Woodland and trees are evident to the north of Derby as an extension to the Peak Fringe landscape and important veteran trees are found at Markeaton and Allestree Parks. The River Derwent provides an important habitat corridor into the city centre with associated wetland and grassland linking in the south to other similar habitats associated with the Trent valley.

The area includes one Sites of Special Scientific Interest, which is

designated for its geological importance, 4 other RIGS, 10 Local Nature Reserves, 62 LWS and a number of potential Local Wildlife Sites. See section 6.3.3 for a list of key sites in the Derby area .

This Action Area is defined by the City of Derby administrative boundary.

6.2 Vision

An area where all people have access to and value their wildlife rich environment close to where they live and work. This is provided by an interlinking green infrastructure system having the River Derwent at its spine. Open land will be sustainably managed for people and wildlife, new built development will play a part in delivering new and enhanced habitats.

6.3 The Challenges and Opportunities

Much of the priority habitat in Derby is fragmented in very small areas. Many have and will come under increasing pressure from development or by increased public access. A number of green areas could be managed better to optimise their value for wildlife including significant restoration opportunities using different management regimes.

Of the 62 Local Wildlife Sites designated in the City, 43 (69%) are considered to be in favourable or a recovering condition. Opportunities exist through development proposals, project work and providing advice for owners to increase this figure throughout the plan period.

There are a number of landscape projects which include part of Derby within their areas and are likely to deliver some biodiversity targets within the plan period. These projects are listed below. Further large-scale re-development on the Celanese site may also include habitat creation and management of existing habitats. Additional opportunities should be sought via development proposals to manage the current resource.

6.3.1 Existing initiatives and projects

The **WildDerby Project**, co-ordinated by Derby City Council, works with a number of different organisations, including many local community groups to deliver conservation projects and raise awareness of biodiversity through events and education.

WildDerby also works with the Derby City Pond Wardens Association on the Wild About Ponds project which runs from 2010-2013 and will see the creation and restoration of a number of key ponds within the city.

Part of Derby lies within the Derwent Valley World Heritage Site, which is the basis of the **Derwent Valley Landscapes Partnership Project**. This project aims to manage existing woodland, grassland and wetland habitats, restore them where necessary and create appropriate habitats to maintain the key wildlife

corridor through the valley.

The River Derwent also falls within one of **Derbyshire Wildlife Trusts Living Landscapes Schemes**. These are areas where Derbyshire Wildlife Trust has identified areas for key habitats and species and will develop projects and use opportunities to strengthen and expand, where possible, the biodiversity resource.

The Markeaton Brook within Derby falls within the **Markeaton and Mercaston Brook Project** which is working on enhancing the river habitats of the catchment.

6.3.2 Main landowning bodies

Derby City Council owns the majority of key sites and open space within the City. Other owners of large important sites include Severn Trent Water, Celanese and Rolls Royce plus riparian owners of the River Derwent and main tributaries.

6.3.3 Key Sites

The key sites in the Derby Action Area are:

- **SSSIs:** Boulton Moor SSSI
- **LNRs:** Allestree Park LNR, Chaddesden Wood LNR, Chellaston Brickworks LNR, Darley and Nutwood LNR, Elm Wood LNR, Mickleover Meadows LNR, Sinfin Moor LNR, Sunnydale Park LNR, The Sanctuary LNR, West Park Meadows LNR
- **Others:** Accordis Lagoons, Chaddesden Park, Darley Park, Markeaton Brook, Markeaton Park, Sturgess Fields, River Derwent Sewage Farm Lagoon and Derwent Meadows.



West Park Meadows LNR.
Credit: Debbie Alston

6.4 KEY ACTIONS for the Derby area.

1. The **primary habitat objective** within the Derby action area is the maintenance, restoration and expansion of any semi-natural habitat to achieve targets in Table 6.1 below
2. The **secondary objective** is to increase connectivity of semi-natural habitats to create larger habitat complexes using priority habitats wherever possible. Habitat creation, through development, will be key to achieving this objective.
3. Work with owners of three golf courses to develop and work towards the achievement of a site biodiversity management plan by 2020.
4. Work with the staff and pupils of five secondary schools to develop and work towards the achievement of biodiversity management plans. Schools should be prioritised where they either include, or are adjacent to, Local Wildlife Sites.
5. Investigate and develop one ark site for white-clawed crayfish.

Full targets for all Priority Habitats and Species are listed in Tables 6.1 and 6.2
All actions listed in the separate **Generic Action Plan** also apply to this area.

6.5 KEY TARGETS for the Derby area.

6.5.1 Targets for UK BAP PRIORITY HABITATS

Table 6.1 below lists the specific habitat targets for the Derby action 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 in this Action Area.

UK BAP Priority Habitat	(1) Current Extent at 2011 (i.e. Maintenance* Target to 2020)	Targets for 2011-2020		
		(2) Manage*	(3) Restore*	(4) Expand*
Primary feature:				
Floodplain grazing marsh	99 ha	99 ha	n/a	9 ha
Lowland mixed deciduous woodland	100 ha	90 ha	n/a	1 ha
Wood-pasture and parkland	3 sites	3 sites	n/a	n/a
Ponds	>90 ponds	65 ponds	15 ponds	20 ponds
Rivers and streams	Unknown [#]			
Secondary feature:				
Lowland meadow	7 ha	7 ha	90 ha	1 ha
Hedgerow	187 km	additional 5 km	n/a	1 km
Swamp	13	13	n/a	n/a
Wet woodland	5	4	n/a	2
Open Mosaic habitats	Unknown ^o			
Localised feature:				
Lakes	3 sites	3 sites	n/a	n/a
Lowland calcareous grassland	0.2 ha	0.2 ha	2 ha	n/a

Lowland dry acid grassland	1 ha	1 ha	2 ha	n/a
Traditional orchards	4 sites	4 sites	n/a	n/a
Green roofs [@]				20 roofs

Table 6.1 Targets for the Derby Action Area 2011-2020.

*Table explanation:

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 6.1

Habitat creation should be targeted wherever there are opportunities to link with existing habitats, and where the underlying ground conditions are suitable.

Hedgerow restoration and creation work should be targeted along existing networks where they are fragmented.

Rivers and streams are an important part of the Derby Action Area, however, the resource is difficult to calculate and monitor against any set targets.

[∞] **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

[@] **Green roofs** Although not a UK Priority Habitat, the installation of green roofs on new developments and also on some existing urban structures can make a considerable contribution to biodiversity in towns and cities. For this reason they have been included in targets within the Derby area.

6.5.2 Targets for UK BAP PRIORITY SPECIES

There are 74 UK BAP Priority Species recorded within the Derby 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 6.2

The full list of UK BAP Species for the Derby area is given in Table 6.3 (see Section 6.6.2)

UK BAP Priority Species	Range targets to 2020 (1km ²)	Range expansion targets 2011-2020 (1km ²)	Method of expansion
Great-crested newt	11	n/a	-
Otter	8	2	Appropriate Habitat enhancement
Water vole	11	1	Appropriate Habitat enhancement
White-clawed crayfish	3	1	Creation of 1 ark site
White-letter hairstreak	16	3	Appropriate Habitat enhancement

Table 6.2 Targets for UK BAP Species within the Derby Action Area.

Otters have been recorded in eight grid squares ($8 \times 1 \text{ km}^2$) since 1990. These are centred along the River Derwent, but are also known to have been recorded up the Markeaton Brook. **Target:** Increase range by two 1 km^2 by 2020.

Water Voles have been recorded in 11 grid squares ($11 \times 1 \text{ km}^2$) since 2000. Water Voles have come under increasing pressure from mink predation and lack of appropriate habitat management. Effort should be targeted to maintaining the existing populations of water voles by habitat management and, where appropriate, mink control. They have been regularly recorded along the Chaddesden Brook and old records exist from the Markeaton Brook.

Target: Increase range by one 1 km^2 by 2020.

Great-crested newts have been recorded in 11 grid squares ($11 \times 1 \text{ km}^2$) since 1990. Great crested newts are confined almost exclusively to the outskirts of Derby with a population in Mickleover and one associated with the mitigation wetland of the A6 bypass. **Target:** Maintain range at 11 km^2 by 2020.

White-clawed crayfish have been recorded in three grid squares ($3 \times 1 \text{ km}^2$) since 2000. The remaining white-clawed crayfish population in Derby is associated with the Markeaton Brook catchment, however in recent years the population has

reduced in size and appears to be suffering from disease. It is thought that the development of an ark site (a safe site away from other water courses) within the city would help maintain a population within the city. **Target:** Increase range by one 1 km² by 2020.

The **White-letter hairstreak** butterfly has been recorded in 16 grid squares (16 x 1 km²) since 1990. These are scattered throughout the city, and need elm trees to sustain a population. Additional strategic planting of suitable elm trees will help expand this species' range. **Target:** Increase range by three 1 km² by 2020.



Otter.
Credit: Debbie Alston

6.6 Current Biodiversity Resources

This list of resources within the Derby area has been divided into three parts:

- 6.6.1. UK BAP Priority Habitat Resources
- 6.6.2 UK BAP Priority Species Resources
- 6.6.3 Organisational and Manpower Resources

6.6.1 UK BAP Priority Habitat Resources

The figures below show the total amount of each Priority Habitat known to exist in the Derby area at the start of this Plan Period in 2011, with figures for sub-priority and newly created habitats where known.

Brief notes on their distribution within the area then follow.



Total area of the Derby region = **7,803 ha**

Total area of Priority biodiversity resource at start of Plan Period= **464 ha**

Percentage of Derby region containing Priority biodiversity resources = **5.9%**

Lowland Mixed Deciduous Woodland:

Ancient Semi-Natural Woodland =	13 ha
Secondary =	74 ha
Plantation =	13 ha
Wet Woodland:	5 ha

Wood pasture and parkland:

3 sites 243 ha

Traditional orchard:

(4 sites) 1 ha

Lowland Meadow:

(Plus 115 ha of sub-priority and 1ha newly created)

7 ha

Lowland Calcareous Grassland:

(Plus 2ha of sub-priority) 0.2 ha

Lowland Dry Acid Grassland:

(Plus 2.1 ha of sub-priority) 0.8 ha

Floodplain Grazing marsh:

99 ha

Wetland:

Ponds >90

8 ha

Lakes 3

13 ha

Swamp

Hedgerows:

187 km

Location of Priority Habitats in the Landscape:

Primary features:

Rivers and streams: River Derwent and tributaries such as Markeaton Brook, Chaddesden Brook, and Bramble Brook.

Floodplain grazing marsh: Associated primarily with the River Derwent.

Lowland mixed deciduous woodland: Scattered throughout the City, Chaddesden Wood is the largest area of ancient woodland, most of the others are secondary.

Wood-pasture and parkland: Markeaton, Allestree and Darley Park are all landscaped parklands with many veteran trees.

Veteran trees: Scattered throughout the city, with a particular concentration within Oakwood.

Ponds: Widespread, but generally associated with publicly owned land, many new ponds have been created on the Local Nature Reserves.

Secondary features:

Lowland meadow: A small number of fragmented sites across the area.

Open mosaic: Brownfield sites exist throughout the City, many of which are allocated for development opportunities.

Hedgerows: Species-rich examples can be found on the edge of the area, a network of hedgerows also spread into the centre of the area.

Swamp: Associated with wetlands within floodplain areas.

Wet woodland: Two examples both associated with adjacent water courses.

Localised features:

Lowland calcareous grassland: Two sites, one on the former Mickleover railway line, the other a small area at Chellaston Brickworks.

Lowland dry acid grassland: One field at Allestree Park on the bunter sandstone.

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.

6.6.2 UK BAP Priority Species Resources

Group	English Name
Amphibian	Great crested newt
Amphibian	Common toad
Reptile	Common lizard
Reptile	Grass snake
Reptile	Slow worm
Bird	Bullfinch
Bird	Corn bunting
Bird	Cuckoo
Bird	Curlew
Bird	Dunnock
Bird	Grasshopper warbler
Bird	Grey partridge
Bird	Hawfinch
Bird	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	Willow tit
Bird	Wood warbler
Bird	Yellow wagtail
Bird	Yellowhammer
Mammal	Brown hare
Mammal	Brown long-eared bat
Mammal	Harvest mouse
Mammal	Hedgehog
Mammal	Noctule
Mammal	Otter
Mammal	Polecat

Group	English Name
Mammal	Soprano pipistrelle
Mammal	Water vole
Butterfly	White letter hairstreak
Crustacean	White-clawed crayfish
Moth	Beaded chestnut
Moth	Blood-vein
Moth	Brindled beauty
Moth	Broom moth
Moth	Buff ermine
Moth	Centre-barred sallow
Moth	Dark spinach
Moth	Deep-brown dart
Moth	Dot moth
Moth	Dusky brocade
Moth	Dusky thorn
Moth	Garden dart
Moth	Ghost moth
Moth	Green-brindled crescent
Moth	Grey dagger
Moth	Latticed heath
Moth	Minor shoulder-knot
Moth	Mottled rustic
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	White ermine

Table 6.3 UK BAP Priority Species known to be present within the Derby area since 2000 (74 species)

6.6.3 Organisational and Manpower Resources

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

Statutory Agencies	Friends of Chaddesden Park *
Environment Agency*	Friends of Markeaton Brook*
Forestry Commission*	Friends of Markeaton Park *
Natural England *	Friends of Mickleover Meadow *
	Friends of Sinfin Moor
Voluntary organisations	Sustrans Rangers
BTCV *	West Park Meadows Working Party
Derbyshire Wildlife Trust *	
Groundwork Derby and Derbyshire *	
Local and Community Groups	Local Authorities
Darley and Nutwood Management Group *	Derby City Council *
Derby City Pond Wardens Association *	
Derby Natural History Society	Other Landowning bodies
Derby RSPB Group *	Goodman
Derwent Green Gym *	Lafarge
Friends of Allestree Park *	Private landowners and farmers
Friends of Alvaston Park	Severn Trent Water
Friends of Chaddesden Wood	Schools
Friends of Chellaston Brickworks *	Homeowners (for UK BAP species in gardens)
	University Of Derby

* indicates Lowland Derbyshire Biodiversity Partnership member.

If your group or organisation would like to join the Partnership, go to

www.derbyshirebiodiversity.org.uk



Hedge laying.
Credit: BTCV

6.7 Achievements to Date in the Derby area

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

Woodland



81 ha (90 % of the target) of Lowland Mixed Deciduous Woodland was considered to be under management (in an agri-environmental scheme or assessed as favourable or recovering condition)

Wood pasture and parkland



3 wood-pasture and parkland sites (100 % of the area resource) were considered to be under management (in an agri-environmental scheme or assessed as favourable or recovering condition)

Lowland Meadow



7 ha (100 % 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)



72 ha (80 % 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



0.8 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)



0 ha (0 % 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.

Lowland Calcareous Grassland



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



0 ha (0 % of the target) of sub-priority Dry Calcareous 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



20 ponds (31% of the target) are currently under management



3 lakes (100% of the target) are currently under management



13 ha of swamp (100% of the target) are currently under management

Current Agri-environment Schemes:

There are currently no agri-environment schemes in this Action Area

Derby Action Area - Priority Habitat Map

