

Heathland Habitats

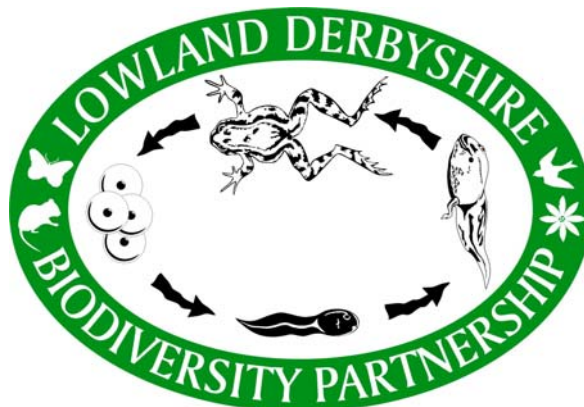
- Background Information -

Lowland Derbyshire LBAP



Heathland at Stone Edge near Holymoorside. Credit: Debbie Alston

Prepared by the Lowland Derbyshire Biodiversity Partnership



This document provides background information for the Lowland Derbyshire Biodiversity Action Plan 2011-2020.

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Heathland Habitats in Lowland Derbyshire

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1. Introduction

Lowland heathland and upland moorland are being dealt with together in the Lowland Derbyshire Local Biodiversity Action Plan. They have distinctive communities and faunas, but do contain a number of very characteristic and conspicuous species in common. Within this Local BAP area there is no true lowland heathland; in some areas heath is only a successional stage towards woodland, and needs to be considered in relation to those habitats. The main blocks of upland heathland or heather moorland occur within the Peak District in the Dark Peak and are covered by the Peak District LBAP. In addition, small remnants of heath developed on acid soils over limestone also occur in the Peak District.

Heathland is normally found on low nutrient status soils and is defined as having more than 25% dwarf shrubs. The soils are usually mineral soils but heathland is defined as also occurring on peaty soils where the peat is less than 0.5m thick. Heaths below 250m are described as **lowland heathland** while those above that height are **upland heathland** or moorland. Heathlands are an internationally important habitat, usually maintained by some form of management such as burning or grazing. Britain contains a large percentage of European heathland.

A variety of **bogs** (peatlands) exist in Derbyshire, but the majority are found in the Peak District, where valley bogs and blanket bogs are significant. In the LBAP area there are small **valley mires** and other very small areas of Sphagnum moss where a layer of peat, which is often very shallow, has developed. There are some specific issues, for example vegetation and hydrological management, that are peculiar to peat bogs, and these need to be considered, where relevant. Controlled rotational burning is commonly used as a management tool to maintain heathland, but it always produces uniform vegetation structure that can be detrimental to many species, especially reptiles.

Dry heathland consists of small bushes of heather, western gorse, bell heather and bilberry, interspersed typically with tormentil, sorrel, heath bedstraw, wavy hair grass and sheep's fescue. Scattered scrubby oaks and birches occur. Lichens may grow on the shrubby plants or on the bare ground between. Small heath and small copper butterflies occur on heathland along with argent and sable moth although the local distribution of the latter is unclear. The relatively few species which occur in heathland, compared with for example, calcareous grassland or ancient woodland, have led to its perception as an unimportant habitat; however the very specialised nature of the habitat has led to specific associations and the species are often confined to heathland and the conditions it provides.

The misconception of heathland as a low value habitat has led to much conversion to forestry. This causes fragmentation, but heath species can still survive as remnants along rides and on the edges. It is possible to restore heath from conifer plantations, and research around England has shown that it is also possible to restore heathland from arable land too.

1.1 Landscape Character Assessment

In 2003 Derbyshire County Council carried out a Landscape Character Assessment for the county, excluding large urban areas, such as the built parts of Derby City and Chesterfield. The project identified where heathland habitat creation and management would be most appropriate in maintaining landscape character and local distinctiveness. This approach has been largely reflected in the landscape scale approach taken by the Lowland Derbyshire Biodiversity Action Plan.



Table 1 outlines appropriate heathland habitats by Natural Area, Character Area and Landscape Character Type. This information can be used by a variety of interest groups including developers, planners, foresters and wildlife groups when considering the appropriateness of particular developments, planting and habitat creation schemes in a specific area.

Table 1: Heathland habitats characteristic and appropriate within each Landscape Character Type

- P Primary (main) habitat - prominent and a key characteristic
 S Secondary habitat - variable and a local characteristic
 L Locally Significant - unusual, often a minor characteristic

Action Area name within this LBAP	Joint Character Area	Landscape Character Type	Lowland heaths	Upland heaths
Peak Fringe	Derbyshire Peak Fringe and Lower Derwent	Enclosed Moors and Heaths		P
		Wooded Slopes and Valleys		
		Wooded Farmlands		
		Gritstone Heaths & Commons	P	
		Settled Farmlands		
		Riverside Meadows		
Rother and Doe Lea Valleys Erewash Valley	Notts, Derbyshire & Yorkshire Coalfield	Wooded Hills & Valleys		
		Coalfield Village Farmlands		
		Estate Farmlands		
		Wooded Farmlands		
		Coalfield Estatelands		
		Riverside Meadows		
		Plateau Estate Farmlands		
Southern Magnesian Limestone	Southern Magnesian Limestone	Limestone Farmlands		
		Limestone Gorges		
Claylands	Needwood & South Derbyshire Claylands	Settled Farmlands	S	
		Settled Plateau Farmlands	S	
		Sandstone Slopes & Heaths	P	
		Estate Farmlands	S	
		Riverside Meadow		
Trent and Dove Valleys	Trent Valley Washlands	Lowland Village Farmlands		
		Wet Pasture Meadows		
		Riverside Meadows		



Action Area name within this LBAP	Joint Character Area	Landscape Character Type	Lowland heaths	Upland heaths
National Forest area	Melbourne Parklands	Estate Farmlands	P	
		Wooded Estatelands		
		Sandstone Slopes & Heaths	P	
		Riverside Meadows		
	Leicestershire & Derbyshire Coalfield	Coalfield Village Farmlands		
	Mease & Sence Lowlands	Village Estate Farmlands	S	
		Riverside Meadows		

1.2 Species associated with heathland

There are many species associated with heathland habitats, some of which are priority biodiversity action plan species. Appendix 1 lists Priority and locally important species associated with heathland habitats.

1.3 Heathland in Lowland Derbyshire

Historically, heathland was more widely distributed than it is today. Cameron's 1959 publication on *The place-names of Derbyshire* includes a number of localities with heath/heather/heathland/moorland references. Such names existed primarily within the Peak Fringe Area, but also occurred in the Little Eaton area, south of Calke Abbey near Ticknall, and to the south of Swadlincote.

The Lowland Derbyshire area now has only tiny patches of heathland within areas of acid grassland and amongst acidic oak and birch woodland. It is primarily located within the millstone grit outcrops within the Peak Fringe Action Area. Other locations include the sandstone ridge between Little Eaton and Sandiacre and sandstone outcrops in the Claylands and National Forest area.

Table 2: Details of heathland resource in Lowland Derbyshire.

LBAP Action Area	Heathland resource (Priority Habitat)	Semi-Improved (Sub-Priority Habitat)	% of total LBAP area heathland resource
Magnesian Limestone	-		-
Rother and Doe Lea valleys		0.8ha	1%
Peak Fringe	42 ha	61 ha	97%
Erewash valley	1.1 ha	-	1%
Claylands	0.2 ha	-	>1%
Derby	-	-	-
Trent and Dove Valleys	-	-	-
National Forest area	0.2 ha	-	>1%
Totals	43.5 ha	61.8 ha	



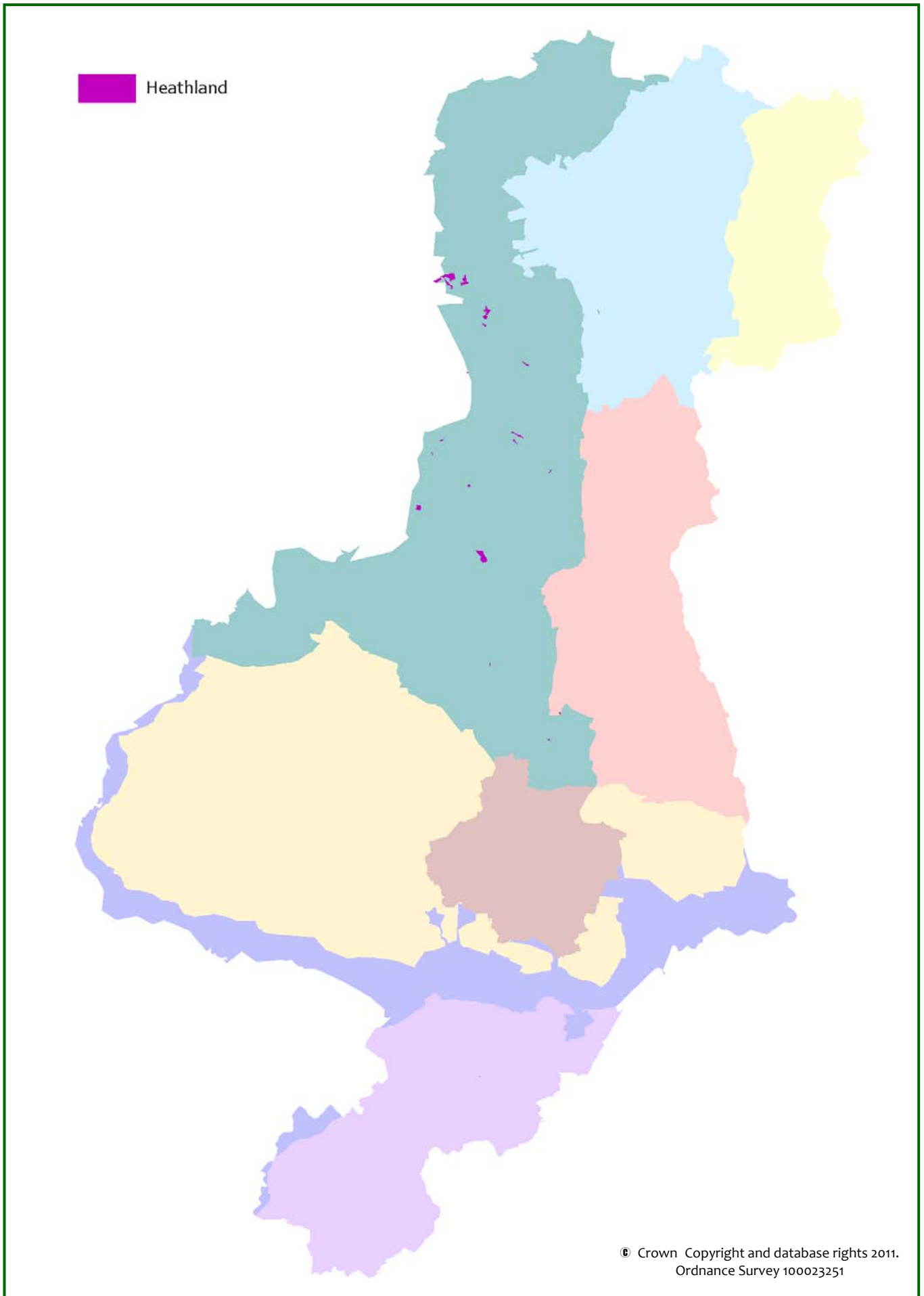
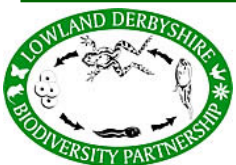


Figure 1: Known areas of heathland in Lowland Derbyshire



The largest area of heathland in this LBAP area occurs at Longstone Moor and Slagmill. Both sites are very close to the boundary of the Peak Park and are at the start of the extensive area of moorland on the Peak District Moors SPA. The millstone grit outcrop within the National Forest Area gives rise to a very small area of heathland within Carvers Rocks SSSI, south of Foremark Reservoir. There is also an area of heathland at Hulland Moss SSSI which is associated with an area of sphagnum bog.

In addition to the heathland sites shown on Figure 1, there are a number of sites which have small areas of heathland that occur as part of grassland and mire habitat mosaics. Wessington Green contains elements of heathland/acid grassland with mire adjacent to the spring. Crich Chase in the Derwent Valley contains areas of open heathland amongst oak and birch woodland and rocky outcrops. Other areas of heathland can be found on former sandstone quarries and other areas of exposed acidic rocks and soils, plus very tiny remnant areas of heathland in the Moss Valley.

There are significant areas of upland heathland and moorland just outside the Lowland Derbyshire LBAP area, this includes the area of the Dark Peak, outside the Peak District National Park, around Matlock moors.



Top left: Calvers Rocks. Credit Debbie Alston
Top right: Heather. Credit: Debbie Alston
Bottom left: Heather. Credit: Debbie Alston
Bottom right: Lowland heathland. Credit: Debbie Alston



Appendix 1: Species for which heathland is a key habitat in Lowland Derbyshire

Priority Species (ie. UK BAP Species recorded in this Habitat in Lowland Derbyshire)

Amphibians

Great crested newt	<i>Triturus cristatus</i>
Toad	<i>Bufo bufo</i>

Invertebrates

Dingy Skipper	<i>Erynnis tages</i>
Small Heath	<i>Coenonympha pamphilus</i>
Wall	<i>Lasiommata megera</i>
Argent and Sable moth	<i>Rheumaptera hastate</i>

Birds

Cuckoo	<i>Cuculus canorus</i>
Grey partridge	<i>Perdix perdix</i>
Skylark	<i>Alauda arvensis</i>
Tree Pipit	<i>Anthus trivialis</i>

Reptiles

Common Lizard	<i>Lacerta vivipara</i>
Adder	<i>Vipera berus</i>
Grass snake	<i>Natrix natrix</i>
Slow worm	<i>Anguis fragilis</i>

Locally Important Species ie. Local Red Data Book (RDB) or important species recorded within this Habitat in Lowland Derbyshire)

An important feature of Local BAPs is the selection of locally important, threatened, declining or rare species which add local distinctiveness—the so-called “Local Red Data Book” species. Using Endangered Wildlife in Derbyshire (Elkington and Willmot, 1996) plus the Red Data List of Derbyshire’s Vascular Plants (Moyes and Willmot, 2009), and with the help of county recorders, the following species have been selected for this category.

Note: These lists identify only rare or locally distinctive species. Neither list should be interpreted as an inventory of ‘typical’ heathland species, or species characteristic of heathland habitats.

Vascular Plants

Common Cudweed	<i>Filago vulgaris</i>
Petty Whin	<i>Genista anglica</i>
a bramble	<i>Rubus durescens</i>

Birds

Barn owl	<i>Tyto alba</i>
Buzzard	<i>Buteo buteo</i>
Golden Plover	<i>Pluvialis apricaria</i>
Green Woodpecker	<i>Picus viridis</i>
Kestrel	<i>Falco tinnunculus</i>
Meadow pipit	<i>Anthus pratensis</i>
Stonechat	<i>Saxicola torquata</i>
Wheatear	<i>Oenanthe oenanthe</i>
Whinchat	<i>Saxicola rubetra</i>

Mammals

Common Pipistrelle bat	<i>Pipistrellus pipistrellus</i>
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Amphibians

Palmate newt	<i>Triturus helveticus</i>
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Invertebrates

Diptera

<i>Cheilosia mutabilis</i>
<i>Triglyphus primus</i>
<i>Chrysogaster virescens</i>
<i>Trichopsomyia flavitarsis</i>
<i>Melanogaster aerosa</i>

Lepidoptera

Green Hairstreak	<i>Callophrys rubi</i>
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