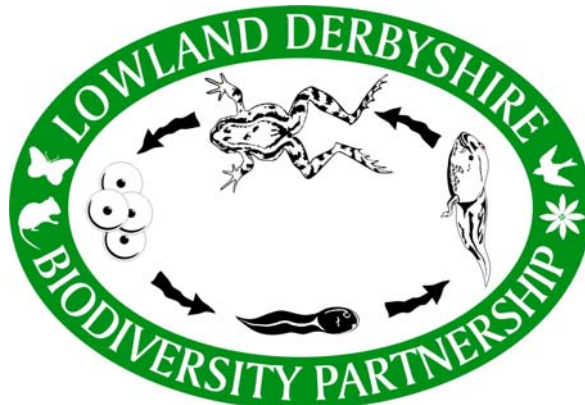




Sand quarries of the Sandstone Slopes and Heaths near Muggington. Credit: Derbyshire County Council

Prepared by the Lowland Derbyshire Biodiversity Partnership



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

Claylands Area

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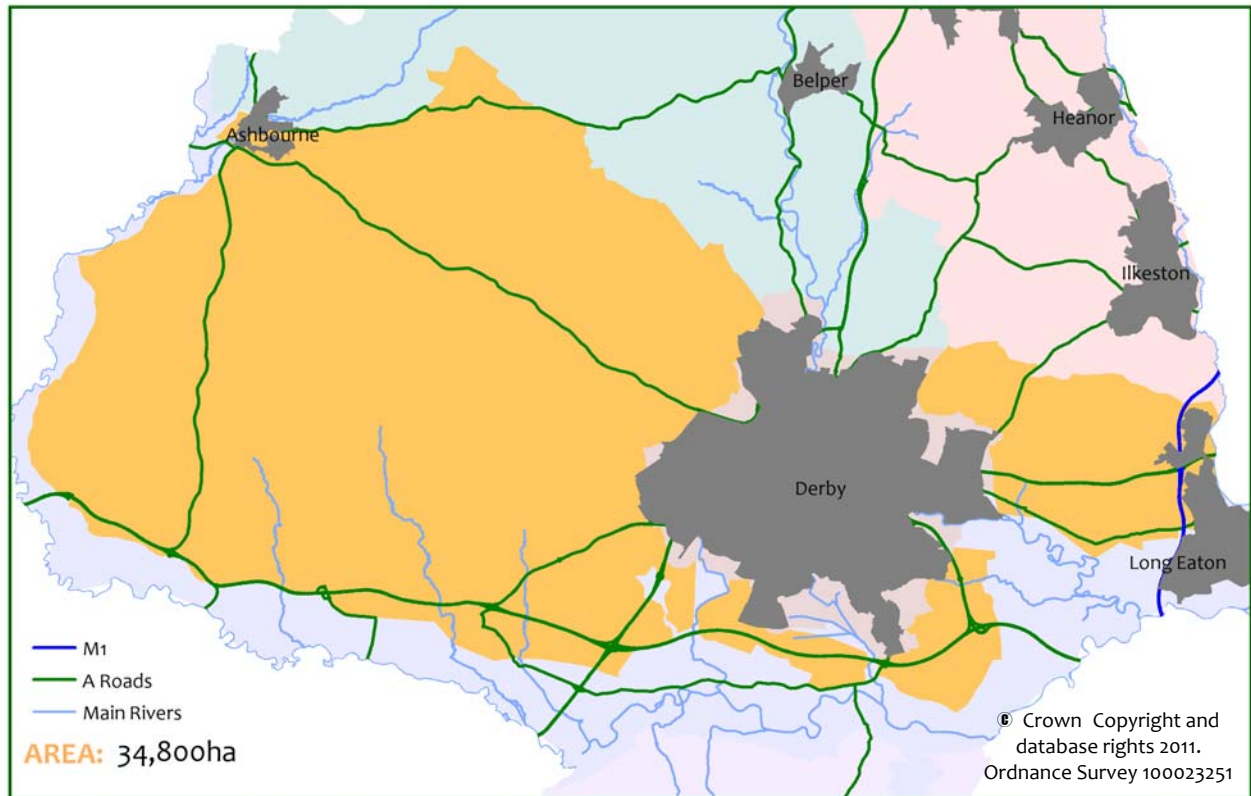
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5. Claylands Area - ACTION PLAN -



Map of Claylands Action Area

For further detail see Maps section

5.1 Area Description:

This is an area of gently undulating to rolling pastoral landscape over Mercia mudstones, sandstones and glacial drift to the west and east of Derby. Small irregular fields are enclosed by mixed species hedgerows with many mature hedgerow trees while the plateau areas have more regular shaped fields with thorn hedgerows and fewer trees. Where the topography allows and on lower valley slopes towards the Trent valley there are areas of mixed farming that provide localised arable habitats. Woodland habitat occurs sparsely but there are important veteran trees associated with historic parklands. There is a dense network of small tributary streams that provide important wetland habitats including rush pasture, mire and fen.

The area includes four Sites of Special Scientific Interest, no Local Nature Reserves, 16 RIGS, 133 Local Wildlife Sites and a number of potential Local Wildlife Sites.

The Claylands area comprises seven Derbyshire Landscape Character Types:

- Sandstone Slopes & Heaths
- Plateau Estate Farmlands
- Estate Farmlands

- Settled Farmlands
- Settled Plateau Farmlands
- Lowland Village Farmlands
- Riverside Meadows

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 Ashbourne (part of), Brailsford, Hilton, Etwall, Borrowash, Stapleford.

5.2 Vision

Maintaining flower rich pastoral grasslands bound by species-rich hedgerows with mature trees, connecting to isolated fragments of wildlife rich ancient woodland and ponds.

5.3 The Challenges and Opportunities

There are some very large land holding organisations within the area, who need to be engaged with to deliver biodiversity. Many of these estates use the woodlands for pheasant rearing.

Where semi-natural grasslands occur, many of these are under-managed due to lack of grazing stock.

There are no community groups and a limited number of parish councils and landowners engaged in biodiversity work within this area. The **Mercaston and Markeaton Brook Project**, however, has the potential to act as a vehicle for facilitating BAP delivery through HLS and other mechanisms. This project runs until 2013.

The aggregate sites around Mercaston offer opportunities through restoration schemes to deliver positively for biodiversity, and the larger areas of acid grassland occur within the disused quarries (Derby Hills, Mercaston Pit).

The area includes 133 **Local Wildlife Sites**, 39 of which (29%) are in 'favourable' or 'recovering' condition. The main reasons for 'unfavourable' condition are associated with unmanaged grassland, the presence of non-native species in woodlands and pollution incidents. See section 5.3.3 for a list of key sites in the Claylands area.

5.3.1 Existing initiatives and projects

The area around Mugginton is within a target area for Higher Level Stewardship. Much of which is associated with the SSSIs.

Markeaton and Mercaston Brook Project, led by the National Trust, has been running since 2006. The aim of the project is to improve the quality of the lakes

in the SSSI at Kedleston Hall, looking holistically at the watercourses flowing into the lakes and trying to reduce the nutrient and sediment run-off as well as improving the habitat for priority riverine species. The project has a grant through the SITA Trust until 2012.

Greenway development, along former railway lines, presents opportunities, so long as their development protects and enhances the existing habitats.

Part of the **Erewash Greenprint document** covers parts of this area. These documents are mini biodiversity action plans setting actions and targets for the local authority areas.

5.3.2 Main landowning bodies

There are a number of large estates in this area, including the National Trust, Meynell Langley, Shirley, Locko and Osmaston Estates. Hansons own a complex of aggregate sites in the Hulland Ward and Muggington area, which offer substantial opportunities for habitat restoration and creation. Derbyshire Wildlife Trust owns a couple of reserves in the area. There is very little publicly owned land in the area, apart from a number of trail networks.

5.3.3 Key Sites

The key sites in the Claylands Action Area are:

- **SSSIs:** Breadsall Railway Cutting SSSI, Hilton Gravel Pits SSSI, Hulland Moss SSSI, Kedleston Hall SSSI, Mercaston Marsh and Muggington Bottom SSSI, Morley Brickpits SSSI.
- **Others:** Great Northern Greenway, Locko Park, Meynell Langley Parkland, Osmaston Park, Radbourne Park, Ravensdale Park.



Reedbed planting at Hilton Gravel Pits SSSI
Credit: Debbie Alston

5.4 KEY ACTIONS for the Claylands area.

1. The **primary habitat objective** within the Claylands area is the maintenance, restoration and expansion of wetlands, hedgerows, grassland and parkland habitats to achieve targets in Table 5.1 below.
2. The **secondary objective** is to increase connectivity of semi-natural habitats to create larger habitat complexes using priority habitats wherever possible. New habitats, linking and extending existing networks will be key to achieving this objective.
3. Target renewing Entry Level Stewardship agreement holders to include appropriate actions for hedgerows, farmland birds and field margins.
4. Explore options to work closer with community groups in this area .
5. Investigate and develop one ark site for white-clawed crayfish.
6. Target Parish Councils to join up and support the LBAP partnership .

Full targets for all Priority Habitats and Species are listed in Tables 5.1 and 5.2
All actions listed in the separate **Generic Action Plan** also apply to this area.

5.5 KEY TARGETS for the Claylands area.

5.5.1 Targets for UK BAP PRIORITY HABITATS

Table 5.1 below lists the specific habitat targets for the Claylands 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.

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:				
Lowland meadow	42 ha	40 ha	165 ha	15 ha
Wood-pastures and Parkland	16 sites	9 sites	n/a	n/a
Hedgerows	unknown	Additional 10 km	n/a	7 km
Ponds	>500 ponds	40 ponds	15 ponds	ponds
Secondary feature:				
Field margins	unknown	50 ha #		
Lowland mixed deciduous woodland	885 ha	700 ha	n/a	20 ha
Wet Woodland	38 ha	20 ha	n/a	n/a
Lowland dry acid grassland	58 ha	40 ha	130 ha	5 ha
Lakes and Canals	6 lakes	6 lakes	n/a	n/a
Rush Pasture	15 ha	15 ha	15 ha	0 ha
Localised feature:				
Traditional orchard	155 sites	60 sites	10 sites	10 sites

Lowland Swamp	13 ha	10 ha	n/a	n/a
Lowland Fen	4 ha	4 ha	2 ha	n/a
Lowland Mire	7 ha	7 ha	n/a	n/a
Heathland	n/a	n/a	0.2 ha	n/a

Table 5.1 Targets for the Claylands 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 5.1

Create **woodlands** where opportunities exist to enlarge, link and buffer smaller woodlands (particularly ancient woods) in the area between Snelston and Kedleston.

Grassland management, restoration and creation should be targeted in the area from Ashbourne to Weston Underwood, north of the A52.

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.

5.5.2 Targets for UK BAP PRIORITY SPECIES

There are 77 UK BAP Priority Species recorded within the Claylands 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 5.2

The full list of UK BAP Species for the Claylands area is given in Table 5.3 (see Section 5.6.2)

UK BAP Priority Species	Range targets to 2020 (1km ²)	Range expansion targets 2011-2020 (1km ²)	Method
Dingy skipper	5	1	Appropriate habitat Enhancement
Great-crested newt	17	2	Targeted pond creation
Oak polypore	1	Maintain current range only	Care of veteran trees
Otter	11	2	Appropriate habitat enhancement
Water vole	16	Maintain current range only	Control mink; habitat maintenance; recording
White-clawed crayfish	3	1	Creation of one ark site

Table 5.2 Targets for UK BAP Species within the Claylands Action Area.

Dingy skippers have been recorded in five grid squares (5 x 1 km²) since 2000, these are mostly associated with the open character of the aggregate complex near Hulland Ward and Muggington. **Target:** Increase range by one 1 km² by appropriate habitat enhancement.

Great-crested newts have been recorded in 17 grid squares (17 x 1 km²) since 1990. **Target:** Increase range by two 1 km² by pond creation activities.

Oak Polypore has been recorded in one grid square (1 x 1 km²) in this Action Area on a single tree at Kedleston Hall. It is unlikely that additional sites will be found. **Target:** Maintain existing range by monitoring and protecting the veteran tree resource.

Otters have been recorded in 11 grid squares (11 x 1 km²) since 1990, these are mostly associated with tributaries of the River Trent and Dove. Unconfirmed records of otters have also been recorded along the Markeaton Brook as it leaves the City.

Water Voles have declined in this area, as other areas, and have been recorded in 16 grid squares (16 x 1 km²) since 2000. **Target:** Maintain existing range by controlling mink where appropriate and ensuring potential habitat is maintained in good condition.

White-clawed crayfish are a key species within this area, but have only been recorded at three grid squares (3 x 1 km²) since 2000. These are at isolated sites, such as Kedleston Hall and Shirley lakes. **Target:** Increase range by the creation of an additional ark site.



Dingy Skipper
Credit: Debbie Alston

5.6 Current Biodiversity Resources

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

- 5.6.1. UK BAP Priority Habitat Resources
- 5.6.2 UK BAP Priority Species Resources
- 5.6.3 Organisational and Manpower Resources

5.6.1 UK BAP Priority Habitat Resources

The figures below show the total amount of each Priority Habitat known to exist in the Claylands 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 Claylands region = **34,825 ha**
 Total area of Priority biodiversity resource at start of Plan Period = **1,675.2 ha**
 Percentage of the Claylands area containing this biodiversity resource = **4.8%**

Woodland:

Ancient Semi-Natural Woodland =	142 ha
Plantation on Ancient Woodland Sites =	93 ha
Secondary =	582 ha
Plantation =	69 ha

Wet Woodland:

38 ha

Wood pasture and parkland: 27 sites

520 ha

Traditional orchard: c.155 sites =

42 ha

Lowland Meadow:

42 ha

(Plus 238 ha of sub-priority, 15 ha of newly created)

Lowland Dry Acid:

58 ha

(Plus 140 ha of sub-priority)

Rush- pasture:

15 ha

(Plus 15 ha of sub-priority and 39 ha newly created)

Floodplain Grazing Marsh:

20 ha

Heathland:

0.2 ha

Wetland:

Lakes (6)	30 ha
Ponds (>500)	
Swamp	13 ha
Fen	4 ha
Mire	7 ha

Location of Priority Habitats in the Landscape:

Primary features:

Wood-pasture and Parkland: Scattered across the area with fine examples at Kedleston, Meynell Langley, Locko Park, Osmaston Park, Radbourne Park, Snelston Park.

Veteran trees: Mainly found in the parks, but also in fields, hedges and woods across the area.

Hedgerows: Widespread throughout the area.

Lowland Meadow: Main concentration in the Mercaston Brook catchment between Hulland Ward and Kedleston .

Ponds: Main concentration between Osmaston and Kedleston.

Secondary features:

Lowland mixed deciduous woodland: A swathe across the northern part of the area, mainly estate woodlands around Kedleston, Osmaston, Snelston.

Wet woodland: Small scattered good examples of alder carr woodland adjacent to watercourses.

Field Margins: Widespread across the area.

Floodplain Grazing Marsh: Mainly on the Erewash, with smaller examples on the Hilton and Foston Brooks.

Rush Pasture: Mainly around Mercaston.

Lowland Dry Acid Grassland: Around Ashbourne, and Mercaston.

Lakes: Mainly associated with the parklands.

Localised features:

Fen, mire and swamp: Concentration between Osmaston and Mugginton.

Heathland: Very small area at Hulland Moss SSSI only.

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.



Parkland at Kedleston.
Credit: Debbie Alston

5.6.2 UK BAP Priority Species Resources

Group	English Name	Group	English Name
Fungus	Oak polypore	Mammal	Noctule
Amphibian	Great crested newt	Mammal	Otter
Amphibian	Common toad	Mammal	Polecat
Reptile	Common lizard	Mammal	Soprano pipistrelle
Reptile	Grass snake	Mammal	Water vole
Reptile	Slow worm	Butterfly	Dingy skipper
Fish	Brown trout	Butterfly	Wall
Fish	Eel	Butterfly	White letter hairstreak
Bird	Bullfinch	Crustacean	White-clawed crayfish
Bird	Corn bunting	Moth	August thorn
Bird	Cuckoo	Moth	Beaded chestnut
Bird	Curlew	Moth	Blood-vein
Bird	Dunnock	Moth	Brindled beauty
Bird	Grasshopper warbler	Moth	Broom moth
Bird	Grey partridge	Moth	Buff ermine
Bird	Hawfinch	Moth	Centre-barred swallow
Bird	Herring Gull	Moth	Deep-brown dart
Bird	House sparrow	Moth	Dot moth
Bird	Lapwing	Moth	Dusky brocade
Bird	Lesser redpoll	Moth	Dusky thorn
Bird	Lesser spotted woodpecker	Moth	Garden tiger
Bird	Linnet	Moth	Ghost moth
Bird	Marsh tit	Moth	Green-brindled crescent
Bird	Reed bunting	Moth	Grey dagger
Bird	Skylark	Moth	Latticed heath
Bird	Song thrush	Moth	Mottled rustic
Bird	Spotted flycatcher	Moth	Mouse moth
Bird	Starling	Moth	Oak hook-tip
Bird	Tree pipit	Moth	Oblique carpet
Bird	Tree sparrow	Moth	Rosy rustic
Bird	Turtle dove	Moth	September thorn
Bird	Willow tit	Moth	Shaded broad-bar
Bird	Wood warbler	Moth	Shoulder-striped wainscot
Bird	Yellowhammer	Moth	Small phoenix
Bird	Yellow wagtail	Moth	Small square-spot
Mammal	Brown hare	Moth	The cinnabar
Mammal	Brown long-eared bat	Moth	The rustic
Mammal	Harvest mouse	Moth	White ermine
Mammal	Hedgehog		

Table 5.3 UK BAP Priority Species known to be present within the Claylands area since 2000. (77 species)

5.6.3 Organisational and Manpower Resources

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

Statutory Agencies	Doveridge Parish Council
Environment Agency*	Draycott and Church Wilne Parish Council
Forestry Commission *	Edlaston and Wyaston Parish Council
Natural England *	Egginton Parish Council
Voluntary organisations	Elvaston Parish Council
BTCV *	Etwall and Ash Parish Council
Derbyshire Wildlife Trust *	Findern Parish Council
Groundwork Derby and Derbyshire *	Foston and Scropton Parish Council
Private landowners and farmers	Hatton Parish Council
Local and Community Groups	Hilton Parish Council
Ashbourne Field Club	Hognaston Parish Council
Local Authorities (including Town and Parish Councils)	Hollington Parish Council
Derbyshire County Council *	Hoon Parish Council
Amber Valley Borough Council *	Hulland Parish Council
Derbyshire Dales District Council *	Hulland Ward Parish Council
Erewash Borough Council *	Hungry Bentley Parish Council
South Derbyshire District Council *	Kedleston Parish Council
Alkmonton and Hungry Bentley Parish Council	Kirk Langley Parish Council
Ashbourne Town Council	Longford Parish Council
Aston upon Trent Parish Council	Mackworth Parish Council*
Atlow Parish Council	Marston Montgomery Parish Council
Barrow upon Trent Parish Council	Marston on Dove Parish Council
Barton Blount Parish Council	Mercaston Parish Council
Bearwardcote Parish Council	Morley Parish Council
Biggin-by-Hulland Parish Council	Norbury and Roston Parish Council
Boylestone Parish Council	Ockbrook and Borrowash Parish Council
Bradley Parish Council	Offcote and Underwood Parish Council
Brailsford Parish Council	Osleston and Thurvaston Parish Council
Breaston Parish Council	Osmaston and Yeldersley Parish Council
Burnaston Parish Council	Quarndon Parish Council
Church Broughton Parish Council	Radbourne Parish Council
Clifton and Compton Parish Council	Ravensdale Park Parish Council
Cubley Parish Council	Risley Parish Council
Dalbury Lees Parish Council	Rodsley and Yeveley Parish Council
Dale Abbey Parish Council	

Sandiacre Parish Council
Shirley Parish Council
Snelston Parish Council
Somersal Herbert Parish Council
Stanley and Stanley Common Parish
Council
Stanton by Dale Parish Council
Stenson Fields Parish Council
Sudbury Parish Council
Sutton on the Hill Parish Council
Swarkestone Parish Council
Trusley Parish Council

Twyford and Stenson Parish Council
Weston Underwood Parish Council
Weston upon Trent Parish Council
Willington Parish Council
Windley Parish Council

Other Landowning bodies

Hansons
Meynell Langley Estate
National Trust*
Homeowners (for UK BAP species in
gardens)

* indicates Lowland Derbyshire Biodiversity Partnership member.

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

www.derbyshirebiodiversity.org.uk



Recording Veteran Trees at Kedleston Park.
Credit: Debbie Alston

5.7 Achievements to Date in the Claylands area

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

Woodland



680 ha (97 % of the target) of priority Mixed Deciduous Woodland was considered to be under management (in an agri-environmental scheme or assessed as favourable or recovering condition)

Wet Woodland



8 ha (40 % 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



6 wood-pasture and parkland sites (67 % of the area resource) were considered to be under management (in an agri-environmental scheme or assessed as favourable or recovering condition)

Lowland Meadow



33 ha (83 % 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)



132 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



29 ha (73 % 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)



122 ha (94 % 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.

Rush-pasture



12 ha (80 % of the target) of priority Rush-pasture was considered to be under management (in an agri-environmental scheme or assessed as favourable or recovering condition)



12 ha (80 % of the target) of sub-priority Rush-pasture 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.

Heathland



0.2 ha (100 % of the target) of sub-priority Heathland 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



24 ponds (60% of the target) are currently under management



3 lakes (50% of the target) are currently under management



8 ha of swamp (80% of the target) are currently under management



4 ha (100% of the target) of fen is currently under management



2 ha (100% of the target) of fen is currently under restorative management



3 ha of mire (43% of the target) are currently under management

Current Agri-environment Schemes:

9 Higher Level Stewardship Schemes
10 Countryside Stewardship Schemes

Claylands Action Area - Priority Habitats Map

- Ponds
- Wood-Pasture and Parkland
- Lowland meadow

Only those Priority Habitats which are seen as primary landscape features are shown here. See Area Action Plan for details.

