

Trent and Dove Valleys Area Action Plan



River Dove. Credit: Debbie Alston

Prepared by the Lowland Derbyshire Biodiversity Partnership



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

Trent and Dove Valleys Area

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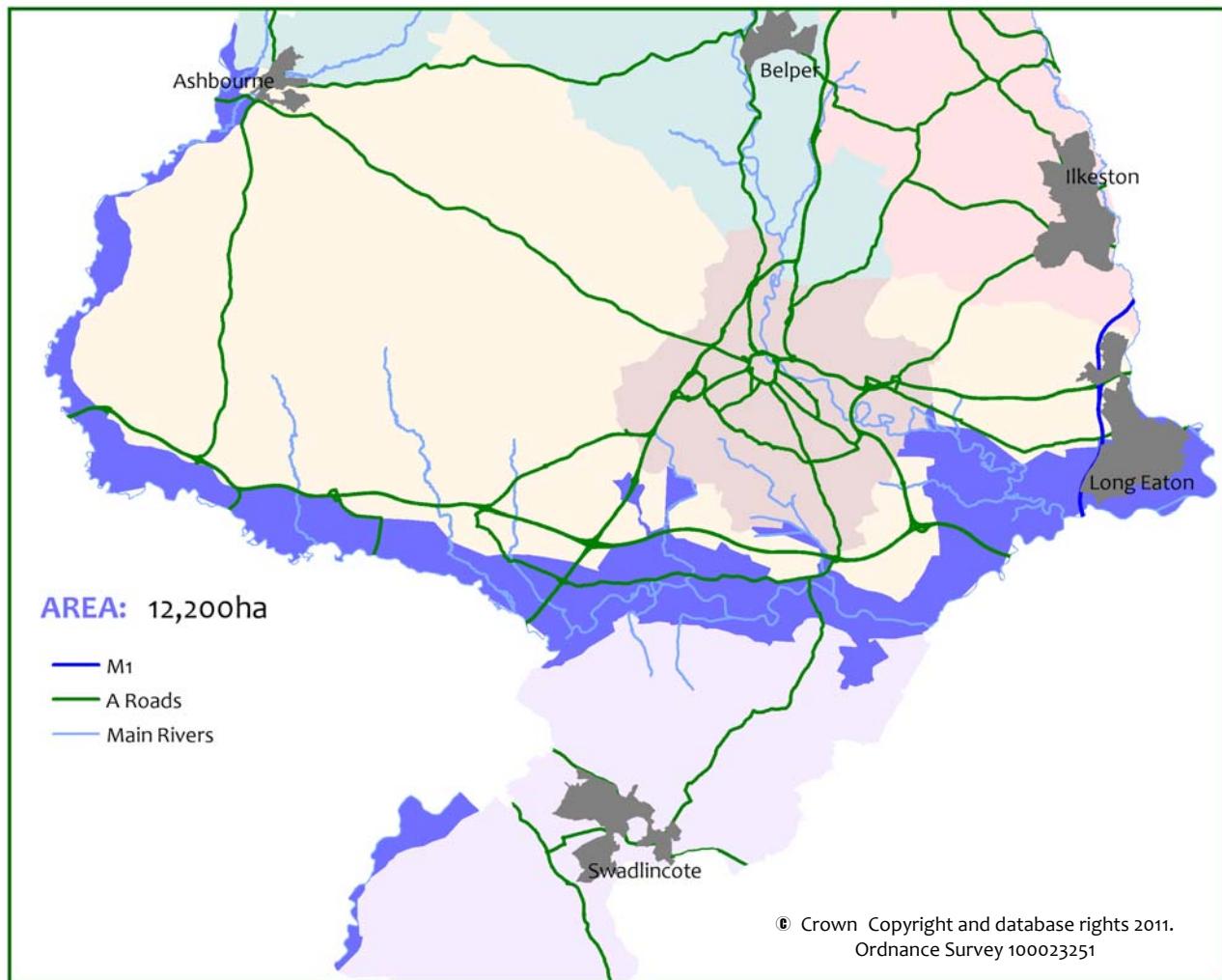
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7. Trent and Dove Valleys Area - ACTION PLAN -



Map of Trent and Dove Valleys Action Area

For further detail see Maps section

7.1 Area Description:

This is a mixed farming landscape associated with the floodplains of the rivers Trent and Dove although grassland habitat is more prevalent within the Dove valley. The landform is flat to gently rolling and is characterised by areas of pasture and semi-improved flood meadows enclosed by predominantly hawthorn hedgerows. Willow pollards, wet woodland and scrub are locally distinctive sitting alongside gravel pits and other industrial development particularly within the Trent valley. The meandering river channel, flood meadow and numerous flooded gravel pits and other man-made lakes influences the character of the area.

The area does not include any SSSIs, but does include four Local Nature Reserves, 3 RIGS, 84 Local Wildlife Sites and a number of potential Local Wildlife Sites.

The Trent and Dove Valleys area comprises five Derbyshire Landscape Character Types:

- Riverside Meadows
- Settled Farmlands
- Lowland Village Farmlands
- Estate Farmlands
- Wet Pasture 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 Doveridge, Sudbury, Hatton, Willington, Melbourne, Shardlow and Long Eaton.

7.2 Vision

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

7.3 The Challenges and Opportunities

The Trent Valley has a long history of aggregate extraction, which has left a legacy of large open water bodies and associated wetlands, many of which are now of significant value for wildlife. Some of these are already managed as nature reserves and others will be restored for conservation under planning obligations. Some long-standing applications for new schemes/extensions are yet to be determined, but if approved could deliver targets within the LBAP period. However there are constraints to the east of the area due to the proximity of East Midlands Airport. The closure of power stations at Willington and Drakelow also presents potential opportunities for habitat creation in association with new development.

There is, however, a need for a more strategic approach to site restoration which aims to link sites through the river corridors where possible, and takes into account the needs of priority species and the function of the valleys as important migratory and dispersal routes, linking the Trent lowlands with the uplands of the Peak District. Much of the area is high quality agricultural land and has become more intensively farmed in recent decades, with an increase in arable and field drainage. This has lead to the loss and fragmentation of priority habitats, especially grassland.

The Trent is a highly modified river, and has been extensively used for navigation and water supply. The Dove retains more of its natural features, although there are weirs which present barriers to migratory fish. In both river valleys areas of floodplain have been impounded and detached from the river system for flood defence and/ or agriculture. However the recent shift in

national policy towards the restoration of rivers and floodplains, and the creation of new wetlands for flood management presents opportunities for biodiversity gain.

Only part of the Trent falls within Derbyshire, and the Dove for most of its length forms the Derbyshire/ Staffordshire border. A strategic approach to conservation working across administrative boundaries is therefore essential, mediated through such bodies as the OnTrent Partnership and Central Rivers Initiative.

The area includes 84 Local Wildlife Sites, only 29 of which (35%) are in favourable or recovering condition. The main reasons for unfavourable condition are associated with the presence of non-native species in woodlands and lack of appropriate management in grasslands.

7.3.1 Existing initiatives and projects

The **OnTrent Partnership** is a project involving a wide range of public, voluntary and commercial organisations. It is working to secure a sustainable balance between the natural and historic heritage, agriculture, commercial activity and development along the River Trent.

The **Central Rivers Initiative** is a partnership project, the area for which includes the Derbyshire Trent to the west of Willington. The aim of the project is to deliver strategic wetland creation and enhancement by influencing mineral restoration schemes.

The Trent and Dove Valleys are both Derbyshire Wildlife Trust **Living Landscape Areas**. The Trust is currently developing a project to deliver strategic wetland creation in the Trent, Dove and Derwent Valleys as a successor to its Water for Wildlife project which has worked with many land managers in the Dove and Derwent.

Derbyshire Wildlife Trust's **Transforming the Trent Valley** Accreditation Scheme encourages landowners to pledge to enhance biodiversity on their land. Toyota were the first to achieve accreditation for their Burnaston plant in 2010.

The Trent Valley has been identified by RSPB as a **Futurescape** area.

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.

7.3.2 Main landowning bodies

Much of the land within the northern and eastern part of Trent valley is within mineral operator's ownership. The Church Commissioners own much of the land within the southern part of the Trent Valley. The Dove valley is largely within the ownership of private landowners.

7.3.3 Key Sites

The key sites in Trent and Dove Valleys Action Area are:

- **LNRs:** Elvaston Castle LNR, Forbes Hole LNR, Fox Covert LNR and St Chads LNR
- **Others:** Attenborough West Gravel Pits, Barrow Gravel Pits, Dovecliff Ponds, Drakelow Nature Reserve, Golden Brook Storage Lagoon Nature Reserve, Marston Crossing Oxbow, Sawley Carr, Swarkestone Gravel Pits, The Wiggs and Cliffe House Plantation, Toyota Balancing Ponds, Trent and Mersey Canal, Willington Gravel Pits Nature Reserve, Witches Oak Waters.



Witches Oak Water.
Credit: Glynis Foster

7.4 KEY ACTIONS for the Trent and Dove Valleys area.

1. The **primary habitat objective** within the Trent and Dove Valleys area is the maintenance, restoration and expansion of wetlands including floodplain grazing marsh, reedbed, wet woodland, lakes, swamp and fen, forming where possible a connected network to achieve targets in Table 7.1 below
2. The **secondary objective** is to increase connectivity of semi-natural habitats to create larger habitat complexes using priority habitats wherever possible and be reconnected with the river. New hedgerows, arable field margins and, in particular, management of watercourses will be key to achieving this objective.
3. Develop a project to engage with minerals operators and land managers with the aim of creating a strategic network of functionally linked wetland habitats.
4. Target renewing Entry Level Stewardship agreement holders to include appropriate actions for farmland birds, hedgerows and field margins.
5. Continue strategic mink control on the Dove to safeguard nationally important populations of water vole, as well as benefiting other species.

Full targets for all Priority Habitats and Species are listed in Tables 7.1 and 7.2
All actions listed in the separate **Generic Action Plan** also apply to this area.

7.5 KEY TARGETS for the Trent and Dove Valleys area.

7.5.1 Targets for UK BAP PRIORITY HABITATS

Table 7.1 below lists the specific habitat targets for the Trent and Dove Valleys 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:				
Lowland meadow	6 ha	6 ha	30 ha	14 ha
Field Margins	unknown		30 ha [∞]	
Reedbed	46 ha	35 ha	n/a	15 ha
Wet woodland	61 ha	55 ha	n/a	8 ha
Lakes and canals	31	28	n/a	n/a
Ponds	>150 ponds	60 ponds	20 ponds	25 ponds
Rivers and streams		Unknown #		
Floodplain Grazing Marsh	132 ha	95 ha	n/a	30 ha
Secondary feature:				
Hedgerows	unknown	additional 5 km	n/a	10 km
Lowland mixed deciduous woodland	190 ha	140 ha	n/a	18 ha
Lowland Swamp	16 ha	15 ha	n/a	5 ha
Localised feature:				

Traditional orchard	21 sites	10 sites	n/a	1 site
Rush Pasture	4 ha	4 ha	5 ha	5 ha
Lowland Dry Acid Grasslands	2 ha	2 ha	2 ha	n/a

Table 7.1 Targets for the Trent and Dove Valleys 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 7.1

Opportunities for habitat creation and restoration are going to be largely confined to land restoration associated with mineral extraction, these should be appropriate to underlying ground conditions and future management of habitats should be secured throughout.

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

∞ **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.

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.

7.5.2 Targets for UK BAP PRIORITY SPECIES

There are 90 UK BAP Priority Species recorded within the Trent and Dove Valleys 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 7.2

The full list of UK BAP Species for the Trent and Dove Valleys area is given in Table 7.3 (see Section 7.6.2)

UK BAP Priority Species	Range targets to 2020 (1km ²)	Range expansion targets 2011-2020 (1km ²)	Method of expansion
Great-crested newt	4	1	Targeted pond creation
Otter	55	2	Appropriate Habitat enhancement
Water vole	4	4	Appropriate habitat enhancement strategic mink control and

Table 7.1 Targets for UK BAP Species within the Trent and Dove Valleys Action Area.

Otters have been recorded in 55 grid squares ($55 \times 1 \text{ km}^2$) since 1990, and are regularly recorded on both the Dove and Trent with evidence of breeding. **Target:** Increase range by two 1 km^2 by 2020

Water Voles have been recorded in four grid squares ($4 \times 1 \text{ km}^2$) since 2000, with some evidence of expansion on the Dove. Mink control is ongoing on the Dove, coordinated by DWT. **Target:** Increase range by four 1 km^2 by 2020

Great-crested newts have been recorded in four grid squares ($4 \times 1 \text{ km}^2$) since 1990. **Target:** Increase range by one 1 km^2 by 2020



Great Crested Newt.
Credit: Lofaesofa (Creative Commons)

7.6 Current Biodiversity Resources

This list of resources within the Trent and Dove Valleys area has been divided into three parts:

- 7.6.1. UK BAP Priority Habitat Resources
- 7.6.2 UK BAP Priority Species Resources
- 7.6.3 Organisational and Manpower Resources

7.6.1 UK BAP Priority Habitat Resources

The figures below show the total amount of each Priority Habitat known to exist in the Trent and Dove Valleys 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 Trent and Dove Valleys region =	12,211 ha
Total area of Priority biodiversity resource at start of Plan Period =	576 ha
Percentage of Action Area containing this biodiversity resource =	4.7%

Lowland Deciduous Mixed Woodland:

Ancient Semi-Natural Woodland =	7 ha
Secondary=	129 ha
Plantation =	54 ha

Wet Woodland:

Traditional Orchard: (21 sites) 2 ha

Lowland meadow: 6 ha

(Plus 61 ha of sub-priority and 7 ha of newly created)

Lowland dry acid grassland: 2 ha

(Plus 3 ha sub-priority)

Rush-pasture: (4 ha newly created)

Wetland:

Ponds: >150 ponds

Lakes: 31 lakes and one canal 255 ha

Reedbed: (including 20ha of newly planted reedbed) 46 ha

Swamp: 16 ha

Location of Priority Habitats in the Landscape:

Primary features:

Rivers and streams: Main rivers are the Dove and Trent and the lower reaches of the River Derwent, where it joins the Trent with some important tributaries including the Hilton brook.

Wet woodland: This is the most important area in the LBAP area for this habitat, it occurs in narrow bands lining the River Trent, in old ox-bows and along its tributaries.

Field margins: Widespread across the area.

Floodplain grazing marsh: Concentrated along the River Trent and Dove, especially where the main channel has not been modified.

Reedbeds: This is the most important area for this habitat in the LBAP area, which mainly occurs in association with former gravel extraction sites.

Lowland meadows: Rare habitat concentrated in the Long Eaton and Willington areas.

Lakes and canals: Lakes associated primarily with the former gravel extraction sites and water storage, Trent and Mersey Canal flows in this area from Egginton to Great Wilne.

Ponds: Scattered throughout the area; most are fished.

Secondary features:

Lowland mixed deciduous woodlands: Mostly small secondary and recently planted woodlands scattered across the area, but not within the immediately river corridors.

Veteran trees: Widespread across the area

Hedgerows: Widespread across the area

Lowland swamp: Associated with large wetland complexes in the immediate floodplain area.



River Dove.
Credit: Debbie Alston

7.6.2 UK BAP Priority Species Resources

Group	English Name	Group	English Name
Amphibian	Great crested newt	Butterfly	Small heath
Plant	see footnote	Butterfly	Wall
Amphibian	Common toad	Butterfly	White letter hairstreak
Reptile	Common lizard	Moth	Autumnal rustic
Reptile	Grass snake	Moth	Beaded chestnut
Reptile	Slow worm	Moth	Blood-vein
Fish	Atlantic salmon	Moth	Brindled beauty
Fish	Brown trout	Moth	Brown-spot pinion
Fish	Eel	Moth	Buff ermine
Bird	Bullfinch	Moth	Centre-barred sallow
Bird	Corn bunting	Moth	Dark spinach
Bird	Cuckoo	Moth	Dark-barred twin-spot carpet
Bird	Curlew	Moth	Deep-brown dart
Bird	Dunnock	Moth	Dot moth
Bird	Grasshopper warbler	Moth	Double dart
Bird	Grey partridge	Moth	Dusky brocade
Bird	Herring gull	Moth	Dusky thorn
Bird	Hawfinch	Moth	Dusky-lemon sallow
Bird	House sparrow	Moth	Feathered gothic
Bird	Lapwing	Moth	Garden dart
Bird	Lesser redpoll	Moth	Garden tiger
Bird	Lesser spotted woodpecker	Moth	Ghost moth
Bird	Linnet	Moth	Green-brindled crescent
Bird	Marsh tit	Moth	Grey dagger
Bird	Reed bunting	Moth	Large nutmeg
Bird	Skylark	Moth	Latticed heath
Bird	Song thrush	Moth	Minor shoulder-knot
Bird	Spotted flycatcher	Moth	Mottled rustic
Bird	Starling	Moth	Mouse moth
Bird	Tree pipit	Moth	Oak hook-tip
Bird	Tree sparrow	Moth	Pale eggar
Bird	Twite	Moth	Powdered quaker
Bird	Turtle dove	Moth	Rosy minor
Bird	Willow tit	Moth	Rosy rustic
Bird	Wood warbler	Moth	Shaded broad-bar
Bird	Yellowhammer	Moth	Shoulder-striped wainscot
Bird	Yellow wagtail	Moth	Small emerald
Mammal	Brown hare	Moth	Small phoenix
Mammal	Brown long-eared bat	Moth	Small square-spot
Mammal	Harvest mouse	Moth	The cinnabar
Mammal	Hedgehog	Moth	The crescent
Mammal	Noctule	Moth	The rustic
Mammal	Otter	Moth	The sallow
Mammal	Polecat	Moth	The spinach
Mammal	Soprano pipistrelle	Moth	White ermine
Mammal	Water vole		

Table 7.3 UK BAP Priority Species present in the Trent and Dove Valleys area since 2000 (90 species)

Note: Grass-wrack Pondweed occurs just 200m beyond this Action Area in Staffordshire, at a site formerly within the county of Derbyshire. Another site is known from Leicestershire, close to the confluence of the Trent and Derwent.

7.6.3 Organisational and Manpower Resources

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

Statutory Agencies	Foremark Parish Council Foston and Scropton Parish Council Hatton Parish Council Hilton Parish Council Hoon Parish Council Ingleby Parish Council Mapleton Parish Council Marston Montgomery Parish Council Marston on Dove Parish Council Melbourne Parish Council Newton Solney Parish Council* Norbury and Roston Parish Council Ockbrook and Borrowash Parish Council Offcote and Underwood Parish Council Repton Parish Council* Sawley Parish Council Shardlow and Great Wilne Parish Council Snelston Parish Council Stanton by Bridge Parish Council Sudbury Parish Council Swarkestone Parish Council Twyford and Stenson Parish Council Walton upon Trent Parish Council Weston upon Trent Parish Council Willington Parish Council*
Voluntary organisations	BTCV * Central Rivers Initiative Derbyshire Wildlife Trust * FWAG * Groundwork Derby and Derbyshire * On Trent Partnership RSPB *
Local and Community Groups	Dove Valley Community Project * Findern Footpaths Group * Friends of Forbes Hole * Long Eaton Natural History Society *
Local Authorities (including Town and Parish Councils)	Aston upon Trent Parish Council Barrow upon Trent Parish Council Breaston Parish Council Burnaston Parish Council Clifton and Compton Parish Council Doveridge Parish Council* Drakelow Parish Council Draycott and Church Wilne Parish Council Egginton Parish Council Elvaston Parish Council Findern Parish Council*
Other Landowning bodies	Cemex Church Commissioners Lafarge Hanson Tarmac Private landowners and farmers Severn Trent Water * Homeowners (for UK BAP species in gardens)

* indicates Lowland Derbyshire Biodiversity Partnership member.

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

www.derbyshirebiodiversity.org.uk

7.7 Achievements to Date in Trent and Dove Valleys area

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

Woodland



109 ha (78% 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)

Wet Woodland



38 ha (69% of the target) of Wet Woodland was considered to be under management (in an agri-environmental scheme or assessed as favourable or recovering condition)

Lowland Meadow



5 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)



10 ha (33 % 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 ha (50 % 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.

Wetland



30 ponds (50% of the target) are currently under management



21 lakes and canals (75% of the target) are currently under management



13 ha under mature Reedbed (37% of the target) are currently under management



14 ha of swamp (93% of the target) are currently under management or restoration

Current Agri-environment Schemes:

- 1 Higher Level Stewardship Scheme
- 3 Countryside Stewardship Schemes

Trent and Dove Valleys Action Area - Priority Habitats Map

