

## Ecological Sub-area Statement of Biodiversity Priorities – Technical Appendix

<b>Sub-area name</b>	Sandwell Valley	<b>Sub-area ref.</b>	CL07
<b>Natural Character Area</b>	Cannock Chase and Cank Wood	<b>NCA ref.</b>	67
<b>Local Authority Area</b>	Sandwell and Walsall	<b>Area km<sup>2</sup></b>	9.01

### Ecological Sub-area Description

#### Overview

Sandwell Valley comprises a large area of open space at the approximate centre of the Birmingham and Black Country conurbation, and forms part of the Black Country's eastern boundary with Birmingham. The ecological sub-area is bisected by the M5 and M6 motorways, and almost entirely surrounded by urban development. A section of the River Tame flows west-east through the area and there are numerous small tributaries of this. The Tame Valley Canal traverses the northern part of the area (through the M5/M6 motorway junction), as does an active railway line.

The landscape of the ecological sub-area remains dominated by the pre-urban field pattern, though only parts of this remain actively farmed. In the south of the area are the remains of Sandwell Hall country house and earlier Benedictine priory, as well as features such as pools associated with the 18<sup>th</sup> century designed landscape. Ancillary buildings, stables and parts of a walled garden remain standing and have been restored for use as Sandwell Park Farm visitor centre. To the north of Swan Pool are the remains of Sandwell Park Colliery which was operational in the early 20<sup>th</sup> century.

A large floodwater storage lake (Forge Mill Lake) was constructed alongside the River Tame in the east of the ecological sub-area in the early 1980s. Part of the lake and the surrounding area are managed as RSPB Sandwell Valley nature reserve.

#### Land Use

Much of the southern part of Sandwell Valley is accessible open space including at Forge Mill Lake, Priory Woods and Sot's Hole Local Nature Reserves, as well as the more formal Dartmouth Park and King George Playing Fields in the south-west. There are also two golf courses (Sandwell Park and Dartmouth Golf Course) and West Bromwich Crematorium. The remainder of the southern section is farmed, with ley pasture, arable and permanent pasture all present.

Further north is the large triangular junction of the M5 and M6 motorways within which is a sewage treatment works, whilst to the north of the M6 is an electricity sub-station. The remainder of the northern section is comprised of further informal accessible open space, school grounds, Walsall Golf Course and a number of sports pitches, as well as Peak House Farm field system of irregular pre-enclosure fields which are actively farmed (see Historic Environment Area Designations).

#### Topography

The highest elevations within Sandwell Valley are at the southern and close to the northern end at an elevation of 170 meters. From these points the land slopes gently down to the valley of the River Tame which is at an elevation of 100 metres.

#### Geology

The southern part of the ecological sub-area is dominated by sedimentary Alveley Member mudstone bedrock formed between 309.5 and 308 million years ago during the Carboniferous period. The northern part is dominated by Coalbrookdale Formation mudstone formed between 433.4 and 427.4 million years ago during the Silurian period, with a small area of Pennine Lower Coal Measures Formation Mudstone, siltstone and sandstone formed between 319 and 318 million years ago during the Carboniferous period. In the central area there is a formation of Pennine Middle Coal Measures Formation mudstone, siltstone and sandstone formed between 318 and 309.5 million years ago during the Carboniferous period.

Parts of the southern area are overlain with superficial deposits of Devensian diamicton till formed between 116 and 11.8 thousand years ago during the Quaternary period, and Mid Pleistocene Diamicton till formed between 860 and 116 thousand years ago during the Quaternary period. Following the course of the River Tame there are river terrace deposits of sand and gravel formed between 2.588 million years ago and the present during the

Quaternary period, and more recent alluvial clay, silt, sand and gravel formed between 11.8 thousand years ago and the present.

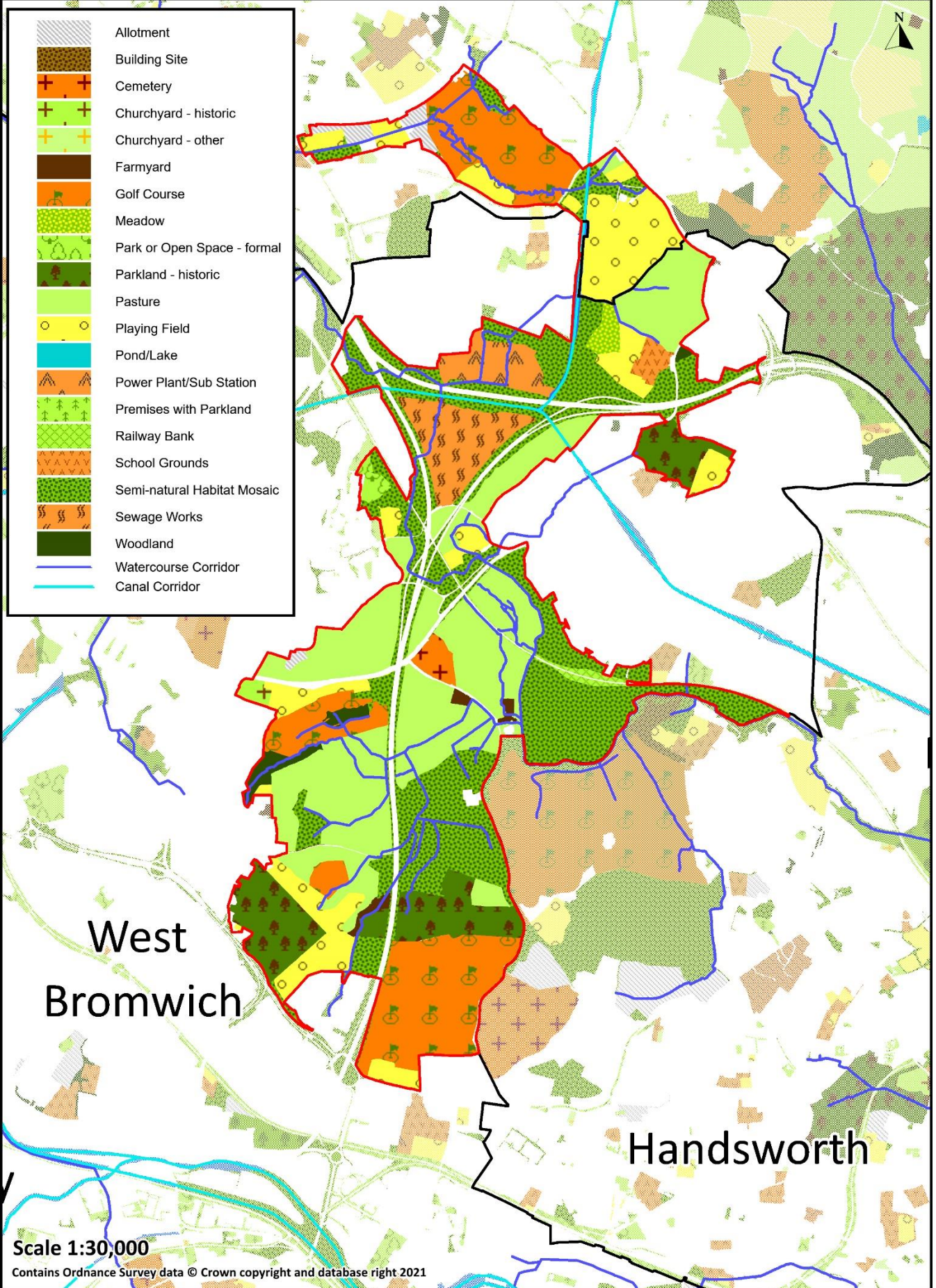
#### **Geopark Sites**

- Sandwell Valley Country Park (GR SP01939149)

#### **Soils**

The ecological sub-area is dominated by slowly permeable seasonally wet, slightly acid but base-rich loamy and clayey soils with moderate fertility and impeded drainage. In the north the soils are slowly permeable, seasonally wet acid loamy and clayey soils with low fertility and impeded drainage, and in the central area around Forge Mill Lake the soils are naturally wet, very acid sandy and loamy soils with very low fertility.

# CL07 - Sandwell Valley - Land Use



Historic Landscape Character Areas			
<b>Reference</b>	SD07	<b>Name</b>	Sandwell Valley
<p>The central and southern part of the ecological sub-area is coterminous with character areas SD07 Sandwell Valley, which is dominated by Sandwell Valley Country Park and agricultural land. The Character Area was originally part of the estate owned by the Earls of Dartmouth from the early 18th century. Sandwell Hall (demolished in 1928) was built by the first Earl on the site of the 12th century Benedictine priory close to the Sand Well spring. The Character Area contains the Registered Park and Garden Dartmouth Park which became public park in 1877.</p>			
<b>Reference</b>	SD02	<b>Name</b>	Newton, Hamstead & Great Barr
<p>Lying to the north of Sandwell Valley and comprising the north-eastern part of the ecological sub-area id SD02 Newton, Hamstead &amp; Great Barr. The modern character of the area is dominated by 20th century residential housing, with areas of surviving fields in the north-west of the character area that continue beyond the Borough boundary into Walsall (WL09). Until the 20th century this area was largely agricultural, crossed by the Tame Valley Canal which opened in 1844.</p>			
<b>Reference</b>	SD05	<b>Name</b>	Yew Tree
<p>A small part of the ecological sub-area to the north of the M5/M6 junction lies within SD05 Yew Tree. The historic character of the area was defined almost entirely of agricultural land much of it worked from Delves Farm and Yew Tree Farm. Residential development began to cover this area after the First World War. The Tame Valley Canal, on the southern edge of the area, was opened in 1844 and, as such was one of the last Black Country canals.</p>			
<b>Reference</b>	WL11	<b>Name</b>	South East Walsall
<p>The northern part of the ecological sub-area lies within WL11 South East Walsall. During the medieval period this area was dominated by open fields with a small manor house or settlement at The Delves. There was also a large deer park to the west of Great Barr, although its extent is unknown. By the mid-18th century a mill had been established at New Mills in the south-west of the area and a country house has been constructed by the Delves. At this time the landscape was still largely agricultural and by the late 18th century- early 19th century woodland had been established in the south-east of the area near Great Barr and two further country houses had been built.</p>			

Historic Environment Area Designations [1]			
<b>Reference</b>	APA 14	<b>Name</b>	Shustoke Farm Moated site
<p>The APA contains earthworks remains of a possible medieval moated site. The moat is shown on the 1841 Tithe map. LiDAR shows remnants of the moat to the north and west and its survival was confirmed by a field survey carried out in 2001. There is therefore the potential for archaeological remains associated with the moat and potential medieval and post-medieval buildings. To the north of the moated site are the earthwork remains of three fish ponds linked to the moated site by leats. The moat, fish ponds and leats have the potential to contain waterlogged remains and there is potential for organic preservation.</p>			
<b>Reference</b>	AHHLV 25	<b>Name</b>	Peak House Farm Field System
<p>The AHHLV contains a well-preserved example of a pre-enclosure field system. Evidence of ridge and furrow is visible across the site as cropmarks (but no earthworks appear to survive). Prehistoric finds have been recovered within this area and cropmarks indicative of below-ground archaeological remains have also been identified, highlighting the archaeological potential of the area. Many of the field boundaries are marked by drainage ditches linked to the moated site to the south (APA 24) and a number of hedgerows are recorded as ancient hedgerows. LiDAR shows a small mound in the AHHLV (NGR 403764 295377).</p>			
<b>Reference</b>	APA 24	<b>Name</b>	Peak House Farm Moated Site
<p>The APA contains the remains of a possible moated site. The Environment Agency LiDAR shows the earthwork remains of a moat and a possible building platform within the APA. There is no building at this location on the 1817 OSD map, or 1st-4th edition OS maps, suggesting that the moated site is of medieval or early post-medieval date. The APA has the potential to contain below-ground archaeological remains associated with the manor house and the moat. The moat may contain waterlogged deposits, which would provide insight into land use in the area during the medieval period.</p>			

<b>Historic Environment Area Designations [1]</b>			
<b>Reference</b>	APA 27	<b>Name</b>	The River Tame
<p>The APA contains part of the route of the River Tame; there is considered to be potential for previously unknown prehistoric activity (including Bronze Age burnt mounds) and environmental evidence present associated with the former water course. Prior to the industrial revolution the land adjacent to the river would have been utilised for mills and other water-based industries. Accordingly, there is potential for archaeological remains associated with these features to survive. Aerial photographs show a number of tributaries and drainage channels associated with the river, which may be possible mill leats. The APA contains the infilled Old Forge Mill pool. There is potential for archaeological remains associated with the Old Forge and Mill. Part of the area was disturbed during the 19th century by the Grand Union Line Railway. However, the majority of the area remains relatively undisturbed. Some ridge and furrow earthworks are present within the APA.</p>			
<b>Reference</b>	AHHLV 26	<b>Name</b>	Wigmore Farm Ridge and Furrow
<p>The AHHLV contains the several areas of surviving earthwork ridge and furrow and a (possibly) medieval holloway. These features are surviving remnants of the open field system within the area. The field system in this area appears to date back to at least the 19th century, and may form part of a pre-enclosure field system that has been subject to some more recent boundary loss. Remnants of a watercourse and two ponds (fish ponds?) of unknown date are present within the AHHLV.</p>			
<b>Reference</b>	APA 25	<b>Name</b>	All Saints Church
<p>The APA contains All Saints Church and Graveyard. All Saints Church is situated on the site of a medieval church, elements of the 14th or 15th century tower survive within the present day Church. The church is surrounded by a graveyard, which has the potential to contain human remains dating from the medieval to post-medieval periods.</p>			
<b>Reference</b>	APA 26	<b>Name</b>	Sot's Hole Stream
<p>The APA contains the remains of a burnt mound and a stone mound as well as several recorded scatters of prehistoric flints. The APA is situated upon sand and gravel deposits resulting in the formation of natural springs in prehistoric times, which would have made it a focus for activity. The HER records a number of patches of ridge and furrow within the APA although these were not visible on the Environment Agency LiDAR survey of the site. Several drainage channels are evident within the APA and fish ponds and a dam are recorded in the very western part of the area (shown on 1817 Ordnance Survey drawings of the area) near Parsons Farm. The ponds and dams were used to control the flow of water supplied to the dams along the River Tame and its tributaries.</p>			
<b>Reference</b>	AHHLV 48	<b>Name</b>	Chambers Wood
<p>The AHHLV is an area of semi-natural ancient woodland. Accordingly, it has the potential to contain well preserved archaeological remains (although none are currently known), and may contain features associated with medieval and post-medieval woodland management. Areas of semi-natural ancient woodland are areas of natural woodland which may have been subject to some previous woodland management and have been in use as woodland since at least the 1600s. Accordingly these areas have the potential to contain well preserved archaeological remains. Areas of ancient woodland represent surviving patches of the historic landscape that date back to the medieval or early post-medieval periods.</p>			
<b>Reference</b>	AHHLV 50	<b>Name</b>	Dartmouth Golf Course Wood
<p>The AHHLV is an area of semi-natural ancient woodland. Accordingly, it has the potential to contain well preserved archaeological remains (although none are currently known), and may contain features associated with medieval and post-medieval woodland management. Areas of semi-natural ancient woodland are areas of natural woodland which may have been subject to some previous woodland management and have been in use as woodland since at least the 1600s. Accordingly these areas have the potential to contain well preserved archaeological remains. Areas of ancient woodland represent surviving patches of the historic landscape that date back to the medieval or early post-medieval periods.</p>			
<b>Reference</b>	DLHHV 1	<b>Name</b>	Sandwell Park
<p>The DLHHV was originally part of the estate associated with Sandwell Priory. It was later sold to the Earl of Dartmouth, who in turn sold it to West Bromwich Council in 1947. The park today contains remnants of the mid-18<sup>th</sup> century designed landscape although the original design has been eroded by the construction of later transport infrastructure. During the inter-war period, parts of the site were used as a colliery. Several earlier features associated with the parkland including ornamental pools (Swan and Pleasure pools), an ice house and a ha-ha (a bank and ditch used to keep out animals) survive within the present day landscape. Swan Pool started life as a mill pool before being extended twice, firstly to take the extra water from the adjacent mines and secondly as a leisure facility. Earlier archaeological remains such as the scheduled remains of Sandwell Hall and the earlier Benedictine Priory, which is a scheduled monument (NHLE 1017763) and areas of non-designated ridge and</p>			

**Historic Environment Area Designations [1]**

furrow are also present, highlighting various land uses within the park over time. A number of archaeological features including a prehistoric burnt mound have been recorded within the site, further highlighting the archaeological interest of the area. The scheduled monument has a high level of archaeological interest, and could be directly impacted by unsympathetic development e.g. ground works.

**Waterbody Catchments**

<b>River Basin District</b>	Humber	<b>Management Catchment</b>	Tame Anker and Mease
<b>Waterbody Catchment</b>	<b>Overall Classification</b>	<b>Ecological</b>	<b>Chemical</b>
Tame - confluence two arms to R Rea Water Body	Moderate (2019)	Moderate (2019)	Moderate (2019)

**Key Habitats [2]**

<b>Broad Habitat Type</b>	Woodland	<b>Priority Habitat</b>	Lowland mixed deciduous woodland
There are two areas of woodland designated as Ancient Semi-natural Woodland in the south-west of the ecological sub-area (Chambers Wood and Bluebell Wood). There are further small areas of mature Oak woodland scattered through the south-west which may be ancient or old plantations.			
<b>Broad Habitat Type</b>	Woodland	<b>Priority Habitat</b>	
Younger woodland is frequent throughout Sandwell Valley, either as plantations or spontaneous woodland on abandoned sites. Planted areas include around Forge Mill Lake, along fairways in the area's many golf courses, around the sewage works and along some of the motorway embankments. Older ornamental plantations are found around the parkland of the former Sandwell Hall. Young woodland now occupies the site of the former Sandwell Park Colliery, though it is not known if this is planted or spontaneous.			
<b>Broad Habitat Type</b>	Grassland	<b>Priority Habitat</b>	Lowland meadows
There are small areas of remnant meadow in Priory Woods Local Nature Reserve, though the extent or condition of this habitat is not known. The irregular fields of the Peak House Farm field system have in recent years been cut for hay, however, these are not floristically diverse and are likely to have been managed as pasture prior to this.			
<b>Broad Habitat Type</b>	Grassland	<b>Priority Habitat</b>	
Grassland of various sward types dominates much of Sandwell Valley. Permeant pasture exists in the southern part of the ecological sub-area, with the surviving ridge and furrow at the Wigmore Farm being a notable surviving remnant of the former open field system of the area. Throughout the publicly accessible parts of Sandwell Valley there are areas of irregularly managed grassland that is relatively species-poor and rank. There are also significant areas of regularly mown grassland in the formal parks and on the golf course fairways.			
<b>Broad Habitat Type</b>	Boundary	<b>Priority Habitat</b>	Hedgerows
Numerous field boundary hedgerows exist throughout the ecological sub-area, either demarcating the boundaries of existing fields or as remnants within areas now used for alternative purposes. It is thought that most of Sandwell Valley was enclosed from mediaeval open fields (see Wigmore Farm), however, the fields at Peak House Farm are considered to be an uncommon example of earlier enclosure. Here the field-pattern is notably more irregular and the hedgerows have been allowed to grow to a substantial size.			
<b>Broad Habitat Type</b>	Freshwater	<b>Priority Habitat</b>	Rivers
A stretch of the River Tame runs through Sandwell Valley, entering the ecological sub-area in the north-west adjacent to the M6 and meandering south and then eastwards around Forge Mill Lake and exiting into Birmingham. The channel is heavily modified, being of uniform width and with raised flood banks, with few natural erosion and depositional features, and very little aquatic vegetation. The catchment is classified Moderate status by the Environment Agency and suffers from urban diffuse pollution. There are numerous minor channels which flow into the River Tame from across the ecological sub-area. These range from unmodified watercourses to artificial drainage channels.			

<b>Broad Habitat Type</b>	Freshwater	<b>Priority Habitat</b>	Eutrophic standing waters
<p>There are a number of artificial standing waters throughout Sandwell Valley. These include an ornamental pool and boating lake in Dartmouth Park, the large floodwater storage lake Forge Mill Lake, and those associated with the former grounds of Sandwell Hall (Pleasure Pool and Swan Pool). These vary significantly in ecological value, with significant works having been undertaken for the benefit of wetland birds at RSPB Sandwell Valley (parts of Forge Mill Lake), and wetland and adjacent terrestrial vegetation having developed at the Pleasure Pool. Conversely the boating lake has artificial banks, and very few naturalised features and associated species.</p>			

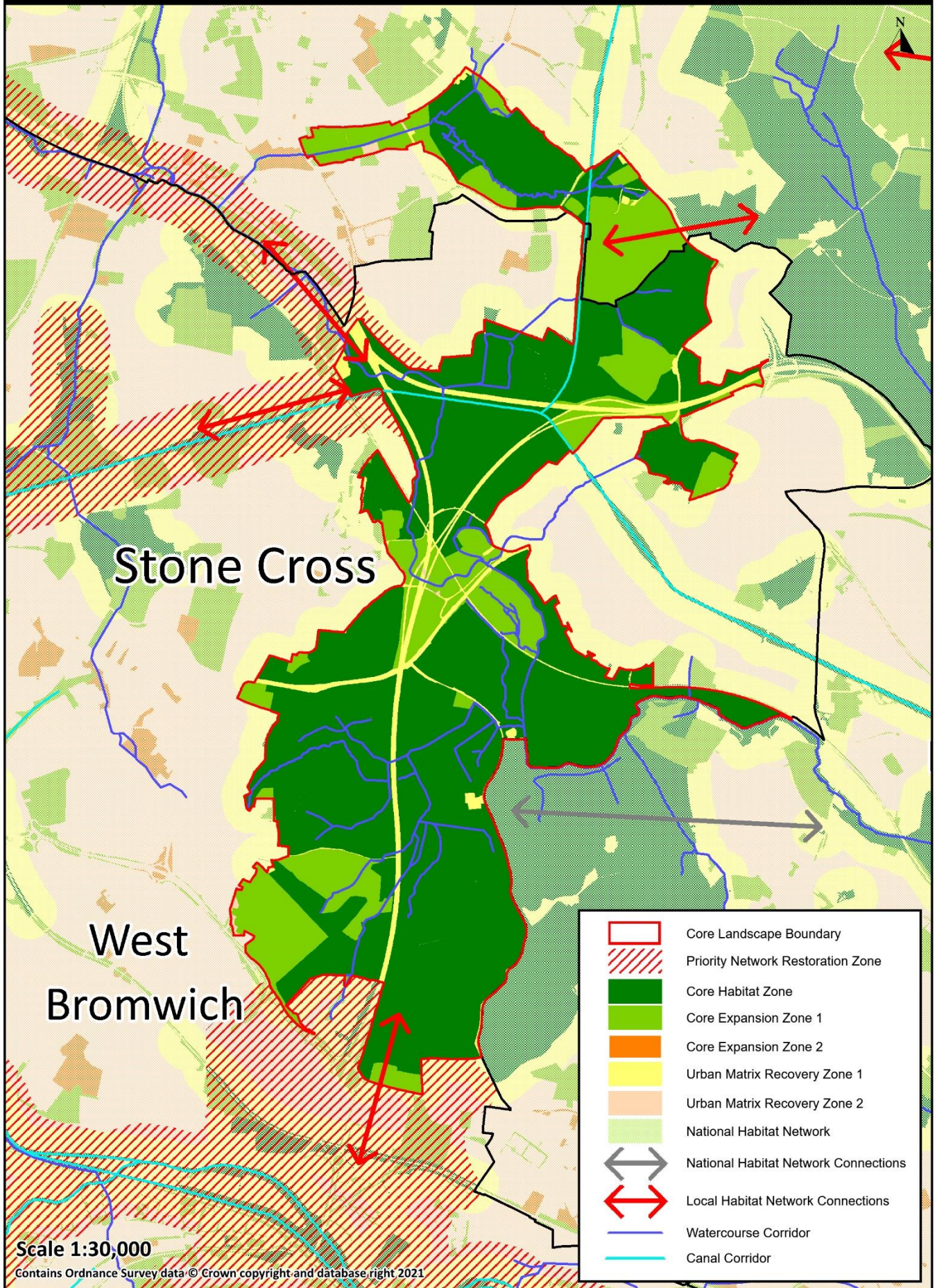
<b>Key Species [3]</b>	
<b>Bird indicators</b>	
<b>Farmland</b>	Common Reed Bunting, Eurasian Skylark, Goldfinch, Greenfinch, Jackdaw, Kestrel, Lapwing, Rook, Starling, Stock Dove, Western Yellow Wagtail, Whitethroat, Woodpigeon, Yellowhammer.
<b>Woodland</b>	Blackbird, Chiffchaff, Coal Tit, Common Chaffinch, Dunnock, Eurasian Blackcap, Eurasian Blue Tit, Eurasian Bullfinch, Eurasian Nuthatch, Eurasian Wren, European Green Woodpecker, Garden Warbler, Goldcrest, Great Spotted Woodpecker, Great Tit, Jay, Lesser Redpoll, Lesser Whitethroat, Long-tailed Tit, Marsh Tit, Redstart, Robin, Siskin, Song Thrush, Sparrowhawk, Spotted Flycatcher, Tawny Owl, Treecreeper, Willow Tit, Willow Warbler.
<b>Water &amp; Wetland</b>	Cetti's Warbler, Common Merganser, Common Reed Bunting, Common Sandpiper, Eurasian Coot, Great Crested Grebe, Grey Heron, Grey Wagtail, Kingfisher, Lapwing, Little Egret, Little Grebe, Mallard, Moorhen, Mute Swan, Oystercatcher, Redshank, Reed Warbler, Sand Martin, Sedge Warbler, Snipe, Teal, Tufted Duck, Western Yellow Wagtail.
<b>Other</b>	Black-headed Gull, Buzzard, Carrion Crow, Collared Dove, Common House Martin, Eurasian Magpie, Gadwall, Golden Plover, House Sparrow, Meadow Pipit, Mistle Thrush, Northern Raven, Peregrine, Pied Wagtail, Pochard, Red Kite, Shelduck, Shoveler, Stonechat, Swallow, Swift, Whinchat.
<b>Amphibians &amp; Reptiles</b>	
<b>Amphibians</b>	Common Frog, Common Toad, Great Crested Newt, Smooth Newt.
<b>Reptiles</b>	none
<b>Mammals</b>	
<b>Bats</b>	Brown Long-eared Bat, Common Pipistrelle, Daubenton's Bat, Lesser Noctule, Nathusius's Pipistrelle, Noctule Bat, Soprano Pipistrelle.
<b>Other</b>	Eurasian Badger, Eurasian Common Shrew, European Water Vole, Harvest Mouse, West European Hedgehog.
<b>Fish</b>	
<b>Bony Fish</b>	none
<b>Jawless Fish</b>	none
<b>Invertebrates</b>	
<b>Assemblage type</b>	
<b>Flora (axiophytes)</b>	
<b>Woodland</b>	<i>Ajuga reptans</i> , <i>Allium ursinum</i> , <i>Anemone nemorosa</i> , <i>Angelica sylvestris</i> , <i>Athyrium filix-femina</i> , <i>Blechnum spicant</i> , <i>Brachypodium sylvaticum</i> , <i>Bromopsis ramosa</i> , <i>Caltha palustris</i> , <i>Carex paniculata</i> , <i>Carex remota</i> , <i>Carex sylvatica</i> , <i>Chrysosplenium oppositifolium</i> , <i>Deschampsia flexuosa</i> , <i>Dioscorea communis</i> , <i>Dryopteris affinis</i> , <i>Epipactis helleborine</i> , <i>Equisetum telmateia</i> , <i>Festuca gigantea</i> , <i>Filipendula ulmaria</i> , <i>Fragaria vesca</i> , <i>Frangula alnus</i> , <i>Galium odoratum</i> , <i>Lysimachia vulgaris</i> , <i>Malus sylvestris</i> , <i>Melica uniflora</i> , <i>Mercurialis perennis</i> , <i>Milium effusum</i> , <i>Molinia caerulea</i> , <i>Oxalis acetosella</i> , <i>Persicaria hydropiper</i> , <i>Quercus petraea</i> , <i>Sorbus torminalis</i> , <i>Stellaria holostea</i> , <i>Teucrium scorodonia</i> , <i>Tilia cordata</i> , <i>Torilis japonica</i> , <i>Valeriana officinalis</i> , <i>Veronica montana</i> .
<b>Grassland</b>	<i>Achillea ptarmica</i> , <i>Agrimonia eupatoria</i> , <i>Agrostis canina</i> , <i>Aira caryophyllea</i> , <i>Ajuga reptans</i> , <i>Blackstonia perfoliata</i> , <i>Blechnum spicant</i> , <i>Brachypodium sylvaticum</i> , <i>Caltha palustris</i> , <i>Carex disticha</i> , <i>Centaureum erythraea</i> , <i>Cirsium palustre</i> , <i>Dactylorhiza fuchsii</i> , <i>Dactylorhiza fuchsii x praetermissa = D. x grandis</i> , <i>Dactylorhiza praetermissa</i> , <i>Daucus carota subsp. carota</i> , <i>Deschampsia flexuosa</i> , <i>Euphrasia officinalis agg.</i> , <i>Festuca filiformis</i> , <i>Filipendula ulmaria</i> , <i>Fragaria vesca</i> , <i>Galium mollugo subsp. erectum</i> , <i>Galium saxatile</i> , <i>Lathyrus nissolia</i> , <i>Leontodon hispidus</i> , <i>Linum catharticum</i> , <i>Lotus pedunculatus</i> , <i>Nardus stricta</i> , <i>Odontites vernus</i> , <i>Ornithopus perpusillus</i> , <i>Persicaria bistorta</i> ,

	<i>Phleum bertolonii</i> , <i>Potentilla anglica</i> , <i>Potentilla erecta</i> , <i>Potentilla sterilis</i> , <i>Rhinanthus minor</i> , <i>Sanguisorba officinalis</i> , <i>Silene flos-cuculi</i> , <i>Stachys officinalis</i> , <i>Stellaria holostea</i> , <i>Succisa pratensis</i> , <i>Trifolium medium</i> .
<b>Heathland</b>	<i>Agrostis canina</i> , <i>Aira praecox</i> , <i>Blechnum spicant</i> , <i>Calluna vulgaris</i> , <i>Carex nigra</i> , <i>Deschampsia flexuosa</i> , <i>Festuca filiformis</i> , <i>Galium saxatile</i> , <i>Juncus squarrosus</i> , <i>Molinia caerulea</i> , <i>Nardus stricta</i> , <i>Ornithopus perpusillus</i> , <i>Potentilla erecta</i> , <i>Salix aurita</i> , <i>Teucrium scorodonia</i> , <i>Ulex gallii</i> .
<b>Mires</b>	<i>Achillea ptarmica</i> , <i>Agrostis canina</i> , <i>Angelica sylvestris</i> , <i>Athyrium filix-femina</i> , <i>Caltha palustris</i> , <i>Carex acutiformis</i> , <i>Carex nigra</i> , <i>Carex paniculata</i> , <i>Carex riparia</i> , <i>Carex viridula subsp. oedocarpa</i> , <i>Cirsium palustre</i> , <i>Dactylorhiza fuchsii</i> , <i>Dactylorhiza fuchsii x praetermissa = D. x grandis</i> , <i>Dactylorhiza praetermissa</i> , <i>Dryopteris carthusiana</i> , <i>Eleocharis palustris</i> , <i>Epilobium palustre</i> , <i>Equisetum fluviatile</i> , <i>Equisetum palustre</i> , <i>Filipendula ulmaria</i> , <i>Galium palustre</i> , <i>Glyceria declinata</i> , <i>Glyceria notata</i> , <i>Hydrocotyle vulgaris</i> , <i>Hypericum tetrapterum</i> , <i>Jacobaea aquatica</i> , <i>Juncus acutiflorus</i> , <i>Juncus squarrosus</i> , <i>Lotus pedunculatus</i> , <i>Lysimachia vulgaris</i> , <i>Menyanthes trifoliata</i> , <i>Molinia caerulea</i> , <i>Persicaria hydropiper</i> , <i>Potentilla palustris</i> , <i>Pulicaria dysenterica</i> , <i>Ranunculus aquatilis</i> , <i>Ranunculus aquatilis</i> , <i>Ranunculus flammula</i> , <i>Ranunculus hederaceus</i> , <i>Silene flos-cuculi</i> , <i>Sparganium emersum</i> , <i>Stachys palustris</i> , <i>Stellaria alsine</i> , <i>Succisa pratensis</i> , <i>Thalictrum flavum</i> , <i>Valeriana officinalis</i> , <i>Veronica beccabunga</i> .
<b>Open Water</b>	<i>Bidens tripartita</i> , <i>Butomus umbellatus</i> , <i>Carex acutiformis</i> , <i>Carex paniculata</i> , <i>Carex riparia</i> , <i>Eleocharis palustris</i> , <i>Equisetum fluviatile</i> , <i>Galium palustre</i> , <i>Glyceria notata</i> , <i>Luronium natans</i> , <i>Menyanthes trifoliata</i> , <i>Potamogeton perfoliatus</i> , <i>Ranunculus aquatilis</i> , <i>Ranunculus aquatilis</i> , <i>Sagittaria sagittifolia</i> , <i>Schoenoplectus lacustris</i> .
<b>Post-industrial (water-stressed)</b>	<i>Agrimonia eupatoria</i> , <i>Aira caryophyllea</i> , <i>Aira praecox</i> , <i>Anthyllis vulneraria</i> , <i>Asplenium adiantum-nigrum</i> , <i>Blackstonia perfoliata</i> , <i>Blechnum spicant</i> , <i>Centaurea scabiosa</i> , <i>Centaurium erythraea</i> , <i>Daucus carota subsp. carota</i> , <i>Deschampsia flexuosa</i> , <i>Erigeron acris</i> , <i>Filago vulgaris</i> , <i>Fragaria vesca</i> , <i>Jacobaea erucifolia</i> , <i>Linum catharticum</i> , <i>Ophrys apifera</i> , <i>Ornithopus perpusillus</i> , <i>Orobanche minor</i> , <i>Reseda lutea</i> , <i>Senecio viscosus</i> , <i>Silene vulgaris</i> , <i>Trifolium arvense</i> , <i>Trifolium medium</i> , <i>Trifolium micranthum</i> , <i>Trifolium striatum</i> , <i>Vicia tetrasperma</i> .
<b>Cultivation</b>	<i>Chenopodium polyspermum</i> , <i>Orobanche minor</i> , <i>Stachys arvensis</i> , <i>Thlaspi arvense</i> , <i>Vicia tetrasperma</i> .

<b>Ecological Connectivity</b>
<b>Local Habitat Network</b>
Sandwell Valley links directly with Core Landscape 06 Park Lime Pits, Cuckoo's Dingle & Great Barr Hall which is located to the north. There are additional links to the Priority Network Restoration Zones M6 Motorway Corridor and Tame Valley Canal to the north-west, and Birmingham Canal to the south.
<b>National Habitat Network</b>
Sandwell Valley links to the national habitat network in Birmingham to the north-east.



# CL07 - Sandwell Valley - Components & Connectivity



## Ecological Sub-area Opportunities

Focus Habitats		
Habitat	Action	Measure
Hedgerows	Improve management of existing	Habitat in good condition
	Reinstate historic/grubbed-out	New habitat
	Restore through gapping up	Habitat in good condition
	Establish hedgerow trees	Habitat structure improved
Ponds	Create new	New habitat at existing and new sites
Rivers	Restore hydromorphology (naturalise modified channels)	Improved ecological status
	Reduce artificial inputs	Improved chemical status
Eutrophic Standing Waters	Enhance marginal and emergent vegetation	Increased floral diversity and habitat structure improved
Lowland meadows	Enhance existing neutral grasslands	Increased floral diversity
	Create new species-rich neutral grasslands	Increased floral diversity and habitat structure improved
Lowland mixed deciduous woodland	Coppice	Habitat structure improved
	Create woodland edge	Habitat structure improved
	Diversify woody component	Habitat structure improved
	Diversify field-layer component of plantations	Increased floral diversity

Target Species	
Species/Species Group	Measure
Barn Owl	Confirmed recent records
Bats	Increased abundance of confirmed species
Breeding farmland birds (specialists)	Increased species and abundance
Breeding water & wetland birds (specialists)	Increased species and abundance
Breeding woodland birds (specialists)	Increased species and abundance
Brown Hare	Confirmed recent records
Brown Long-eared Bat	Confirmed recent records
Brown/Sea Trout	Confirmed recent records
European Otter	Increased signs, confirmed breeding population
European Water Vole	Confirmed recent records
Great Crested Newt	Increased abundance and number of breeding ponds
Hedgehog	Confirmed recent records
Woodland axiophytes	Recent records and increased abundance
Grassland axiophytes	Recent records and increased abundance
Heathland axiophytes	Recent records and increased abundance
Mires axiophytes	Recent records and increased abundance
Open Water axiophytes	Recent records and increased abundance

<b>Geodiversity</b>		
<b>Site</b>	<b>Action</b>	<b>Measure</b>
Sandwell Valley Country Park	Unknown	n/a

### **Connectivity Opportunities**

#### **Local Habitat Network**

<b>Connection</b>	<b>Action</b>
Within Core Landscape CL07	Restoration of modified channel of the River Tame and tributaries.
	Species-rich neutral grassland enhancement and creation at sites including areas of public open space, golf courses, school grounds and sports fields.
	Plantation woodland enhancement.
	Creation of new ponds.
	Field boundary hedgerow recreation, restoration and creation.
	Planting of standard trees in parks, green spaces and school grounds.
Priority Network Restoration Zones (Tame Valley Canal and Birmingham Canal)	Increased marginal vegetation through the installation of coir rolls along hard banks.
	Species-rich neutral grassland enhancement and creation on undeveloped land including parks, green spaces, school grounds and substantial road verges.
	Woodland enhancement and small-scale planting.
	Planting of standard trees (including fruit trees) along canal corridor.
Priority Network Restoration Zone (M6 Motorway Corridor)	Species-rich neutral grassland enhancement and creation on undeveloped land including parks, green spaces, school grounds and substantial road verges.
	Woodland enhancement and small-scale planting in adjacent areas of open space.

#### **National Habitat Network**

<b>Connection</b>	<b>Action</b>
Birmingham section of Sandwell Valley (to south-east)	Restoration of modified channel of the River Tame and tributaries.
	Species-rich neutral grassland enhancement and creation at sites including areas of public open space, golf courses, school grounds and sports fields.
	Plantation woodland enhancement.
	Creation of new ponds.
	Field boundary hedgerow recreation, restoration and creation.
	Planting of standard trees in parks, green spaces and school grounds.

Information and Data Sources		
	Source	Date
Landuse	Ecological Evaluation of Birmingham and Black Country GIS data set, EcoRecord.	2021
Topography	OS Terrain 50 GIS data set, Ordnance Survey.	2017
Geology	British Geological Society 1:625,000 bedrock & superficial GIS web map services from BGS website: <a href="http://mapapps.bgs.ac.uk/geologyofbritain/home.html">http://mapapps.bgs.ac.uk/geologyofbritain/home.html</a>	2021
	Black Country UNESCO Global Geopark sites names and location information <a href="https://blackcountrygeopark.dudley.gov.uk/bcg/">https://blackcountrygeopark.dudley.gov.uk/bcg/</a>	2021
Soils	Soilscapes, Cranfield Soil & Agricultural Institute website: <a href="http://www.landis.org.uk/soilscapes/">http://www.landis.org.uk/soilscapes/</a>	2021
Species and Habitats	EcoRecord species and habitat databases.	2021
Ecological Connectivity	EcoRecord, The Wildlife Trust for Birmingham and the Black Country (2021) <i>Draft Black Country Local Nature Recovery Opportunity Map</i>	2021
	EcoRecord et al. (2021) <i>Midlands Heathland Heartland Lowland Heathland Nature Recovery Opportunity Mapping</i> .	2021
Historic Landscape Character Areas	Wolverhampton City Council (2010) <i>Black Country Historic Landscape Characterisation</i> [data-set]. York: Archaeology Data Service [distributor] <a href="https://doi.org/10.5284/1000030">https://doi.org/10.5284/1000030</a>	2010
Historic Environment Area Designations	Black Country Historic Landscape Characterisation Study, Oxford Archaeology.	2019

#### [1] HISTORIC ENVIRONMENT AREA DESIGNATIONS

The Black Country Historic Landscape Characterisation Study has divided the Historic Environment Area Designations into four categories:

**Archaeological Priority Areas (APA):** sites with a high potential for archaeological remains of regional or national significance that have not been considered for designation as scheduled monuments, or where there is insufficient data available about the state or preservation of any remains to justify a designation. APAs are likely to have high archaeological and historic interest.

**Areas of High Historic Townscape Value (AHHTV):** areas where built heritage makes a significant contribution to local character and distinctiveness. The significance of AHHTVs is likely to be derived primarily from their architectural and historic interests. However, these areas may also have artistic and archaeological interests. Areas of High Historic Townscape Value are not limited to towns or cities, they also include villages, hamlets and areas of industry where the built heritage is considered to make a positive contribution to the historic environment of an area.

**Designed Landscapes of High Historic Value (DLHHV):** landscape areas that make an important contribution to local historic character but do not meet the criteria for inclusion on the national Register for Parks and Gardens. The significance of these areas is likely to arise from their historic, artistic and architectural interests, although such areas may also contain remains of archaeological interest.

**Areas of High Historic Landscape Value (AHHLV):** these recognise the quality of the wider landscape and their relative values. The significance of these areas arises from the natural and historic features contained within them (e.g. woodland, watercourses, hedgerows, and archaeological features). The significance of these areas is likely to be derived from their archaeological and historic interests.

#### [2] KEY HABITATS follows the UK Biodiversity Action Plan (BAP) Broad & Priority Habitat definitions

This is a UK-habitat classification prepared by the UK Biodiversity Group that classifies all terrestrial and freshwater habitats in the UK into 37 broad habitat types. UK BAP Priority Habitats are a range of semi-natural habitat types that were identified as being the most threatened and requiring conservation action. The original Priority Habitat list was created between 1995 and 1999 and revised in 2007. The list of Priority Habitats has been used to help draw up statutory lists of habitats of principal importance for the conservation of biodiversity in England, Scotland, Wales and Northern Ireland. The suite of habitats of principal importance for the conservation of biodiversity (formerly Priority Habitats) nest into the defined Broad Habitat Types.

#### [3] KEY SPECIES

**Bird Indicators:** Species listed under UK Biodiversity Indicator C5, Birds of the wider countryside and at sea (JNCC). The indicator shows changes in the breeding population sizes of common native birds of farmland and woodland and of freshwater and marine habitats in the UK.

**Amphibians & Reptiles:** All amphibian and reptile species native to the UK are included.

**Mammals:** Those protected by UK or EU law, included on the current list of Principal Importance in England under Section 41 of the NERC Act (2006 or amended), and those included on the latest B&BC LBAP list of Priority Habitats/Species.

**Fish:** Those protected by UK or EU law, included on the current list of Principal Importance in England under Section 41 of the NERC Act (2006 or amended), and those included on the latest B&BC LBAP list of Priority Habitats/Species.

**Invertebrates:** Pantheon Assemblage Types Analysis.

**Flora (axiophytes):** Those included on the Birmingham & the Black Country list of axiophytes (administered by EcoRecord) by four locally defined habitat types.