

BIRMINGHAM AND THE BLACK COUNTRY

BIODIVERSITY ACTION PLAN

2010



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PREFACE

Since the publication of the first Biodiversity Action Plan for Birmingham and The Black Country (2000) there has been a significant update to the legislation, guidance and mechanisms for supporting biodiversity and actions to help prevent its decline. The England Biodiversity Strategy requires the full integration of biodiversity for local and regional action to allow us to have a healthy and flourishing broad partnerships that champion, promote and enhance local and regional biodiversity in order to deliver national, regional and local priorities.

The introduction of the Natural Environment and Rural Communities Act (2006), places a statutory duty on all public bodies to have regard for biodiversity protection and enhancement as well as recognising habitats and species of principal importance. With these changes in mind, the Birmingham and Black Country Biodiversity Partnership have produced a new Local Biodiversity Action Plan (LBAP) in accordance with national and regional guidance, with the emphasis on landscape scale conservation and recognition of the importance of linking habitats with the integration of species management. Despite the urban nature of this region, Birmingham and the Black Country retains a wealth of habitats and species that will benefit from the adoption and implementation of this plan.

Each section deals with elements of biodiversity conservation and management beginning with the importance of why biodiversity should be integrated into planning policies and the strategic direction for Birmingham and the Black Country in order to enable the area to continue in its prosperity and maintain a healthy population. The current resource is described with a brief outline of the habitats and species of principal importance including a selection of sites where these can be seen. Sections 5 to 7 outline the role of the biodiversity partnership and a review of the previous action plan and Section 8 identifies local priorities and targets as context for the action plan. Section 9 details actions required under a series of topic areas dealing with partnership development, engaging people, data collection, influencing policy, practical action and a framework for reporting on progress made.

The strategic nature of this plan will enable local partners to embed biodiversity within their own structures and local plans and provide justification for policies and actions. This is intended to be a working document that will evolve as more information is gathered and a greater understanding of the natural resource is gained.

SECTION 1: INTRODUCTION

- 1.1 Biodiversity is the collective term used to describe the biological diversity on Earth. It has been in common use since the Rio Earth Summit in 1992. The conservation of biodiversity benefits human life in the provision of essential services, such as pollination, medicines, food, textiles, water storage, conservation of soils and building materials. In addition to maintaining life, the conservation of biodiversity has benefits for maintenance of physical and mental health and provides inspiration for the creative arts and education.
- 1.2 The current Birmingham and the Black Country Biodiversity Action Plan (LBAP) was published in 2000. Researched and written by a range of partner organisations and individuals on behalf of the LBAP Steering Group, it has been the framework for biodiversity action through the past decade. The 4 Issues Action Plans, the 16 Habitat Action Plans and the 22 Species Actions Plans have formed the backbone of biodiversity action carried out by the partners and others.
- 1.3 Since the publication of the first LBAP significant updates to legislation, guidance and mechanisms supporting biodiversity and action to help prevent its decline have taken place. The England Biodiversity Strategy (2002) emphasizes the need for healthy regional and local partnerships that champion, promote and enhance biodiversity and help to deliver national priorities.
- 1.4 With these changes in mind, the Birmingham and Black Country Biodiversity Partnership (formerly the LBAP Steering Group) has decided that the time is ripe to review and refresh the LBAP.
- 1.5 The Partnership understands that conserving and increasing biodiversity will continue to require considerable leadership, joint working, creativity, innovation and enterprise to meet the challenges we face and to achieve our vision. Therefore the Partnership will encourage the strategic aims, objectives and actions set out in this sub-regional document to be brought forward in more detail by partners at the landscape/borough/city level through Nature Conservation Delivery Plans wherever possible.
- 1.6 Action to help protect biodiversity and rebuild degraded natural systems is more important now than ever before. Climate change is altering the local environment. Some species in the area are shifting their populations north to cooler areas, whereas others from the south are moving northwards to take advantage of the warmer conditions. Therefore wildlife corridors are becoming even more important. Increased flooding can damage river ecosystems not only directly but also by bringing in pollutants if it overloads existing infrastructure. However there is also a real opportunity to use conservation activity for wildlife to create multiple benefits for our society, as many improvements (such as the creation of new habitats and the restoration of wetlands) have significant abilities to reduce the impacts of climate change for people living in the area.

1.7 To enable flexibility to adapt to new opportunities and challenges the Partnership will ensure Sections 1 to 8 of this document will be reviewed at least once every five years. Section 9 will be monitored and revised, as required, annually.

SECTION 2: AIMS AND OBJECTIVES

2.1 The Partnership's 50 year vision for biodiversity is:

A diverse and natural Birmingham and Black Country, where we are connected to our wildlife and landscape; healthy, sustainable communities and local livelihoods, working with nature and securing its future.

2.2 This LBAP aims to realise this vision whilst recognizing the existing challenges facing Birmingham and the Black Country, such as habitat fragmentation, increased urbanization and financial pressures. We also need to take account of future challenges, in particular climate change.

2.3 Our objectives are to:

- maintain and increase the biodiversity of key sites and landscapes through appropriate protection and management
- restore degraded habitats and key species populations by restoring key areas
- link key areas with ecological corridors to reconnect wildlife populations and make them less vulnerable
- promote and support the use of the natural environment to mitigate against, and adapt to, the effects of climate change
- enable the sustainable use of the natural environment to benefit health and wellbeing of residents, workers and visitors as well as improving the local economy

SECTION 3: BIODIVERSITY MATTERS

- 3.1 Today, the natural world helps to “green” towns and cities, offers more opportunities to escape noise and pollution, more protection from the elements and makes urban areas more attractive to live in. In addition, the “greening” of towns and cities makes positive contributions towards pollution amelioration, carbon sinking and physical and mental well-being. The well-being of a city’s wildlife is a key indicator of the state of the environment for its people. Clean rivers and wetlands, safe and well-managed woodlands and grasslands, and diverse and stimulating parks and other formal open spaces are good for both people and wildlife. Successful urban regeneration should be built on a proper appreciation of the values and functions of green infrastructure and the natural world in towns and cities. It is right that development and land management has due regard for the natural world, and recognises that having a healthy environment encourages inward economic investment.
- 3.2 Birmingham and the Black Country’s biodiversity is a critical component of high quality of life and contributes significantly to the quality of the environment within the conurbation. The diversity of the geological past has given us the Birmingham and Black Country we have today. Limestone and coal, allied to local peoples’ skills and other raw materials provided the foundation of the area’s wealth. The urban living landscape has many reminders of Birmingham and Black Country’s evolution from farming, through the Industrial Revolution and into today’s society. The area’s natural heritage is inextricably bound up with its historical and cultural heritage and economic development. Now, more than ever, this link remains strong. Geological conservation is delivered by the Geodiversity Action Plan (2005) published by the local Geodiversity Partnership. Due to the strong relationship between geology and biodiversity, the two Partnerships work together.
- 3.3 Over the previous decade, the links between biodiversity and the maintenance of our quality of life have become clearer. This is especially true to help reduce the impacts of climate change. Natural habitats absorb rainwater better than most other land uses preventing flooding. They also help to cool peak summer temperatures making urban life more comfortable and reducing the toll on human health and life that this causes. These relationships can be described as ecosystem services, which have been defined by Natural England (2010) as:

Provisioning Services:

- Providing renewable resources
- Providing food
- Providing clean water

Regulating Services:

- Reducing heat island effect
- Reducing flooding

- Reducing air pollutants
- Filtering water pollutants
- Disease regulation

Cultural Services:

- Aiding physical and mental health
- Benefiting well being and quality of life
- Providing recreation opportunities
- Providing educational resource
- Enrichment of peoples lives through contact with nature
- Nature has a value in its self and forms an integral part of the urban landscape.
- Creating jobs
- Attracting financial investment
- Provision of attractive settings for work and leisure

Supporting Services:

- Soil formation
- Nutrient cycling

3.4 Biodiversity is therefore an important element in achieving the ambition of the West Midlands to promote the area as an economically successful and world-class region. Sustainable development demands the integrated management of the economic, social and environmental factors affecting peoples' quality of life. Biodiversity contributes to economic activity and social progress, as well as being a key indicator of environmental quality. It will be impossible to realise this ambition without paying regard to, making provision for and helping people to enjoy their local wildlife.

SECTION 4: BIODIVERSITY RESOURCE

- 4.1 Birmingham and the Black Country contains a wealth of wildlife. Some of the more significant places include Wren's Nest, the UK's first urban National Nature Reserve (NNR), and Fens Pools Special Area of Conservation. In Birmingham, Sutton Park NNR is 860 ha of wild, unenclosed country within the urban area. It contains some of the largest and richest areas of ancient woodland, wood pasture, heathland and wetland in Birmingham and the Black Country. The Park is of outstanding importance in the context of the conurbation for the extent and diversity of its habitats and the species richness of its plant communities. Sutton Park along with a number of other important sites in the area are also of considerable archaeological and historical importance.
- 4.2 Farming continues, especially on the fringes of the conurbation, and there are many examples of encapsulated countryside within the urban landscape with wetlands, woodland, meadow, heathlands and hedgerows. Past and present transport corridors, such as railway lines and canals, wind their way through the urban area, for example Smestow Valley Local Nature Reserve (LNR) in Wolverhampton. Formal parks, public open spaces, the Black Country Urban Forest, allotments, gardens and water bodies add to the living landscape matrix. All of these features help to "soften" the urban fabric.
- 4.3 Finding homes amongst these urban spaces are familiar species, such as House Sparrow, House Martin, Red Fox and Common Frog, in addition to a number of highly protected species such as Great Crested Newt, Water Vole and bats. The open spaces, including wetlands, are also important to migratory birds, large numbers of which pass through Birmingham and the Black Country in spring and autumn.
- 4.4 Figure 1 shows the location of designated nature conservation sites and the distribution of biodiversity resource zones; these zones relate to habitat quality in Birmingham and the Black Country. Appendix 1 provides further information on how the quality of habitats has been mapped.
- 4.5 The high biodiversity resource zones shown on the map are landscape areas which are vital for the maintenance of biodiversity within Birmingham and the Black Country. These include Smestow Valley (Wolverhampton), Pelsall North Common (Walsall), Sandwell Valley (Sandwell), Fens Pools (Dudley) and Woodgate Valley (Birmingham). The areas with medium biodiversity resources help to buffer the high resource zones and often provide linking habitat. These medium resource zones also provide additional habitat to allow wildlife to adapt to the impacts of climate change. The low biodiversity resource zones cover much of the urban heartland. In these areas, private gardens and public open spaces are especially important for biodiversity.

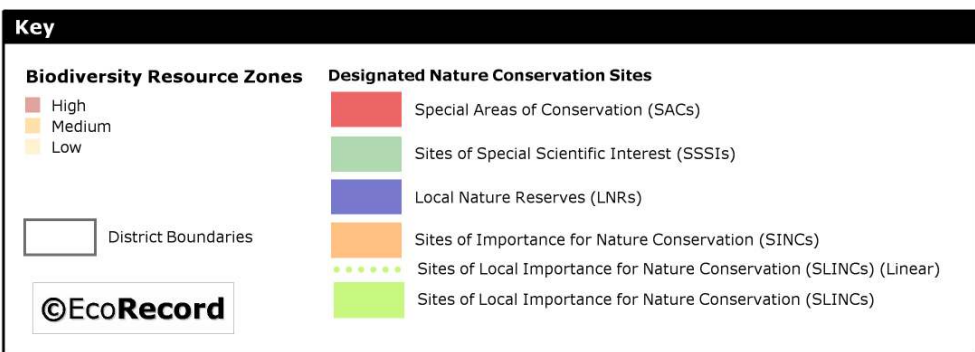
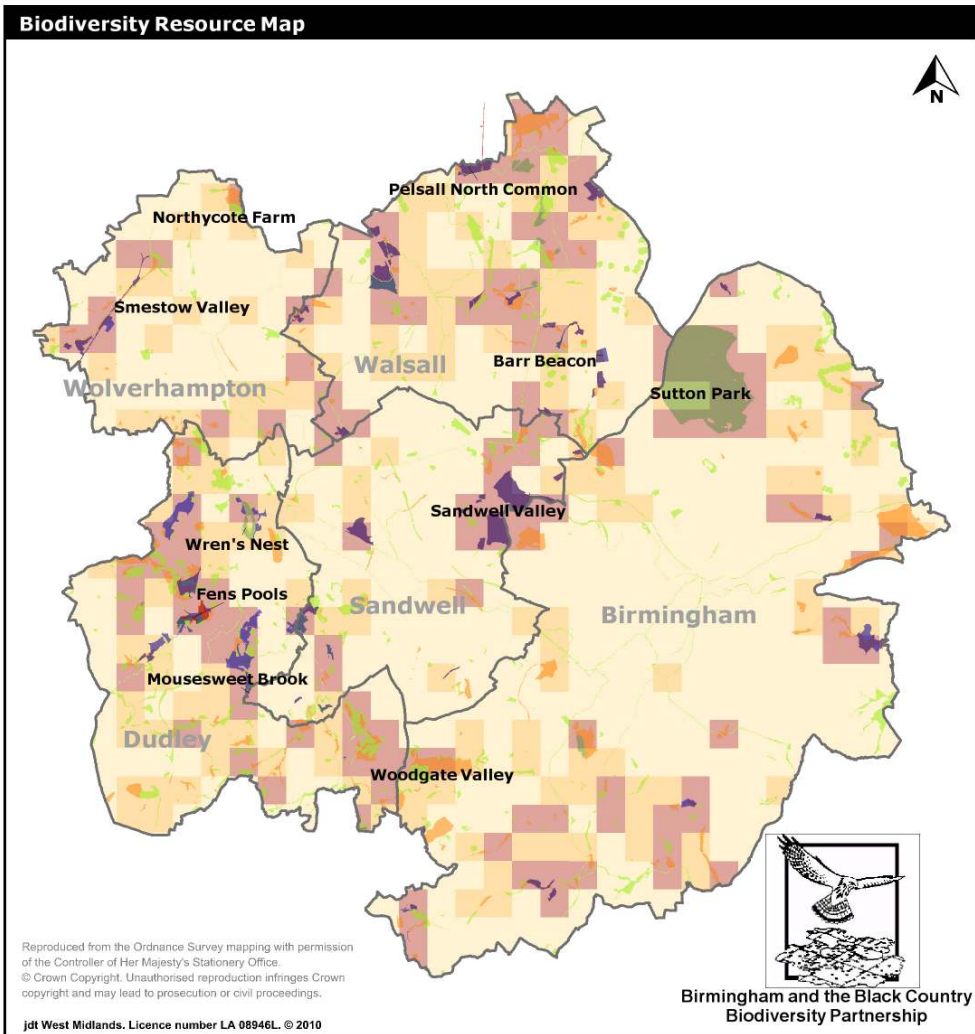


Figure 1: Biodiversity Resource Map

- 4.6 The high biodiversity resource zones within Birmingham and the Black Country link into biodiversity rich areas beyond the conurbation. One significant regional concentration runs from the Wyre Forest in Worcestershire (to the south-west of the conurbation), north-west through the administrative boundaries of Dudley, Wolverhampton, Walsall and Birmingham, and into Cannock Chase in Staffordshire (to the north-east). Another regional "hotspot" runs north from the Clent Hills in Worcestershire (south of the conurbation), into the Black Country at Halesowen, and continues north-west through Dudley and Sandwell to Sedgley.

Priority Habitats and Species within Birmingham and the Black Country

National Priority Habitats

- 4.7 In England there are 56 habitats listed as Habitat Types of Principal Importance for the purpose of conserving biodiversity within section 41 of the Natural Environment and Rural Communities Act 2006. Of these, 22 have been recorded in Birmingham and the Black Country (see Appendix 2). The following habitat descriptions are based upon the Biodiversity Reporting and Information Group Report, and UK LBAP Priority Habitat Descriptions (2008) published by the Priorities Species and Habitat Review Group, UK BAP.

Woodland

Upland Oak Woodland

- 4.8 The term 'upland' does not reflect altitude but rather areas of England where this habitat is typically found. It is characterised by a predominance of oak, commonly Sessile but may contain Pedunculate along with birch in the canopy. There may be varying amounts of Holly, Rowan and Hazel as the main understorey species. Upland Oak Woodlands often have variation in the ground layer and in tree species composition, reflecting local variations in soil type and hydrology.

- 4.9 Upland Oak Woodlands are found occasionally in Birmingham and the Black Country with good examples found in Saltwells Wood (Dudley), Cuckoo's Nook, Rough Wood and Coppice Lane Wood (Walsall).

Upland Mixed Ashwoods

- 4.10 The term 'upland' does not reflect altitude but rather areas of England where this habitat is typically found. The term 'Upland Mixed Ashwoods' refers to woods that have developed on base-rich soils, in which Ash is a major species, although locally oak, birch, elm and Hazel may be the most abundant species. Yew may form small groves in intimate mosaics with the other major tree species and Alder may occur where there are transitions to wet woodland.

- 4.11 A small amount of Upland Mixed Ashwoods is found in Birmingham and the Black Country. Examples can be found at Park Lime Pits and Cuckoo's Nook and The Dingle (Walsall).

Wet Woodland

- 4.12 Wet Woodland occurs on poorly drained or seasonally wet soils, usually with Alder, birch and willow as the predominant tree species. It is found on floodplains around water bodies and along streams and spring lines. Boundaries with dry land woodland may be sharp or gradual and can change over time through natural succession or as a result of human influence. Wet Woodlands frequently occur in a mosaic with other woodland and open ground habitats. The dominant species of the ground flora vary according to the soils and geology; Pendulous Sedge and Greater Tussock-sedge often dominate or can be more diverse with Marsh Marigold and Opposite-leaved Golden-saxifrage prominent.
- 4.13 Within Birmingham and Black Country good examples can be found at Cuckoo's Nook and Sneyd Reservoir (Walsall); along the river corridors of the Stour (as in the Mousesweet Brook LNR at the junction of the Mousesweet Brook and Black Brook on the boundary of Dudley and Sandwell), close to the Charlemont Estate near West Bromwich at the northern end of the Sandwell Valley and at Coopers Wood in Newhall Valley and within Sutton Park (Birmingham).

Wood Pasture and Parkland

- 4.14 Wood Pastures are described as areas that have been managed by a long established tradition of grazing allowing the survival of multiple generations of trees, characteristically with at least some veteran trees or shrubs. The tree and shrub component can occur as scattered individuals, small groups, or as more or less complete canopy cover. Depending on the degree of canopy cover other habitats, including grassland, heath and scrub may occur in mosaic with woodland communities. While oak, Beech, Alder, birch, Ash, Hawthorn, Hazel or pine are often dominant, a wide range of other tree and shrub species may occur as part of wood-pasture systems. The ancient trees associated with this habitat, along with the grazed land beneath, are extremely important for invertebrates and lower plants.
- 4.15 This is a localised habitat within Birmingham and the Black Country, partly related to the remnant deer parks. Good examples can be found at Sutton Park (Birmingham), Great Barr Hall area (Walsall) and Northycote Farm (Wolverhampton).

Lowland Mixed Deciduous Woodland

- 4.16 This habitat occurs at relatively low altitudes, though altitude is not a defining feature. Such woodlands grow on a wide range of soils, from very acidic to base-rich. They include most semi-natural woodlands in southern and eastern England, and parts of lowland Wales and Scotland, complementing the ranges of upland oak and ash types. Often small (less

than 20 ha), these woodlands occur largely within enclosed landscapes, usually on sites with well-defined boundaries. Many are ancient woods, often with evidence of past coppicing, particularly those on moderately acid to base-rich soils; those on very acid sands may be represented by former wood pastures of oak and birch. There is great variety in the species composition of the canopy layer and ground flora. Pedunculate is generally the commoner oak (though Sessile may be abundant locally) and may occur with virtually all combinations of other locally native tree species.

- 4.17 Examples occur across the area and include Park Hall and Springhill Woods (Birmingham), Park and Ashen Coppices (Wolverhampton), the Dingle woodlands (Dudley), woodland in the River Stour valley and Haden Hill areas of Cradley (Sandwell), and Cuckoo's Nook and the Dingle (Walsall).

Heathland

Lowland Heathland

- 4.18 Lowland Heathland is described as a broadly open landscape on acidic mineral and shallow peat soil, which is characterised by the presence of plants such as heathers and gorses. Areas of heathland in good condition should consist of an ericaceous layer of varying heights and structures that has a greater than 25% cover, plus some or all of the following additional features: scattered and clumped trees and scrub, Bracken, areas of bare ground, areas of acid grassland, lichens, gorse, wet heaths, bogs and open waters. Lowland Heathland is a dynamic habitat which undergoes significant changes in different successional stages, from bare ground and grassy stages, to mature, dense heath. These different stages are often present together on a site. The presence and numbers of characteristic birds, reptiles, invertebrates, vascular plants, bryophytes and lichens are important indicators of habitat quality.

- 4.19 The heaths of Birmingham and the Black Country are regionally important because they have a mixture of characteristics of the western wet heaths of Shropshire and the Welsh Borders, the upland heaths of the Peak District to the north and the dry heaths of southern England. The best example of this habitat can be found at Sutton Park (Birmingham) with other good examples at Pelsall North Common and Brownhills Common (Walsall), and also in the vicinity of the Lickey Hills (Birmingham). Small highly urban enclaves exist including Galton Valley (Sandwell).

Grassland

Lowland Meadows

- 4.20 This habitat is not restricted to grasslands cut for hay, but also takes into account unimproved neutral pastures where livestock, but more frequently, horse grazing is the main land use. Characteristic species include Black Knapweed, Greater Burnet, Pignut, Yellow Rattle, Cowslip, Bird's-foot Trefoil and the fine-leaved grasses dominated by Crested Dog's-tail with fescues and bents, and the fern Adder's-tongue.

4.21 Birmingham and the Black Country contains areas of species rich grasslands but they rely on regular management. These meadows are usually small (1 – 3 ha) and occur singly, or in small groups, where they may be separated by established hedgerows surrounded by housing. Good examples can be found at Park Lime Pits (Walsall), The Leasowes and Illey Pastures (Dudley), Northycote Farm (Wolverhampton), meadows along the southern section of the River Cole and Woodgate Valley Country Park (Birmingham) and Sandwell Valley Country Park.

Lowland Calcareous Grassland

4.22 Lowland Calcareous Grassland vegetation is dominated by grasses and herbs on shallow, well-drained soils which are rich in bases formed by the weathering of limestone or base-rich rock. Although the base status of such soils is usually high, with a pH of above 6, it may also be more moderate and calcareous grassland communities can occur on soils with a pH as low as 5. Typical species include Fairy Flax, Hoary Plantain, Carnation Sedge and Pepper-saxifrage.

4.23 In Birmingham and the Black Country the habitat is very restricted to the limestone working areas within Dudley and Walsall, being associated with quarries, roadside verges and railway cuttings. Examples can be found at Wren's Nest and Sedgley Beacon (Dudley) and the Rushall area (Walsall).

Lowland Dry Acid Grassland

4.24 Lowland Dry Acid Grassland is characterised by vegetation dominated by grasses and herbs on a range of lime deficient soils. These are derived from acid rocks, such as sandstones and pebble beds, and on superficial deposits, such as sands and gravels. This habitat includes open communities of very dry sandy soils, which may contain many annual species including Silver, Early and Wavy Hair-grasses, Mat Grass, Heath Rush, Harebell, Heath Bedstraw and bent and fescue grasses.

4.25 In Birmingham and the Black Country, examples of this habitat can be found at Barr Beacon (Walsall) and Sutton Park (Birmingham).

Purple Moor Grass and Rush Pastures

4.26 These occur on poorly drained, usually acidic soils. Their vegetation consists of Purple Moor-grass and rushes, especially Sharp-flowered Rush, with Meadow Thistle, Devil's-bit Scabious and Marsh Thistle. The characteristic plant communities often occur in a mosaic, together with patches of wet heath, dry grassland, swamp and scrub.

4.27 The northern part of Birmingham and the Black Country provides good examples of this habitat, such as Brownhills Common, Pelsall North Common, Clayhanger and Black Cock Farm (Walsall), and Sutton Park.

Coastal and Floodplain Grazing Marsh

4.28 Coastal and Floodplain Grazing Marsh is defined as periodically inundated pasture, or meadow with ditches which maintain high water levels, containing standing fresh water. The ditches are especially high in plant and invertebrate diversity. Almost all areas are grazed and some are cut for hay or silage.

4.29 In Birmingham and the Black Country this habitat can be found within regularly flooding river valleys on clays. Good examples can be found at Jockey Meadows (Walsall) and Park Hall Nature Reserve (Birmingham).

Farmland

Arable Field Margins

4.30 These are herbaceous strips or blocks around arable fields that are managed specifically to provide benefits for wildlife. The arable field must be in a crop rotation which includes an arable crop, set-aside or fallow. Arable Field Margins are usually sited on the outer 2-12m margin of the field, although when planted as blocks they occasionally extend further into the centre. Rare plants particularly associated with this habitat are frequently 'arable weed' species, once very common across the country, such as Cornflower, Small-flowered Buttercup and Shepherd's Needle.

4.31 Within Birmingham and the Black Country the majority of the land under this designation is generally in an agri-environmental scheme, for example Lime Pits Farm (Walsall).

Hedgerows

4.32 A Hedgerow is defined as any boundary line of trees or shrubs over 20m long and less than 5m wide, and where any gaps between the trees or shrub species are less than 20m long. Any bank, wall, ditch or tree within 2m of the centre of the Hedgerow is considered to be part of this habitat, as is the herbaceous vegetation within 2m of the centre. All Hedgerows consisting of 80% or more cover of at least one woody UK native species are covered by this habitat. Ancient and/or species-rich Hedgerows usually pre-date the Enclosure Acts of 1720 to 1840.

4.33 In Birmingham and the Black Country, Hedgerow complexes can be found around the fringes of the conurbation; such as in the Sedgley and Illey areas (Dudley), eastern Walsall, northern Wolverhampton, Sandwell Valley Country Park (Sandwell) and Woodgate Valley Country Park (Birmingham).

Wetland

Mesotrophic Lakes

4.34 This covers lakes and pools, as well as man-made waters such as reservoirs, canals, ponds and gravel pits. It includes the open water zone,

which may contain submerged, free-floating or floating-leaved vegetation, and fringing vegetation. Ditches with open water for at least the majority of the year are also included in this habitat type. Mesotrophic lakes are characterised by having a narrow range of nutrients, the main indicative ones being inorganic nitrogen and total phosphorus.

4.35 In Birmingham and the Black Country, this habitat is extensive along the canal system. Good examples can be found along sections of the Rushall Canal, Wyrley and Essington Canal, the Birmingham Main Line Canal and the Dudley Canal. Good examples of lakes are Edgbaston Pool (Birmingham) and Fens Pool (Dudley).

Eutrophic Standing Waters

4.36 Eutrophic standing waters are highly productive because plant nutrients are plentiful, either naturally or as a result of artificial enrichment. These water bodies are characterised by having dense, long-term populations of algae in midsummer, often making the water green. Their beds are covered by dark mud, rich in organic matter. This definition covers natural and man made still waters such as lakes and reservoirs.

4.37 In Birmingham and the Black Country examples of these pools can be found within many public parks such as West Park (Wolverhampton).

Ponds

4.38 Priority ponds are defined as permanent and seasonal standing water bodies up to 2ha in extent which meet one or more of the following criteria:

- (i) Habitats of international importance: ponds that meet criteria under Annex I of the Habitats Directive;
- (ii) Species of high conservation importance: ponds supporting Red Data Book species, UK BAP species, species fully protected under the Wildlife and Countryside Act Schedule 5 and 8, Habitats Directive Annex II species, a Nationally Scarce wetland plant species, or three Nationally Scarce aquatic invertebrate species;
- (iii) Exceptional assemblages of key biotic groups: ponds supporting exceptional populations or numbers of key species.

4.39 In Birmingham and the Black Country over 1000 ponds have been identified through a variety of sources (excluding garden ponds). Of ponds surveyed, approximately 5% meet the priority criteria. Good examples can be found around Park Lime Pits (Walsall), Clayhanger (Walsall), Fens Pools (Dudley) and Elm Road Pool (Birmingham).

Reedbed

4.40 Reedbeds are wetlands dominated by stands of Common Reed, where the water table is at or above ground level for most of the year. They tend to incorporate areas of open water and ditches, and small areas of wet grassland and carr woodland may be associated with them.

4.41 In Birmingham and the Black Country, this is a very localised habitat, the largest example is at Lady Pool (Walsall).

Lowland Fens

4.42 This is a very rare habitat within the area. The only examples are to be found within Sutton Park, particularly around Bracebridge Pool which contains Marsh Pennywort; Bogbean, Marsh Cinquefoil and Lesser Reedmace. The fen areas of Sutton Park can be described as poor-fens because the water is derived from underlying Triassic sandstones which are base-poor rocks.

Lowland Raised Bog

4.43 These have developed from fens or in wet areas through peat accumulation with the surface typically waterlogged and acidic in nature. A distinctive flora develops dominated by *Sphagnum* mosses, which build layers of peat over many centuries.

4.44 This restricted habitat type was found at Stubbers Green Bog in Walsall, but the site was damaged during the 1980s and has not recovered. Now it is severely degraded and has succeeded to birch woodland.

Rivers

4.45 In their natural state rivers are dynamic systems, continually modifying their form. The mosaic of features found in rivers and streams supports a diverse range of plants and animals. Riffles and pools support aquatic species. Exposed sediments such as shingle beds and sand bars are important for a range of invertebrates. Marginal and bankside vegetation supports an array of wild flowers and animals. They often provide a wildlife corridor link between fragmented habitats in intensively farmed and urban areas.

4.46 In Birmingham and the Black Country there are over 800km of rivers and streams. The major rivers are the Tame, Cole and Rea which flow into the River Trent to the east and the River Stour which flows into the River Severn to the west of the area. Many sections of river within the urban area have been highly modified, but there are remnant sections that have retained their natural features and habitats. Good examples can be found along the rivers Cole and Rea at Hall Green and King's Norton respectively (Birmingham) and the Stour at Haden Hill (Dudley-Sandwell boundary).

Built Environment

Inland Rock Outcrops and Scree Habitat

4.47 This habitat covers a wide range of rock types, varying from acidic to highly calcareous. Within Birmingham and the Black Country this habitat can be found within redundant quarries, where slopes have been allowed to naturally colonise with lichens, bryophytes and ferns.

4.48 Examples of this habitat can be found at Pinfold Lane Quarry and Shire Oak Park (Walsall) which are acidic in nature and Wren's Nest (Dudley) which is calcareous.

Open Mosaic Habitats on Previously Developed Land

4.49 The priority habitat usually occurs during the first five years following demolition or abandonment of buildings, hardstanding or features such as railway lines, or following the reclamation of contaminated land. The substrate has been highly modified and can comprise brick rubble, concrete, furnace slag and road surfaces. The characteristic features include a high percentage of bare ground with a mixture of native and non-native annuals and perennials. Where the substrate is compacted and drainage becomes impeded, ephemeral ponds and seasonally flooded areas form.

4.50 Typical species for Birmingham and the Black Country include poppies, Weld, mulleins, vetches and Buddleia. Due to the open nature of the vegetation and the long flowering period, these areas are important for invertebrates and attract bird species, especially Black Redstart and Skylark. This habitat is concentrated within former industrial areas.

Local Priority Habitats

4.51 In addition to the national priorities, within Birmingham and the Black Country there are other valuable habitats. Criteria for the selection of these Local Priority Habitats can be found in Appendix 3. So far the following Local Priority Habitats have been identified and others will be added as appropriate.

Ancient Woodland

4.52 Ancient woodlands are an irreplaceable habitat. They are areas that have been continuously wooded since at least 1600. Due to their longevity, they are very important for the conservation of genetic material, (especially native trees that were growing within the region prior to the Industrial Revolution), preservation of soils and as repositories of local species that can re-colonise other woodlands.

4.53 A study of ancient woodland (2008) undertaken by The Wildlife Trust for Birmingham and The Black Country has provisionally identified 89 sites covering a total of 318 hectares. This identified clusters of small sites within the urban fringe particularly around Lye, Halesowen, Bartley Green, Longbridge and Sutton Coldfield.

Canals

4.54 As linear waterbodies, canals perform similar ecological functions as rivers. They are extensive throughout the area linking semi-natural habitats and post industrial sites as well as providing links to the wider countryside. They were created between 1795 and 1863 to transport materials and goods

during the Industrial Revolution. Many of the connecting branch canals and basins have been lost as transport systems have changed, but there are still 220km in existence.

4.55 This resource provides important habitat for many of the region's declining and scarce species such as Shining Pondweed, Perfoliate Pondweed, Spiked Water-milfoil and Flowering Rush, as well as the nationally scarce Floating Water-plantain. In addition a wide range of invertebrates and other animals can be found within the canal environment, including dragonflies, White-clawed Crayfish, Otter, Water Vole, Bullhead and Stone Loach.

Parks and Open Space

4.56 Parks and open spaces are functionally critical habitats as they aid ecological connectivity and provide a buffer for climate change impacts. They also perform similar ecological functions to a variety of other habitats. All the major towns and cities within the area have formal public parks. These have been created since the mid 19th Century and are of varying sizes. They can contain many different types of habitat. The older Victorian parks contain mature trees of native and non-native species with areas of close mown grass and herbaceous borders. Buildings and mature trees can provide roosting areas for bats. Grey squirrel is a frequent mammal, with some areas supporting Red Fox, Badger and Hedgehog. Many of the larger parks contain ponds and lakes which attract ducks, swans, geese and Kingfisher. These lakes may be national priority habitats in their own right (Eutrophic Standing Waters).

4.57 Some open spaces are more informally managed and therefore can contain habitats such as secondary woodland, scrub, tall grassland, streams and spoil mounds. Although these habitats may not meet the national criteria for being classed as of principal importance, they are still very important for wildlife, especially invertebrates and birds.

4.58 Examples of formal parks include West Park (Wolverhampton) and Cannon Hill Park (Birmingham). Examples of more informal open spaces include Sedgley Hall Farm Park (Dudley) and Moseley Parkland (Wolverhampton).

Allotments

4.59 Research for the Birmingham and Black Country Flora (2009) has indicated that allotment flora is similar to that of arable margins. Allotments also contain assemblages of key species. Currently there are 276 allotment sites in this area, covering 428 hectares. They vary in size and levels of cultivation but provide additional habitats for a wide range of wildlife.

4.60 These areas have been open land for a number of years and some contain remnants of semi-natural habitats that were present before urbanisation, e.g. hedgerows, veteran trees, ponds and streams. The combination of cultivation techniques, structures, crop varieties and composting areas provides habitats for a variety of species including Hedgehog, bats, solitary bees, owls, Slow-worm and Common Lizard.

4.61 Allotments are found throughout the area.

Gardens

4.62 Gardens mimic functions of many priority habitats including hedgerows, woodlands and arable field margins. They may also contain ponds, which are themselves priority habitats. Gardens also contain assemblages of key species and are functionally critical habitats as they aid ecological connectivity and provide a buffer for climate change impacts.

4.63 Usually they are the first areas where people experience contact with the natural world by watching wildlife using the garden. Many gardeners encourage wildlife by providing bird boxes and tables, wildlife areas, invertebrate boxes and ponds or by planting native species. The mosaic of gardens within Birmingham and the Black Country provides linkages to areas of semi-natural open space thereby allowing species to move through the urban area.

4.64 Gardens occupy a total area of 17,500 hectares within the conurbation and are important for pollinating insects, birds, small mammals and reptiles.

National and Local Priority Species

4.65 In England there are 943 species listed as Species of Principal Importance for the purpose of conserving biodiversity within section 41 of the Natural Environment and Rural Communities Act 2006. Of these, 131 have been recorded in Birmingham and the Black Country. These include five amphibian and reptile species, 72 invertebrates, 23 birds, ten mammals, 17 plants, two fish, a lichen and a crustacean (see Appendix 2).

4.66 In addition to the national priorities, within Birmingham and the Black Country there are other important species. Criteria for the selection of these Local Priority Species can be found in Appendix 3.

4.67 The guidance from the England Biodiversity Strategy is to concentrate action for priority species into habitat management, restoration and improvement, which will directly benefit the species concerned. This is a more efficient method of targeting resources into effective conservation outcomes, as good quality habitats benefit all species.

4.68 Whilst the majority of National Priority Species found in Birmingham and the Black Country will be dealt with in this way, special provision will be given to the following four species due to their extent, relationship with quality habitats and scarcity within the surrounding counties. Others will be added as appropriate.

Great Crested Newt

4.69 Great Crested Newt is a National Priority Species with an internationally important population in the Black Country. They require a landscape of a

mosaic of small ponds, without fish, surrounded by tall grassland and scrub. The terrestrial habitat is essential for hibernation, feeding and for allowing young newts to mature to breeding age.

4.70 This was once a common species throughout the West Midlands, but due to changes in agricultural management with the draining of wetlands, increase in recreational fishing, and nutrient enrichment of ponds, this species has dramatically declined throughout Western Europe. It has been given protection under European and UK legislation that makes it an offence to intentionally damage, destroy or obstruct Great Crested Newts or their surrounding habitat.

4.71 Within Birmingham and the Black Country, they are under threat from development, fragmentation of habitats and inappropriate management of wetland areas. The internationally important population is found at Fens Pools (Dudley), with other large populations in the Waddens Brook area of Wednesfield (Wolverhampton) and Willenhall (Walsall).

White-clawed Crayfish

4.72 White-clawed Crayfish is a National Priority Species. Their presence is a good indicator of wetland 'health' and a balanced ecosystem. They require submerged crevices among stones, tree roots, leaf litter and woody debris and also earth banks into which they burrow.

4.73 This was once a common species throughout the West Midlands. However, due to the draining of wetlands, increased pollution, re-engineering of watercourses and the spread of non-native species and associated disease, White-clawed Crayfish has dramatically declined. It has been given protection under European and UK legislation.

4.74 Birmingham and the Black Country contains important colonies around Rushall (Walsall), Sandwell Valley and Sutton Coldfield (Birmingham). These populations live in closed systems that prevent natural colonisation of non-native species, which could introduce 'crayfish plague'.

Water Vole

4.75 Water Vole is a National Priority Species. They prefer soft banks in order to dig burrows and feed on the adjacent grassland.

4.76 This was once a common species throughout the country, occupying river banks and ponds. A recent survey (2008) by The People's Trust for Endangered Species, Environment Agency and The Wildlife Trusts covering England, Scotland and Wales, indicated that Water Voles could no longer be found at 90% of sites once occupied by them. However, Birmingham and the Black Country remained a stronghold. The species is fully protected under UK legislation, which includes protection of the terrestrial habitat as well as the animal itself.

4.77 Within Birmingham and the Black Country there is a strong relationship between canals and Water Vole.

Black Redstart

4.78 Black Redstart is a Local Priority Species. It has a preference for nesting on old buildings adjacent to areas of brownfield land and canals. The openness of the brownfield land is ideal for foraging for invertebrates and is therefore essential to successful breeding.

4.79 This migrant summer visitor to Britain has a strong correlation with urban areas. Redevelopment of brownfield land affects the availability of habitat. Recent anecdotal evidence suggests that the number of breeding pairs has declined. It is listed on Schedule 1 of the Wildlife and Countryside Act 1981.

4.80 Previous surveys (1998-2001: West Midland Bird Club) indicated that Birmingham and the Black Country held a nationally significant breeding population. Traditional hotspots have focussed around the industrial heartlands of the area, with a strong relationship with the canal network.

SECTION 5: THE BIRMINGHAM AND BLACK COUNTRY BIODIVERSITY PARTNERSHIP

The Approach to Biodiversity Action in England

- 5.1 The UK Biodiversity Action Plan is the UK Government's response to the Convention on Biological Diversity (1992), and action on its delivery is co-ordinated by the UK Biodiversity Partnership.
- 5.2 The England Biodiversity Strategy *Working with the grain of nature* (Defra 2002) takes forward delivery of the UK BAP within England and provides a framework for biodiversity action at regional and local levels. Development and delivery of this strategy is overseen by the England Biodiversity Group, which involves stakeholders from the public, private and voluntary sectors. National strategy implementation is supported by six sector and five cross-cutting work-streams. Of particular relevance to Birmingham and the Black Country is the work of the Towns, Cities and Development work-stream, and the associated urban and brownfield Biodiversity Integration Group.
- 5.3 Developing and supporting flourishing regional and local biodiversity partnerships that champion, promote and enhance biodiversity is an essential part of the England Biodiversity Strategy. These partnerships are considered to be vital in enabling the integration of biodiversity objectives with social and economic priorities, delivering national and local priorities for action and promoting communication, understanding and community involvement in biodiversity objectives.
- 5.4 More recently, a new framework *Securing Biodiversity* (Natural England 2008) has sought to strengthen biodiversity partnerships by clarifying the roles at national, regional and local levels. The framework advocates a new approach to biodiversity action, focusing on landscape-scale working that restores whole ecosystems.
- 5.5 The West Midlands Biodiversity Partnership (WMBP) is the link between biodiversity strategy and activity at the national and local levels, and is the prime conduit for translating the England Biodiversity Strategy into regional policy. Working with the local Biodiversity Partnerships across the West Midlands, the WMBP is the focal point for determining regional delivery priorities that contribute to national objectives. Regional level action is identified in the Regional Biodiversity Strategy *Restoring the Region's Wildlife* (West Midlands Regional Assembly and WMBP 2005) and supporting delivery plans.
- 5.6 The West Midlands region is covered by six local Biodiversity Partnerships, of which the Birmingham and Black Country Biodiversity Partnership is one. These partnerships are responsible for developing their own Biodiversity Action Plans and agreeing targets for biodiversity within their own area which contribute to the regional "share" of national targets.

The Role of the Birmingham and Black Country Biodiversity Partnership

5.7 The main purpose of the Birmingham and Black Country Biodiversity Partnership (LBP) is to coordinate and promote action to achieve the vision for biodiversity in Birmingham and the Black Country. In doing this, the partnership works with reference to national and regional biodiversity strategies and objectives, and broader sustainable development principles.

5.8 Collectively, the partnership's roles are as follows:

- To identify, promote, deliver and regularly review local biodiversity priorities
- To work with other Biodiversity Partnerships and a wide variety of organisations to develop, monitor and promote local biodiversity targets
- To promote understanding and support for biodiversity by key local sectors, organisations, communities and the public
- To ensure that biodiversity is reflected as a key test of sustainable development within local decision making

5.9 The LBP's terms of reference provide further details of roles, responsibilities and working arrangements.

Composition of the Partnership

5.10 The partnership has a wide ranging membership of organisations with interest and expertise in biodiversity and the natural environment. Members include statutory agencies such as Natural England, Environment Agency and Forestry Commission, the area's five local authorities, key voluntary sector organisations such as the Wildlife Trust for Birmingham and the Black Country, RSPB, and EcoRecord (the ecological database for the Black Country and Birmingham). A full list of current partners can be found on the front page of this document.

5.11 The work of the LBP is supported by a co-ordinator hosted by the Wildlife Trust. Funding for the co-ordinator's post and delivery of core services by the partnership has been secured via a Memorandum of Agreement (MoA) between Natural England, the Wildlife Trust and the five local authorities. The current MoA runs from April 2008-March 2011.

5.12 The co-ordinator and partners represent the partnership at regional and national fora such as the WMBP. The co-ordinator takes responsibility for reporting on the delivery of Birmingham and the Black Country's contribution to regional and national biodiversity targets.

The Future of the partnership

5.13 Despite its uneven implementation, the publication of the first LBAP for Birmingham and the Black Country in 2000 was a significant collaborative achievement for the partnership (known at that time as the Birmingham and

Black Country LBAP steering group). However, in order to move forward with effective delivery of the revised LBAP, and to achieve the vision for Birmingham and the Black Country's biodiversity, there are considerable challenges that will need to be met. The work of the partnership will therefore continue to require leadership, joint working, creativity, innovation and enterprise.

- 5.14 New Terms of Reference were adopted in January 2010, providing greater definition for the partnership. These clarifications about roles and responsibilities have helped strengthen and move the partnership forward.
- 5.15 There is significant scope for broadening the partnership by engagement, advocacy, involvement and influence within other broad agendas and using other mechanisms. The partnership should be able to establish new links and involve different organisations, local groups and individuals in the LBAP process and achieve action of the ground which will help to deliver LBAP targets.
- 5.16 The effective functioning of the partnership and its ability to deliver is underpinned by availability of adequate resources. Successful delivery by the partnership of agreed objectives should help to provide justification for continued support from existing funding partners. Broadening the partnership may help to secure additional resources to allocate towards implementation and partnership development. A Funding Strategy for the partnership will be in place in 2010.
- 5.17 Dissemination and publicising biodiversity work and successes is a priority for the partnership. A Communications Strategy for the partnership will be adopted in 2010.

SECTION 6: PROGRESS SO FAR

6.1 The first Birmingham and Black Country LBAP was published in 2000. During its preparation there was wide consultation and collaboration between the wide range of organisations, groups and individuals involved in local nature conservation. Individual action plans were compiled by a range of local experts and regular consultation events were held to encourage debate and discussion.

6.2 The implementation of the LBAP has been uneven. There has been progress but there is still much to do.

Implementing the first Biodiversity Action Plan

6.3 The first LBAP contained 4 Issues Action Plans, 16 Habitat Action Plans and 22 Species Action Plans.

6.4 The implementation of the first LBAP has been mixed. Considerable practical and effective action to conserve biodiversity has taken place but progress in some areas has been disappointingly limited.

Implementing the Issues Action Plans

6.5 The four Issues Action Plans covered over-arching topics at the heart of biodiversity conservation. There were:

- Maintaining Biological Records
- Site and Species Protection
- Species and Habitat Management
- Environmental Education

6.6 Progress with the implementation of the Issues Action Plans is described below.

Maintaining Biological Records Issues Action Plan

6.7 Many of the actions in this Issues Action Plan relate to the development of EcoRecord, the ecological database for the Black Country and Birmingham. Many key actions have been achieved. EcoRecord now holds a database of over half a million species records and provides sophisticated analysis of the species and habitats data it holds. Several species atlases have been published and EcoRecord has played a key role in the preparation of the forthcoming Birmingham and Black Country Flora. An additional project officer has been employed to increase the level of service provided. EcoRecord also has worked closely with local groups to encourage the collection and submission of ecological records. The key tasks set out in this action plan have largely been achieved.

Site and Species Protection Issues Action Plan

6.8 The actions set out in this Issues Action Plan are mainly the responsibility of the local authorities and other public bodies and implementation has been mixed. All local authorities have planning policies in place to protect sites and species and all monitor the effectiveness of these planning policies in an Annual Monitoring Report (AMR) to central government. However, the implementation of actions to survey and monitor the condition of designated wildlife sites has been patchy and only one authority has achieved the national targets for the provision of LNRs. No local authority has carried out all the actions in this Issues Action Plan.

Species and Habitat Management Issues Action Plan

6.9 Implementation of this Issues Action Plan has been steady. All local authorities have a ranger service to manage the sites, species and habitats within their services. Management plans for local authority-owned sites generally exist. Consultation with local stakeholders is often undertaken when management plans are prepared and 'friends of' groups assist in site management. Habitat creation has also taken place in many places. Outside local authority managed sites, other partners have undertaken work on sites within their responsibilities.

6.10 Outside land in the management of the partners, progress has been mixed. Some habitat creation and management has been achieved through the planning system but securing the management of privately owned priority habitats has rarely been successful. Similarly assessing the management status of designated sites outside public ownership has been patchy except by Natural England on Sites of Special Scientific Interest (SSSIs).

Environmental Education Issues Action Plan

6.11 A considerable amount of environmental education work has taken place. The local authority ranger services organise a range of training and educational activities on sites they manage. Other partners do similar work. There has also been basic training for public wildlife surveys organised by the Wildlife Trust. This is an Issues Action Plan where many of the substantial actions have been implemented.

Implementing the Habitat Action Plans

6.12 The 16 Habitat Action Plans covered the major habitats present in Birmingham and the Black Country. Progress on the implementation of these plans has been variable.

6.13 Before any habitat can be conserved it is essential to understand the extent, location and condition of the resource. Unless this basic information is known, habitats cannot be properly protected or managed. For some habitats this has been achieved. A major milestone was the publication by the Wildlife Trust of a provisional ancient woodland inventory for Birmingham and the Black Country. British Waterways has completed

ecological survey work of Birmingham canals together with parts of the network in Walsall and Sandwell. The location of heathland is largely understood. A Pond Action Group now exists for Birmingham and the Black Country and 1,052 ponds have been identified in the area. Recent work carried out for the Birmingham and Black Country Flora has shown that many allotments are important for rarer arable weeds which are largely absent from the surrounding countryside. For other habitats there is sufficient information to ascertain temporal change in the extent of the habitat. For example, research undertaken in 2004-5 showed that loss of grasslands had occurred.

- 6.14 Considerable knowledge has been gained on the ecology of urban wasteland, now a national priority habitat called Open Mosaic Habitat on Previously Developed Land. The rich wasteland habitats of the east side of Birmingham city centre have recently been surveyed to provide baseline data for the regeneration of this area. One local authority has produced a basic inventory of sites, although this often difficult to define and transitory habitat has proved difficult to survey comprehensively and its total extent is unknown.
- 6.15 Protection of important habitats ensures the habitat resource is not eroded. A large proportion of the area's heathland sites are protected through site designations and four new sites have been protected in this way. (In Birmingham and the Black Country there are three levels of protection for important sites. Sites of Importance for Nature Conservation (SINCs) are regionally important sites and Sites of Local Importance for Nature Conservation (SLINCs) are of more local interest. This is in addition to the nationally important SSSIs). Inventory work for grasslands, ancient woodlands and ponds co-ordinated by EcoRecord and the Wildlife Trust has identified good examples of these habitats which are outside designated sites. Incorporating the need for site protection into policy documents at all levels is important. All the local authorities include site protection measures in their planning policies and this will continue with the publication of the Black Country Core Strategy and equivalent work in Birmingham. The Environment Agency is preparing River Basin Management Plans for the Humber and Severn Catchments which will focus biodiversity activity and set targets for local rivers.
- 6.16 Protection of sites within the time span of the first LBAP has been generally effective but sites continue to be lost. This loss cannot be blamed on the contents of the LBAP but site protection continues to be hampered by a lack of systematic survey work to identify valuable sites so they can be protected.
- 6.17 Habitat invariably has to be managed to retain its diversity and value. Management is an essential part of many of the Habitat Action Plans. It is encouraging that considerable management work has been carried out by a range of partners during the life of the first LBAP. Many of the designated wildlife sites are local authority owned and managed and generally management plans are in place for their effective management. Management is often substantially supported by national agri-environment

schemes. British Waterways, as the managers of the canal network, have undertaken habitat improvement measures along the Staffordshire and Worcestershire and Dudley Canals. One recent success has been the successful completion of the Sustainable Management of Urban River Flood-plain Project (SMURF) in Birmingham restoring a length of the River Tame to a more natural channel at Perry Hall Playing Fields.

6.18 While much positive work has been done there is much to do. Data collected by the local authorities shows that a substantial majority of all SINCs and SLINCs are unmanaged.

6.19 An essential part of biodiversity conservation is the expansion of the resource through habitat creation and restoration. Many of the Habitat Action Plans propose the restoration of the specific habitat by defined levels over the life of the LBAP. Apart from the restoration of 1.5 kilometres of hedgerows it is unclear whether the habitat creation work which has undoubtedly taken place accords with the actions in the first LBAP due to a general lack of reporting.

Implementing the Species Action Plans

6.20 The 22 Species Action Plans covered many of the protected species present in Birmingham and the Black Country as well as other species considered important. Progress on the implementation of these plans has been disappointing.

6.21 Some progress has been made with the implementation of the Great crested-newt Species Action Plan. New ponds have been created at Fens Pools in Dudley while breeding ponds have been restored in Birmingham and Walsall. The Bats Species Action Plan has largely been implemented. The Birmingham and Black Country Bat Group has been revitalised and gathers records and actively promotes bat conservation. EcoRecord obtains bat records from survey work carried out in support of planning applications and provides site alert maps to local authorities to enable roosts to be protected. There has also been progress with the Black redstart Species Action Plan. Black redstarts consideration zones maps have been prepared by EcoRecord and green roofs and brown roof habitat has been created on a small number of buildings in Birmingham and Walsall.

6.22 While there has been action undertaken for the conservation of other species, this has generally been local and uncoordinated.

What Went Well

6.23 Since the first LBAP there have been significant successes. These are described below:

Integration of Biodiversity Action into Public Policy

6.24 All the local authorities have planning policies in place which provide a strong policy framework for the conservation of biodiversity. Strong regional

planning policies are also in place. Two local authorities have adopted Supplementary Planning Documents (SPD) relating to the natural environment.

Ecological Records

6.25 In EcoRecord there is a strong local records centre to facilitate the collection, storage, retrieval and analysis of ecological records. This is fundamental to any biodiversity conservation.

Engaging with People

6.26 During the preparation of the first LBAP there was extensive and positive engagement with a range of people, groups and organisations involved in nature conservation. This broad base inevitably reduced as responsibility passed to major land owners and organisations for delivering the priorities and actions set out in the plan. This led to achievements such as the Partnership being a key consultee in the emerging Black Country Core Strategy.

Implementing Biodiversity Action

6.27 Progress has been made in carrying out recording, surveys, site protection and management throughout Birmingham and the Black Country.

Barriers to Progress

6.28 While there has been considerable progress, some of the actions set out in the first LBAP remain unimplemented. A number of barriers to progress are responsible.

Ineffective Reporting

6.29 It is likely that more work to implement the first LBAP was carried out than reported. There are several reasons for this. Firstly, with no biodiversity co-ordinator in place for much of the life of the first LBAP, there has been little reporting of actions achieved. Secondly, there is no effective mechanism for reporting. The use of the Biodiversity Action Reporting System (BARS), the main national tool for reporting biodiversity action, has been problematic and consequently under-used.

Lack of Co-ordination

6.30 Lack of coordination has inevitably resulted in the partners acting independently with too little collaborative working. The partnership must therefore work in a more coordinated way. It must also engage with all the organisations which influence local biodiversity conservation. Biodiversity is organised at a regional and national level and it is also important to coordinate effectively with the policy makers and target setters as well as with the groups and individuals carrying out practical local action.

Confused Priorities

6.31 The first LBAP proposed far more actions than the main implementing organisations could realistically achieve. Many actions were also vague and ill-defined. Actions implemented have depended on pragmatic decisions by individual organisations driven by the availability of resources and operational needs. The need for the local authorities to achieve national targets and indicators has often stimulated more activity than the LBAP itself. The lack of a published justification for the selection of priority species and habitats covered also led to some difficulties when the LBAP was challenged.

Limited Resources

6.32 There will never be sufficient resources to carry out all the biodiversity work the partnership would like to see. Therefore action must match the imaginative use of the resources available.

Lessons Learnt

6.33 The following key lessons have been learnt from the partner's experiences in compiling and implementing the first LBAP:

- Biodiversity actions need to be tightly focused, measurable and prioritised.
- Biodiversity priorities need to be clear and defensible.
- A well organised local ecological records centre forms the bedrock of biodiversity conservation.
- Integration of biodiversity conservation into policy at all levels is important.
- Proposed actions must be closely linked to available resources.
- Key partners must be identified and fully engaged throughout the preparation and implementation of any LBAP.
- Interest and enthusiasm must be sustained in the longer term.
- Strong central organisation of the partnership is required.
- Effective communication is required at all levels.
- An effective approach to reporting is required.

SECTION 7: MAINTAINING PROGRESS

7.1 This section describes the way in which the new LBAP has embraced the lessons learnt from the first LBAP and taken into account the differing circumstances a decade on from its publication. First of all, changes to the legislative and guidance context are summarised.

Changes to Legislation and Guidance

7.2 Since the first LBAP was published in 2000 there have been important changes to the framework of legislation and guidance relating to biodiversity. The most significant are listed below together with a brief description of their effect. A more comprehensive list is provided in Appendix 4.

Duty to Conserve Biodiversity

7.3 Section 40 of the Natural Environment and Rural Communities Act 2006 introduced a duty for all public bodies to conserve biodiversity in carrying out their work. The definition of biodiversity conservation included 'restoring and enhancing' a population or habitat as well as the protection of the existing resource.

Priority Species and Habitats

7.4 Section 41 of the Natural Environment and Rural Communities Act 2006 lists habitats and species of principal importance in England. These lists identify national priorities for conservation.

Integration of Biodiversity with other Agendas

7.5 Local Government Act 2000 required local authorities to prepare a community strategy 'for promoting or improving the economic, social and environmental well-being of their area and contributing to the achievement of sustainable development in the United Kingdom'. Guidance issued as part of DETR Circular 4/2001 stated that local authorities should build upon Local Biodiversity Action Plans when preparing their community strategies.

Biodiversity and Planning

7.6 Planning Policy Statement 9: Biodiversity and Geological Conservation updates National planning guidance. There is a clear emphasis on enhancing as well as conserving biodiversity and local planning policy must be consistent with national, local and local biodiversity priorities and objectives.

7.7 Government Circular: Biodiversity and Geological Conservation- statutory obligations and their impact within the planning system. (ODPM Circular 06/2005) provides more detail on national planning requirements. It states that the effects of development on habitats or species listed as priorities at

national or local level are 'a material consideration' in the preparation of local planning policy and the making of planning decisions.

- 7.8 West Midlands Regional Spatial Strategy (2008) incorporates a biodiversity enhancement policy and also introduces Biodiversity Enhancement Areas (BEA), large areas which hold important regional biodiversity resources.

Biodiversity Action

- 7.9 Conserving biodiversity- The UK approach (2007) sets out the approach to biodiversity action in the UK. The emphasis is on an ecosystem approach rather than on individual species and habitats.
- 7.10 Securing Biodiversity (2008) sets out Natural England's framework for biodiversity action in England. The main change from previous approaches is the consideration of biodiversity at a landscape scale.
- 7.11 National Indicator 197: Biodiversity was introduced in 2007 and all local authorities have to report annually on the percentage of local sites which are under management. This indicator covers all SINCs and SLINCs in Birmingham and the Black Country.

Biodiversity and Climate Change

- 7.12 Conserving biodiversity in a changing climate: guidance on building capacity to adapt (2007) describes guiding principles for actions to reduce the impact of climate change on biodiversity.
- 7.13 England Biodiversity Strategy: climate change adaptation principles (2008) updates the principles for conserving biodiversity in a changing climate.

Implications of Changes to Legislation and Guidance

- 7.14 These changes have the following implications for our approach to the preparation of a new LBAP.
- 7.15 All public bodies represented on the partnership now have a duty to conserve biodiversity in carrying out their duties. Involvement in the preparation and implementation of the new LBAP demonstrates the practical observance of the duty.
- 7.16 Published national priority habitats and species give strong guidance on which habitats and species the new LBAP should conserve and enhance.
- 7.17 Local planning policy must take account of both national and local biodiversity priorities. Local biodiversity priorities must be robust and defensible to resist inevitable challenge through the planning process.
- 7.18 LBAP should be integrated into other statutory documents such as Sustainable Community Strategies. In this way the health, wellbeing, climate change and economic agendas can be integrated with biodiversity.

7.19 The national emphasis has switched to landscape scale biodiversity conservation moving away from individual Habitats and Species Action Plans. This will mean a more pragmatic approach considering a landscape scale where possible but Habitat and possibly Species Action Plans may still play an important role.

7.20 The region's Biodiversity Enhancement Areas need to be considered and integrated. Future regional policy is uncertain and the LBAP will need to reflect future changes.

7.21 The local authorities have to report on the management of all SINC and SLINC within their areas underlining the importance of site management and monitoring.

7.22 Actions to reduce the effect of climate change on the local biodiversity resources are required.

Lessons Learnt from the first Biodiversity Action Plan

7.23 Changes in legislation and guidance will have a major influence on the approach and content of the new LBAP. The previous section concluded with a list of lessons learnt from the preparation and implementation of the first LBAP. It is important to build on both the positive and negative experiences gained.

7.24 The lessons learnt from the first LBAP have the following implications for our approach.

7.25 Key lessons for the content of the first LBAP:

- Biodiversity actions need to be tightly focused, measurable and prioritised.
- Biodiversity priorities must be rigorously selected and defensible.
- Proposed actions must be closely linked to available resources.
- Biodiversity conservation must permeate public policy at all levels.
- Key partners must be identified and fully engaged throughout the preparation of the LBAP to influence the content of the revised plan.

7.26 Key lessons for the Biodiversity Partnership

- Key partners must be identified and be fully engaged throughout the LBAP process and influence the work of the Biodiversity Partnership.
- Effective communication is required at all levels.
- An effective approach to reporting is required.
- Strong central organisation of the partnership is required.
- Biodiversity conservation should be planned for the long-term.

Rising to the Challenge

7.27 The review of the first LBAP and consideration of new legislation and guidance has identified a pragmatic approach to the preparation of a

practical and effective new LBAP. Rising to the following key challenges is central to the approach adopted:

Making a practical difference:

- Taking action on the basis of sound evidence and baseline data.
- Monitoring and reporting progress to demonstrate that action taken has the desired effect.
- Writing a revised LBAP which is clear, focused, realistic and practical.
- Making a practical difference while taking account of national and regional targets and guidance, the requirements of partners, land use pressures and finite resources.

Making best use of resources:

- Setting priorities to make best use of the resources and expertise available.
- Securing resources in a time of austerity.
- Sustaining the process over the longer term.
- Striking a balance between local, regional and national priorities.

Working together:

- Working together in an effective and coordinated way.
- Maintaining a strong biodiversity partnership.
- Integration of biodiversity conservation at local, regional and national levels.

Communicating effectively:

- Promoting biodiversity conservation.
- Publicising success and learning from failures.

Addressing the key challenges

7.28 These key challenges will be addressed by the partnership in the following ways.

Developing the Partnership

7.29 Ensuring the partnership, at any time, contains an optimal mix of people to make effective progress in the conservation of biodiversity in Birmingham and the Black Country.

Engaging People

7.30 Engaging with organisations in public, private, academic and voluntary sectors, politicians, policy makers, target setters, local people and all those with an interest in or influence over biodiversity conservation. It is essential to engage with those responsible for on-the-ground action.

Collecting and Interpreting Data

7.31 Ensuring that biodiversity action is based on sound ecological principles and good survey data is available to inform the protection, management, enhancement, understanding and enjoyment of the natural resource.

Influencing Policy and Decision-Making

7.32 Ensuring biodiversity conservation is embedded and fully integrated within public policy at all levels. The LBAP will take full account of, and influences relevant policy, guidance and targets. The link between biodiversity action and the partners' mainstream functions will be made to ensure that it is integral rather than separate.

Implementing Practical Conservation, Protection and Enhancement Measures

7.33 Clear, defensible and effective priorities for action will be set. Actions will be matched to available resources, including secured funds, and considering long term activities.

Reporting Progress

7.34 Reporting will be enhanced to ensure actions are effective and have the intended effects.

SECTION 8: KEY PRIORITIES AND TARGETS FOR THE LOCAL BIODIVERSITY ACTION PLAN

- 8.1 The aim and objectives set in Section 2 relate primarily to delivery of practical action on the ground. However it is essential to recognise the lessons learned and challenges (as set out in Section 7) whilst ensuring that a suitable partnership environment exists within which these actions can take place in the most efficient way. For this reason the Key Priorities set out in Section 9 will deliver the Aim and Objectives set out in Section 2. They also reflect a wider range of outcomes which, when delivered, will ensure long-term sustainability of the Partnership and through this, a lasting legacy of improved biodiversity for Birmingham and the Black Country.
- 8.2 This section sets out the spatial priorities and targets for the actions under each Key Priority to follow. The Key Priorities are;
- Developing the partnership
 - Engaging people
 - Collecting and interpreting data
 - Influencing policy and decision-making
 - Implementing practical conservation, protection and enhancement measures
 - Reporting progress
- 8.3 The Framework for Action in Section 9 describes how these Key Priorities will be translated into measurable actions (Outputs). Reporting progress is seen as a cross-cutting issue which will be integrated into all actions.

Habitat and Species Targets

- 8.4 Targets for the protection, improvement, restoration and expansion of habitats have been produced through the Regional Habitats Targets Review (2009). This work assessed the habitat resource and potential for expansion which occurred in the West Midlands and have been adjusted where necessary following consultation with the LBP.
- 8.5 These targets have since been apportioned to Birmingham and the Black Country and are included in Appendix 5. They cover National and Local Priority Habitats in Birmingham and the Black Country (identified in section 4). Certain habitats are identified for no net loss given their importance. Some National Priority Habitats are still to have targets established and apportioned (these include Rivers and Wood-Pasture & Parkland). These will be added through the annual review and monitoring of the LBAP (see Section 9).
- 8.6 Actions from this LBAP will need to contribute towards these targets which should be seen as the minimum to be achieved. These actions include the apportionment of targets to each Local Authority area (see Key Priority 5 in Section 9). Progress towards these targets will be monitored annually.

- 8.7 The regional and LBAP targets are subject to review through the production of Nature Conservation Delivery Plans. They are therefore being treated as interim targets and the revised figures will be published and apportioned through the monitoring of the LBAP in line with the regional targets.
- 8.8 It is not anticipated that species targets will be produced at the regional level. As previously stated species actions will be carried out by integrating species needs into habitat management wherever possible, using the integrating species document produced for the England Biodiversity Group.

Spatial Priorities

- 8.9 Figure 2 shows the West Midlands Biodiversity Areas relevant to Birmingham and the Black Country as set by the West Midlands Biodiversity Partnership. These are regional, landscape scale areas where it is anticipated that significant conservation actions will take place.
- 8.10 Figure 2 also shows Biodiversity Enhancement Zones present within and adjacent to Birmingham and the Black Country. These zones relate to the presence or absence of important habitat types (see Figure 1 and Appendix 1). The *Maintain* zone has a higher proportion of important habitats where management work aimed at retaining their condition is vital. The *Restore* zone is characterised by areas with a moderate amount of important habitats where it is often possible to improve the quality of other habitats to make them important. The *Create* zone contains the least amount of important habitat and therefore there is a need to increase the amount of habitats present for social and wider environmental benefits. It also shows areas that have value in helping some species migrate and move through the conurbation.
- 8.11 Figure 2 will be used to achieve the Key Priorities by identifying landscapes that are strategically important for habitat creation, restoration and maintenance. These landscapes/landscape areas will be defined and identified in Nature Conservation Delivery Plans.

SECTION 9: FRAMEWORK FOR ACTION

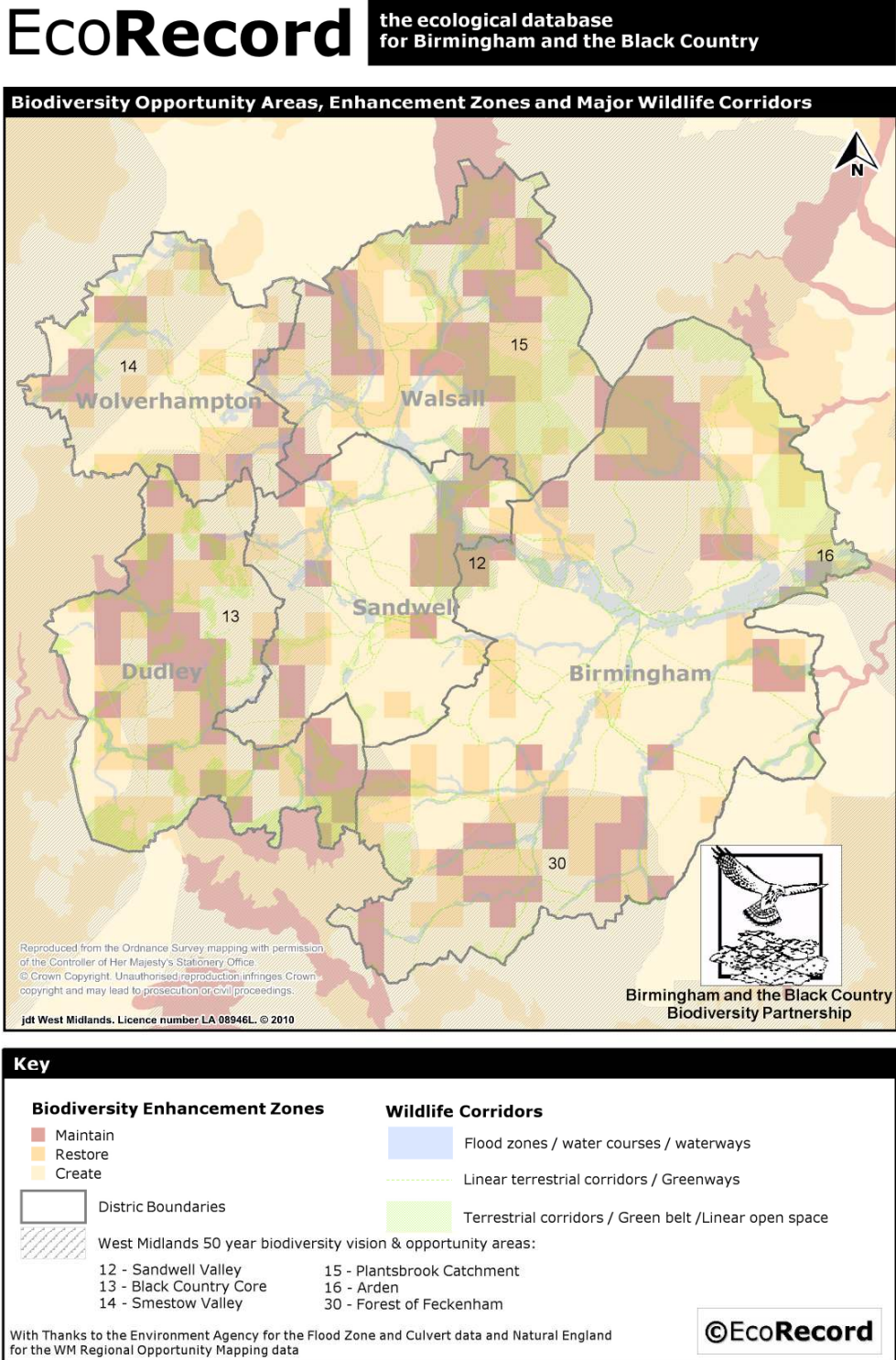


Figure 2: Biodiversity Opportunity Areas, Enhancement Zones and Wildlife Corridors

- 9.1 The first five Key Priorities identified in Section 8 are the broad areas for action in the new LBAP. The sixth (Reporting Progress) has been embedded within these Key Priorities. This section translates the broad priority headings into the practical actions the partnership will implement over the life of the new LBAP. This framework for action therefore lies at the heart of this LBAP.
- 9.2 Within each Key Priority, Outcomes have been set. Outcomes are the key things which need to be achieved or maintained. Each Outcome requires several Outputs (specific tasks which need to be completed to deliver the Outcome) which have been identified. Each Output is based on a SMART target approach, with Measures of Success, a Lead Partner and Completion Date identified. Therefore a link can be made between each Key Priority, which describe the important issues in this document, and each specific Output needed to deliver it. A number of the Outputs crossover several Key Priorities, however they have been identified within the Key Priority to which they have the strongest link.
- 9.3 The previous sections of this document will be reviewed at least every five years. Section 9 will be monitored and reviewed annually. The Outputs will be transferred into an annual work plan for the LBP which will be monitored on a quarterly basis. The results of this monitoring will be fed into the annual review of this section to ensure the most important and urgent priorities are addressed, whilst providing a strong framework to guide the long term delivery needed to achieve our 50 year vision.
- 9.4 This document will also feed into the work programmes of Partners of the LBP through such mechanisms as Nature Conservation Delivery Plans. This will facilitate the targeting of locally appropriate actions within specific landscapes, boroughs and cities through the Key Priorities set within this document. It will also provide direction for individual organisations wishing to undertake more biodiversity actions.
- 9.5 The LBAP will defer to future changes in national and regional policy. To ensure that this document remains relevant against such changes and to take advantage of opportunities for unforeseen resources, periodic reviews will occur.
- 9.6 It is envisaged that future reviews of this section will allow the inclusion of maps which set out important landscapes, zones and/or corridors. Although it would obviously not be desirable for all resources to be used in these areas alone, the maps will aid Partners in targeting their actions for the strategic benefit of biodiversity. Synergies in delivering actions between partners and other agents will be encouraged, especially where landscapes, zones and/or corridors are important to a number of partners/agents.

Key Priority 1: Developing the Partnership

Outcomes:

A Sustain LBAP Partnership.

B Grow the LBAP Partnership.

C Ensure efficient progress.

Outcome	Output	Measure of Success	Completion Date	Lead Partner
A	Employment of Co-ordinator	Co-ordinator in post	Ongoing	LBP
A	MOA (and Core Services)	In place, activity reported	Jan 2010 – Mar 2011	Natural England
A	MOA renewed	In place	April 2011	Natural England/LBP
A	Adopt reviewed LBAP document using appropriate formal mechanisms	Adopted by all partners	October 2010	All Partners
A/C	Biodiversity Partnership Action Plan	Adopted and monitor	Annually – April	LBP
A	Biodiversity Co-ordinator Work Plan	Adopted and monitor	Annually – April	LBP
B	Funding Strategy	Complete	July 2010	LBP
		Implement and monitor	Ongoing	
B	Recruit new partners	No. of new partners increased	Ongoing	All Partners
C	Management Group representative of Partnership	Meeting 6 weekly	8 / Yr	LBP Management Group
C	Formulate effective reporting methodology	Methodology in place	April 2011	LBP
C	Monitoring of BAP	Annual Report published	Annually - April	LBP

Key Priority 2: Engaging People

Outcome:

- A** Influence decision making and public opinion by engaging with organisations in public, private, academic and voluntary sectors, politicians, policy makers, target setters, local people and all those with an interest in or influence over biodiversity conservation

Outcome	Output	Measure of Success	Completion Date	Lead Partner
A	Communications Strategy	Complete	July 2010	LBP
		Implement and monitor	Ongoing	
A	Set priorities for targeting relevant public, private and academic organizations with particular reference to politicians, policy makers, target setters, local people and all those with an interest in or influence over biodiversity conservation.	Implementation and monitoring of Communications Strategy	Ongoing	LBP
A	Undertake BC Living Landscape Community Involvement Project	BC Living Landscape project completed	October 2012	B&BC Wildlife Trust
A	Review activity of Local Authorities in connection with Section 40 of the NERC Act and prepare and implement a plan of activity to support/assist authorities in terms of compliance with the Biodiversity Duty.	Paper/report produced for consideration at Steering Group meeting.	Annually - March	Local Authorities
A	Review activity of all other Public Bodies in relation to Section 40 of the NERC Act and prepare and implement a plan of activity to support those identified as a priority.	Paper/report produced for consideration at Steering Group meeting.	Annually – March	Other public bodies
A	Encourage all Local Authorities to sign the West Midlands Biodiversity Pledge.	Local Authorities agree to sign.	Ongoing until achieved	Natural England / LBP
A	Birmingham and Black Country Biodiversity Forum	1 / Yr	Annually - October	LBP

Key Priority 3: Collecting and Interpreting Data

Outcomes:

- A** Collect data to ensure there is a clear and up to date baseline
- B** Analyse and interpret data to inform accurate setting of priorities and decision making.

Outcome	Output	Measure of Success	Completion Date	Lead Partner
A	Support the Local Sites Partnership	Assist the formation of common standards and methodologies for ecological surveys of Local Sites, species and habitats.	July 2010	LBP
		Assist with completion of the Local Sites baseline review and production of a programme of survey priorities.	March 2011	
		Encourage survey work in accordance with established priorities	Ongoing	
A/B	Support EcoRecord to collect, analyse and interpret data to monitor and report changes in priority habitats and species.	Partners and others submit biological records to EcoRecord	Ongoing	All Partners
		Encourage EcoRecord to support biological recording groups and recorders	Ongoing	LBP
		Assist EcoRecord in the analysis of data to inform formation and review of local biodiversity priorities.	Ongoing	
		Review local biodiversity priorities to inform the Annual Review of LBAP	Annually - December	

Key Priority 4: Influencing Policy and Decision-Making

Outcomes:

- A** The conservation of biodiversity is fully integrated into planning policy and development control decision-making.
- B** The conservation of biodiversity is fully integrated into public policy affecting social, economic and environmental agendas.

Outcome	Output	Measure of Success	Completion Date	Lead Partner
A/B	Establish and maintain a sub-group of the partnership to coordinate the effective implementation of policy issues.	Policy sub-group established	March 2011	LBP
		Develop work programme to respond to relevant policy initiatives for the coming year.	Annually – April	Policy sub-group
A	Integrate biodiversity conservation into local planning policy.	Provide feedback via consultation / engagement requests as set out in work programme.	Ongoing	Policy sub-group
		Monitor success of work programme and review annually	Annually – March	
A	Support Local Planning Authorities in applying biodiversity policies effectively.	Identify and share best practice.	Ongoing	Policy sub-group
		Review AMR's to assess the effectiveness of LPAs to protect biodiversity. Used to inform Policy sub-group work programme	Annually - January	
B	Integrate biodiversity conservation into policy initiatives.	Provide feedback via consultation / engagement requests as set out in work programme.	Ongoing	Policy sub-group
		Monitor success of work programme and review annually	Annually – March	
B	Support organisations in applying biodiversity policies effectively.	Identify and share best practice.	Ongoing	Policy sub-group
		Review monitoring reports to assess the effectiveness of organisations to protect biodiversity. Used to inform Policy sub-group work programme	Annually - January	

Key Priority 5: Implementing Practical Conservation, Protection and Enhancement Measures.

Outcomes:

- A** Identify Local Priority Habitats and Species for action.
- B** Set and achieve targets for Local Priority Habitats and Species and undertake action at a landscape and/or local scale.
- C** Identify and take opportunities to provide social and economic benefits whilst delivering biodiversity action.

Outcome	Output	Measure of Success	Completion Date	Lead Partner
A/B	Apportion regional habitat targets to Local Authority areas	Borough / City targets set	December 2010	LBP
A	Identify Local Priority Habitats and Species and agree timescales for producing Action Plans	Priorities defined and timescales agreed	Annually - March	LBP
A	Produce Habitat and Species Action Plans	Action Plans produced	Annually – as per timetable	LBP
A	Implement, monitor and review Habitat and Species Action Plans	Action Plans implemented, monitored and reviewed	Annually - March	LBP
B	Publish Nature Conservation Delivery Plan and annual action plan for each local authority area	Regional, sub-regional and local wildlife corridors and natural areas mapped for each local authority area	August 2010	All Partners
		Landscape scale priorities identified	October 2010	
		Actions for delivery of landscape scale priorities agreed	January 2011	
		Targets and actions for enhancing areas of local deprivation (biodiversity and Accessible Natural Greenspace) agreed and published	March 2011	
		Local targets and actions for priority habitats and species agreed and published	March 2011	
		Nature Conservation Delivery Plans published	March 2011	
		Annual action plan produced	Annually – March	
B	Implement actions identified in Nature Conservation Delivery Plans and annual action plans	Resources for assisting with delivering actions sought and secured	Ongoing	All Partners
		Actions implemented	Ongoing	
		Monitor and review annual action plans	Annually – March	
		Actions reported on BARS	Annually – March	

B	Ensure that statutory sites are in favourable condition (where achievable)	Natural England favourable condition reports	Frequency of NE reports	Local Authorities / Natural England
B	Bring Local Sites under beneficial management supporting key biodiversity priorities, where resources allow.	Report against NI197	Annually - May	Local Authorities
B	Improve the biodiversity of privately owned Local Sites	Audits for all privately owned / managed Local Sites completed	March 2014	Local Authorities / Local Sites Partnership
		Approach owners / managers of 5% of private Local Sites to encourage improved management.	Annually – From March 2015	Local Authorities / Local Sites Partnership / B&BC Wildlife Trust
B	Empower, provide support for and involve local groups and individuals in biodiversity action	Report on volunteer days (Target of 2,000pa)	Annually - March	All Partners
B	Establish and maintain Countryside Management sub-group	Set up Countryside Management sub-group	March 2011	LBP
		Two meetings	Annually	Countryside Management sub-group
B	Developing skills to aid delivery of LBAP	Assessment completed	Biannually - From September 2011	Countryside Management sub-group
		Sharing of best practice / delivery of training	Ongoing	
C	Develop programme of action for LNR designation to meet / move towards the Natural England LNR standard	Prepare programme for declaring new LNRs	March 2011	Local Authorities
		Area (ha) of new LNRs declared / local authority	Annually – December	
		Each local authority achieves / moves towards the LNR standard	March 2015	
C	Increase biodiversity and Accessible Natural Greenspace provision within areas of deficiency	Targets and actions agreed and published	March 2011	LBP
		Resources for assisting with delivering actions sought and secured	Ongoing	All Partners
		Actions implemented / targets reviewed	March 2015	
		Monitor achievements against targets	Annually – December	Local Authorities

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APPENDIX 1: METHODOLOGY FOR MAPPING BIODIVERSITY ENHANCEMENT AND RESOURCE ZONES IN BIRMINGHAM AND THE BLACK COUNTRY

A simple scoring system was applied to the distribution of known wildlife habitats across Birmingham and the Black Country, to provide a map of biodiversity value. The datasets used to inform the mapping were:

- Good quality grasslands inventory for Birmingham and the Black Country
- Woodlands
- Heathlands inventory for Birmingham and the Black Country
- Ponds

A 1km grid was mapped over the Birmingham and Black Country area. The habitats present within each of these 1km squares (1kmx1km) were scored on a scale of 1 to 3 (1 being of lower biodiversity value and 3 being of high biodiversity value). The following guidelines were used to allocate scores to the habitats present:

- Good quality grasslands inventory for Birmingham and the Black Country
 - Habitat within a sub-regionally, nationally or internationally designated nature conservation site (SINC, SSSI or SAC) scores 3 points.
 - Habitat within a locally designated nature conservation site (SLINCs) scores 2 points.
 - Other habitat scores 1 point.
- Woodlands
 - Ancient woodland scores 3 points.
 - Woodland within a sub-regional, national or international designated nature conservation site (SINC, SSSI or SAC) scores 3 points
 - Woodland within a locally designated nature conservation site (SLINCs), is a Millennium Forest, or is classified as being broadleaf on MasterMap scores 2 points.
 - Woodland classified as being coniferous on MasterMap scores 1 point.
- Heathlands inventory for Birmingham and the Black Country
 - All heathland sites score 3 points.
- Ponds
 - Ponds that contain at least 1 Red Data Book species and/or meet the requirements of a priority pond (as identified in Section 41 of Natural Environment and Rural Community Act 2006) score 3 points.
 - Ponds which have ecological survey data, but do not meet the threshold for priority pond status score 2 points.
 - Ponds present on MasterMap, which currently have no ecological data at present, score 1 point.

Within every 1km square each habitat category is only scored once, giving a maximum of 3 points. The total score for each 1km square is therefore a cumulative score for each of the habitats that it contains.

Each 1km square was then placed into one of three groups (Create/Low, Restore/Medium or Maintain/High) by a Triangulated Irregular Network (TIN) interpolation algorithm, which uses the square's total score and those that surround it. By acknowledging the value of neighbouring 1km squares, the method has ensured that the more fluid and mobile character of biodiversity is represented whilst continuing to use a robust mathematical analysis of the data. The groupings reflect the following:

- Low scores = Create/Low (shaded yellow)
- Medium scores = Restore/Medium (shaded orange)
- High Scores = Maintain/High (shaded red)

These groupings broadly describe the resource and the most appropriate approach to prioritize biodiversity conservation action.

APPENDIX 2: HABITATS AND SPECIES OF PRINCIPAL IMPORTANCE PRESENT WITHIN BIRMINGHAM AND THE BLACK COUNTRY

Section 41 of the Natural Environment and Rural Communities Act 2006

Habitats of Principal Importance in England that are present within Birmingham and the Black Country

Broad Habitat	Habitat Name
Arable and Horticulture	Arable field margins
Boundary	Hedgerows
Freshwater	Eutrophic standing waters
Freshwater	Mesotrophic lakes
Freshwater	Ponds
Freshwater	Rivers
Grassland	Lowland calcareous grassland
Grassland	Lowland dry acid grassland
Grassland	Lowland meadows
Grassland	Purple moor-grass and rush pastures
Heathland	Lowland heathland
Inland Rock	Inland rock outcrop and scree habitats
Inland Rock	Open mosaic habitats on previously developed land
Wetland	Coastal and floodplain grazing marsh
Wetland	Lowland fens
Wetland	Lowland raised bog
Wetland	Reedbeds
Woodland	Lowland mixed deciduous woodland
Woodland	Upland Mixed Ashwoods
Woodland	Upland Oakwood
Woodland	Wet Woodland
Woodland	Wood Pasture and Parkland

Amphibians and Reptiles:	Common Toad Great Crested Newt Grass Snake Adder Slow-worm	Mammals:	Water Vole West European Hedgehog Brown Hare Otter Harvest Mouse Polecat Noctule Soprano Pipistrelle Brown Long-eared Bat Lesser Horseshoe Bat	Moths (continued:	The Crescent Latticed Heath Small Square-spot Figure of Eight Small Pheonix September Thorn Dusky Thorn August Thorn Galium Carpet
Bee:	Andrena tarsata (a mining bee)				
Beetles:	Early Sunshiner Sallow Guest Weevil				Autumnal Rustic The Spinach Netted Carpet Garden Dart
Birds:	Tree Pipit Greater Scaup Great Bittern European Nightjar Hawfinch Common Cuckoo Corn Bunting Yellowhammer Reed Bunting Herring Gull Black-tailed Godwit Common Grasshopper Warbler Wood Lark Common Scoter Spotted Flycatcher Eurasian Curlew House Sparrow Eurasian Tree Sparrow Grey Partridge Wood Warbler European Turtle Dove Ring Ouzel Northern Lapwing Sky Lark	Plants:	Spreading Bellflower Cornflower Eyebright Floating Water Plantain Tubular Water-dropwort Corn Buttercup		Double Dart Small Emerald Ghost Moth The Rustic Rosy Rustic Brindled Beauty The Lackey Dot Moth Broom Moth Rosy Minor Shoulder-striped Wainscot Lunar Yellow Underwing Oblique Carpet Powdered Quaker Dark Spinach Scarce Aspen Knot-horn Shaded Broad-bar White Ermine Hedge Rustic Blood-vein The Cinnabar
Bug:	Lesser water-measurer	Moths:	Grey Dagger Knot Grass Flounced Chestnut Brown-spot Pinion Beaded Chestnut Green-brindled Crescent Ear Moth Mouse Moth Dusky Brocade Rest Harrow Scarce Brown Streak Deep-brown Dart		Oak Hook-tip The Sallow Dark-barred Twin-spot Carpet Heath Rustic The Streak
Butterflies:	Small Pearl-bordered Fritillary Mountain Ringlet Small Heath Small Blue Dingy Skipper Wall Wood White White Admiral White Letter Hairstreak				

Species of Principal Importance in England that are Present within Birmingham and the Black Country

APPENDIX 3: CRITERIA FOR THE SELECTION OF LOCAL PRIORITY HABITATS AND SPECIES

The national selection process (Annex 3 of the Report on the Habitat and Species Review 2007) has been used as a template for these local criteria. The habitats and species selected using these criteria supplement those identified nationally (see Appendix 2). Any habitat / species meeting one or more of these criteria will be selected as priority by Birmingham and the Black Country Biodiversity Partnership.

Local Priority Habitats

Any habitat;

- which, although not selected at a national level, performs the same ecological function in our urban environment.
- where there is a significant increase in the variety and magnitude of human activities causing damage and a substantial decline is predicted. This may be as a result of cumulative impacts including local extinction.
- that is restricted to isolated locations and are threatened with local extinction because they are vulnerable to human pressures.
- important for assemblages of key species or that contain several nationally or locally rare / scarce species.
- at risk such as with a high rate of decline in extent and/or quality, or which is rare / irreplaceable.
- which is 'functionally critical' i.e. essential for organisms inhabiting wider ecosystems. This could include significant climate change adaptation and mitigation properties.
- which is on the existing local priority list, where the original factors contributing to its prioritisation are still operating.

Local Priority Species

Any species:

- at risk of significant decline due to a substantial threat to a highly specialised habitat.
- that is likely to decline as a result of external environmental factors such as disease, hybridisation, alien invasive species or climate change.
- which is a good indicator or 'flagship' that highlights a conservation issue.
- which is on the existing local priority list, where the original factors contributing to its prioritisation are still operating.

APPENDIX 4: NATIONAL, REGIONAL AND LOCAL LEGISLATION AND STRATEGIES

NATIONAL LEGISLATION AND STRATEGIES	REGIONAL STRATEGIES	SUB-REGIONAL AND LOCAL STRATEGIES
<p>Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (EC Habitats Directive). Article 10 states: Through land-use planning and development policies to encourage management of features of major importance for wild flora and fauna.</p> <p>Conservation of Habitats and Species Regulations 2010. Includes Regulation 39 on Nature conservation policy in planning contexts which states policies in respect of the conservation of the natural beauty and amenity of the land shall be taken to include policies encouraging the management of features of the landscape which are of major importance for wild flora and fauna.</p> <p>Natural Environment and Rural Communities Act 2006:</p> <ul style="list-style-type: none"> ▪ Section 40 – places a statutory duty on all public bodies in England and Wales to conserve biodiversity. ▪ Section 41 - lists habitats and species of principal importance for biodiversity conservation. 	<p>West Midlands Regional Spatial Strategy (2008): Includes specific policies for: Climate Change and Regeneration and Transforming the Environment of the Black Country. Phase 3-Revision Options Consultation (2009) includes the quality of the environment across the region. Policies QE1-9 deals with the environment, whilst QE7 specifically deals with 'Protecting, Managing and Enhancing the Region's Biodiversity and Nature Conservation Resource.' Promoting:</p> <ul style="list-style-type: none"> ▪ Regional Opportunity Map (50 year Biodiversity Vision and Opportunity). ▪ Regional BAP Habitat Targets. ▪ Landscape scale projects. ▪ Growth Points which provide an opportunity to enhance biodiversity through provision of Green Infrastructure. <p>Regional Sustainability Development Framework (2006). Includes sections on:</p> <ul style="list-style-type: none"> ▪ Natural resource protection and Environmental enhancement. ▪ Sustainable Communities. 	<p>Birmingham, Dudley, Sandwell, Walsall and Wolverhampton saved UDP biodiversity planning policies. Supported by:</p> <ul style="list-style-type: none"> ▪ Birmingham Nature Conservation Strategy Supplementary Planning Guidance (1997). ▪ Dudley Nature Conservation Supplementary Planning Document (2006). ▪ Walsall Nature Conservation Supplementary Planning Document (2008). <p>Black Country Core Strategy (2009) Environment Infrastructure Guidance:</p> <ul style="list-style-type: none"> ▪ Contributes to the objectives of the WMRSS. ▪ Delivering environmental transformation. ▪ Provision of robust baseline data. ▪ Informed spatial data for policy formulation. ▪ Guidance for project development and delivery. <p>Birmingham Core Strategy: under development.</p>

<p>Planning Policy Statement 9: Biodiversity and Geological Conservation (2005): Sets out the national planning guidance and policies on biodiversity and geological conservation.</p> <p>‘Securing Biodiversity’ Framework (2008) and England Biodiversity Strategy (2002): Promotes:</p> <ul style="list-style-type: none"> ▪ Landscape scale conservation and ecosystem services. ▪ Formation of local partnerships to enhance biodiversity at a Regional and Local level. ▪ Targets for habitat restoration and expansion. <p>National Performance Indicators – Public Service Agreement (PSA) 28:</p> <p>To secure a healthy natural environment for today and the future. Includes:</p> <p>National Indicator 197 (2007)- Improved local biodiversity.</p> <ul style="list-style-type: none"> • Proportion of local sites where positive conservation management has been or is being implemented. 	<p>West Midlands Regional Biodiversity Strategy (2005): Promoting:</p> <ul style="list-style-type: none"> ▪ Maintaining and improving the condition of habitats, species and ecosystems. ▪ Developing an area based approach to restoring wildlife. ▪ Monitoring the condition of habitats, species and ecosystems. ▪ Re-connecting and integrating action for biodiversity with other environmental, social and economic activity. ▪ Coping with the impacts of climate change. ▪ Regional Delivery Plan (2010-2015). <p>Enhancing Biodiversity Across The West Midlands (2008): Promotes:</p> <ul style="list-style-type: none"> ▪ Local opportunity mapping. ▪ Landscapes for Living (landscape scale conservation). ▪ Climate change adaptation. ▪ Green Infrastructure and Growth Points. ▪ Strategic river corridors. 	<p>Biodiversity Action Plan (2000): includes 4 Issues Plans, 16 Habitat Action Plans and 22 Species Action Plans based upon guidance from English Nature.</p> <p>Black Country Geodiversity Action Plan (2006): Promotes 7 Priority Work areas: Policy.</p> <ul style="list-style-type: none"> ▪ Data resource. ▪ Site identification, designation and enhancement. ▪ Managing existing diversity. ▪ Public awareness. ▪ Education. ▪ Sustaining the process. <p>Biodiversity Action Plan (2010): Updates the 2000 BAP including new and revised guidance on:</p> <ul style="list-style-type: none"> ▪ Biodiversity Opportunity Map ▪ Landscape Scale Conservation. ▪ Local habitat targets. ▪ Partnership working. ▪ Priority action within topic areas. ▪ Integration with national and regional strategies and policies.
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APPENDIX 5: INTERIM ALLOCATION OF REGIONAL HABITAT TARGETS FOR BIRMINGHAM AND THE BLACK COUNTRY – 2010 to 2026 (July 2010)

Habitat (All figures in Ha unless stated otherwise)	Maintain Extent		Achieve Condition		Restoration		Expansion	
	2015	2026	2015	2026	2015	2026	2015	2026
Arable Field Margins	0	0	n/a	n/a	0	0	3	11
Canals (km)	217	217	0	0	0	0	To be provided	
Coastal and Floodplain Grazing Marsh	234	234	48	152	19	62	4	12
Eutrophic Standing Waters (sites)	231	231	54	173	0	0	0	0
Lowland Fens	10	10	3	9	1	2	0	0
Hedgerows (km)	0	0	n/a	0	0	0	3	8
Inland Rock Outcrop and Scree	0	0	n/a	n/a	0	0	0	0
Lowland Calcareous Grassland	4	4	1	3	0	0	0	0
Lowland Dry Acid Grassland	36	36	10	31	1	3	1	2
Lowland Heathland	198	198	56	178	0	0	9	30
Lowland Meadows	213	213	50	160	18	57	2	7
Native Woodland*	177	177	36	115	15	49	19	60
Open Mosaic Habitats on Previously Developed Land**	147	147	n/a	n/a	5	16	0	0
Ponds (sites)**	0	0	n/a	0	13	43	13	43
Purple Moor Grass and Rush Pastures	29	29	7	22	1	2	1	2
Reedbeds	13	13	3	10	0	0	1	4
Traditional Orchards	4	4	1	2	0	0	0	0

Source: Regional Habitat Targets Review; Technical Report (August 2009).

* This includes all woodland National Priority Habitats in Birmingham & the Black Country, plus Lowland Beech and Yew Woodland.

**No net loss of habitat, i.e. total extent of the habitat should be maintained but loss may be compensated for by gains through mitigation as long as overall integrity of the habitat is sustained.

Maintain extent – Total current resource in the area. Derived from the best available data and adjusted through consultation with the LBP.

Achieve condition – Amount of habitat which should be in condition and / or under appropriate management. Derived from a percentage of the maintain extent target, based on national targets information available on Biodiversity Action Recording System.

Restoration and Expansion – derived from an assessment of the land which is physically and ecologically suitable in the area, and adjusted through local knowledge.