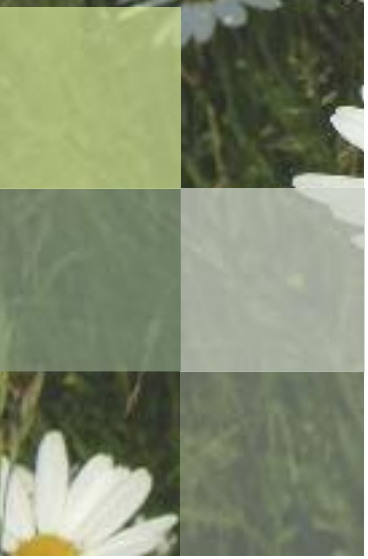
Leicester's Biodiversity Action Plan 2011 – 2021

GROUNDWORK LEICESTER & LEICESTERSHIRE

Leicester City Council



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foreword

This Biodiversity Action Plan sets out how we will manage, promote and extend the city's natural habitats. Much has already been achieved across the city by managing our parks and green spaces with biodiversity and nature conservation in mind. Through our partnership with Groundwork Leicester & Leicestershire we have been able to involve volunteers and engage local communities in the management of local nature reserves and wildlife sites. Maintaining these sites to protect and enhance biodiversity, whilst at the same time encouraging people to enjoy them remains an important priority.

Bioblitz events are a key part of this work and more events will be organised as part of this action plan, building on the events held in recent years at Abbey Park and Watermead Country Park.

Our Biodiversity Action Plan is not just about enhancing and protecting existing wildlife sites, it is also about identifying where new natural habitats can be created in Leicester. This action plan therefore aims to help inform decisions about land use and development, making sure that issues of biodiversity and greenspace protection are properly considered in the future.

This action plan recognises that effective management of biodiversity and provision of greenspace can have a significant impact on overall quality of life. We want more people to enjoy and understand the biodiversity of the city.

The priorities and objectives set out in this action plan require strong partnerships and we will continue to work alongside the many organisations and our communities in enhancing and protecting the city's natural habitats and greenspaces.

Protecting and enhancing the city's biodiversity and greenspaces, and creating new habitats for wildlife, will contribute significantly to our vision of Leicester as a greener and more sustainable city.

Sir Peter Soulsby
City Mayor

Cllr Rory Palmer
Deputy City Mayor

the vision

To conserve and enhance a range of habitats and associated species that characterise the City of Leicester, contributing to the regional and national biodiversity whilst providing an attractive and sustainable natural environment in which to live, work, learn and enjoy.

executive summary

This 10-year Biodiversity Action Plan (BAP) follows on from the 'Wild About Leicester' – Leicester Biodiversity Action Plan 2006-2009 (Leicester City Council 2006). It incorporates the One Vision for Leicester in upholding that we all have a responsibility to safeguard and improve the environment in which we live for our enjoyment and for future generations to enjoy. Recognising the importance of wildlife and nature conservation and its contribution to the biodiversity of Leicester is central to this vision.

In 2008-09 the City of Leicester signed an international agreement through "Local Action for Biodiversity" (LAB) to protect and enhance sites of nature conservation value in the City; to identify new sites and to encourage the residents of Leicester to help create and manage those areas of importance to wildlife right on their doorstep.

This Biodiversity Action Plan is key to this success and sets out a strategy, identifying real targets and objectives within a timeframe in which they can be achieved. Bodies such as Natural England, the Leicestershire and Rutland Wildlife Trust and local natural history groups have been consulted together with local community groups to ensure that we have included the most important aspects of wildlife conservation in the Plan. The involvement of such specialist bodies and the local community is fundamental to it succeeding.

Leicester City Council will also continue to work in the partnership with Groundwork Leicester and Leicestershire who have assisted in writing this Plan, together with the many other partners who have helped Leicester protect and conserve its wildlife. Managing our parks, open spaces and woodlands as well as planting more trees and creating new woodlands, wetlands and grasslands around the City will allow people greater access to wildlife. Incorporating nature conservation into all aspects of development and encouraging our schools and colleges to create outdoor classrooms in which wildlife can live and be seen will help provide areas for wildlife to live and disperse throughout the City. Monitoring and recording of wildlife will help identify whether targets are being achieved and where further attention needs to be focussed to safeguard the habitats and wildlife associated with them. Progress against the targets will be regularly reviewed and new targets set as old ones are achieved during the lifetime of this Plan (2011-2021).

1. introduction

This document sets out to secure a strategy for biodiversity in Leicester for the next 10 years (2011-2021). It is however recognised that it is particularly difficult to foresee how biodiversity can be incorporated and evolve in an urban environment over such a long time. Economic and financial circumstances (both boom and recession) heavily influence the level of development and availability of funding for environmental projects. Physical changes such as atmospheric pollution, climatic instability (summer storms, high temperatures and severe winters) and changes in legislation and policy at a central and local government level (particularly Planning and Wildlife) can influence how areas are managed strategically and the impact on biodiversity within an urban environment.

To overcome this, the strategy seeks to promote several generic objectives, namely Participation Objectives, Strategic Objectives and Habitat Objectives that form the basis of the 10 year Plan. Specific Stragetic and Habitat Action Plans that incorporate the participation, strategic site and habitat objectives are then described in detail to identify the current position; the aims of each Action Plan; what is required to achieve them and who is responsible. This section is divided into action to be taken in the current year (2011-2012) and in the next 4 years (2012-2016). Each years achievements and progress towards the next 5 years will be reported separately. This will enable the plan to be updated and respond to changes by reviewing each year and following 4 years, for example, the next report will include progress made in 2011- 2012, actions for 2012 – 13 and 2013 – 17.

The annual report will provide information on the Action Points and targets met which will inform on National Indicator and EMAS targets reported on quarterly and annually as well as supporting the UK, Regional and County Biodiversity Action Plans and targets. The report will also assist in identifying potential projects and schemes for biodiversity enhancement in the City, their prioritisation and potential funding.

1.1 WHAT IS BIODIVERSITY?

Biodiversity is a word created by biologists to describe the richness and variety of life around us (bio = 'life' and 'diversity' = range or variety). It is a catch-all expression and also includes the genetic variation (size, colour etc) within those species and the variation in the habitats in which these species live. Crucially the term biodiversity does not just refer to rare or endangered species but includes the wildlife familiar to us all in the places where we live and work and certainly what we might see in the City.

The Earth Summit in Rio de Janeiro (1992) identified the need to address the accelerating loss of biodiversity around the world when the leading nations of the world accepted responsibility to “halt the loss” of biodiversity. This resulted in the UK producing a Biodiversity Action Plan (BAP) in 1994 with an overall goal "to conserve and enhance biological diversity within the UK and contribute to the conservation of global biodiversity through all appropriate mechanisms".

1.2 THE NATIONAL AND INTERNATIONAL CONTEXT

The UK BAP defines urban habitats as 'green spaces and the associated ecological niches found within built up areas'. It applies to such areas as gardens, parks, ponds, and allotments which provide most of us with our first and most regular contact with nature.

Recently the acceptance that many more people live within

our cities (worldwide more than 50% of people now live in urban areas, but this proportion, at 90%, is even higher in the UK) shows that the UK BAP and local BAPs should apply as much to cities as they do to the countryside and coast. Leicester City Council and Groundwork Leicester and Leicestershire (GWLL) recognised a need to reflect this and produced the first Leicester City BAP "Wild About Leicester" (Green and Timms 2006). The local County BAP for Leicester, Leicestershire and Rutland (Jeeves et al 2002) also includes a generic Habitat Action Plan (HAP) for urban habitats. However, "urban" is a catch-all phrase that actually includes a complex mosaic of habitats that collectively provide wildlife value within these developed areas. Specialist habitats include remnants of old habitats such as ancient woodland and unimproved meadows; buildings and other built structures; derelict land, including disused industrial land, demolition sites and waste ground; wetlands, including rivers, brooks, ponds, lakes, flooded gravel pits and canals; allotments; parks and gardens; railway lands; cemeteries and churchyards and mature trees.

This second BAP is building on the success of the first by identifying new targets and challenges to help conserve biodiversity in the City.

Since the adoption of the first BAP by the City, Leicester has made a significant commitment to promoting biodiversity by being one of 21 pioneering cities around the world that are currently participating in the urban biodiversity project: Local Action for Biodiversity (Groundwork Leicester and Leicestershire 2008). Each City has signed up to an agreement to promote, increase and enhance biodiversity within their Cities. This commitment was signed in 2008 and launched in 2009 to coincide with the 200th anniversary of Charles Darwin who laid the foundations of the theory of evolution and transformed the way we think about the natural world. Leicester City is now committed to publishing biodiversity reports on the state of biodiversity in Leicester which will stand as a public record.

1.3 THE BENEFITS OF BIODIVERSITY TO LEICESTER

The benefits of biodiversity to people living in cities have attracted a lot of attention in the last few years from national and international research. It is hard to put a monetary value on many of the benefits that are associated with wildlife in our City, but perhaps the most valuable is that it can improve the quality of life for its residents. Many of us gain great pleasure by simply being in a more natural place whether it be whilst playing or working and such natural landscapes can have an important effect on our psyche.

Recently, the government has put a value on green space and the type of benefits it can provide. These benefits have been termed "ecosystem services" and include the monetary benefits associated with providing a well-managed green space in terms of water quality, soil protection, flood protection, reducing effects of climate change as well as indirect benefits related to health and well-being. Some of these are explained in more detail.

Grasses, shrubs and trees in an urban environment can all have a beneficial effect of reducing pollution through the absorption of noxious gases from the atmosphere and particles of dust and grit which eventually settle

and contribute to the build up of soils. Reducing temperatures and alleviating the effects of climate change may still need more research, but certainly the trees within our City provide us with shade and shelter, with a tree-lined road being more visually pleasing than a barren, sterile street devoid of vegetation.

Many people value the wildlife they come into contact with in the City. It may not be the rarest or most charismatic, and it may only occur in small pockets of land, but because it is so accessible to so many people, such areas may be used more frequently than many of our more traditionally recognised areas of wildlife value such as our nature reserves and wildlife sites.

Many of the new schools in our City appreciate the educational value of wildlife and having an "outdoor classroom" on their doorstep. Bringing young people closer to wildlife can help to safeguard the natural environment of our City and the benefits of biodiversity for future generations to enjoy.

Incorporating biodiversity through strategic planning of where our green spaces will be most valuable to the residents of Leicester is an important role. Linking biodiversity to specific "green infrastructure" associated with sustainable drainage systems, rights of way and existing areas of open space will provide multiple benefits where demand for space is high.

1.4 BIODIVERSITY IN LEICESTER

Leicester's wildlife, natural features, landuse and human history have helped to shape the general character of the area. This has been defined in the Trent Valley and Rises Natural Area by Natural England which describes and evaluates the wildlife and geological features. In addition to the obvious urban environment, Leicester also has a number of other important habitats which include neutral grasslands, wet meadows, parkland, woodlands, rivers and streams. These habitats support a vast range of characteristic and rare species, such as the white-clawed crayfish of international importance historically recorded in a several rivers in Leicester. Those habitats of particular importance to Leicester have been identified in a series of strategic Habitat Action Plans to safeguard the species and the environment in which they thrive (see Section 5).

1.5 THREATS TO HABITATS AND THEIR CONSERVATION

Whilst the area of developed land has increased in Leicester, the quality of some of the urban wildlife habitats has declined. The main factors causing this degradation are:

- Development pressure on derelict land and waste ground causing habitat loss and fragmentation;
- Increased use of fertilisers, pesticides and herbicides in gardens, parks, allotments, and railway lands;
- Pollution – atmospheric and from largely industrial sources;
- Recreational pressure;
- Demolition of old buildings to make way for new development;
- Frequent or inappropriate mowing of amenity grasslands; and
- Anti-social behaviour and acts of vandalism

The value of urban wildlife and its contribution to the quality of life to the local residents has been recognised to a degree by addressing some of the threats through a variety of initiatives by local authorities, government and charitable organisations, for example:

- Establishment of Leicester as Britain's first Environment City;
- Leicester signing the Local Action for Biodiversity to ensure the local council is engaged in urban biodiversity, enhancement, utilisation and management;
- Publication of the Leicester Ecology Strategy and subsequent nature conservation strategies;
- Protection of Wildlife Sites through local development plans and policies;
- Declaration of Aylestone Meadows, Knighton Spinney, Goss Meadows, The Orchards, Humberstone Park, Kirby Frith and Watermead Local Nature Reserves;

- More enlightened management of local authority land;
- The establishment of projects such as Leicester's Riverside Park; and
- The provision of advice to schools and the general public.

1.6 THE PURPOSE OF THE BAP

At the heart of the biodiversity process is recognition of the need to take positive, practical action to reverse declines in species and habitats and restore them as key elements in a healthy, diverse and sustainable environment, across the urban, sub-urban and rural areas of Leicester. The Leicester BAP identifies the action that is needed and the role of lead agencies. The habitats identified are of national, regional or local importance, but all are of special significance within the Leicester area. The actions may not only benefit the condition of a habitat or the status of a particular species, but will have a wider benefit to both people and wildlife, helping to assist in improving the quality of life for residents whilst working towards the One Vision for Leicester. The Plan fully incorporates the benefits of contact with nature and green space in terms of people's well being, including health, emotional and developmental benefits.

The purpose of this document is to build on the first Leicester BAP which successfully demonstrated to the people of Leicester why and where biodiversity was important in the City. This document will continue to further that knowledge, but also provide information to assist with guidance on strategic policy such as the planning framework, green infrastructure and sustainable development, all of which are key to safeguarding nature conservation and biodiversity in the City.

The Plan also addresses the needs of wildlife and their habitats potentially affected by climate change. This has been done by reinforcing the aspirational project-type targets aimed at public participation; identification of sites of wildlife value, and inclusion of more specific habitat based targets to ensure that they are maintained and enhanced for biodiversity.

The Plan, however, is a working document and will be reviewed periodically to address changes in habitats and species around the City; changes in political agenda, policies and legislation; and funding streams available for habitat creation and enhancement.

1.7 SETTING PRIORITIES FOR ACTION

In addition to safeguarding biodiversity in the City, a major role of the local BAP is to maximise the effective use of resources by identifying those habitats and species where action is needed and where resources will have the greatest effect. It should be emphasised that this does not mean that habitats and species not identified in the Plan will be ignored.

Auditing is a key part of the process of identifying local priorities for biodiversity action. Audits of local biodiversity have been completed by the Leicestershire and Rutland Wildlife Trust in 1996 (Bowen and Morris 1996) to determine the status of the Counties' wildlife, and to identify the priority species and habitats for action.

A long tradition of natural history recording is publicly available having been collected or acquired by local organisations such as the Leicester and Leicestershire County Council's Museum Services, Leicestershire Environmental

Records Centre, Leicester City Council and Groundwork Leicester and Leicestershire (GWLL) (and its forerunners Environ and the City Wildlife Project, the Leicester Ecology Trust and the Leicester Environment City Trust).
However, there are some inherent problems with the collation of this data as the information held by local organisations is not always accessible and much of the data stored are not available in an electronic format or digitised maps. The data collected are also stored at a number of locations across the City making it difficult to collate and update records efficiently. Nevertheless, Leicester has a large amount of data on wildlife sites, habitats and species within the City and this has been used to identify specific habitats and species considered important locally; set targets and prioritise actions. The following sources of data have been used:
Historic data from the Leicester Habitat Survey (1983-1986) by the City Wildlife Project which identified the main habitat types in Leicester: woodland and tree groups, hedgerows and scrub, unmanaged grassland, tall herbs and pasture grassland, intensively managed grassland, rivers, streams, canals and small lakes, reedswamp and other wetland, arable land and allotment land. These habitats were mapped, together with a detailed plant list of every site which provided a useful baseline data for habitats in Leicester.

- Phase I Habitat Survey of Leicester (2006-08) which identified and digitised specific habitats across the City and identified potential sites of local wildlife value for further assessment;
- A series of reports (1992-1995) produced by GWLL on specific habitats around the City: private gardens, allotments, cemeteries, wetlands, ancient trees, woodlands, grasslands which provide baseline data for distribution, condition and quality;
- Wildlife sites in Leicester now known as Local Wildlife Sites (LWS), but previously referred to as Sites of Importance to Nature Conservation (SINC) collated by Leicester City Council since 2000. Each site's designation contains information on the habitats and species present;
- Wildlife information from development site surveys commissioned by Leicester City Council's planning department;
- Survey data of protected species (bats, badgers, great crested newts, water voles and white-clawed crayfish) often submitted with planning applications or as part of an Environmental Impact Assessment;
- Public surveys of great crested newts, hedgehogs, foxes and kestrels;
- Various site-based surveys on specific invertebrate groups (beetles, snails, crayfish);
- Dr Jenny Owen's survey of her Humberstone garden ('The Ecology of a Garden') contains comprehensive invertebrate data collected between 1972 and 2001, as well as data on flora and other animals;
- Surveys of some parks, cemeteries and public open spaces including: Braunstone Park, Knighton Park, Evington Park, Welford Road Cemetery, Astill Lodge Park, St Mary's Allotments, Western Park, Anstey Lane Green Wedge, Castle Hill Country Park;
- Surveys of lichens from 350 sites in the City in 1992, grasslands in 2000 and the Soar and Grand Union Canal in 1997;
- Local naturalists groups such as the Leicestershire and Rutland Ornithological Society (LROS), the Leicestershire and Rutland Moth Group, the Leicestershire and Rutland Bat Group and Leicestershire Badger Group also hold extensive and very valuable data sets which include the City.
- Opportunities to plan for new areas of natural green space to connect existing sites and create new corridors will be co-ordinated through the planning process. Green Infrastructure planning will identify existing and potential sites for nature conservation to enable specific habitats to be protected, created or enhanced whilst providing additional benefits such as climate change amelioration and sustainable drainage within the City. This process will enable those sites of high local wildlife value to be identified, enhanced and protected whilst the creation of habitats in appropriate places will link green spaces across the City.

2. leicester's BAP objectives

A number of objectives and targets have been identified to conserve the valued habitats and species which characterise Leicester whilst also contributing to an attractive and sustainable natural environment. The new Leicester BAP sets out to update the BAP from being mainly aspirational project type targets with qualitative data, to having specific and measurable targets that establish and implement a delivery programme, with agreed accountabilities, for priority habitats and species. In line with the national review of biodiversity that states targets of all local BAPs are made SMART by March 2008, the specific targets for participation, strategic and habitat have been SMARTened.

SMART stands for Specific, Measurable, Attainable, Realistic and Time-bound and being explicitly quantitative within a specified time-frame as well as being realistic and attainable is the best way to ensure that a target is SMART. This has been achieved by using the best available data and expert advice to set target figures and units and will be regularly reviewed to account for changes in factors and policy affecting the urban environment.

2.1 OBJECTIVES

In order to achieve the vision of the Leicester BAP three specific strategic objectives have been identified, namely Participation Objectives, Strategic Site Objectives and Habitat Objectives. These objectives and targets will require agreement from all partnership organisations and departments within Leicester City Council that have an influence on biodiversity. This will involve a concentration of effort from all agencies, particularly with regard to funding.

2.2.1 PARTICIPATION OBJECTIVES

- Increasing participation in biodiversity;
- Increasing understanding of biodiversity issues; and
- Increasing availability and quality of biodiversity recording and information.

2.2.2 STRATEGIC OBJECTIVES

- Ensuring the wildlife corridors, green wedges and biodiversity networks are maintained or improved, particularly with regard to mitigation against climate change and flooding through incorporation of strategic green infrastructure principles.

2.2.3 HABITAT OBJECTIVES

- Specific targets and actions for the main habitat types and species found in Leicester.

The next section provides details of the history and current situation with regard to each of the three objectives. This is followed by a set of action points for the current year and following four-year period in order to meet these objectives.

3. strategic action plans – history and current status

History of biodiversity strategies in Leicester

Where we are now

Participation

Leicester has a good record of encouraging public participation in biodiversity management and nature conservation which has evolved from the Councils partnership with Groundwork (previously called Environ) over the last 25 years. Groundwork encourages community participation in local conservation projects and co-ordinates volunteers to complete conservation tasks across the City.

Groundwork has assisted with the setting-up of several "Friends Of" groups (FOGs) across the City who assist with management of local sites close to residential areas.

Parks and Green Spaces run regular guided walks and events to encourage people to visit the Parks

The Green Lifeboat Project managed by Parks encourages public participation to clean-up the River Soar and GUC through a regular programme of litter picking.

There are 15 FOGs across the City associated with nature reserves and parks. The groups are actively encouraged and assisted by Parks staff and/or GWLL. Parks and Green Spaces have targets to increase the number of Park User Groups and FOGs in the City.

During 2009 and 2010 GWLL and LCC NCO ran a series of Biodiversity Events to encourage participation. This included a Garden Survey to encourage residents to record wildlife in their gardens; and an Environment Day for FOGs which included a series of speakers, workshops and training.

Parks in partnership with OPAL have organised volunteers to participate in research to record biodiversity and monitor habitat quality. This is a national programme and records contribute at a national and regional as well as local level. The Green Lifeboat Project increased the number of boats following a successful bid for funding enabling more volunteers to participate in conservation projects.

Public awareness

Leicester was declared an Environment City in 1990 in recognition of its green vision for sustainability and conservation of wildlife. It was the first council in the UK to employ a Nature Conservation Officer (NCO) to co-ordinate planning and biodiversity strategies across the City and raise awareness.

Several nature conservation strategies have been produced which include the Biodiversity SPD (2003) and The City Biodiversity Action Plan (2006-09). Publicity material and reports have been regularly produced by the LCC Environment Team, Parks and Green Spaces, GWLL and LRWT.

Leics CC, the City Council, GWLL and LRWT have developed web pages to inform the public of green spaces and wildlife across the City.

In Feb 2009 the Local Action for Biodiversity was launched following the signing of an International Agreement by the Council to protect and conserve biodiversity in the City (Leicester is one of only 21 Cites worldwide to have signed-up to this agreement).

In 2009-10 GWLL and LCC NCO ran a series of guided walks for the general public to raise awareness of natural green space in the City.

In May 2010 the first Leicester and Leicestershire Bioblitz was held at Watermead CP and encouraged the public to record wildlife in the nature reserve with the help of specialists and organised events. The event was highly successful and resulted in partners being awarded the overall Green Life Environmental Award in December 2010. Another successful Biobltiz was completed at Abbey Park in June 2011 which encouraged participation with the public and local schools.

Parks and Green Spaces regularly organise events across the Parks such as Watermead Family Fun Day, guided walks and bird surveys.

4. strategic action plans – objectives and targets

Strategies in Leicester The programme 2011–12	Lead & Partners	Looking forward 2011–2015	Lead & Partners
• Set out our commitment to local **Bioblitz events,** such as the recent event at Abbey Park, with the aim of involving local residents and voluntary groups in improving understanding of the biodiversity in Leicester's city parks and greenspaces.	**LCC NCO, Parks, GWLL**	• Establish a FOG for each LNR to be involved in developing a management plan and active management to assist in achieving aims and objectives for specific species or habitat	**GWLL,** LCC Parks
• Co-ordinate 10 guided walks or events with wildlife/nature conservation element across the City parks/LNR	**LCC NCO, Parks, GWLL**	• Increase percentage of wildlife sites in favourable condition from 45% to 65% by encouraging landowners (public or private) to enhance the biodiversity value	**LCC NCO, Parks,** GWLL
• Support 5 x FOGs through direct management of conservation projects and on-going advice	**GWLL,** LCC Parks, NCO	• Organise at least one Bioblitz event annually to involve local residents and voluntary groups in improving and understanding of the biodiversity	**GWLL,** LCC NCO, LRWT
• Encourage participation of Universities and FE/HE Colleges in conservation projects, research and strategies	**LCC NCO,** GWLL, Leics CC, LRWT	• Establish "Biodiversity Champions" and train them to record wildlife across the City • Set-up and co-ordinate one species survey each year (flora or fauna) across City	**LCC NCO** GWLL
• Promote biodiversity in City using a variety of media – websites, posters, leaflets, newspapers, TV	**LCC NCO, Parks, Environment, GWLL**	• Provide Biodiversity Projects as exemplar case studies for promotion at international, national and local level	**LCC NCO,** Parks, GWLL
• Visit 5 x schools and/or youth groups to promote biodiversity	**GWLL,** LRWT	• Maintain targets for work with schools and community groups	**GWLL,** LCC Parks, LRWT
• Organise 2 x school or community projects	**GWLL,** LCC Parks	• Deliver a programme of Bioblitz events across the City to involve the public and increase the understanding of biodiversity in Leicester	**LCC NCO, Parks, GWLL,** Environment
• Provide advice and information on national and local biodiversity policy within the local authority, the general public and developers	**LCC NCO,** GWLL, LRWT	• Update websites and links to other organisations promoting biodiversity in the City	**LCC NCO** Environment, GWLL, Leics CC, RWT
• Promote Green Flag Awards of Parks and Green Life Awards for conservation groups	**LCC Parks, Environment Team,** NCO, GWLL	• Promote Green Flag Awards of Parks and Green Flag Awards for conservation groups	**LCC Parks, Environment Team,** GWLL

3. strategic action plans cont'd

	History of biodiversity strategies in Leicester	Where we are now
Data Recording	The City council has data records held in several locations – City museums, New Walk Centre and at the County Record Office. Recent records are digitised, but many historic records are not in electronic format making the existing data scattered and insecure. GWLL has records from City Wildlife Projects and Habitat data, but much of this is still in paper format. There are gaps in the knowledge of Leicester's biodiversity which requires improvement to provide an evidence base to support future policy and funding. The number of people recording data in the City is restricted to a few individual specialists and groups. A Phase I Habitat Survey of the City was completed 2006-08 to inform on the locations and types of habitats present.	The City and County Council have continued to work in partnership to exchange data and update records. Records of protected species in the City have been digitised to inform on planning and appropriate biodiversity enhancements. Specific wildlife projects in the City are being co-ordinated to increase and encourage data collection e.g. Garden survey; Harvest Mouse survey. Annual monitoring of one site by University of Leicester commenced 2009 prior to change in grassland management regime and will inform on appropriate techniques and increases in species diversity which will contribute to other targets in the City.
Green Infrastructure	Sites designated for their nature conservation value (LNRs, LWS and BES) have been digitised and are available on the City and County council websites. The Habitat Phase I maps are not fully digitised, but data are held on main habitat types, locations and significant species and include land in public and private ownership. The Site Allocation City Local Plan 2006 and Biodiversity Map show the designated sites, areas of green wedge and green space in the City. The Green Space Study and Open Space Strategy were completed in 2006 and 2007 and provide information on the locations and types of green space, current usage and deficiencies.	In 2010 the Core Strategy was adopted by the Council and incorporates a strategy for improving green networks in the City which aim to provide multiple benefits to include biodiversity and wildlife. The River Soar and GUC Strategy (launched Nov 2009) identified the importance of this strategic corridor for multiple benefits of wildlife, flood alleviation, climate change amelioration and water source as well as the potential for regeneration and investment. The corridor and its surrounding tributaries will be central to the developing Green Infrastructure Strategy within the City.

4. strategic action plans cont'd

Strategies in Leicester The programme 2011–12	Lead & Partners	Looking forward 2011–2015	Lead & Partners
• Update data exchange agreement between organisations holding Leicester's biodiversity records, access historical data held at LRERC	**LCC NCO, Leics CC** GWLL, LRWT;	• Create virtual library of data to be held centrally and shared between organisations	**Leics CC,** LCC, GWLL, LRWT, EA, NE
• Set-up and co-ordinate one species surveys	**LCC NCO,** LRWT, GWLL	• 10% of paper records held by organisations to be digitised each year and forwarded to LRERC	**Leics CC,** LCC NCO, GWLL, LRWT
• LCC and GWLL to digitise protected species data in City and forward to LRERC quarterly	**LCC NCO, GWLL,** Leics CC	• Establish a group of "Biodiversity Champions" and train them to record wildlife in the City	**GWLL, LCC NCO,** LCC Parks, LRWT
		• Establish "Biodiversity Champions" and train them to record wildlife across the City • Liaise with Universities to encourage adoption of local sites for continued research	**LCC NCO** GWLL
• Develop Green Infrastructure (GI) priorities for the City to identify and prioritise areas for creation/enhancement of green space; provision of ecosystem to include areas such as Aylestone Meadows and the larger network of green space	**LCC NCO,** Parks, Highways, Drainage, Environment, Sport, Planning Policy	• Maintain and enhance wildlife corridors, green wedges and biodiversity networks through Identification of 4 x LWS through the green network and GI Strategy	**LCC NCO,** LRWT
• Leicester Core Strategy adoption and site allocation map to identify areas of green space for protection and conservation	**LCC Policy,** LCC NCO	• Update Management Plans (5 –yr rolling review) on Green Spaces (LNRs, Parks) and implement	**LCC Parks, GWLL,** LCC NCO;
• Produce guidance on Green Space Strategy to include natural and amenity green space	**LCC Parks, Policy,** LCC NCO	• Identify and complete 3 x schemes for GI/biodiversity enhancement, seeking appropriate funding	**LCC NCO, GWLL** LCC Highways, Parks
• Consider potential approaches relating to the issue of the loss of back gardens to development and impact on wildlife	**LCC Urban Design,** NCO	• Review GI Strategy and data (annual data processing and map digitisation and link to Climate Change, Adaptation, SuDs policies and Flood Risk Management Study	**LCC IT,** NCO

5. habitat action plans – history and current status

	History of biodiversity strategies in Leicester	Where we are now
Lowland Mixed Broadleaved Woodland and Wet Woodland	Total area of woodland is ~ 80 ha (public and private ownership). No areas of ancient woodland, but 3 areas of mature semi-natural woodland > 1 ha (Highway Spinney, Meynells Gorse and Knighton Spinney) and similar spinneys < 1 ha planted in last 15-20 years in parks. Important areas of wet woodland on the designated LNRs of Aylestone and Watermead where the woodland runs adjacent to the strategic River Soar. Abandonment of traditional systems, removal of dead wood and large old trees, and planting of nonnative species has depleted the biodiversity value of woodland in the past. More recently the Trees & Woodlands Stategy has introduced a management programme to increase diversity of native species to enhance the age and structure of woodlands. Inappropriate recreational activity, dumping of litter, habitat loss from development and clearance of understorey for public safety (e.g. Two Acre Spinney) has caused degradation. Dutch elm disease; Horse chestnut bleeding canker are impacting, but pathogens affecting Alder and Oak are currently low impact.	Several woodlands are designated sites (LNR/LWS) e.g. Knighton, Highway Spinney and Meynells Gorse in recognition of their local wildlife value and are managed by GWLL. FOGs assist with management tasks and litter picking. 3 yr 10 000 Tree Project has exceeded the target of planting native and naturalised trees in the City. Sustainable use of timber encouraged – felled trees re-used following purchase of saw mill (planks, chippings, picnic tables); rotten tree trunks used for seating; safety barriers. Woodland officer (community) employed by LCC – remit small woodlands near to housing estates to manage woodlands and encourage partnerships and local community involvement. Tree Strategy – replacement planting 1:1 for trees felled or 2:1 on Highway schemes. Resource funding severely restrict the level of management to increase their biodiversity value across the City
Wetland (Rivers, Streams, Ponds)	R Soar and Grand Union Canal (GUC) provide a strategic corridor for wildlife linking the City to surrounding countryside. Major tributaries include Saffron/Wash Brook, Melton, Braunstone and Rothley Brook. Biodiversity is threatened by diffuse pollution from agricultural and urban runoff and more directly from industrial centres; a legacy of culverting and channel straightening resulting in removal of habitat features in 1970s; land drainage and increased sediment load; water abstraction and discharge, and increased litter along the banks. Climate impacts from droughts and flooding; unsympathetic development adjacent to the watercourses and the spread of non-native species of flora and fauna are reducing biodiversity.	R Soar and GUC are largely designated as a LWS through the City with areas adjacent designated as Biodiversity Enhancement Sites (BES) which form part of the green network. Larger areas to the north and south are designated LNR (Aylestone Meadows and Watermead CP). LCC programme to control Floating Pennywort (non-native invasive plant) along Soar and GUC since 2006 in partnership with EA and BW. Recent strategies include “Re-Wilding the Soar” (2008 – Leicestershire & Rutland Wildlife Trust), “River Soar and Grand Union Canal” (2009) Biodiversity Opportunity Mapping (Natural England 2009) and Leicester and Leicestershire Strategic Green Infrastructure Report (EMGIN 2010) to identify areas for creation and enhancement of biodiversity along strategic corridors such as the R Soar. Otter (UK and local BAP species) found in City (Aylestone LNR, Willowbrook LNR and Melton Brook)

6. habitat action plans – objectives and targets

Habitat Programme 2011	Lead & Partners	Looking forward 2011–2015	Lead & Partners
• Assess quality of 3 mature spinneys using standard methodology; botanical survey of flora and create 5-year rolling Mgt Plan for each	**LCC Trees & Woodlands, NCO**	• Further develop Tree Strategy for Leicester to incorporate Biodiversity	**LCC Trees & Woodlands**
• Write/update rolling 5 yr Mgt Plan for each LNR/LWS woodland (x3) and implement management	**LCC Trees & Woodlands, NCO, GWLL**	• Thin plantations and spinneys to create a diverse age and open structure 2 x woodlands per year and manage on a 5 - 10 year rotation period	**LCC Trees & Woodlands**
• Launch plans to plant **more trees** across the city, building on the success of the 10,000 trees initiative, including plans for at least three new community orchards. Alongside developing new community orchards promote allotments and garden growing to support local people in 'growing their own'	**LCC Project and Allotments Team**	• Plant under-storey of trees and replace top canopy trees where required to maintain diverse age and structure in 2 x woodlands per year	**LCC Trees & Woodlands**
		• Identify areas for new planting adjacent to existing woods to act as buffer. Map areas on GIS base (to complement Green Infrastructure Strategy)	**LCC Trees & Woodlands, NCO**
• Complete otter survey of Soar and main tributaries. Map and produce otter strategy for the City	**LCC Parks, NCO**	• Complete/commission wetland BAP species surveys (water vole, white-clawed crayfish, great crested newt)	**LCC NCO,** LRWT
• Write/update 5 yr rolling Mgt Plans for Aylestone Meadows, Castle Gardens, and Watermead CP	**LCC Parks**	• Continue programme of invasive plant control – floating pennywort and Japanese Knotweed through appropriate funding support	**EA, BW,** LCC Parks, NCO, LRWT, **Trees & Woodlands**
• Continue programme of invasive plant control – Japanese knotweed, Himalyan balsam, floating pennywort	**EA, BW,** LCC Parks, **Trees & Woodlands, NCO,** LRWT	• Seek funding for pond/wetland creation projects with partners and create 2 x ponds per year	**LCC NCO, GWLL,** EA, BW, NE
• Enhance wetland and access within Regeneration Areas e.g. Abbey Meadows and Rally Park	**LCC Regen, NCO, Urban Design**, Parks	• Identify suitable areas for pond and wetland creation to create 3 x new habitat areas	**LCC NCO, GWLL,** EA, BW, NE

5. habitat action plans cont'd

	History of biodiversity strategies in Leicester	Where we are now
Grassland and Meadows	Leicester has large areas of closely mown amenity grassland and areas of natural grassland either managed traditionally as meadows or left un-managed. It has lost much of the species-rich meadow grasslands due to poor management (mown too frequently/infrequently; arisings not removed; scrub encroachment). Other areas have been lost due to development (on or adjacent to), vandalism, compaction and increased disturbance. Priority areas of grassland are generally well-managed by trained staff or GWLL (e.g. Braunstone Park meadow, Kirby Frith, The Orchards) and contract farmer who oversees the herd of Longhorn cattle that graze Aylestone Meadows.	Inappropriate management and lack of resources have degraded grassland sites, some of which are designated as LWS on which their condition is reported as a National Indicator (NI 197) or an EMAS target. Advice on appropriate management is provided for sites. Development proposals at two grassland LWS/LNRs high-lighted biodiversity concerns regarding loss of habitats and species. Ashton Green site has small areas of species-rich grassland which will be conserved and enhanced as part of the development mitigation process. An application to develop part of the Aylestone Meadows LNR was refused and work has commenced to identify and safeguard areas of high biodiversity value through appropriate management and usage. Two new grassland LWS were designated in 2009. Hamilton College NR is attached to a college where students studying nature conservation are able to complete conservation tasks on site. A Management Plan has been prepared for staff and students. The successful grazing project at Aylestone Meadows has increased the diversity of plant species. Monitoring programme at Piggy's Hollow LWS commenced with University of Leicester and a Management Plan has been prepared for the site.
Mature Urban Trees	Applies to trees that occur as individuals or in small groups rather than in woodlands; usually located on roadsides, verges, parks, cemeteries and private gardens. Leicester has many such trees, e.g. the old Parkland Estate of Braunstone Park; all designated as LWS and some additionally with TPOs in recognition of their wildlife and aesthetic value. Decline in tree numbers has occurred through inappropriate planting locations; development affecting root/canopy growth; drought-stress through extremes of temperature; vandalism and incorrect management (pollarding etc). Health & Safety issues dominate requirements for tree surgery resulting in loss of biodiversity value and potential bird and bat roosts.	The majority of trees in public open space (POS) have been plotted electronically. A mature tree survey has provided baseline data and identified those trees that meet the criteria as a LWS. This complements the Trees & Woodlands database to enable designation of trees where appropriate. Several individual trees were identified as LWS in 2009-10 (Ashton Green, Castle Hill CP and Western Park). The great Oak in Western Park lost a couple of limbs from disease and has resulted in some initial safety work being completed. Public concern regarding further work on the tree has resulted in a thorough inspection; bat assessment and evaluation prior to any further work. Mature parkland trees at Braunstone Park (LWS) are regularly monitored by Trees & Woodlands re concerns about the health and safety. Trees are being retained and sympathetic tree surgery has resulted in trees retaining some wildlife value.

6. habitat action plans cont'd

Strategies in Leicester The programme 2011–12	Lead & Partners	Looking forward 2011–2015	Lead & Partners
• Write/update rolling 5 yr Mgt Plan for each LNR grassland managed by GWLL	**GWLL,** LCC NCO	• Write rolling 5 yr Mgt Plan for 3 x LNR/LWS grasslands managed by Parks - review each year	**LCC NCO,** Parks
• Prioritise and write 5 yr Mgt Plan for 3 x LNR/LWS grasslands managed by Parks	**LCC NCO,** Parks	• Bring one site back into favourable management each year	**LCC Parks**
• Review SLA and Groundcare maintenance programme between GWLL and LCC	**LCC Parks, NCO, GWLL**	• Declare 2 x new LNR each year (dependent on resource availability at each site)	**LCC NCO, NE**
• Declare 2 x proposed LNR (Highway Spinney and Glen Hills Nature Reserve)	**LCC NCO, NE**	• Organise training event for grassland managers (Parks, golf courses, cemeteries) on good grassland mgt	**LCC Parks, NCO**
• Commence formal monitoring programme at grassland sites x 2 (Piggy's Hollow and Goss Meadows)	**LCC NCO, GWLL,** Parks	• Organise a FOG to be attached to each LNR or proposed LNR	**GWLL, LCC Parks**
		• Review SLA and Groundcare maintenance annually and prioritise sites to be managed by GWLL to complement Park resources	**LCC Parks, NCO, GWLL;**
• Update tree inventory to identify mature urban trees and designate sites as LWS	**LCC NCO**	• Develop a Mature Tree/Veteran Tree Strategy to advise on appropriate management for the tree and associated species	**LCC Trees & Woodlands, NCO**
• Inform NCO prior to commencing works to mature trees or other trees considered of wildlife value in accordance with EMAS	**LCC NCO, Trees & Woodlands,**	• Establish a Tree Warden Scheme for local communities to identify and monitor mature trees in the City (seek funding)	**GWLL**
• Organise in-house/external training on wildlife legislation and trees	**LCC NCO, Trees & Woodlands,**	• Organise in-house/external training for management and awareness of veteran trees to Parks staff, NCO and GWLL (open it to partnership	**LCC Parks**

5. habitat action plans cont'd

	History of biodiversity strategies in Leicester	Where we are now
Hedgerows	Most of the hedgerows were planted after the Enclosures Act in the 18th and 19th centuries to divide and enclose former common land, but a number of ancient hedgerow systems linking old spinneys are of higher conservation value associated with a diverse range of woodland plants and invertebrates e.g. Gorse Hill, Anstey Lane, Stokes Drive, Ratby Lane and Gartree Road. Hedgerows have been lost or degraded due to neglect or inappropriate management, removal, intensive farming practices or damage to root structure through development and road building.	5 ancient hedgerows in the City are designated as LWS and are monitored on a 5 yearly basis. Agricultural hedgerows are protected under the Hedgerow Regulations (1997), but many of the urban hedgerows fall outside the regulations. Advice and guidance is provided through the British Standards to protect against impacts of development and is commented on in planning applications. Damage caused to some hedgerows through inappropriate cutting of ivy from around trunks; illegal felling or poor coppicing of tree and shrub species by un-trained personnel.
Green Space (Allotments, gardens, parks, golf courses, graveyards and cemeteries)	Collectively these green spaces provide opportunities for habitat enhancement to increase and sustain biodiversity. Allotments cover a large area of the City and provide a series of micro habitats across individual plots and average 30% higher species diversity than urban parks. The large parks around the City cover 5% of land and are valued for their amenity and recreation as well as biodiversity value. Most are formally landscaped, but many contain mature trees and wildlife areas of relatively un-managed grasses of value to wildlife. The graveyards and cemeteries provide a haven for wildlife and network of stepping stones for species to disperse. They often contain relict grasslands and mature trees. Leicester has 4 golf courses located in the green wedge around the City boundary totalling 198 ha in public and private ownership.	Several former allotment sites have been designated as LWS (e.g. The Orchards, Stokeswood Park). Gardens provide an important refuge for wildlife in close proximity to people, enabling areas to connect and provide a corridor to adjacent public open green space. The four cemeteries in Leicester adjoin areas of open space which adds to the wildlife value. Belgrave (2ha) and Welford Rd (12.3 ha) are designated LWS for their relict grassland. 11 historic churchyards in Leicester vary in their wildlife value and have opportunities for enhancement. Some golf courses are designated LWS because of great crested newts and/or species-rich grassland and trees.

6. habitat action plans cont'd

Habitat Programme 2011	Lead & Partners	Looking forward 2011–2015	Lead & Partners
• Identify extent of linear hedgerows across the City. Prioritise and assess 5 hedgerows to identify those of high wildlife value and designate as LWS	**LCC Parks, NCO**	• Continue assessment of 5 hedgerows each year to identify those of high wildlife value and designate as LWS, provide mgt advice	**LCC NCO,** GWLL
		• Enhance connectivity and structure through appropriate tree planting of 3 hedgerows (review following assessment)	**LCC Parks, NCO, Trees & Woodlands, GWLL**
		• Get 1 site into HLS agreement to include appropriate hedgerow mgt	**LCC NCO, Parks, NE**
• Identify 1 x allotment site within the City and commence monitoring programme to assess wildlife value	**GWLL,** Leicester Allotment Gardens Council	• Promote wildlife gardening organise "Open Garden" event to show practical examples of wildlife gardening in the City	**GWLL**
• Monitor grassland LWS sites and train Parks staff in procedure	**LCC NCO**	• Identify a further 2 x allotment sites to monitor wildlife value	**GWLL,** Leicester Allotment Gardens Council
• Complete Green Space SPD and incorporate into planning guidance to seek appropriate funds for natural green space	**LCC Policy, NCO, Parks**	• Seek funding to support practical wildlife gardening projects across the City	**GWLL**
• Declare 2 x proposed LNR (Highway Spinney and Glen Hills Nature Reserve)	**LCC NCO, NE**	• Review grassland management strategy for the City to incorporate a range of sustainable methods to implement management regimes and disposal of arisings etc.	**LCC NCO, Parks**
• Commence formal monitoring programme at grassland sites x 2 (Piggy's Hollow and Goss Meadows)	**LCC NCO, GWLL,** Parks		

5. habitat action plans cont'd

Buildings & Built Structure

History of biodiversity strategies in Leicester

In addition to the large built structures; walls, bridges, tunnels, underground sites, hard surfacing and railway ballast, urban commons and brownfield sites are included in the definition. The ecological value of built structures is poorly studied and the dynamic changes brought about through demolition, re-development and disturbance are continuance. Fragmentation of land ownership makes it difficult to provide a co-ordinated approach to ecological management, but the Biodiversity SPD (2003) has provided a good basis for Biodiversity and Development guidance.

Where we are now

The Conservation Area guides provide information on built structures of conservation value and their ecological value. EMAS guidance on LCC action required has been updated in 2010 to inform on actions necessary to minimise disturbance to wildlife. Regular guidance to Planning officers re development and biodiversity opportunities is provided with the implementation of Wildlife legislation and Planning Policy Guidance re Biodiversity.

The Leicester and Rutland Environmental Record Centre provide records of species in the City. This is supplemented as collation of data from the City through casual observation and surveys.

6. habitat action plans cont'd

Strategies in Leicester The programme 2011–12	Lead & Partners	Looking forward 2011–2015	Lead & Partners
• Develop policy and guidance on actions to conserve buildings whilst enhancing structures for wildlife	**LCC NCO**	• Incorporate 3 x green/brown roof or green wall design into City development	**LCC Urban Design,** Planning, City Architects
• Develop policy on SUDs for incorporation into planning system	**LCC Urban Design,** SWMP Steering	• Identify areas suitable for wildlife verges and adopt 2 into favourable management	**LCC HTD**
• Collate data on brownfield sites across the City (co-ordinate monitoring of 2 x brownfield sites)	**LCC NCO**	• Monitor 2 x brownfield sites per year and identify and declare 2 x sites as LWS	**LCC NCO**

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acronyms

BAP	Biodiversity Action Plan
BES	Biodiversity Enhancement Site
BW	British Waterways
EA	Environment Agency
EMAS	Environmental Management Monitoring Systems
FOGs	Friends of Groups
GI	Green Infrastructure
GUC	Grand Union Canal
GWLL	Groundwork Leicester and Leicestershire
HTD	Highways, Transport & Drainage
LRERC	Leicestershire and Rutland Environmental Resource Centre
LCC	Leicester City Council
Leics CC	Leicestershire County Council
LNR	Local Nature Reserve
LWS	Local Wildlife Site
LRWT	Leicestershire and Rutland Wildlife Trust
NE	Natural England
NI	National Indicator
NCO	Nature Conservation Officer
OPAL	Open Air Laboratories
POS	Public Open Space
SLA	Service Level Agreement
SPD	Supplementary Planning Document
SWMP	Surface Water Management Plan
SUDs	Sustainable Urban Drainage
TPO	Tree Preservation Order

Leicester's biodiversity
action plan

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