

Introduction

Welcome to the 3rd edition of the Northamptonshire Biodiversity Action Plan (BAP). This document sets out the highest priorities for action to conserve Northamptonshire's most threatened and declining habitats and species.

Much progress was made during the period of the last BAP (2008–2015). However our wildlife remains under threat, and many of our species are declining due to increased pressure from development, agricultural intensification and climate change, which causes habitats to become reduced, fragmented or lost.

The document is aimed at conservation professionals, planners as well as the general public and provides an evidence base and framework for wildlife conservation priorities across the county for 2015–2020.

Based on the Lawton principles of bigger, better and more joined-up habitats, the BAP provides an action plan for landscape-scale conservation to maintain, restore and create priority habitats across the county.

What is the BAP?

At the 1992 Earth Summit in Rio the UK government, along with 150 other countries, signed the Convention on Biological Diversity (CBD). This is a commitment that all contracting parties shall “rehabilitate and restore degraded ecosystems and promote the recovery of threatened species through the development and implementation of plans or other strategies”. The UK's strategy was the UK Biodiversity Action Plan (UK BAP), launched in 1994. Local Biodiversity Action Plans (LBAPs) followed, recognising that action for biodiversity conservation ultimately takes place at the local level. LBAPs identify priorities for action and give guidance on implementing targets to reverse the loss of habitats and species.

The tenth meeting of the Conference of the Parties to the CBD took place in Nagoya, Japan in October 2010. The meeting resulted in the 20 Aichi Targets, which were signed by 192 governments and aim to halt the loss in biodiversity worldwide by 2020. The targets include a range of challenges, from protecting our best habitats and rarest species to restoring the services our natural environment provides and tackling climate change. The UK Post-2010 Biodiversity Framework (July 2012) succeeds the UK BAP and describes how the Aichi Targets will be implemented across the UK. The current blueprint for biodiversity conservation in England is Biodiversity 2020: A strategy for England's wildlife and ecosystem services (August 2011).

While Biodiversity 2020 has replaced the UK BAP, LBAPs have not been superseded. They are therefore still a very valuable reference and are written into current legislation and policy. The Northamptonshire BAP follows the Biodiversity 2020 ambition of landscape scale conservation, restoring natural processes and creating resilient ecological networks. It is continually updated and is still in use to inform and guide many projects.

Biodiversity in Northamptonshire

Northamptonshire has diverse wildlife with a range of important habitats supporting species and sites of international importance (Figure 1). Priority habitats and species include:

- gravel pits and wet grassland supporting lapwing and curlew in the Nene Valley
- ancient woodlands of the Rockingham Forest and Yardley-Whittlewood Ridge where adder, barbastelle bats and wood white butterflies are found
- limestone grasslands of the north, with their orchids and grizzled skipper butterflies
- acid grasslands in the west, which support common lizard, and
- throughout the county, meadows supporting brown hare and many wildflower species.

Figure 1 Northamptonshire's key wildlife resources



However, Northamptonshire's biodiversity is under severe pressure. Most of our countryside consists of arable fields, which are of little biodiversity value. Additionally, our local wildlife is experiencing one of the highest levels of development pressure in the whole of the UK. Northamptonshire is expecting approximately 27,000 new homes to be built by 2021¹, along with the necessary infrastructure that goes along with them.

This development pressure, coupled with the fact that Northamptonshire has one of the UK's lowest proportions of protected areas for biodiversity, means that it is vital that steps are

¹ Includes approximately 7500 (half of 2011-2021 total of 15,000) in North Northamptonshire per Policy 28 of the North Northamptonshire Joint Core Strategy 2011-2031, plus 18,814 in West Northamptonshire per Appendix 3 Housing Trajectory of the West Northamptonshire Joint Core Strategy 2014-2029.

taken to ensure our remaining biodiversity is not further degraded or destroyed. Instead, new development should be seen as an opportunity, within which biodiversity can be integrated and enhanced to safeguard its future, while providing a naturally functioning environment for local communities to enjoy.

Biodiversity – a contraction of ‘biological diversity’ – simply means the variety of life. It refers to the number, variety and variability of living organisms. It is often described in terms of genes, species and ecosystems and is important for a range of reasons:

- **Appreciation:** many people have an interest in wildlife; approximately 1 in 10 UK adults are members of an environment and/or conservation group²
- **Quality of life:** wildlife can give us a sense of wellbeing, helping us to relax and improve our mental and physical health
- **Ecosystem services:** biodiversity provides humans with vital (and often undervalued) services such as climatic stability, clean air and water, pollination and flood protection
- **Economic benefits:** visitors who come to see wildlife and attractive landscapes spend money and contribute to the local economy. A biodiverse area is also more likely to be a desirable place to live and work.
- **Local distinctiveness:** the natural environment is an important part of local heritage, contributing to a sense of place and creating much of what makes Northamptonshire distinctive
- **Sustainable development:** biodiversity is a key aspect of sustainable development, ensuring that we pass on a healthy, functioning natural environment to future generations.

² Cracknell J, Miller F, Williams H. 2013. Passionate Collaboration? Taking the pulse of the UK environmental sector. Report to the Environmental Funders Network.

General principles for conservation in Northamptonshire

The importance of a landscape-scale approach

Good quality habitat areas are now small in size and heavily fragmented, resulting in increased threats of local extinctions. Added to this, climate change is a huge challenge for biodiversity. Most species are adapted to live within a clearly defined 'climate space'. As the climate changes, some species are starting to shift their geographic distribution to stay within their climate space. In Northamptonshire's current landscape of small, isolated habitat patches, it would be impossible for many species to 'jump the gaps' to follow their climate space. Left unchanged the situation would likely result in large numbers of local extinctions. Therefore it is essential to future-proof landscapes, allowing biodiversity to move freely through large, interconnected habitats (Figure 2).

Conservation is now focussed on a landscape scale-approach, for example The Wildlife Trusts' ['Living Landscapes'](#) and RSPB's ['Futurescapes'](#), which aim to work with landowners outside nature reserves and protected areas in order provide bigger, better and more joined up wildlife habitat. Key landscapes in Northamptonshire are the Nene Valley, Rockingham Forest and Yardley-Whittlewood Ridge (Figure 1 above).

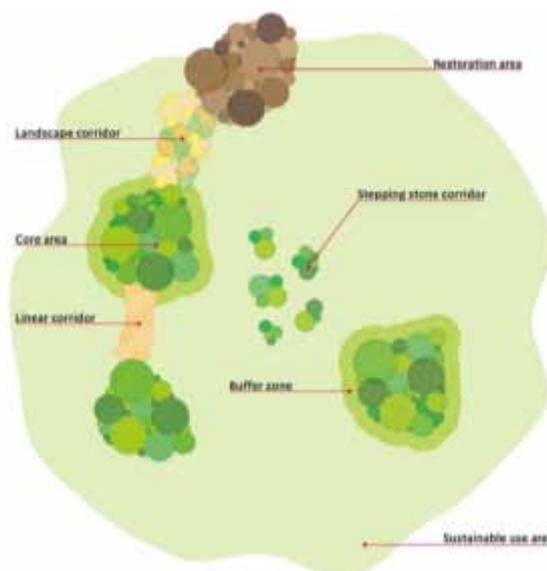


Figure 2 The principle of habitat connectivity

Green infrastructure

Green Infrastructure (GI) provides a framework to guide and prioritise habitat restoration and creation within strategic areas in Northamptonshire. Northamptonshire has a robust GI framework at both a sub-regional and local level. One of the main principles behind the GI framework is to provide a network of greenspace from high-use amenity land through to wilderness areas. It also seeks to link up areas of high biodiversity value into a continuous functioning network. The GI framework should be used in conjunction with the Northamptonshire BAP to help prioritise habitat creation or enhancement in any given area, and where possible, to link these areas with public access for the benefit of the local community.

The National Planning Policy Framework (NPPF) requires local authorities to set out a strategic approach. Sub-regional and local GI corridors have been mapped and can be found at www.rnrpenvironmentalcharacter.org.uk. GI is also being developed at a local level by Local Authorities such as [Northampton Borough Council](#).

Ecological networks and habitat opportunity maps

Priority habitats are an essential part of GI. The GI Strategic Biodiversity Network maps for West and North Northamptonshire form a preliminary basis for prioritising habitat restoration and creation. Full details can be found in [Northamptonshire's Environmental Character and GI Suite](#).

In priority areas, more detailed field-by-field habitat opportunity maps have been produced to

help identify which habitats would be priorities for habitat creation and restoration. A habitat opportunity map for the Nene Valley and a woodland opportunity map for the Rockingham Forest can be found on the [Northamptonshire County Council website](#).

Nature Improvement Areas

Nature Improvement Areas (NIAs) are flagship nature areas for England that were established to create joined up and resilient ecological networks at a landscape scale. The Nene Valley Nature Improvement Area covers an area of 41,000 hectares running through the heart of Northamptonshire to Peterborough. It includes the River Nene and its tributaries, gravel pits, reservoirs and much of the floodplain within the valley itself. The NIA partnership was set up in 2012, with the aim of delivering a step change in nature conservation, where local organisations have come together with a shared vision for the natural environment. The NIA has a strong partnership approach, with conservation NGOs, local authorities and statutory agencies working closely together. Much progress has been made in the first three years with significant improvements for wildlife and people delivered through the sustainable use of natural resources, restoring and creating wildlife habitats, connecting local sites and joining up local action. The Nene Valley NIA has five objectives based around natural development, public access, river restoration, land management and ecosystem services. The NIA will continue to deliver against these objectives through its 2015-20 business plan.

For more information visit www.nenevalleynia.org.

The Ecosystem Approach, natural capital and ecosystem services

The [Ecosystem Approach](#) is a concept that integrates the management of land, water and living resources and aims to reach a balance between three objectives: conservation of biodiversity, its sustainable use, and equitable sharing of benefits arising from the utilisation of natural resources. The Ecosystem Approach involves a better understanding and the conservation of our natural capital and ecosystem services. [Natural capital](#) can be defined as the world's stocks of natural assets which include geology, soil, air, water and all living things. It is from this natural capital that humans derive a wide range of services, often called ecosystem services, which make human life possible.

Priority Habitats and Species

Priority habitats and species are the new national terms for BAP habitats and species. As the BAP still exists locally the terms priority habitat/species and BAP habitat/species are used interchangeably.

Maintaining and restoring priority habitat is the focus of the BAP. Northamptonshire's priority/BAP habitats cover a wide range of semi-natural habitat types, and are those that are identified as being the most threatened and requiring conservation action. Action plans for each priority habitat can be found in Chapter 3.

Priority/BAP species are those that were identified as being the most threatened and requiring conservation action. Most of our priority species depend on our priority habitats, and can therefore be conserved by maintaining our priority habitats. Some species require additional actions; these can be found in the relevant habitat action plans.

A range of wildlife, including priority species also rely on more common habitats such as churchyards and gardens. Conserving these habitats is also important and is covered in the General Action Plans in Chapter 2.

In some instances habitat creation will be necessary to maintain sufficient habitat for our

priority species and to extend and link existing habitats. Habitat creation should be targeted using the habitat opportunity maps and according to the following principles:

- Identify existing priority habitats, particularly Sites of Special Scientific Interest (SSSI) and Local Wildlife Sites (LWS), and aim to link and expand these
- Refer to the GI strategy map and aim to match suggested habitat types
- Take existing land character into account
- Aim to include several habitats to improve diversity and to avoid severing potential linkage of one habitat type for that of another
- Take into account minimum sizes required for different habitats in order to allow correct functioning
- Take into account the relative habitat creation targets between different habitats.

Almost all of Northamptonshire's priority habitat can be found in the designated statutory and non-statutory sites. Statutory sites receive some form of statutory protection for their nature conservation value. Non-statutory sites are also designated for their nature conservation value but do not receive statutory protection. Some non-statutory sites may however receive a degree of protection under national or local policy. Examples of each of these types of sites are detailed below.

Statutory sites

Natura 2000 Sites/European Sites: are the European Union-wide network of nature conservation sites established under the EC Habitats and Birds Directives. This network comprises Special Areas of Conservation (SAC) and Special Protection Areas (SPA).

Northamptonshire's only European Site is the Upper Nene Valley Gravel Pits SPA.

Ramsar Sites: wetlands of international importance, designated under the Convention on Wetlands of International Importance, especially as Waterfowl Habitat (known as the Ramsar Convention after the Iranian city where it was drawn up and adopted in 1971). As a matter of policy, Ramsar sites in the UK are protected as European Sites. The Upper Nene Valley Gravel Pits SPA is also a Ramsar site.

Sites of Special Scientific Interest (SSSI): are the suite of sites providing statutory protection for the best examples of the UK's flora, fauna, or geological features. These sites are also used to underpin other national and international nature conservation designations. Most SSSI are privately owned or managed; others are owned or managed by public bodies or non-government organisations.

At the time of writing, there are 57 SSSI in Northamptonshire, including Bugbrooke Meadows, Salcey Forest and Pitsford Reservoir (Figure 3).

National Nature Reserves (NNR): contain examples of some of the most important natural and semi-natural terrestrial and coastal ecosystems in Great Britain. NNR are managed to conserve their habitats or to provide special opportunities for scientific study of the habitats communities and species represented within them.

In Northamptonshire, at the time of writing, there are two NNR: Buckingham Thick Copse, and Collyweston Great Wood and Easton Hornstocks.

Local Nature Reserves (LNR): declared and managed for nature conservation, LNRs provide opportunities for research and education, or simply enjoying and having contact with nature.

In Northamptonshire, at the time of writing, there are 18 LNR including Barnes Meadow, Kingsthorpe and Titchmarsh.

Non-statutory sites

Local Wildlife Sites (LWS): are local areas of land rich in wildlife. They encompass a variety of habitats such as species rich grasslands, ancient woodlands, wetlands, old quarries and roadside verges. [Local Wildlife Sites](#) (LWS) are a range of shapes and sizes and provide refuge for a wealth of wildlife. They are places where species and habitats flourish because of past and current management, are locally defined and are the most important areas for wildlife outside of legally protected sites.

At the time of writing, there are 734 LWS in Northamptonshire, including Abington Meadows, Cransley Wood and Stanwick Lakes (Figure 3).

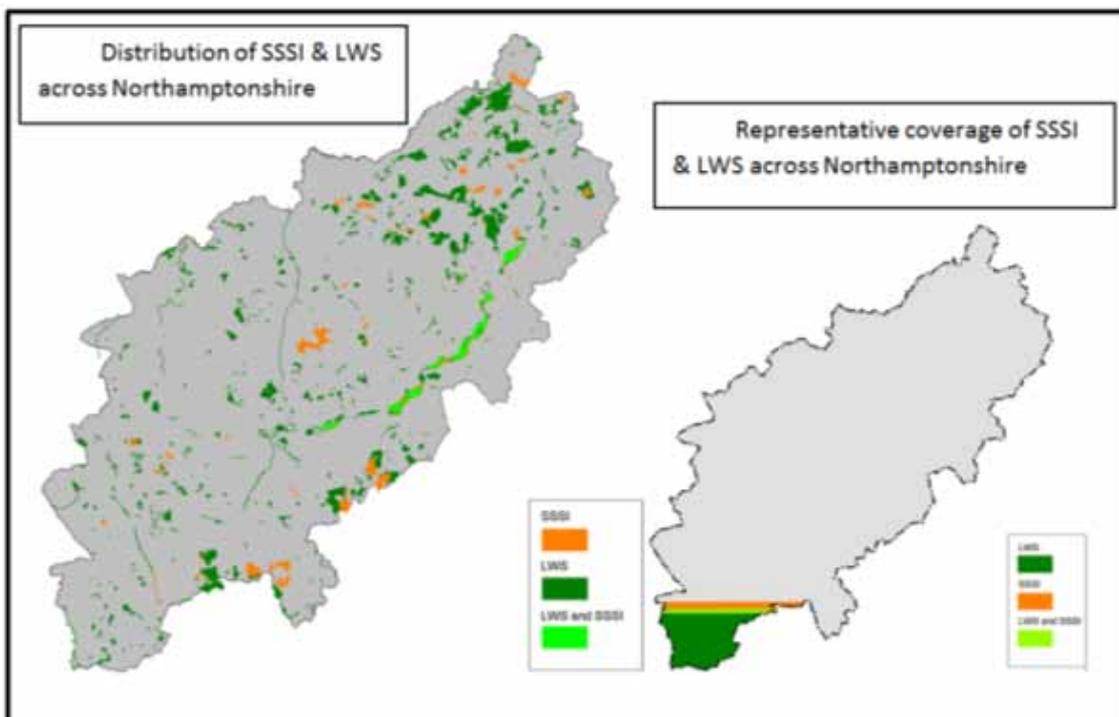
Protected Wildflower Verges: are roadside verges rich in wildlife. The Wildlife Trust and Northamptonshire County Council run a system to designate certain verges and protect and manage them to retain their wildflower interest as Protected Wildflower Verges (PWV).

At the time of writing, there are 32 PWV in Northamptonshire, stretching 26km and covering over 17 hectares.

Pocket Parks: the idea of [Pocket Parks](#) originated in Northamptonshire. They are natural areas of countryside which are owned, looked after and cherished by the local community for peaceful enjoyment, the protection of wildlife and to provide access for all.

At the time of writing, there are 83 Pocket Parks in Northamptonshire, including Crick Millennium Wood, Hollowell and Spratton.

Figure 3 Distribution and coverage of SSSI and LWS in Northamptonshire

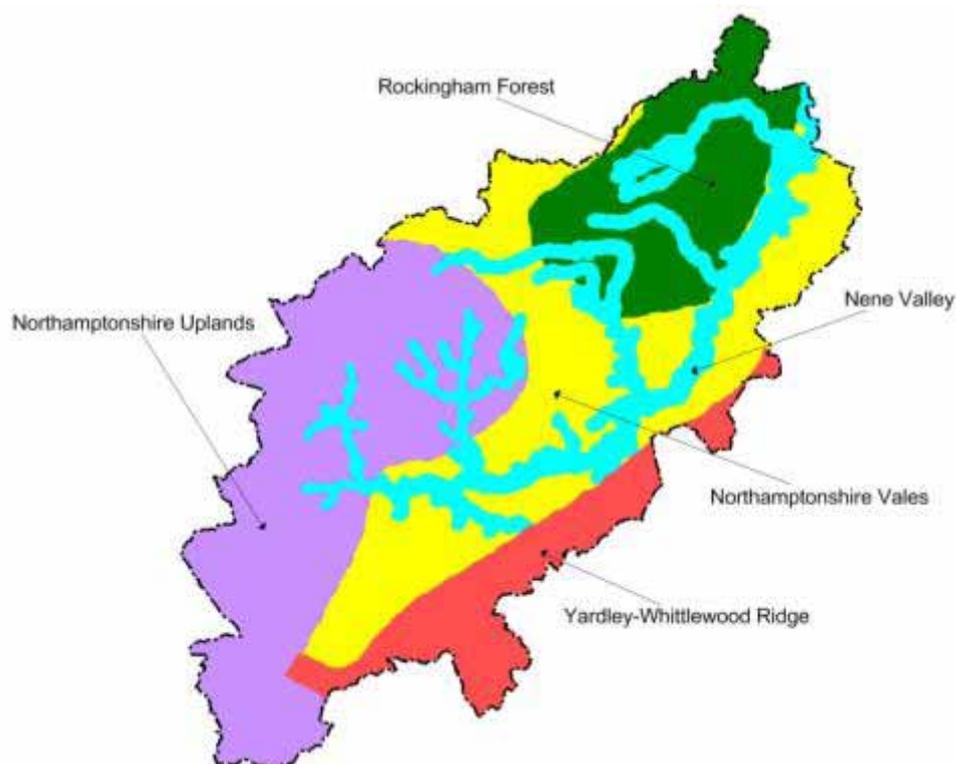


National Character Areas

Natural England has provided revised profiles for England's 159 [National Character Areas](#) (NCAs). These are areas that share similar landscape characteristics and follow natural lines in the landscape rather than administrative boundaries, making them a good decision-making framework for the natural environment.

Northamptonshire's landscape is covered by four NCAs (Figure 4):

Figure 4 The four National Character Areas in Northamptonshire



Northamptonshire Vales (NCA Profile 89): a series of low-lying clay vales and river valleys, including the rivers Nene and Welland and their tributaries, historic parkland, ridge and furrow and open field patterns. The river valleys are striking features of the area, with their riverside meadows and waterside trees and shrubs. Also common are the flooded gravel pits and their associated wetlands, which result from reclamation schemes.

Within the Vales is the Nene Valley NIA, at the heart of which is the Upper Nene Valley Gravel Pits Special Protection Area (SPA). The SPA was classified in 2011 in recognition of its wetland bird assemblage, which includes non-breeding great bittern, gadwall and European golden plover.

Northamptonshire Uplands (NCA Profile 95): an area of gently rolling hills and valleys. Rivers flow out in all directions, including the Cherwell, Avon, Welland, Tove, Ouse, Nene and Ise. Landscape features include extensive areas of open field systems with ridge and furrow, high and wide A-shaped hedgerows with their frequent mature trees, nationally important designed parkland landscapes, narrow lanes with very wide grassy verges, and the small, scattered but prominent, broadleaved woods and coverts.

Rockingham Forest (NCA Profile 92): a broad, low, undulating ridge underlain by Jurassic limestone. Large areas of woodland remain a significant feature of the landscape and form a patchwork with large to medium-sized fields of mixed arable. The area takes its name

from the Royal Hunting Forest and many of the woodlands are ancient. Formerly extensively coppiced, these woodlands contain a rich diversity of species that are of considerable nature conservation interest such as the black hairstreak butterfly and red kite.

Yardley-Whittlewood Ridge (NCA Profile 91): a low, gently undulating limestone plateau known locally as the Ridge. It contains a variety of semi-natural habitats, including ancient woodland, wood pasture and parkland, hedgerows and lowland meadow. It is a well-wooded landscape with a historic feel stemming from the former royal hunting forests around Yardley Chase, Salcey and Whittlewood forests. The Ridge retains a high proportion of ancient woodland of national importance and supports a wide range of species, particularly scarce species of butterfly such as the white admiral and wood white.

Table 1 below shows which priority habitats are of importance in each area.

Table 1 Priority habitats in the Nene Valley and National Character Areas

Habitat	Nene Valley	Rockingham Forest	N'hants Vales	N'hants Uplands	Yardley-Whittlewood Ridge
Arable field margins	Y	Y	Y	Y	Y
Eutrophic standing water	Y		Y		
Floodplain grazing marsh	Y		Y		
Hedgerows	Y	Y	Y	Y	Y
Lowland calcareous grassland		Y		Y	Y
Lowland dry acid grassland				Y	
Lowland fen	Y		Y		
Lowland heathland				Y	
Lowland meadow	Y	Y	Y	Y	Y
Lowland mixed deciduous woodland		Y	Y	Y	Y
Open mosaic		Y	Y		
Pond	Y	Y	Y	Y	Y
Reedbed	Y				
River	Y	Y	Y	Y	Y
Traditional orchards	Y	Y	Y	Y	Y
Wet woodland	Y				Y
Wood-pasture and parkland		Y			Y

Progress 2008–2015

There has been good progress against many BAP targets, actions and objectives over the last seven years. A large amount has been achieved through Higher Level Stewardship (HLS) and the English Woodland Grant Scheme, alongside specific projects run by individual organisations such as Wildlife Trust, River Nene Regional Park (RNRP) and RSPB, as well as collaborative projects such as the Nene Valley NIA.

Below are highlights of the achievement since the last BAP. Due to the difficulty and differences in reporting progress across different habitats and organisations, and the recent improvement in our baseline values, it is not possible to fully report on each target.

Across the county 608ha of priority habitat has been created and 1086ha of priority habitat restored including:

- 253ha of floristically enhanced grass margins created
- 172ha of species rich grassland brought into management through environmental stewardship
- 215ha of species rich grassland created and 423ha restored including 210ha of lowland meadow created and 210ha restored
- 285ha of floodplain grazing marsh brought into management under environmental stewardship, 162ha restored and 50ha created
- 32ha of lowland fen brought into management under environmental stewardship and 5ha restored
- 43 ponds brought into management under environmental stewardship
- 12ha of reedbed restored
- 32km of rivers restored
- 5ha of traditional orchard restored
- 16ha of wet woodland brought into management under environmental stewardship
- 29ha of wood-pasture and parkland created and 362ha restored, whilst 114ha was brought into management through environmental stewardship
- 5.27km of hedgerow of high environmental value brought into management under environmental stewardship
- 250ha of new woodland was created through the English Woodland Grant Scheme.

BAP partners

Below is a list of the key conservation organisations, BAP partners and partnerships in Northamptonshire.

Organisations

The Wildlife Trust BCN: local conservation charity who conserve local wildlife, by caring for land ourselves and with others, inspire others to take action for wildlife and inform people, by offering advice and sharing knowledge.



Bedfordshire
Cambridgeshire
Northamptonshire

www.wildlifebcn.org

River Nene Regional Park: an independent Community Interest Company creating a green infrastructure network of environmental projects extending from Daventry to Peterborough linking the towns of Northampton, Towcester, Wellingborough, Kettering and Corby.



www.riverneneregionalpark.org

Natural England: the government's adviser for the natural environment in England, helping to protect England's nature and landscapes for people to enjoy and for the services they provide.



www.gov.uk/government/organisations/natural-england

RSPB: a national nature conservation charity, inspiring everyone to give nature a home. Together with partners, they protect threatened birds and wildlife so towns, the coast and countryside will teem with life once again.



www.rspb.org.uk

Rockingham Forest Trust: connecting people and places for good. They are an environmental charity that works to bring wide-ranging community benefits through creating and conserving special green spaces, and exploring local heritage, in ways which educate, involve and inspire.



www.rockingham-forest-trust.org.uk

Environment Agency: the government body responsible for managing the risk of flooding from main rivers, reservoirs, estuaries and the sea; working to create better places for people and wildlife, and support sustainable development.



www.gov.uk/government/organisations/environment-agency

Forestry Commission: the government department responsible for protecting, expanding and promoting the sustainable management of woodlands and increasing their value to society and the environment.



www.forestry.gov.uk

Northamptonshire Biodiversity Records Centre: promoting and supporting the collection and sharing of wildlife records, and providing access to information about the county's species, habitats and designated wildlife and geological sites.



www.northantsbrc.org.uk

University of Northampton: the primary university in the county housing academic schools covering business, education, health, science and technology, arts and social sciences. Supports business organisations in Northamptonshire and research.



www.northampton.ac.uk

Anglian Water Services Ltd: Provides water and water recycling services to more than six million domestic and business customers in the East of England and in Hartlepool. It is the largest water industry company by geographic area in England and Wales.



www.anglianwater.co.uk

Campaign for the Farmed Environment: a partnership approach which aims to pull together the huge amount of work that farmers and land managers already do to encourage wildlife, to benefit soil and water resources and support pollinators and farmland birds. It encourages voluntary management that will benefit the environment, including the retention of in-field habitats, whilst ensuring efficient and profitable food production.





Local councils



Partnerships

