

1. An integrated large-scale approach to conservation

Advisory and advocacy

Introduction



Most of Northamptonshire's countryside, including protected sites and nature reserves, is under private ownership. Landowners are therefore stewards of a significant proportion of the county's biodiversity resource. To conserve biodiversity it is essential that as much privately owned land as possible is not lost or degraded, but instead enhanced.

Arable fields are the dominant land cover in the county. Advisory work is therefore needed to notify landowners of existing biodiversity resources and to facilitate creation, restoration and enhancement works under Countryside Stewardship and other funding sources. The higher tier of Countryside Stewardship is likely to be highly targeted to

where the greatest opportunities lie. Other schemes such as Catchment Sensitive Farming, Campaign for the Farmed Environment and the lower tiers of Countryside Stewardship will have more general wildlife benefits.

Much of our biodiversity exists within Local Wildlife Sites (LWS). These are non-statutory and are recognised at the local level as being of county (or sometimes greater) importance. Most LWS owners and managers welcome advice on funding availability and appropriate land management to benefit wildlife.

Main issues

- Limited resources available: funding and advice therefore needs to be targeted
- Scarcity of additional funding streams to complement agri-environment schemes
- Lack of advice and advocacy available to landowners

Strategy and guidelines

- Support and advise land owners and managers
- Target stewardship and other funding to maintain, buffer and link priority habitats
- Make good practice guidance for biodiversity available to landowners and managers
- Establish key sites as best examples of good practice

Targets

1. Establish another landscape conservation initiative across the county in addition to the Nene Valley NIA

2. Increase extent of priority habitat across the county by 1770ha through creation and restoration work
3. Ensure that 95% of county's SSSI are in at least favourable-recovering condition and that 50% are in a favourable condition
4. Ensure that 50% of Local Wildlife Sites are under positive management across the county by 2020
5. Maintain all Protected Wildflower Verges to ensure they meet the designation criteria or improve in species diversity by 2020 and identify 5 new PWV by 2020

Actions

A.	Continue Nene Valley NIA partnership and Nene Valley Catchment Partnership promoting and providing expert advice across all elements of conservation in the Nene Valley	All
B.	Ensure that landowners of 35 Local Wildlife Sites receive survey and management advice each year	Wildlife Trust
C.	Provide advice to landowners through Campaign for Farmed Environment (CFE) and Catchment Sensitive Farming (CSF) to manage, buffer and connect priority habitats	RNRP Wildlife Trust CFE Environment Agency
D.	Provide advice to SSSI owners and other landowners to manage, buffer and connect priority habitats through Countryside Stewardship	Natural England Forestry Commission
E.	Ensure all Protected Wildflower Verges are managed annually to maintain their interest and surveyed on a 5 year rotation	NCC Wildlife Trust
F.	Follow up on reports of suitable new PWV made by partners or the public by surveying and assessing during the current/next suitable surveying period	NCC Wildlife Trust

Further information and management advice

- ▶ [Northamptonshire's Local Wildlife Sites](#)
- ▶ [Countryside Stewardship information](#)
- ▶ [Catchment Sensitive Farming information from RNRP](#)
- ▶ [Catchment Sensitive Farming guidance](#)
- ▶ [Nene Valley Nature Improvement Area](#)
- ▶ [Information on Sites of Special Scientific Interest](#)
- ▶ [Campaign for the Farmed Environment](#)
- ▶ [Campaign for the Farmed Environment in Northamptonshire](#)

Urban & artificial habitats

Introduction

Northamptonshire’s landscape is a patchwork of different habitats and built-up areas of varying scale and density. Beyond its arable expanses and fragments of wildlife-rich land that highlight past management and exploitation, lies a range of residential, commercial and industrial areas. These are superimposed on the geology and topography that form the National Character Areas and river catchments, and which, in a changing climate, determine the hydrology and ecology of a particular location.

In open, arable areas, buildings may offer nesting and roosting opportunities that otherwise wouldn’t exist. Within villages and suburbs pollinator abundance and diversity can greatly exceed what is now present in much of the farmed countryside. Former gravel pits now have much greater wildlife value than the areas from which they were excavated.

Within built-up areas parks, private gardens, cemeteries, road verges, rail sidings, river banks and ‘wasteland’ can support a surprising variety of wildlife. Although species are likely to be restricted to adaptable generalists that either tolerate or are quick to respond to change, they can help in ‘greening the grey’ in very positive ways. How different areas (and their surroundings) are managed has a significant impact on the species they are likely to support in the long term. Some species can take advantage of the smallest opportunity but others may need help. Small decisions and interventions add up to make very real differences.

To help minimise adverse pressures on sensitive sites, it makes considerable sense to concentrate impacts within urban areas. The physical and mental health benefits of access to natural green space, of street trees, living walls and living roofs are well known. Houses near a park or waterway sell for higher prices than similar houses farther away. Even many smaller developments can include a communal green area which supports an abundance and diversity of wildlife. Such spaces can be multifunctional, by including ponds to absorb runoff and reduce winter flood risk, and sizeable trees which clean the air and provide summer cooling. Well designed green and brown roofs can compensate for some habitat losses at ground level.

In built-up areas the following features have considerable existing or potential wildlife value:

Features	Value	Suggestions
Main areas		
Woodland and other natural green spaces	Can depend on whether they are recent plantings or historic fragments that predate development	Effective management and buffering from development impacts can increase their value
Private gardens	Add up to a significant resource for wildlife across urban areas	Gardening with (or even for) nature can add greatly to their wildlife value
Parks, recreation areas and public gardens, sports grounds etc.	Larger green spaces, especially older ones can have considerable interest for people and wildlife	Much depends on how areas are managed both within their boundaries and in relation to their surroundings

General Action Plans ● An integrated large-scale approach to conservation

Features	Value	Suggestions
Allotments and leisure gardens	Large areas, offering a diversity of microhabitats, shelter and nectar sources. Can be particularly important for amphibians, reptiles and hedgehogs.	Manage with wildlife in mind (limiting pesticide use and retaining features of value) to promote natural pollination and pest control
School grounds	Whatever space is available, these offer opportunities to bring nature into school and introduce children to natural processes	From green walls/roofs to meadow areas or grey water/ rainwater-fed ponds, loggeries, gardens, bushes or trees, many small to large opportunities exist
Churchyards and cemeteries	Often long established and with a variety of monumental rocks and plants, native and introduced memorial areas can provide surprising oases for wildlife in town and village	Surveys and appropriate management can reveal and retain the main interest and key features associated with memorial sites
Industrial and commercial areas	Areas between warehouses and factories, as well as the buildings themselves can offer space and unusual conditions	Management suited to keeping areas open can benefit species associated with brownfield communities
Main connectors and isolators		
Road and rail networks	Street trees, verges, roundabouts, embankments, rail sidings can all contribute significantly to urban greening, especially in hard-surfaced areas	Those responsible for network management can choose from a wide range of beneficial approaches
Footpaths, streets and cycleways etc.	Long established pathways and subsequent linkages between these to provide routes for people also offer corridors for wildlife. Such connections are important in linking scattered green spaces and have value in themselves.	
Water courses	Streams, rivers and canals can add hugely to the diversity of wildlife but past culverting, pollution and flood prevention measures too often limit ecological value and enjoyment	Waterway re-naturalisation incorporating more effective flood relief systems offers a way of benefitting nature and people. SUDS and new plantings have a vital role to play in this.
Small scale – features within wider areas		
Green and brown patches	The small spaces within developed areas, and between houses, and long-term and temporary brownfields often have potential which is rarely fully realised	Parish and neighbourhood plans offer communities an opportunity to identify local enhancements and management needs

Features	Value	Suggestions
Historic trees, avenues and hedges	Veteran trees and lines of trees and hedges may have considerable historical interest as well as wildlife interest	Such features should be subject to sensitive management, allowing for replacement where appropriate
Built structures	Walls, bridges, and buildings are highly artificial but potentially offer conditions suited to species that wouldn't otherwise be present	Wildlife-friendly features can be designed into structures and/or added at a later stage to benefit a wide range of plant and animal species

Options for urban enhancement

General options	Opportunities
Trees	<ul style="list-style-type: none"> • New plantings should be in accordance with the principle of 'the right tree, in the right place', taking account of likely climate change impacts • Mature and veteran trees should be identified, managed and valued appropriately
Artificial aids	<ul style="list-style-type: none"> • Roosting and nesting shelters: individual nest/roost box retrofits in walls or roof spaces respectively, purpose-built structures (e.g. bat breeding roosts/hibernacula) and/or retention/exposure of natural materials on site (dead wood, rock, bare earth)
'NuWilding'	<ul style="list-style-type: none"> • Green/brown roofs/walls make a profound difference, transforming what would otherwise be hard, sterile surfaces for the benefit of people, climate and wildlife • Meadow creation/restoration • SUDS: incorporation into new and existing development minimises flood/pollution risk and offers biodiversity enhancement • River restoration: where opportunities and resources exist e.g. in parks and regeneration areas, there is considerable scope to enhance urban areas • Pond/wetland/reedbed creation
Management	<ul style="list-style-type: none"> • Simple, cost-neutral changes in management regime (e.g. leaving unmown strips in grassland areas), even in small areas can have significant positive benefits, by adding to the diversity of conditions (different vegetation structure, soil moisture, food sources). • More extensive, long-term changes can benefit those species and habitats that respond more slowly
Plantings	<ul style="list-style-type: none"> • Choice of variety/species: pollen and nectar producing plants should be chosen to provide food for pollinators. Plants which flower at different times of year should be included. • Planting for impact: different plantings can help to raise awareness of biodiversity issues and positive actions which people can take in their own gardens (e.g. planting for pollinators). Prairie plants for example offer late season nectar sources and a wonderful autumnal displays. • Making the most of small areas

General options	Opportunities
Safeguarding	<ul style="list-style-type: none"> • Preservation: identifying and preserving areas of value • Management: getting the most out of areas • Protection: minimising (the likelihood of) negative impacts, e.g. pollution, non-native invasive species

Making a difference

There is a wide range of information available on how to enhance existing areas and new developments for biodiversity. Development and restoration schemes offer the prospect of resources to support biodiversity works. Helping community or special interest groups to address obstacles, realise proposals or make ongoing interventions can be a cost-effective means of delivering sustainable, wildlife-friendly development.

The greatest benefit will be realised through schemes that are based on up to date biodiversity evidence and framed within local plans and wider strategies including this BAP. Long-running and permanent schemes are likely to have the most significant value, provided ongoing management commitments are delivered. However ephemeral schemes will suit some species better and may more easily be incorporated within certain phases of a particular project.

Biodiversity conservation will only rarely be the main goal of a particular project, so it is important that where practicable there should be consideration of how it may contribute to biodiversity goals, whether in the short or longer term.

A range of grants is available, usually subject to match funding, which can help to bridge resource gaps, but knowing where and how to apply for what isn't always obvious to those most in need of help.

The introduction of a Community Infrastructure Levy should be used as an opportunity for making the most of Northamptonshire's natural capital at county, district and neighbourhood/parish level. This is particularly important in urban situations where impacts are concentrated and where there is greatest need – and greatest potential benefit – in relation to sustainability and quality of life.

Individuals can have a positive impact through their decisions and actions, by making space for nature in their gardens, responding to development proposals and joining community groups.

Local groups can achieve much through their own actions, their ability to secure funding, and their influence on local agencies.

Local agencies like **housing associations, businesses, and local authorities** can play a part by calling for or contributing to improving conditions for wildlife, through day to day operations, their policies, the advice they provide and influence they have on others.

Figure 1 Northamptonshire local authority boundaries and major settlements



Options for BAP user groups

For the public

- Consider enhancing your garden or allotment for wildlife.
- Get involved with voluntary practical tasks in your local park or wildlife site.
- Respond to planning applications.
- Influence local development plans: tell your local authority which areas could be improved or connected.

For local authorities

- Review how individual areas are managed and the regimes provided to contractors: could these be improved?
- Identify enhancements for parks, greenways, commons and small green areas: which would have greatest benefit for wildlife and for connecting people with nature?
- Ensure the Community Infrastructure Levy (CIL) will work for wildlife.
- Identify likely areas for improvement in connection with biodiversity offsetting.

For business

- What local sites/community groups in your area might benefit from support?
- What sites might offer team-building tasks for staff?
- What elements of the BAP – championing a particular action plan or resourcing a particular action – could you contribute towards?

For developers

- How might your scheme(s) relate to strategies and particular BAP proposals and planning policies?
- Can you deliver effective biodiversity enhancement within your development site, its neighbourhood or through CIL?

Since Urban & Artificial is a new GAP, requiring the compilation of baseline data in a number

of areas, its targets are necessarily somewhat open in nature, with a focus on informing, influencing, involving and enabling others.

Targets

1. To have an effective evidence base to inform and influence future plans and actions
2. To ensure that different user groups are aware of relevant advice
3. 5–10 urban enhancement projects within the county showcase best practice
4. Different user groups are able to publicise plans and projects that have beneficial impact in urban areas

Actions

A.	Map urban areas of existing and potential value to biodiversity as part of local ecological network mapping	NBRC Local authorities
B.	Identify and prioritise practicable projects within urban areas, and promote fully costed projects on relevant platforms	Local authorities Environment Agency
C.	Highlight best practice examples of biodiversity enhancement/offsetting in connection	Local authorities Wildlife Trust RSPB
D.	Ensure contributions towards biodiversity through planning obligations	NBP Local authorities
E.	Provide guidance to local communities on enhancing biodiversity through CIL contributions	NBP Local authorities
F.	Review and enhance management of public open spaces	Local authorities
G.	Work with park rangers and community groups to develop management strategies for parks and open spaces	Local authorities Wildlife Trust
H.	Publicise information about enhancing gardens	Wildlife Trust RSPB
I.	Encourage greater participation in the planning process to benefit biodiversity	Local authorities Wildlife Trust
J.	Promote wildlife recording within urban areas	NBRC
K.	Signpost local, regional and national information/advice sources	All
L.	Develop funding proposals around most suitable (B) projects	All

Further information and management advice

- ▶ [Wildlife gardening advice from the Wildlife Trust](#)
- ▶ [Wild About Gardens](#)
- ▶ [Wildlife ponds \(Freshwater Habitats Trust\)](#)
- ▶ [Birds and bird boxes \(RSPB\)](#)
- ▶ [Bats and bat boxes \(Bat Conservation Trust\)](#)
- ▶ [Managing your churchyard for wildlife](#)
- ▶ [Green roofs](#)

Ecosystem services

Introduction



The benefits that people derive from the natural environment are known as ecosystem services. They are critical to our wellbeing and economic prosperity, yet are consistently undervalued in decision making. By identifying, mapping and valuing ecosystem services and biodiversity we are improving our understanding of the interdependencies between the natural environment, people and the economy.

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 the ecosystem services which make human life possible.

Examples of ecosystem services include flood regulation by grassland, crop pollination by insects and carbon sequestration by trees. Ecosystem services also include recreational benefits like tourism.

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: biodiversity conservation, its sustainable use and equitable sharing of benefits arising from the use of natural resources.

The University of Northampton has been quantifying and mapping the provision of a range of different ecosystem services across the Nene Valley Nature Improvement Area.

Main issues

- Lack of knowledge about what ecosystem services provide and the biodiversity threshold required for a service to be provided
- Lack of understanding of the importance of ecosystem services
- Reductions in ecosystem services associated with declines in habitat extent or condition and changes in biodiversity

Strategy and guidelines

- Quantify the value of ecosystem services in Northamptonshire
- Map a range of ecosystem services, particularly those on which it is difficult to place a monetary value
- Enhance areas of nature conservation to support ecosystem services
- Raise awareness of ecosystem services, in particular with local authorities and the general public
- Promote an ecosystem approach to conservation across the county

Targets

1. Successful study of ecosystem services provided across a target area such as the Nene

Valley

2. Increase in ecosystem services integrated into planning policy and new development
3. Increase in investment in ecosystem services

Actions

A. Collate data on key ecosystem services	University of Northampton NBRC
B. Map or quantify key ecosystem services	University of Northampton NBRC
C. Integrate ecosystem services into key local authority policies such core strategies, development plans and local plans	University of Northampton JPUs Local authorities Wildlife Trust
D. Research and trial a working model of an ecosystem services payment scheme	University of Northampton RNRP

Further information and management advice

- ▶ [Ecosystem services in the Nene Valley](#)
- ▶ [The UK National ecosystem services assessment](#)
- ▶ [Natural Capital Initiative](#)
- ▶ [Ecosystem Approach](#)