



Parish BAP -A Biodiversity Action Plan for Local Communities

1.0 THE WARWICKSHIRE LOCAL BIODIVERSITY ACTION PLAN

- **1.1 What you can do for biodiversity**
- **1.2 What is biodiversity and the Local Action Plan?**
- **1.3 What is the LBAP Partnership?**

2.0 HABITAT ACTION PLANS – how to help your local wild spaces

- **2.1 Farmland habitats**
 - 2.1.1 Field margins
 - 2.1.2 Hedgerows
 - 2.1.3 Roadside verges
- **2.2 Urban habitats**
 - 2.2.1 Allotments
 - 2.2.2 Built environment
 - 2.2.3 Churchyards & cemeteries
 - 2.2.4 Gardens
 - 2.2.5 Parks & public open spaces
 - 2.2.6 School grounds
- **2.3 Woodland habitats**
 - 2.3.1 Traditional orchards
 - 2.3.2 Woodlands
- **2.4 Wetland habitats**
 - 2.4.1 Ponds, lakes & reservoirs
 - 2.4.2 Rivers & streams

3.0 SPECIES ACTION PLANS – how to help your local wildlife

- **3.1** Barn owl
- **3.2** Bats
- **3.3** Black poplar
- **3.4** Farmland birds
- **3.5** Great crested newt
- **3.6** Rare bumblebees
- **3.7** Scarce arable plants
- **3.8** Song thrush

4.0 CASE STUDIES OF LOCAL ACTION – to give you inspiration

- **4.1** Tree planting on Parish land
- **4.2** Management of a Churchyard for Wildlife
- **4.3** Implementing a Parish Plan
- **4.4** Starting a Wildlife Gardening Group
- **4.5** Construction of a School Pond
- **4.6** Restoring a Village Pond
- **4.7** Regeneration of a Local Conservation Area
- **4.8** Conservation on a Family Farm
- **4.9** Creation of a New Woodland
- **4.10** Warwickshire Hedgerow survey

5.0 HOW WE CAN HELP YOU TO GET STARTED

- **5.1** Resources available to parishes
- **5.2** Possible sources of funding
- **5.3** People who can help you
- **5.4** Biodiversity Action Recording System (BARS)
- **5.5** Natural Environment & Rural Communities (NERC) Act 2006



1.1 WHAT YOU CAN DO FOR BIODIVERSITY

Dear Parishioner

Welcome to the Warwickshire, Coventry and Solihull Biodiversity Action Plan for parishes which has been produced by the Local Biodiversity Action Plan (LBAP) partnership, an alliance of over 50 organisations and individuals involved in nature conservation within the sub-region. Whilst the LBAP highlights agreed priority objectives and targets for Warwickshire, Coventry and Solihull, this document has been tailored specifically for use by local communities to help translate the countywide conservation priorities into practical action for biodiversity on the ground.

Why bother with biodiversity?

We've all heard about the destruction of the rainforests and the extinction of the dodo, but it is sometimes difficult to see how the decline of a rare species or habitat thousands of miles away affects us locally. However, on our doorstep our own biodiversity is suffering a similar fate, only it receives much less media attention so we are often unaware of the impacts. For example, in just six years between 1984 and 1990, 20% of the UK's hedgerows were destroyed. Since the 1930s, 97% of our flower rich meadows have been lost. And as habitats are destroyed, so too are the plants and animals which depend on them. The song thrush has declined by 50% over the last 25 years, and the once common house sparrow and starling, often referred to as a pest in the past, are now considered to be of national conservation concern. These are species and habitats which we often take for granted, but which could be found in almost any parish within the sub-region.

How can this plan help my parish?

You will find inside a series of **Habitat Action Plans** selected to provide you with the most *practical opportunities* to involve local parishioners in the conservation of their natural heritage. From hedgerows to ponds, gardens to roadside verges, there are multitudes of ways to encourage people to protect and enhance local biodiversity.

We have also chosen a selection of **Species Action Plans** to represent those plants and animals you are likely to come across in your local patch. Again, these contain practical suggestions which can be undertaken within your own parish to help protect local priorities such as bats and great crested newts, and help build up their population levels.

There are also a series of **case studies** to highlight what other communities have achieved for biodiversity, and how they have gone about it, such as management of the

churchyard at Oldberrow for wildlife and the restoration of a village pond at Bourton-on-Dunsmore.

Finally, section five of the plan gives some hints and tips on **getting started**, including resources available to parishes, and ideas for identifying funding sources.

The West Midlands Biodiversity Partnership **Landscapes for Living** project aims to create a 50-year vision for biodiversity within the region. This project, which takes a landscape-scale approach to nature conservation, relies on the building blocks of parish and community level biodiversity action to achieve on the ground our vision and ambition for a region richer in wildlife. By working together at the local level and encouraging community involvement with the biodiversity action planning process, you can make a significant contribution to the protection and enhancement of our local natural heritage, both now and for years to come.

Producing a plan at this level is a first for the UK, and shows the vital importance of action on the ground in order to achieve national biodiversity targets and make a real difference to wildlife. We hope that you will find this plan informative and useful, but above all be inspired to use the practical suggestions to undertake your own projects to address local priorities in your parish.

Please do not be put off by the amount of information in this guide but use it to give you ideas. You do not have to address all the habitats we describe! If one person in every parish supports just one action in the Local Biodiversity Action Plan we shall have 253 more examples of practical support for biodiversity.

We would be grateful if you would inform us of your local conservation projects so that the information may be added to our monitoring (*see section 5.4*). Should you need any additional advice or support, please contact the LBAP Coordinator on (01926) 412197 or email: ruthmoffatt@warwickshire.gov.uk or biodiversity@wkw.org.uk.

We very much look forward to working with you to put biodiversity back onto the map in Warwickshire, Coventry and Solihull.

Yours sincerely

Beth Gardner
Chair of the Local Biodiversity Action Plan Partnership
Director of Conservation, Warwickshire Wildlife Trust



1.2 WHAT IS BIODIVERSITY AND THE LOCAL ACTION PLAN?

What is biodiversity?

The term 'biodiversity' comes from the words biological diversity and quite simply means the variety of all living things, including microbes, plants and animals – from single-celled organisms to the largest mammals and trees. Biodiversity also refers to genetic diversity within a species (essential for evolution) and also the diversity of the woodlands, wetlands and other habitats which provide the food, water and shelter for these species.

Why conserve biodiversity?

Human life itself depends upon healthy ecosystems (e.g. wetlands, forests and grasslands) and the biodiversity that they contain. Biodiversity gives us many of the essentials of life – water, oxygen, food, clothing, and medicines, without which we could not survive, and therefore contributes greatly to our economy. Access to nature is also a popular form of relaxation that greatly enriches our lives and helps keep us healthy.

Species are linked in an infinite number of ways via food-webs and the habitats they share. If one species becomes extinct, it may affect many more. If too many species become extinct then whole ecosystems can collapse, with severe consequences for the way we live. Across the world biodiversity is under threat from human activity such as over-intensive or inappropriate farming, large-scale commercial forestry, forest clearance, mineral extraction, pollution and urban development. We need to take action now if we are to secure a healthy planet for the future.

The origins of biodiversity conservation

In June 1992, the Earth Summit in Rio de Janeiro resulted in over 150 countries signing the Convention on Biological Diversity. The main aim of the Convention is to forge widespread commitment to sustaining and enhancing global biodiversity. It calls for the creation and enforcement of national strategies and action plans to conserve, protect and enhance biological diversity.

As part of its response to the Rio Earth Summit, the UK Government established a Biodiversity Steering Group and in 1995, the UK Biodiversity Action Plan was published, setting out national biodiversity objectives.

Local Biodiversity Action Plans (LBAPs)

LBAPs provide a local response that address both national targets and other local objectives. LBAPs reflect the views, values and individual character of their area and the national priorities identified by the UK BAP.

The Warwickshire, Coventry and Solihull Local Biodiversity Action Plan

Biodiversity contributes significantly to what makes Warwickshire, Coventry and Solihull distinctive. Imagine local woods without bluebells, road verges without flowers, farmland without hedges, meadows without butterflies and lakes without wildfowl. Warwickshire's landscapes and habitats have influenced and shaped local culture for hundreds of years. The heavily wooded Arden landscape in the west has historically been a major source of timber and is responsible for the many attractive timber-framed buildings we see in places like Stratford-upon-Avon, and Henley-in-Arden. The long-deforested Feldon area to the east has for centuries served as the grain basket for the region and a source of healthy livestock. Today, Warwickshire plays a crucial role in contributing to Britain's biodiversity, supporting many species classified as Nationally Threatened or Nationally Scarce. Some of our habitats are also nationally significant – and have been classified as Sites of Special Scientific Interest (SSSIs) to reflect this.

The 24 Habitat Action Plans (HAPs) in the LBAP are divided into 6 broad habitat types and land issues:

- **Farmland**
- **Grassland & Heathland**
- **Post-industrial land**
- **Urban habitats**
- **Woodlands**
- **Wetlands**

Grassland, Woodland and Wetland cover the more traditional habitat classifications. Farmland looks at the main types of habitats created or influenced by farming practice. Post-industrial land (that which has a previous usage e.g. quarrying or former industry) includes a whole suite of individual habitats. This means that there is some overlap with other habitat action plans although many of the challenges and issues and interested parties associated with post-industrial sites are sufficiently distinct to merit separate treatment. Urban habitats again may incorporate a number of the more traditional habitat types, but the issues and the means for management are quite individual and will depend a great deal on local authority practices, community involvement and awareness raising. The Urban HAPs offer great potential to enhance the quality of life of people in our towns and cities, and can be an area where parishes can have most impact.



1.3 WHAT IS THE LBAP PARTNERSHIP?

This partnership of **57 organisations and individuals** within the sub-region was formed in 2001 to develop the Warwickshire, Coventry & Solihull Local Biodiversity Action Plan. This large number of members all involved in nature conservation ensures that we are working towards the same priorities. An **Annual Conference** for the partnership was held this year for the first time.

There is a **Steering Group** within the wider group, of 41 core members who meet several times a year to adopt new action plans and discuss matters referred to them by the LBAP co-ordinator. The Steering Group welcomes the involvement of new organisations and individuals.

A small **Monitoring Subgroup** was formed in 2005 to assist the co-ordinator with reporting on the progress of the actions proposed in the individual action plans (see 5.3) and the preparation of this publication. In 2007 the group will be helping the co-ordinator to review the LBAP to bring targets in line with the 2006 UK BAP Targets Review.

ORGANISATIONS & INDIVIDUALS IN THE LBAP PARTNERSHIP

Local Agenda 21	English Heritage	Royal Society for the Protection of Birds
Allotment Societies	Natural England	Stratford District Council
Cotswold Area of Outstanding National Beauty	Forestry Commission	Shakespeare Trust
Butterfly Conservation	FROGLife	Solihull Metropolitan Borough Council
Bat Conservation Trust	Friends of Brandon Wood	Severn Trent Water
Brandon Marsh Conservation Volunteers	Farming & Wildlife Advisory Service	Thames Water
Barn Owl Trust	Garden Organic (formerly the Henry Doubleday Research Association)	Tree Wardens
Botanical Society of Great Britain	Game Conservancy Trust	Warwickshire Amphibian & Reptile Team
British Trust for Conservation Volunteers	Habitat Biodiversity Audit	Warwick University

British Trust for Ornithology	Herpetological Conservation Trust	Warwickshire Bat Group
British Waterways	Local Biodiversity Action Plan Steering Group	Warwickshire Biological Record Centre
Coventry City Council	Linking Environment & Farming	Warwickshire County Council
Coventry Diocesan Environmental Group	Warwickshire College	Wildlife Conservation Partnership
Country Landowners Association	Nuneaton & Bedworth Borough Council	Warwick District Council
Coventry University	National Farmers' Union	Warwickshire Dormouse Group
Council for Protection of Rural England	National Trust	West Midland Bird Club
Diocesan Advisory Councils	North Warwickshire Borough Council	Warwickshire School Grounds Alliance
Department for the Environment, Food & Rural Affairs	Network Rail	Wildlife Sites Project
Environment Agency	Rugby Borough Council	Warwickshire Wildlife Trust

ORGANISATIONS THAT HAVE FUNDED THE LBAP

The project would like to gratefully acknowledge the financial and in-kind support of the following organisations for the period 2001 –2006:

Colins & Aikman	Solihull Metropolitan Borough Council
English Nature (now part of Natural England)	Stratford District Council
Environment Agency	Warwick District Council
Forestry Commission	Warwickshire Amphibian & Reptile Team
National Grid	Warwickshire County Council
Nuneaton & Bedworth Borough Council	Warwickshire Wildlife Trust
Royal Society for the Protection of Birds	West Midlands Biodiversity Partnership
Severn Trent Water	

2.0

HABITAT ACTION PLANS (HAPs) OF MOST RELEVANCE TO PARISH COUNCILS, PARISH PLAN GROUPS AND WOMEN'S INSTITUTES

Out of the total of 24 HAPs in the full Local Biodiversity Action Plan, the following 4 habitat types and 13 action plans have been selected for inclusion here:

2.1 Farmland habitats

- 2.11 Field Margins
- 2.12 Hedgerows
- 2.13 Roadside Verges

2.2 Urban habitats

- 2.21 Allotments
- 2.22 Built Environment
- 2.23 Churchyards & Cemeteries
- 2.24 Gardens
- 2.25 Parks & Public Open Spaces
- 2.26 School Grounds

2.3 Woodland habitats

- 2.31 Traditional Orchards
- 2.32 Woodlands

2.4 Wetland habitats

- 2.41 Ponds, Lakes & Reservoirs
- 2.42 Rivers & Streams

*The **full Local Biodiversity Action Plan** with copies of all 50 individual action plans can be viewed on the website:*

www.warwickshire.gov.uk/biodiversity

*There is also a **Bibliography web page** and another page giving the **web sites of all the organisations** cited in the plans.*



2.1 FARMLAND

Associated Species Action Plans

- Song Thrush
- Scarce Arable Plants
- Bats
- Barn Owl
- Rare Bumblebees
- Farmland Birds
- Water Vole
- White-clawed Crayfish
- Great Crested Newt
- Otter
- Lapwing
- Snipe
- Black Poplar

Associated Habitat Action Plans

- Field Margins
- Hedgerows
- Ponds, Lakes & Reservoirs
- Roadside Verges
- Woodlands
- Rivers & Streams

The Warwickshire area has a strong agricultural tradition with wheat, dairying, sheep and cattle grazing, farmland accounts for 80% of the local land cover. Farmland has suffered significant biodiversity losses, but also has great potential for restoring wildlife habitat.

Hedgerows can be one of the most biodiverse habitats of the farmland landscape and many of those in the Arden have a very ancient origin that long pre-dates the Parliamentary Enclosure Acts. Hedges of all sorts provide vital wildlife corridors across the rural landscape, and support a good variety of plants, nesting sites and feeding areas for birds, and habitats for invertebrates. In the latter part of the last century many hedgerows were removed to provide larger fields for greater productivity, this has been most noticeable in the Feldon, though ancient small field systems still survive in parts of the Arden.

The action plans for cereal fields identify field margins as one of the most effective ways to maximize their biodiversity potential with minimal effect on productivity. Cereal field margins are the strip between the crop and the field boundary, they are effective when the strip is adjacent to existing habitats such as hedgerows, rivers, ponds and woodland. Appropriate management of this strip of land can help many wildlife species to thrive e.g. certain rare bumblebees, butterflies, moths, rare arable plants, as well as grey partridge and other ground-nesting birds.

The main threat to farmland habitat in the past has been the lack of incentives to adopt appropriate wildlife-friendly strategies, however agri-environment schemes such as Environmental Stewardship have made a huge improvement, but there is still much scope to raise awareness amongst farmers of the options available.

Roadside verges form an important habitat particularly for plants and invertebrates. Some areas have to be cut for safety reasons, as with roadside hedges. The greatest challenges with these areas are the cost of appropriate management, control of injurious weeds (e.g. ragwort) and inappropriate planting with non-native species.



2.1.1 FIELD MARGINS

INTRODUCTION

For the purposes of this action plan the term "field margin" refers to strips of land lying between a crop and the field boundary, and extending for a limited distance into the crop. This action plan is primarily concerned with arable fields but some of the issues are also relevant to the margins of intensively managed grassland. The margins of fields provide very valuable habitat. Some of Britain's rarest plants are found within the edges of arable fields.



© Steve Falk

These once common species such as cornflower, spreading hedge-parsley and shepherd's needle are now rarely found due to changes in methods of agricultural production.

As well as providing an important refuge for wildflowers, field margins also provide buffer strips between farming operations and sensitive habitats such as hedgerows, watercourses and ditches. These features provide valuable wildlife corridors for a range of species including invertebrates, birds, small mammals, reptiles and amphibians. Wildlife corridors act as a link for wildlife moving to neighbouring habitats, or between hibernation and breeding habitats.

Field margins provide nesting and feeding sites for game birds and songbirds. Invertebrate species including butterflies, grasshoppers, solitary wasps, and bees are attracted to field margins. Many beneficial predators such as spiders and ground beetles which feed on a variety of foods, especially traditional crop pests such as aphids, are dependant on the field margins for part of the year. The high number of invertebrates provides food for farmland birds and mammals such as bats. The presence of small mammals may also attract barn owls. Field margins can be deliberately managed to create conditions which benefit arable wildflowers, invertebrates, small mammals and birds.

Sensitive management of field margins habitat throughout England could offer huge benefits to threatened farmland species, many of which have suffered severe declines over recent decades.

OUR OBJECTIVES & TARGETS

	Target
A. To record all known examples of biodiversity rich field margins	by 2010
B. To maintain the existing overall area of conservation field margins and increase by at least 40ha per year	annual

ASSOCIATED ACTION PLANS

- Hedgerows
- Woodlands
- Lowland Grassland (all types)
- Rivers & Streams
- Scrub & Carr
- Farmland Birds
- Song Thrush
- Scarce Arable Plants
- Barn Owl
- Rare Bumblebees

KEY FACTORS AFFECTING THE HABITAT

- The availability of agri-environment schemes
- Intensive management associated with cereal production
- The pressure on farm incomes

WHAT YOU CAN DO

- **Participate in the BSBI survey of scarce arable plants – ASK PERMISSION FIRST!**
- **Send your records to the Warwickshire Biological Record Centre**
- **Ask landowners to consider Environmental Stewardship Schemes and integrated crop management systems**
- **Encourage landowners to use maximum field margin options within the Entry Level Scheme alongside gardens and private dwellings**
- **Publicise the benefits of field margins for wildlife, particularly ground-nesting birds, and ask walkers and dog owners to keep off these areas**

USEFUL INFORMATION

Farming and Wildlife Advisory Group, FWAG - information on the new Environmental Stewardship agri-environment scheme. Tel.01926 318280 or email: warwickshire@fwag.org.uk

Buglife (2004) Information on the habitat-management requirements of key invertebrates. CD-Rom £34.99 from Beverley Doyle by email at: beverley.doyle@buglife.org.uk

Botanical Society of the British Isles BSBI : James Partridge, 01926 427452 or email: jmpart@yahoo.co.uk

Game Conservancy Trust: '*Restoring wild grey partridge to farms*' . 5 free fact sheets, also an on-farm advisory service. Tel. 01425 652381.

WBRC, Warwickshire Museum Field Services, The Butts, Warwick CV34 4SS. Tel. 01926 418060

CONTACT

biodiversity@wkw.org.uk



2.1.2 HEDGEROWS

INTRODUCTION

Hedgerows are boundary features, dominated by tree and shrub species and used to enclose fields, woods and property. Hedges provide a home for many forms of wildlife. Their wildlife value is frequently complemented by of semi-habitat. an adjacent bank ditch, field margin, verge, or some other type Hedgerows are typically linked together to create a network of wildlife corridors, often through intensively-farmed landscapes, and help link other important habitats such as woods, ponds, grasslands and wetlands.



© FWAG

Hedgerows can support hundreds of species of plants and animals, including small mammals and they form valuable nesting sites for a variety of birds including song thrush, tree sparrow and yellowhammer, as well as being an important winter food source. The sheltered herb rich hedge margins can support many butterflies and other invertebrates, including the nationally notable leaf beetle species *Cryptocephalus frontalis* and the species which feed on them and their larvae.

Ancient hedgerows, which tend to be those which support the greatest diversity of plants and animals, are those which were in existence before the Parliamentary Enclosure Acts, passed mainly between 1720 and 1840. Ancient hedgerows are often associated with banks and ditches and are particularly common in the Arden area of the sub-region. They tend to support more woody species than more recent hedgerows and may support ancient woodland herbs such as bluebell and wood anemone at their base. Species-rich hedgerows are those which on average support 5 or more woody species in a 30m length.

The species-poor, straight hedgerows surrounding the large regular fields in the east and south of the sub-region mostly originate from the Parliamentary Enclosure Acts and tend to be dominated by hawthorn, blackthorn, elm and elder, with a less interesting flora at their bases compared to ancient species-rich hedges. However, in what can be a very intensively farmed landscape, they still provide valuable blossoms, berries and shelter.

Many mature and veteran trees can be found within hedgerows. Unfortunately as traditional management techniques have declined, the age structure of hedgerows trees has become biased towards mature trees as very few young trees are planted or allowed to grow on. Dutch Elm Disease has also substantially reduced the total number of hedgerow trees since the mid 1970's as our sub-region was one of the worst affected (due to a predominance of English elm).

Since the middle of the last century there has been a huge loss of hedgerows within the UK, although the rate of loss has been substantially reduced in recent years and the new hedges are being planted.

OUR OBJECTIVES & TARGETS

	Target
A. Promote appropriate management and protection of species rich hedgerows to maintain their quality and integrity	by 2005
B. Seek to complete the survey of hedgerows throughout the sub-region to enable the development and maintenance of a central database of information	by 2015
C. Maintain overall numbers of hedgerow trees at least at current levels by encouraging new planting and natural regeneration	on-going

- D. Encourage new planting of 10km native species rich hedges** **annual**
- E. Halt the net loss of ancient and species rich hedgerow.** **by 2005**
- F. Increase awareness of the Hedgerow Regulations 1997 and the need for Felling Licence in relation to hedgerow trees** **by 2004**

ASSOCIATED ACTION PLANS	KEY FACTORS AFFECTING THE HABITAT
<ul style="list-style-type: none">▪ Field Margins▪ Woodlands▪ Lowland Grassland(all types)▪ Roadside Verges▪ Bats▪ Farmland Birds▪ Song Thrush▪ Bloody-nosed Beetle	<ul style="list-style-type: none">▪ Physical removal▪ Neglect▪ Poorly timed or over zealous cutting▪ The introduction or natural colonisation of non-native and invasive species▪ The loss of mature trees within hedgerows▪ Fragmentation i.e. the increasing separation of hedgerows from other semi-natural habitats▪ Pesticide and herbicide spray▪ Damage

WHAT YOU CAN DO

- Carry out a survey of your parish hedgerows
- Ask landowners if you can tag young trees so they are avoided during hedge cutting
- Ensure that important hedgerow trees are protected by Tree Protection Orders
- Make sure that important hedgerows are protected by Hedgerow Regulations
- Find out about good hedgerow management from FWAG and encourage people to practise it
- Volunteer for the WWT / CPRE Hedgerow Survey
- Ask landowners to include important visual or ecological hedgerows in their Environmental Stewardship Schemes
- Encourage landowners to plant new hedgerows that link habitats of biodiversity value
- Encourage the planting of hedgerows in urban areas using native species

USEFUL INFORMATION

Game Conservancy Trust: 'Restoring wild grey partridge to farms' . 5 free fact sheets, also an on-farm advisory service. Tel. 01425 652381.

Farming and Wildlife Advisory Group, FWAG - information on the new Environmental Stewardship agri-environment scheme. Also advice on hedgerow management for wildlife. Tel.01926 318280 or email: warwickshire@fwag.org.uk

Buglife (2004) Information on the habitat-management requirements of key invertebrates. CD-Rom £34.99 from Beverley Doyle by email at: beverley.doyle@buglife.org.uk

Campaign for the Preservation of Rural England (CPRE), Hedgerow Survey Campaign and Training Days. Contact John Wharam on 01926 494597 or email: office@cprewarwickshire.org.uk

Flora Locale – the Knowledge Zone: www.floralocale.org

CONTACT

biodiversity@wkw.org.uk



2.1.3 ROADSIDE VERGES

INTRODUCTION

Roadside verges are defined as the strips of land between the road surface and the boundary line (i.e. the adjacent hedge, fence or hard development). The principal habitat for consideration in this plan is grassland and tall herb vegetation. However, there can also be many other habitats here including ponds, woodlands and areas of geological interest. Boundary habitats such as ditches and hedgerows can add to the verge's ecological value. The plant communities often reflect the under-lying geology – so the associated Habitat Action Plans (HAPs)

for neutral and calcareous grasslands are key references. The most valuable verges for wildlife are usually wide ones on less fertile soils, where management has been sympathetic, or on 'new' road schemes where topsoil has been removed and sub-soil allowed to revegetate naturally. Road verges in cuttings can often be substantial features supporting extensive areas of flower-rich grassland and scrub (e.g. sections of the M6, M40, A46, A45, the Ettington by-pass and Southam by-pass) and the warmer, south-facing slopes can support important butterfly assemblages. The majority of the verges in Warwickshire, Coventry and Solihull are managed by regular mowing and hedge trimming.



© David Lowe

With the massive loss of unimproved grassland in post-war years, roadside verges now provide an important habitat for plants (700 plant species could be associated with verges nationally), birds, mammals and invertebrates. Typical flowers found on verges include umbellifers like hogweed, vetches, bedstraws and knapweeds. One road verge has Warwickshire's largest population of rockrose, pyramidal orchid and a good population of the regionally scarce brown argus butterfly which feeds on the rockrose. Verges are also important as corridors for wildlife particularly in areas of intensive agriculture such as the Feldon, and can provide good linkages to conservation headlands which are increasing with the advent of Environmental Stewardship.

Road verges are subject to a variety of stresses imposed by passing road traffic including salt spray, oil and other petrochemicals, lead and other air pollutants, and effects of vehicle movement actually on the verge. They are also under threat from rubbish dumping and management that is insensitive to nature conservation. An added stress is the right of utilities to lay and access their equipment in verge areas. Indeed they are encouraged to place their equipment in verge areas, rather than carriageways or footways. This does not just have an effect when the excavations take place but also in the 'static' laid condition.

Road verges contribute enormously to the attractive rural character of Warwickshire and are important in sustaining tourism. Spring blossoming shrubs and good shows of flowers such as cow parsley, hogweed and buttercups create a strong positive impression to visitors as well as pleasing local people.

OUR OBJECTIVES & TARGETS

	Target
A. To survey, designate and record all verges of ecological importance, having defined criteria for this	2008
B. To develop management guidelines for individual sites and proposals in partnership with the Highways Authorities and other managing organisations to maximise the wildlife value of the verges	2009

- C. **To increase the monitoring, management and enhancement of roadside biodiversity** review 2008
- D. **To increase awareness of the ecological value of roadsides** ongoing

ASSOCIATED ACTION PLANS

- Woodlands
- Field Margins
- The Built Environment
- Ponds, Lakes & Reservoirs
- Scrub & Carr
- Hedgerows
- Lowland Acid Grassland
- Lowland Heathland
- Lowland Calcareous Grassland
- Bats
- Farmland Birds
- Bloody-Nosed Beetle
- Barn Owl
- Dingy Skipper
- Black Poplar
- Scarce Arable Plants

KEY FACTORS AFFECTING THE HABITAT

- Parking/erosion/over-running
- Pesticide and herbicide use and drift
- Invasive species
- Road widening
- Conversion to footpath and cycle path
- Planting-up - .g. with bulbs
- Essential cable and pipe laying work
- Winter road salt application
- Limited funding for management
- Excessive mowing
- Residual lead pollution
- Public perception of tidiness

WHAT YOU CAN DO

- **Survey your verges – CARE WITH TRAFFIC! - and report to the Warwickshire Biological Record Centre on those that have a rich flora or rare species**
- **Develop a simple monitoring scheme that other people can take part in**
- **Try to persuade your local authority to manage the interesting verges more sympathetically**
- **Investigate the provision of interpretive signs at important verges**
- **Get involved with Warwickshire Wildlife Trust to help produce a leaflet about the good management of roadside verges**
- **Encourage species diversity on verges within your parish by seeking advice on the best cutting regime, e.g. for flower-rich verges avoid cutting until early August and remove cuttings wherever possible**

USEFUL INFORMATION

Warwickshire Wildlife Trust. Tel. 02476 302912 or email: enquiries@wkw.org.uk

Living Highways Project: Michelle Delafield, Project Officer, Brecknock Wildlife Trust, Lion House, Bethel Square, Brecon, Powys LD3 7AY. Tel. 01874 625708

Highways Authority c/o Warwickshire County Council, Shire Hall, Warwick CV34 4RA Telephone: 01926 410410

WBRC, Warwickshire Museum Field Services, The Butts, Warwick CV34 4SS. Tel. 01926 418060

CONTACT

biodiversity@wkw.org.uk

Based on the full action plan which can be seen on our website: www.warwickshire.gov.uk/biodiversity



2.2 URBAN HABITATS

Associated Species Action Plans

- Water Vole
- Otter
- Barn Owl
- Bats
- Song Thrush
- Great Crested Newt
- Otter
- White-Clawed Crayfish
- Rare Bumblebees
- Bloody Nosed Beetle
- Dingy Skipper
- Black Poplar

Associated Habitat Action Plans

- Gardens
- The Built Environment
- Parks & Public Open Spaces
- Roadside Verges
- School Grounds
- Churchyards & Cemeteries
- Hedgerows
- Allotments
- Canals
- Ponds, Lakes & Reservoirs
- Rivers & Streams
- Disused Industrial & Railway Land
- Wood Pasture , Old Parkland & Veteran Trees

Urban areas are often thought of as inhospitable for wildlife, but this is not strictly the case. Many plants and animals survive in cities, town and villages and a few species even prefer such areas. Urban habitats such as parks, gardens and churchyards provide vital corridors for our wildlife to penetrate into own towns and cities. Even buildings and walls can provide homes to wildlife such as birds, bats and certain wildflowers.

The urban action plans aim to look at ways in which we can enhance the urban landscape for wildlife and people's appreciation of nature. They cover buildings, factories, schools and houses plus the grounds, gardens and parks around them. So many threats to urban habitats stem from a lack of awareness, leading to damage or destruction through development, changes in land use, excessive grass cutting and weed-killer usage.

Other ways in which we can help species and habitats in the way we live our lives include:

- (i) Peat-free and chemical-free gardening.
- (ii) Reducing, re-using and recycling waste.
- (iii) Being careful what you pour down the drain!



2.2.1 ALLOTMENTS

INTRODUCTION

Allotments are an important community facility and can provide a valuable habitat for many native plants and animals, especially in urban areas where green space may be limited. Often with overgrown plots as well as cultivated plots, compost heaps, grass areas, sheds and boundary trees or hedgerows, they can attract a variety of birds, invertebrates and mammals. In particular many insects, spiders and invertebrates thrive in areas of 'weedy' vegetation such as vacant plots, and because this type of habitat has been virtually eliminated from farmland these corners of urban areas can have an unexpectedly high wildlife value. 'Minibeasts', such as millipedes and woodlice, and weed seeds are a valuable food source for some bird species, including sparrows and finches, which are becoming much less common on intensively cultivated land.



Allotment project SMBC

Sympathetic maintenance regimes can maximise the benefit of boundary hedgerows and tree belts whilst vacant plots can be managed to increase the growth of wildflowers. In addition well-tended plots often act as seed banks for rare vegetable species with seed being collected and resown, while Garden Organic (formerly the Henry Doubleday Research Association) is encouraging people to grow more traditional native vegetables by making seed available through its heritage seed library.

Currently there is over 13,000ha of allotment land in the UK and evidence from the National Society of Allotment and Leisure Gardeners shows that the average allotment site has up to 30% more wildlife diversity than a typical urban park. In Solihull, for example, most allotment sites are associated with adjacent public open space making them part of important wildlife corridors, linking areas of green space within the urban environment. Being managed primarily for recreation and amenity, allotments can be termed 'managed green space', along with other areas including town parks, playing fields, cemeteries and school grounds.

As long as plot holders and allotment associations comply with their tenancy agreements they have control over planting, cultivation and maintenance regimes, all of which can impact on the potential for allotments to contribute towards biodiversity and Local Agenda 21 priorities.

OUR OBJECTIVES & TARGETS

	Target
A. To protect, enhance and promote the biodiversity already within allotment gardens	from 2004
B. To promote sensitive management and habitat creation where possible, paying particular attention to treatment of boundaries and vacant plots	from 2004
C. To develop a database of allotments undertaking positive habitat management including wildlife records	by end 2005
D. To promote allotments to schools and community groups as an outdoor classroom and emphasise their value as community gardens	by 2006
E. To continue to encourage and promote organic gardening, recycling	from 2004

and composting, as well as the health and social benefits of having an allotment

ASSOCIATED ACTION PLANS

- Parks & Public Open Spaces
- Gardens
- School Grounds
- Scrub & Carr
- Lowland Grassland (all types)
- Hedgerows
- Song Thrush

KEY FACTORS AFFECTING THE HABITAT

- How allotments are used
- Planning controls and political issues
- Level of funding
- Lease and tenancy agreements
- Use of pesticides and inorganic fertilisers
- Use of peat
- Planting of non-native plants

WHAT YOU CAN DO

- **Use alternatives to slug pellets and peat based products**
- **Discuss and implement wildlife-friendly gardening techniques such as biological predator control**
- **Put up bat and bird boxes**
- **Create new habitats with log piles - and ponds, BUT ASK FIRST – they may not be allowed**
- **Collect seeds for sowing next year**
- **Grow local fruit varieties and traditional vegetables and flowers on plots**
- **Compost your waste and encourage community composting**
- **Plant native hedgerow and tree species and encourage sensitive hedgerow management**
- **Encourage your local school to have an allotment and link the work into the National Curriculum by surveying, recording and monitoring wildlife**
- **Involve children with competitions, e.g. , for sunflower growing, making scarecrows**
- **Hold nature walks around your allotments**
- **Promote allotments as a healthy and social pastime**
- **Organise visits to demonstration allotment sites run by COGA, HEOG and Garden Organic (see below)**
- **Join the Heritage Seed Library at Ryton to help conserve vegetable biodiversity**
- **Get training in organic gardening by joining ‘Organic Food for All’ at Ryton**

USEFUL INFORMATION

‘Garden Organic’ (formerly Henry Doubleday Research Association (HDRA) , Ryton Organic Gardens, Coventry, Warwickshire, CV8 3LG. Leaflets available on many aspects of organic gardening. Tel: 02476 303517 or email: info@hdra.org.uk

Heart of England Organic Gardeners (HEOG), 6 Waverley Road, Kenilworth, CV8 1JN. Tel. 01926 852135 or email: info@heog.org.uk

Coventry Organic Gardeners Association (COGA), c/o Garden Organic

English Nature (2004) Many leaflets including: *Composting and peat-free gardening*, *Garden ponds and boggy areas: havens for wildlife*, *Mammals in your garden*, *Wildlife on Allotments*. Free from the EN Enquiry Service, tel. 01733 455101 or email: enquiries@naturalengland.org.uk

Federation of City Farms & Community Gardens – Allotment Regeneration Initiative: www.farmgarden.org.uk

National Society of Allotment & Leisure Gardeners: www.nsalg.co.uk

Britain in Bloom: www.rhs.org.uk/britaininbloom

CONTACT

biodiversity@wkw.org.uk



2.2.2 BUILT ENVIRONMENT

INTRODUCTION

This action plan covers species and habitats associated with:

- Buildings
- Structures such as walls, bridges, tunnels, pylons and underground sites.
- Hard surfacing such as unit paving, bound materials, hardcore, tarmac, concrete and railway ballast



Fox cub

© Steven Falk

The urban environment can form a wide variety of habitats relating to their material component, aspect, age and state of dilapidation. Pipistrelle bats have a particular fondness for buildings constructed in the last 30 years and have been found in tower blocks. Birds such as the kestrel and peregrine have joined the feral pigeons on ledges of buildings, which mimic cliff habitats, and foxes are now a common sight in our cities. Walls can support a characteristic plant species such as Ivy-leaved toadflax and many ferns and mosses. More than 600 species of lichen have been recorded in the built environment, walls and other surfaces are frequently covered with their multicoloured growths. The older the wall and the less it is disturbed, the richer the lichen flora. Many invertebrates are associated with walls including spiders, beetles, wasps and bees.

The urban stretches of canals, roads and railways are important parts of this habitat plan as well as gardens and traditional brownfield sites. The habitats are covered in more depth in their other action plans.

There are many species that now depend upon the built environment for their survival. The swift (a migratory bird) has declined significantly over the last decade with one contributory factor being the loss of breeding sites in roof spaces, through repair work and new fascias. Bats have also suffered for the same reasons. Both these declines can be easily rectified through the provision of nest boxes.

2.	OUR OBJECTIVES & TARGETS	Target
A.	Survey, designate and record important sites and structures, after defining criteria for this	2008
B.	Protect sites containing legally protected species and the best examples of the habitat	2006
C.	Identify and implement a procedure to improve the quality of the built environment for priority species	2008
D.	Raise public and business awareness of the importance of the ongoing built environment for biodiversity	review 2006

ASSOCIATED ACTION PLANS

- Canals
- Disused Industrial & Railway Land
- Churchyards & Cemeteries
- *Gardens*
- School Grounds
- Ponds, Lakes & Reservoirs
- Hedgerows
- Parks & Public Open Spaces
- Rivers & Streams
- Great Crested Newt
- Bats
- Barn Owl
- Song Thrush
- Water Vole
- Otter

KEY FACTORS AFFECTING THE HABITAT

- Lack of biological information
- Disturbance, destruction and change of the habitats
- Lack of a co-ordinated approach to the protection and enhancement of habitats and associated species
- Lack of awareness of the importance of the habitats and species

WHAT YOU CAN DO

- **Promote wildlife at your workplace**
- **Erect bat roost boxes, bird nest boxes and invertebrate boxes (see CIRIA below)**
- **Offer to help with conservation work on urban nature reserves**
- **Get involved with wildlife surveys – BUT BE CAREFUL WHERE YOU GO and ALWAYS TELL SOMEONE**
- **Encourage people to record wildlife sightings, especially bats, and send records to the Warwickshire Biological Record Centre**

USEFUL INFORMATION

WBRC, Warwickshire Museum Field Services, The Butts, Warwick CV34 4SS. Tel. 01926 418060

Warwickshire Wildlife Trust. Tel. 02476 302912 or email: enquiries@wkw.org.uk

Neighbourhoods Green - a project to improve our green spaces. Email: info@neighbourhoodsgreen.org.uk

English Nature (2006) *Environment quality in spatial planning – incorporating the natural, built and historic environment, and rural issues in plans and strategies.*

Buglife (2004) Information on the habitat-management requirements of key invertebrates.

CD-Rom £34.99 from Beverley Doyle by email at: beverley.doyle@buglife.org.uk

RSPB (2006) – ‘*Healthy, wealthy and wise. Sustainable communities: creating the right environment.*’

Free leaflet about incorporating environmental concerns into developments from Heather Mitchell, Planning Policy Officer, RSPB, The Lodge, Sandy, Beds. SG19 2DL. Tel: 01767 680551

CIRIA – Building Greener Project: the use of green roofs and walls and other complementary wildlife features. www.ciria.org

CONTACT

Dave Lowe, Senior Ecologist, Warwickshire Museum. 01926 418060 or email: davidlowe@warwickshire.gov.uk

Ian Jelley, Reserves Volunteering Officer, Warwickshire Wildlife Trust, Tel. 02476 308998
or email: ian.jelley@wkw.org.uk



2.2.3 CHURCHYARDS & CEMETERIES

INTRODUCTION

Churchyards and cemeteries are places where people are laid to rest or people come to remember those who are close to them. Churchyards can be very ancient and were often areas of an old hay meadow and are likely never to have been ploughed, fertilised or sprayed. They can therefore represent relics of former countryside or 'unimproved' pasture, supporting a variety of plants that are now rare in the surrounding countryside such as devil's-bit scabious and betony. City centre churchyards can often provide refuges for wildlife and bring solace into an otherwise busy, noisy environment.



Oldberrow © J O'Dell

Associated habitats can include veteran trees (especially yews), hedges, ponds, ditches, ivy-clad walls and unusual tree specimens. The variety of stone used in boundary walls, gravestones and the church itself provides habitat for a range of mosses, ferns, lichens and drought tolerant plants. They are particularly important for lichen species because of the rarity of stone outcrops elsewhere in the local landscape.

In this action plan the churchyards incorporates the church, other buildings, graves and walls as well as grass and trees. These habitats are the responsibility of the churchwardens with all management works to them requiring Diocesan permission. Churchyard management is normally carried out either by volunteers from the church congregation or by a gardener employed and paid for by the Parochial Church Council. Cemeteries and crematoria are usually much larger and are normally the responsibility of the local authority but can include similar structures to those found in churchyards.

OUR OBJECTIVES & TARGETS

	Target
A. To raise awareness of the importance, rarity and fragility of the biodiversity within churchyards and cemeteries and overcome a perception of untidiness and disrespect	2004 onwards
B. To encourage sympathetic management of 50 churchyards and cemeteries by advising on management	by 2008
C. To investigate churchyards as a source of local provenance seed for spreading into the wider countryside, especially in connection with the re-creation of species-rich hay meadows through agri-environment schemes	by 2006
D. To ensure protection of any remaining species-rich churchyards and cemeteries as SINC (Site of Importance for Nature Conservation) or SSSIs (Site of Scientific Interest) by referring to 1984/5 churchyard survey and Habitat Biodiversity Audit and any resurvey work	by 2008
E. To encourage their use as an educational resource	ongoing

ASSOCIATED ACTION PLANS

- Lowland Neutral Grassland
- Roadside Verges
- Lowland Calcareous Grassland
- The Built Environment
- Rare Bumblebees
- Song Thrush
- Barn Owl
- Bats

KEY FACTORS AFFECTING THE HABITAT

- Size
- Attitude towards 'untidiness'
- Lack of resources/ volunteers/ equipment
- Grass-cutting around gravestones
- Introduction of inappropriate plants
- Insufficient management guidelines
- Cleaning lichens off gravestones
- Lack of awareness/education

WHAT YOU CAN DO

- **Ask permission to survey your churchyards, cemeteries and crematoria for bats, amphibians, invertebrates, plants, fungi, etc.**
- **Compare survey results with the 1984 survey to monitor losses and gains**
- **Encourage and help site managers to erect wildlife interpretation boards**
- **Find out about the 'Caring for God's Acre' initiative to help you develop good management practice**
- **Erect nest boxes for birds and bats**
- **If introducing new shrubs choose native species to give fruits through the year**
- **Restrict the use of herbicides and molluscicides to give a supply of seeds, ants, slugs and snails for birds and other animals**
- **Organise grass cutting on a rotation to create a mosaic of grass heights and leave a few patches of coarse tussocky grass to provide cover for butterflies**
- **Get more people involved by turning the final grass cut of the year into a community event**
- **Encourage your school to use the churchyard for educational purposes**

USEFUL INFORMATION

Caring for God's Acre, CFGA, 6 West St., Leominster, Herefordshire HR6 8ES.
Tel. 01568 611154 or email: info@cfga.fsnet.co.uk

Plantlife International, 14 Rolleston St., Salisbury, Wilts. SP1 1DX.
Send A5 SAE for leaflet: *Churchyard Lecanactis: old walls can harbour secrets (lichens)*.

Parker, M. (1989) *The Living Churchyard*. Natural World.

Buglife (2004) *Information on the habitat-management requirements of key invertebrates*.
CD-Rom £34.99 from Beverley Doyle by email at: beverley.doyle@buglife.org.uk

Norfolk Wildlife Trust Churchyard Scheme. Information sheets on managing grasslands
in churchyards from Andrina Walmsly : Tel. 01603 625540

Flora Locale – the Knowledge Zone: www.floralocale.org

CONTACT

biodiversity@wkw.org.uk

Based on the full action plan which can be seen on our website: www.warwickshire.gov.uk/biodiversity



2.2.4 GARDENS

INTRODUCTION

Managed appropriately, private gardens can be extremely rich in wildlife. They can support a number of important small-scale habitats including ponds, hedgerows, mature trees, walls, species-rich grassland and a wide range of useful flowers.

Collectively, gardens combine to form a large habitat for wildlife. In urban areas they can act as wildlife corridors between parks, open spaces, allotments, woods and eventually the countryside. In agricultural areas gardens can provide valuable refuges for a variety of wildlife that has come to depend upon both habitats for its survival. Although it is untrue to say that conventional gardening methods are of no value to wildlife, a more environmentally friendly approach would be of much greater benefit to local biodiversity and could potentially support endangered or unusual species.



Bee on Buddleia © D.Lowe

Depending upon size, a range of habitats can be created to maximise wildlife including woodland edge, flower-rich grassland, scrub, ponds and streams. With careful planning even a small garden can increase its wildlife value and for less ambitious gardeners a few simple changes such as berry bearing bushes or insect friendly flowers can make a notable difference. By providing the right conditions many species, including some that are struggling in the wider countryside, can be encouraged and supported.

Good practices include non-chemical forms of weed and pest control or using target-specific rapidly degrading chemicals such as *Glyphosate*, recycling of garden waste (especially for compost) and less frequent mowing. Feeding birds and providing nest boxes, ladybird houses and bat boxes can all help.

Involving communities in wildlife gardening and informal surveys is a great way to promote sustainability issues e.g. healthy eating, waste minimisation, re-use and recycling through composting, natural forms of pest control (not chemical control) and the importance of conserving biodiversity.

OUR OBJECTIVES AND TARGETS

	Target
A. Set up a Wildlife Gardening Initiative (WGI) to raise awareness and provide information, advice and support on the importance of gardens as habitats for wildlife	2004
B. Develop a system of local recording to monitor the health of garden habitats and wildlife populations	2006
C. Stimulate local action to benefit garden wildlife through Local Agenda 21 and other community initiatives	by 2004

Warwickshire, Coventry and Solihull Local Biodiversity Action Plan

ASSOCIATED ACTION PLANS

- Ponds, Lakes & Reservoirs
- Hedgerows
- The Built Environment
- School Grounds
- Parks & Public Open Spaces
- Traditional Orchards
- Bats
- Great Crested Newt
- Song Thrush

KEY FACTORS AFFECTING THE HABITAT

- Over-use of chemical herbicides, pesticides
- Over-use of fertilizers
- Over-use of non-native and hybrid species
- The use of materials from controversial sources, e.g. peat, limestone
- Excessive tidiness
- Media coverage

WHAT YOU CAN DO

- **Use native and locally found plant species where possible**
- **Provide evergreens such as holly and ivy for shelter**
- **Plant nectar-rich flowers to attract insects, particularly white ones for night insects**
- **Start a compost heap with your green waste, providing a habitat for slow worms, worms and woodlice, and use it instead of peat as its extraction causes irreversible damage**
- **Make a wildlife-friendly pond, with gentle slopes and emergent native vegetation for cover, preferably with no fish as these will eat the invertebrates**
- **Encourage beetles – and hedgehogs - with a log pile in a damp shady area**
- **Leave an area to go wild complete with nettles to attract butterflies**
- **Leave some areas of grass longer to provide habitat for grasshoppers & young amphibians**
- **Reduce the use of slug pellets and other chemicals**
- **Give children their own patch of garden to look after**
- **Erect bird & bat boxes & a vole feeding table (with black sunflower seeds) close to a hedge**
- **Feed the insect-eating birds with porridge oats soaked in fat and grated bits of old cheese**
- **Make a note of what wildlife (from insects to birds) you see in your garden, and the date you saw them, and feed the results back to the Warwickshire Museum**
- **Keep your cat in at dawn and dusk when the birds and bats are feeding**

USEFUL INFORMATION

Warwickshire Museum Field Services, The Butts, Warwick CV34 4SS. Tel. 01926 418060

'Garden Organic', Ryton Organic Gardens, Coventry, Warwickshire, CV8 3LG.
Tel: 024 76 303517 or email: enquiry@hdra.org.uk

Royal Horticultural Society & The Wildlife Trusts 'Wild About Gardens' Project. and 'Wildlife Gardening for Everyone' Question & Answer book. 80 Vincent Square, London SW1P 2PE.
Tel. 020 7834 4333 or email: info@rhs.org.uk

English Nature (2004) *Gardening with Wildlife in Mind CD ROM* from Plant Press, FREEPOST, Lewes BN7 2ZZ, £9.99 plus £1.50 p & p in UK, tel. 01273 476151. Also many leaflets including: *Minibeasts in the garden*, *Wildflower meadows - create one in your garden*, *Composting and peat-free gardening*, *Garden ponds and boggy areas: havens for wildlife*, *Mammals in your garden*. Free from the EN Enquiry Service, tel. 01733 455101 or email: enquiries@naturalengland.org.uk

Centre for Alternative Technology (2005) *The Little Book of Slugs*. Tel. 01654 705950

Buglife (2004) Information on the habitat-management requirements of key invertebrates CD-Rom £34.99 from Beverley Doyle by email at: beverley.doyle@buglife.org.uk

Louise Bardsley (2005) *The Wildlife Pond Handbook* £12.99. New Holland.

Mammal Trust UK – *Garden Mammal Survey 2006* – 15 Cloisters House, 8 Battersea Park Road, London SW8 4BG. Tel. 0207 498 5262 or email: enquiries@mtuk.org

Ken Thompson(2006) *No Nettles Required – the reassuring truth about wildlife gardening*. Eden Project Books.

Flora Locale – the Knowledge Zone: www.floralocale.org

CONTACT

Eddie Asbery, Wildlife Gardening Co-ordinator, Warwickshire Wildlife Trust.
Tel 02476 308984 or email: eddie.asbery@wkwf.org.uk



2.2.5 PARKS & PUBLIC OPEN SPACES

INTRODUCTION

The Warwickshire sub-region has extensive areas of urban development within which there is a high proportion of greenspace which is formally managed municipal parkland or gang - mown amenity grassland. These are important features for local communities, and often carefully designed and supporting historic value but their ecological value is highly variable. At one extreme are the regularly mown lawns with recently planted trees and perhaps some limited planting of exotic shrubs. These sites tend to support little ecological interest but are valuable for a range of recreational activities such as child playing, dog walking etc. At the other extreme are sites that incorporate a variety of semi-natural habitats such as woodlands, wetlands, flower-rich grasslands, former wood pasture, tall herb and scrub plus collections of old trees. These latter sites have higher value for wildlife'. Some examples include Brueton Park in Solihull, Priory Park in Warwick and Newbold Comyn in Leamington Spa, sections of the Sowe Valley in Coventry and Abbey Fields in Kenilworth. There are also Country Parks and Green Spaces owned and managed by the Local Authorities. Many of the habitats at these sites are covered by other habitat action plans in this BAP.



War Memorial Park, Coventry © S.Falk

Some areas of public open space have evolved from more natural landscapes e.g. the Sowe Valley of Coventry, and therefore still retain many historic features such as old grassland and old trees. But it is also clear that newly created sites can be designed and managed to incorporate a degree of ecological value (e.g. Burnsall Road in Coventry) e.g. though sensitive mowing regimes and planting schemes.

Areas of public open space in turn attract interesting wildlife, such as good bird populations (including declining species such as song thrush, linnet, green woodpecker and kestrel), insects associated with dead wood and old trees and a good variety of butterflies, moths, hoverflies and bees attracted by the plentiful flowers at many sites. Many unusual trees can be present, including superb examples of exotic trees or cultivars e.g. large cedars and other conifers, unusual oaks and limes, plus some important specimens of native species such as the black poplar (subject of a SAP) and a few mature elms.

The challenge of this HAP should be to maximise the wildlife value of parks and public open spaces while enhancing the recreational value and safety of such areas.

OUR OBJECTIVES & TARGETS

	Target
A. To identify the more ecologically important parks and open spaces and their ownership	by 2007
B. To maximise our knowledge of such sites and ensure they are appropriately designated (e.g. SINC, TPO, Conservation Areas)	by 2007
C. To maintain and enhance the extent and quality of semi-natural habitats in and around parks and public open spaces with priority given to those holding UK BAP Priority Species, Red Data Book species, Nationally Scarce and Regionally Scarce species.	ongoing

- | | | |
|----|--|----------------|
| D. | To promote good management practice in parks and public open spaces which will maximise their wildlife value without compromising safety, and to share knowledge through the development of a network of regular communication between landowners and practitioners | 2007 |
| E. | To encourage local communities to undertake local action which enhances the contribution of parks and public open spaces to biodiversity | ongoing |

ASSOCIATED ACTION PLANS	KEY FACTORS AFFECTING THE HABITAT
<ul style="list-style-type: none"> ▪ Ponds, Lakes & Reservoirs ▪ Reedbeds ▪ Fen & Swamp ▪ Lowland Grassland (all types) ▪ Woodlands ▪ Scrub & Carr ▪ Wood-Pasture, Old Parkland & Veteran Trees ▪ Churchyards & Cemeteries ▪ Song Thrush ▪ Bats ▪ Water Vole ▪ Black Poplar 	<ul style="list-style-type: none"> ▪ Development ▪ Unsympathetic landscaping or restoration ▪ Public perception ▪ Site management ▪ Recreational pressure ▪ Restoration potential

WHAT YOU CAN DO
<ul style="list-style-type: none"> ▪ Survey your village open spaces for wildlife and report to the Warwickshire Biological Record Centre on what you find ▪ Get people interested in the potential biodiversity value of your village open spaces ▪ Offer advice on the management of your village open space ▪ Persuade owners of suitable land adjacent to your village open spaces to allow it to provide an extension of, or stepping stone between, sites ▪ Get your local authority to discontinue the use of slug pellets in public open places. ▪ Get a group of people together to improve open space (see CABE below) ▪ Join an existing 'Friends of Group'

USEFUL INFORMATION

WBRC, Warwickshire Museum Field Services, The Butts, Warwick CV34 4SS. Tel. 01926 418060
 Mammal Trust UK – ‘Living with Mammals’ Survey 2006 – 15 Cloisters House, 8 Battersea Park Road, London SW8 4BG. Tel. 0207 498 5262 or email: enquiries@mtuk.org
 Flora Locale – Knowledge Zone. ‘Wild plants and your village green’ - free leaflet from Flora Locale, Denford Manor, Lower Denford, Berks. RG17 0UN (sae A5) or email: info@floralocale.org
 CABE Space (2006) ‘It’s Our Space – Guide for Community Groups’. Email: enquiries@cabe.org.uk

CONTACT

Steven Falk, Senior Curator of Natural History, Warwick Museum, Market Hall, Market Place, Warwick CV34 4SA. Tel. 01926 412481 or email: stevenfalk@warwickshire.gov.uk
 David Lowe. Senior Ecologist, Warwickshire Museum Field Services, : davidlowe@warwickshire.gov.uk



2.2.6 SCHOOL GROUNDS

INTRODUCTION

School grounds can provide a valuable habitat for many native plants and animals, especially where green space may be limited. Sympathetic maintenance regimes can maximise the benefit of boundary features, such as hedgerows and tree belts. Unused corners of recreational areas can be managed to increase the growth of wild-flowers and therefore the sites value as invertebrate and bird habitat.



Oak Cottage Primary School, Solihull

School grounds also have great potential for developing young people's awareness of the environment around them. Having school nature areas, which have been set aside or created especially for environmental education should be valued as it allows children to experience and interact with biodiversity on a daily basis. Such nature areas enable local children to take part in enjoyable activities that benefit nature conservation.

The recording, investigation and creation of wildlife habitats and species within school grounds can be used in conjunction with almost all the National Curriculum core subjects and themes. There is also evidence that natural surroundings have a calming effect on people, including children.

OUR OBJECTIVES & TARGETS

	Target
A. To protect, enhance and promote the biodiversity within school grounds	from 2003
B. To promote sensitive management and habitat creation within school grounds	from 2003
C. To develop a database of school grounds undertaking positive habitat management including wildlife records	by 2004
D. To promote school grounds as an outdoor classroom through linking biodiversity with the National Curriculum	by 2005

Warwickshire, Coventry and Solihull Local Biodiversity Action Plan

ASSOCIATED ACTION PLANS	KEY FACTORS AFFECTING THE HABITAT
<ul style="list-style-type: none">▪ Parks & Public Open Spaces▪ Ponds, Lakes & Reservoirs▪ Gardens▪ Scrub & Carr▪ Lowland Neutral Grassland▪ Hedgerows▪ The Built Environment▪ Song Thrush▪ Great Crested Newt▪ Bats	<ul style="list-style-type: none">▪ Development encroachment▪ Lack of, or inappropriate, management▪ Lack of funding and manpower for on-going maintenance of wildlife areas▪ Recreational and development pressure and land use change▪ OFSTED promotes the use of school grounds for biodiversity education

WHAT YOU CAN DO

- **Design an easy to use biodiversity survey form and get your school to use it as part of the science timetable**
- **Encourage your school to develop native tree nurseries getting the kids involved in the planting and aftercare.**
- **Encourage your school to leave wild verges and corners of playing fields, etc, that link up to create wildlife corridors**
- **Encourage your school to have an environmental area that can be used in curriculum activities**
- **Help your school to write a management plan to protect and enhance species and habitats in the school grounds**
- **Encourage your school to run an after-school 'Wildlife Club'**
- **Get your school to join the Duchy Originals Garden Organic for Schools project at Ryton to help children grow vegetables at school and learn more about food**

USEFUL INFORMATION

'Garden Organic' (formerly Henry Doubleday Research Association (HDRA) , Ryton Organic Gardens, Coventry, Warwickshire, CV8 3LG. Tel: 024 76 303517 or email: info@hdra.org.uk

Warwickshire Wildlife Trust – *Globe Programme*, an international environmental education project for schools. Education Team: Brandon Marsh Nature Centre, Brandon Lane, Coventry, CV3 3GW. Tel. 02476 302912 or email: enquiries@wkw.org.uk

British Trust for Conservation Volunteers BTCV. Tel 01926 4430574 or email: L.Hawker@btcv.org.uk

The Mammal Society. Tel. 0208 498 5262 or email: enquiries@mtuk.org.uk

Royal Society for the Protection of Birds: The Lodge, Sandy, Bedfordshire SG19 2DL
Tel: 01767 680551 Website: www.rspb.org.uk

Warwickshire County Council - Eco Schools Officer: Tel.01926 418065

Warwickshire County Council [Dept. of Environment & Economy] *Developing School Grounds*:
Two videos (1998 and 2000)

Buglife (2004) *Information on the habitat-management requirements of key invertebrates*.
CD-Rom £34.99 from Beverley Doyle by email at: beverley.doyle@buglife.org.uk

English Nature – '*Nature for Schools*' lesson plans linked to National Curriculum and ideas for environmental activities. Tel. 01733 455000 or email: enquiries@naturalengland.org.uk.
Web site: www.naturalengland.org.uk/science/nature_for_schools

Flora Locale – the Knowledge Zone: www.floralocale.org

CONTACT

biodiversity@wkw.org.uk

Based on the full action plan which can be seen on our website: www.warwickshire.gov.uk/biodiversity



2.3 WOODLAND HABITATS

Associated Species Action Plans

- Wood White Butterfly
- Argent & Sable Moth
- Great Crested Newt
- Bats
- Leaf-rolling Weevil
- Red Wood Ant
- Common Dormouse
- Black Poplar
- Song Thrush
- Rare Bumblebees

Associated Habitat Action Plans

- Scrub & Carr
- Wood Pasture, Old Parkland & Veteran Trees
- Traditional Orchards
- Woodlands

There four woodlands habitat action plans which look at habitats dominated by trees at various stages of growth, the youngest being scrub and carr. Scrub represents the intermediate stages between grassland and dry woodlands and carr is the intermediate stage between wetland and wet woodland. These are valuable habitats supporting a unique assemblage of species. Good examples of scrub occur at Claybrookes Marsh and Ufton Fields and carr at Brandon Marsh, Alvecote Pools and Kingsbury Water Park.

Some of the oldest trees are the centuries old veteran trees of wood pasture and parkland. Important concentrations of these can be found locally at places like Stoneleigh Deer Park and Packington Park which feature oak trees of up to 9m around their girth and perhaps as much as 800 years old. Trees of such age are very rare in NW Europe, making them an internationally important resource, as well as one of great historical significance. These veteran trees also provide important micro-habitats for many rare species of insect (especially beetles and flies), fungi, plus nesting sites for scarce birds such as lesser-spotted woodpecker. Managing veteran trees and wood pasture is challenging and long-term planning to ensure new veterans replace those that eventually die.

Traditional orchards of standard fruit trees planted at low densities, with the grassland beneath the trees grazed by stock, share many of the characteristics that make wood-pasture & parkland so valuable for biodiversity. Because fruit trees are short-lived compared to species such as oak and ash, they are relatively quickly attractive to species of wood-decay habitats including beetles such as the noble chafer, moths like the red-belted clearwing and birds such as the lesser-spotted woodpecker. Old orchard trees are also important hosts for mistletoe and lichens, their blossom provides valuable nectar for insects and the fruits themselves food for birds such as wintering thrushes. The old varieties of apples, plums and other fruits themselves, some peculiar to the Warwickshire area, make an important contribution to biodiversity as this encompasses genetic diversity.

Modern, intensively managed commercial orchards, with their high densities of small, bush-type trees, by contrast are of much more limited wildlife interest.

Many traditional orchards have been lost from Warwickshire, as elsewhere, victims of neglect and deliberate removal for development or more productive agricultural uses. Despite this, important sites survive, especially in Stratford-on-Avon District, and in recent years there has been a welcome trend towards restoration and replanting using traditional local varieties, much of it encouraged by Countryside Stewardship and more recently Environmental Stewardship schemes.

The woodlands action plan covers ancient, semi-natural and coniferous woodland. Although only amounting to 5% of the area, 11175ha (Habitat Biodiversity Audit 2001), woodland forms one of the most important habitats supporting biodiversity target species. Larger woodlands tend to be the best for wildlife, especially where they contain a range of features such as rides, clearings, ponds, dead wood and a diverse woodland edge and lie adjacent to habitats such as flower-rich grasslands, scrub, and wetlands. Woods containing conifers can also be wildlife rich where they contain such features and some, including Weston & Waverly, Oversley, Brandon, Monks Park and Hay Woods, remain very important with some exceptionally rare species. Woodlands are widespread but fragmented throughout the area. With notable concentrations of ancient woodlands around Princethorpe, on the western side of Stratford-upon-Avon District and in North Warwickshire. The eastern parts of the county are particularly sparsely wooded. The extent of wet woodland is not accurately known, in part because this habitat often forms a part of larger woodland areas.

The loss of woodland has been substantially reduced in recent years and lack of appropriate management is now a greater threat than habitat destruction. The cessation of coppicing in the 19th and 20th centuries resulted in substantial losses of woodland biodiversity, as they became densely shaded. This was compounded in the 20th century by many woods being converted to conifer plantation or cleared for agriculture. There are now moves to reintroduce coppicing, and to convert some conifer plantations back to broadleaved woodland. The creation of new woodland is also helping to reverse recent trends.

New woodland offers an opportunity to extend existing woodlands, create connections between the remaining woods and could help to restore populations of certain woodland animals. New woodlands can provide shelter to adjacent habitats, and help develop habitat mosaics that increase the biodiversity of a site, providing that planting does not damage existing valuable habitats.



2.3.1 TRADITIONAL ORCHARDS

INTRODUCTION

Orchards are collections of cultivated fruit trees such as apples, pears, plums; nut-bearing shrubs such as walnuts, almonds and hazelnuts can also be present in some sites. Warwickshire is not as rich in traditional orchards as its neighbouring counties of Gloucestershire and Worcestershire but it retains a valuable resource of this habitat, especially within Stratford-on-Avon District.

There are distinct differences between modern commercial orchards and non-commercial "traditional" orchards. The former are generally managed intensively and are made up of younger trees that have a relatively short productive life, perhaps only 20-25 years. They are usually of more limited wildlife interest and may be subject to heavy pesticide usage. Traditional orchards may have originally been commercial orchards but are now no longer managed intensively. Others are small orchards originally planted to produce fruit for local consumption or for the production of cider and perry (pear wine). They are usually dominated by older, less intensively managed 'standard' trees (branches springing above the reach of grazing animals) planted at relatively lower densities, which allows livestock grazing beneath the orchard canopy.



© FWAG

Traditional orchards can have significant ecological value. The spring blossom is vital for insects such as bees, butterflies and hoverflies and can vastly increase the carrying capacity of a landscape for these (which can benefit the pollination of other habitats and crops and boost beneficial insect predators of pests such as aphids). The flower buds, leaf buds and fruit can be important for birds such as bullfinch, and winter thrushes such as fieldfare and redwing. Older trees can support holes suitable for nesting birds and may even attract the nesting of lesser-spotted woodpeckers. The dead wood (e.g. heart rot) or mature wood of older trees can be important for 'saproxylic' invertebrates such as the red-belted clearwing moth *Synanthredon myopaeformis* (rare in our area, (Joy, 2001)) and the noble chafer *Gnorimus nobilis* (not currently known from our area but recorded from nearby parts of Worcestershire), though the insect fauna is poorly recorded in our area. A diverse fungus flora can also be associated with old or dead trees. The foliage is important for insectivorous birds, also phytophagous insects such as the scarce pinion-spotted pug *Eupithecia insigniata*. Traditional orchards are also an important local habitat for mistletoe, which supports a number of scarce insects. The underlying grassland can be relatively unimproved and species-rich where fertilizer usage has not been heavy.

Traditional orchards are also important reservoirs of genetic diversity in supporting locally distinctive varieties of fruit which are increasingly rare. Local examples include the Wyken Pippin apple and Warwickshire Drooper Plum.

2.	OUR OBJECTIVES & TARGETS	Target
A.	To identify all ecologically important orchards, and their ownership (including freehold or leasehold status)	by 2007
B.	To ensure all ecologically important orchards are protected by appropriate designations (e.g. SINC or SSSIs or LNRs)	by 2009
C.	To maintain and enhance the extent and quality of ecologically and horticulturally (rare varieties) important orchards	by 2010
D.	To restore 15ha of old orchard	by 2010

Warwickshire, Coventry and Solihull Local Biodiversity Action Plan

- E. To create 10ha of new standard orchards of locally traditional fruit varieties on land of low existing conservation value by 2010**
- F. To promote the importance of traditional orchards for wildlife, promote good conservation management practice and share knowledge ongoing**

ASSOCIATED ACTION PLANS	KEY FACTORS AFFECTING THE HABITAT
<ul style="list-style-type: none"> ▪ Lowland Grassland (all types) ▪ Wood Pasture, Old Parkland & Veteran Trees ▪ Song Thrush ▪ Bats 	<ul style="list-style-type: none"> ▪ Insensitive management ▪ Destruction for “agricultural improvement” ▪ Development ▪ Neglect or loss through natural processes ▪ Isolation of sites

WHAT YOU CAN DO

- Find out what varieties of fruit are in your parish orchards and pass the information to the Shakespeare Trust
- Offer to help the Warwickshire Museum to survey orchards
- If you have old fruit trees, look for the endangered Noble Chafer Beetle which only develops as a larva in decaying trees (see PTES below)
- Get involved with, or start, a plan for your parish that will promote the value of your orchards
- Find out from FWAG about orchard management and make it available to landowners
- Alert landowners to the Environmental Stewardship Higher Level Scheme options for orchards
- Monitor planning applications and contact the FWAG (see below) if a nearby orchard is threatened
- Create a new orchard using locally native species

USEFUL INFORMATION

People’s Trust for Endangered Species (PTES) – *Summer 2006 - Noble Chafer Beetle Survey* - wants to hear from people who have old orchard trees and/or any records of this elusive beetle.

Tel. 0207 498 4533 or email: laura@ptes.org for identification postcard with colour photo of the beetle.

Common Ground - champions community orchards - Gold Hill House, 21 High Street, Shaftesbury, Dorset SP7 8JE

. Tel. 01747 850820 or e-mail: info@commonground.org.uk

National Orchard Forum - champions traditional orchards. Contact :

- *Staffordshire Orchards Initiative* - Mike Deegan at the Staffordshire Wildlife Trust, The Wolseley Centre, Wolseley Bridge, Stafford ST17 0WT
- *Worcester Orchard Workers* - Wade Muggleton at The Countryside Centre, Wildwood Drive, Worcester WR5 2LG. Tel: 01905 766493

Latimer, J. (2005) *Orchards. Through the Eyes of an Artist*. Langford Press, Peterborough.

Garden Organic, Ryton, Warks. (formerly known as HDRA) - dedicated to researching and promoting organic gardening, farming and food. Tel. 02476 303517 or email: enquiry@gardenorganic.org.uk

Farming and Wildlife Advisory Group (FWAG) - information on the new Environmental Stewardship agri-environment scheme. Tel.01926 318280 or email: warwickshire@fwag.org.uk

CONTACT

biodiversity@wkw.org.uk



2.3.2 WOODLANDS

INTRODUCTION

Definition: Woodland is sometimes used to mean a forest, but more commonly an area where tree canopy or shrubs coverage is at least 25% of the total land area. (www.ecohealth.org)

Woodland is one of the most important habitat categories in the sub-region, supporting many species and a variety of benefits such as landscape, public amenity and timber production. The multi-functional value of woodlands has been increasingly acknowledged nationally and in recent years reflected regionally by the West Midlands Regional Forestry Framework (FC,2004) and the RFF Delivery Plan (FC,2005). The sub - region has relatively low woodland cover in England terms, circa.11175ha - 5% of land area (Habitat Biodiversity Audit, 1996-2002), although a mosaic of small woodlands and mature hedgerow trees gives the impression of a woodland environment.



Bunsons Wood © S Falk

The Ancient Woodland Inventories for Warwickshire and West Midlands identify woodland sites of greater than 2ha that are considered to be of an ancient origin (pre-dating 1600). A few sites, characterised by the presence of small-leaved lime and sessile oak, may be especially old. Indeed, Piles Coppice, to the east of Coventry, is considered by some researchers to be a remnant of Wildwood that formed 8000 years ago. There are many smaller woodlands which have the characteristics of Ancient Woodland that are currently unrecorded as such. From the Warwickshire Inventory about 4236ha of the woodland are listed. Of this, 2439ha are classified as ancient semi-natural woodland (ASNW), our most biologically important woodland resource. The remaining 1797ha of ancient origin woodlands are recorded as plantation on ancient woodland sites (PAWS). Many of the larger PAWS sites were converted wholly or in part to conifer plantations in the twentieth century. These areas tend to retain features of the original semi-natural woodland and remain of high biodiversity value. Data from the West Midlands (Coventry& Solihull) Ancient Woodland Inventory have not been included.

The remaining woodland area (grown since 1600) is either plantation, grown mainly for timber production or is secondary semi natural woodland and scrub. Plantation woodlands are generally linked with the estate-lands parts of the Warwickshire sub- region, where as the secondary semi-natural woodlands are associated with post-industrial sites (gravel and sand extraction, etc.) and poorer quality land not cultivated for agriculture. More recently there has been significant creation of new woodland by individual landowners as part of farm diversification, game shooting, shelter and screening and by organisations such as the Woodland Trust looking at social inclusion opportunities and core habitat areas. Principally these are broad-leaved or mixed woodlands and generally are of small landscape scale (less than 10ha).

The best woodlands for biodiversity tend to be larger ones on long standing sites (AWS) with a varied and diverse structure. An abundance of different internal habitats such as standing and fallen deadwood, wide rides, clearings or open space, water, 'soft' woodland margins or scrub and field headlands are key components and can be supported by woodland management operations such as coppicing or thinning.

For **OBJECTIVES & TARGETS** see the full action plan on the website

ASSOCIATED ACTION PLANS	KEY FACTORS AFFECTING THE HABITAT
<ul style="list-style-type: none">▪ Wood-Pasture, Old Parkland & Veteran Trees▪ Scrub & Carr▪ Orchards▪ Hedgerows▪ Dormouse▪ Bats▪ Great Crested Newt▪ Wood White Butterfly▪ Argent & Sable Moth▪ Black Poplar▪ Song Thrush▪ Farmland Birds▪ Leaf-rolling Weevil	<ul style="list-style-type: none">▪ Fragmentation of habitat▪ Neglect or cessation of coppicing▪ Unsympathetic management of woodland margins▪ A lack of mature and over mature trees▪ Health and safety concerns▪ Increasing deer population▪ Damage by grey squirrels▪ Coniferisation▪ Recreational and development pressure▪ Woodland creation▪ Organisations and individuals

WHAT YOU CAN DO

- **Ask permission to survey woodlands for wildlife, eg. plants, invertebrates, fungi, etc.**
- **Discuss with landowners places where planting new woodland could create connections between existing woodland**
- **Always undertake a habitat survey before planting woodland to ensure other important habitats such as rare grassland, is not inadvertently destroyed**
- **Find out where native trees and/or local seed can be obtained and use these in any parish planting scheme**
- **Investigate increasing the accessibility of local woodlands to the public to promote their importance as a diverse habitat**
- **Encourage and help site managers to erect wildlife interpretation boards to promote local woodland sites**
- **Make information on the sustainable management of woodlands and markets for produce available to landowners**
- **Be aware of development proposals that could affect ancient woodland**
- **Volunteer at Warwickshire Wildlife Trust woodland nature reserves and learn new skills and meet people**

USEFUL INFORMATION

RSPB – *Woodland Management for Birds – a guide to managing for declining woodland birds in Britain.*

WWF (2005) *Deadwood – Living Forests. The importance of veteran trees and dead wood for biodiversity.*

English Nature (2005) *Development of good practice guidelines for woodland management for bats .* Report no. 661, available from 01733 455100 or email: enquiries@naturalengland.org.uk

Olsen, Lars-Henrik (2006) *Small Woodland Creatures.* OUP

Tudge,C (2006) *The Secret Life of Trees – how they live and why they matter.*

Flora Locale – the Knowledge Zone: www.floralocale.org

CONTACT

Forestry Commission, Block B, Government Buildings, Whittington Road, Worcester, WR5 2FR.
Tel. 015 362730.

Eddie Asbery, Woodland Project Officer, email: eddie.asbery@wkw.org.uk or tel. 02476 308984
at Warwickshire Wildlife Trust



2.4 WETLAND HABITATS

Associated Species Action Plans

- Water Vole
- Snipe
- Bittern
- Otter
- White-Clawed Crayfish
- Great-Crested Newt
- Black Poplar
- Bats
- Lapwing
- Farmland Birds
- Rare Bumblebees

Associated Habitat Action Plans

- Rivers & Streams
- Canals
- Fen & Swamp
- Scrub & Carr
- Ponds, Lakes & Reservoirs
- Reedbeds
- Woodlands

As a land-locked area, the water-bodies of Warwickshire, Coventry and Solihull are vitally important for wildlife.

Natural wetlands are few but include river-side marshland, poorly-drained valley bottoms and seepage areas of hillsides.

Fortunately, the industrial nature of the area has led to the creation of many new wetlands and water bodies. We have an extensive canal system, although now used for pleasure rather than cargo transport. Canal banks and backwaters can support valuable swamp. Quarrying of gravel, particularly along the Tame and Avon Valleys, has produced some huge and complex wetland systems at places like Kingsbury Water Park and Brandon Marsh, and smaller wetlands and water bodies exist in some of our hard rock quarries e.g. Newbold Quarry, Bishops Bowl and Ufton Fields. Large reservoirs exist at Draycote and Shustoke and are important bird watching sites.

The wetland action plans cover both open water, and the habitats that exist in wet conditions such as reedbeds and fen & swamp. Wet woodland is covered in the Woodlands section of the Local Biodiversity Action Plan.

Many rare plants and animals are completely dependant on wetland and water features and some have very specific requirements, e.g. bitterns which require large reedbeds and certain insects that need limestone springs.

The main issues affecting wetland biodiversity include water pollution from diffuse sources, such as run-off from agricultural and urban areas, drainage for development and other land use and increasing water-abstraction for domestic use.

Based on the full action plan which can be seen on our website : www.warwickshire.gov.uk/biodiversity



2.4.1 PONDS, LAKES & RESERVOIRS

INTRODUCTION

Local 'standing water bodies' (as opposed to flowing 'water courses') come in a great variety of sizes and configurations and include small ponds and pools, larger lakes and more artificial reservoirs. Most have a man-made origin either as ornamental features (e.g. Coombe Pool), for water storage (e.g. reservoirs at Draycote and Shustoke), as a supply of water for stock (many field Ponds), as flood defence features (e.g. balancing pools at places like Claybrookes Marsh) or as the flooded bottoms of worked-out gravel pits and quarries. Some of the best ones (e.g. Alvecote Pools, Wyken Slough and Stoke Floods) have also developed accidentally following subsidence of land overlying coal mines.



© Warwickshire Wildlife Trust

Most local water bodies are classified as 'eutrophic' because they are relatively nutrient rich (especially in phosphorus and nitrates – see UKBAP for technical definition) with a tendency for large populations of algae to form in mid-summer which often makes the water green. This also leads to the formation of dark, anaerobic mud on their beds and a tendency to silt up quite quickly. This enrichment can result from farm run-off, road run-off and other sources of enriched water flowing into a water body (including the tap water you put in your garden pond!), also polluted rain water. At low levels, such pollution may not affect the ecological diversity (mildly eutrophic water bodies are typically very diverse), but at higher levels it results in acute 'eutrophication' creating stagnant water bodies of much lower diversity, with a tendency to produce toxic blue-green algal blooms in hot summers and sometimes characterised by death of aquatic vegetation and surrounding shrubs.

The water body itself, where not too polluted can support a large array of fully aquatic and emergent plants, including 'macrophytes' like water lilies, pondweeds, reeds, and reed-maces plus microscopic algae. Animals using the water body include fish, a wide range of waterfowl (e.g. ducks, swans, grebes, gallinules), herons, herptiles (frogs, newts, grass snake), many types of insect (notably dragonflies, midges, water beetles) and other invertebrates such as water snails, leeches and crustaceans (e.g. crayfish and smaller isopods). Some of these can require very specific parts of a water body or other specific conditions related to water depth, water quality, water body size, water level fluctuations (summer draw-down can benefit many species), plant abundances, the presence/absence of fish or other predators and low levels of disturbance.

The margins of water bodies are very important, and sometimes the most diverse part of a water body. At the best examples, they are characterised by broad fringes of varied emergent and other marginal vegetation (including carr) and plentiful exposed wet mud. Many species of invertebrate have their larval stage located here, and many wetland birds nest in the cover of lake edges, both at ground level (e.g. wildfowl) or higher up (e.g. warblers and herons).

This action plan covers natural and man-made still waters such as non-garden ponds, lakes, reservoirs and restored gravel pits and overlaps with a number of other habitat action plans that cover wetland habitats. A few local water bodies may not be eutrophic e.g. Coleshill Pool.

2. OUR OBJECTIVES & TARGETS

Target

- | | | |
|----|--|----------------|
| A. | Retain and enhance the existing value of water bodies above 0.1ha by appropriate management | by 2010 |
|----|--|----------------|

- | | | |
|-----------|---|-----------------|
| B. | Promote the retention, creation and enhancement of buffer zones and sympathetic land use around water bodies | by 2006 |
| C. | Create 10ha of new open water, targeting particularly areas that link existing wetland habitats | by 2010 |
| D. | Raise awareness of the value and importance of water bodies through environmental education, advice and interpretation | on going |

ASSOCIATED ACTION PLANS	KEY FACTORS AFFECTING THE HABITAT
<ul style="list-style-type: none"> ▪ Rivers & Streams ▪ Canals ▪ Quarries & Gravel Pits ▪ Water Vole ▪ White-clawed Crayfish ▪ Great Crested Newt ▪ Otter 	<ul style="list-style-type: none"> ▪ Enrichment caused by nitrates or phosphates ▪ Other pollution ▪ Lowering of water levels ▪ Desiccation ▪ Urbanisation and in-filling ▪ Poor management of recreational activities ▪ Changes in surrounding land-use ▪ Stocking with certain fish ▪ Excessive bird levels

WHAT YOU CAN DO

- **Encourage people to dig a garden pond with a slope at one edge and no fish - BUT CARE WITH CHILDREN! – get a strong frame made to cover the pond**
- **Persuade your school to make a pond with boggy area and use it for studies – AGAIN, SAFETY IS IMPORTANT, especially for Primary Schools**
- **Join WART and offer to help with pond surveying**
- **Ask permission to survey your parish green and field ponds for the Parish Pond survey (see PCT below) and send amphibian records to WART**
- **Find out about pond management for wildlife and offer to manage any ponds which are great crested newt breeding sites**
- **Encourage landowners with ponds and riparian land to consider Environmental Stewardship as a way of creating and enhancing wetland features**
- **Encourage and help site managers to erect wildlife interpretation boards**
- **Ensure that planning applications for commercial water development (fishing/sporting) consider opportunities for environmental gain**

USEFUL INFORMATION

Warwickshire Amphibian & Reptile Team (WART) Tel. 02476 506416 or email: janclemmons@wartsoc.co.uk

Pond Conservation Trust - Parish Pond Survey Recorders Pack from Pond Conservation, BMS, Oxford Brookes University, Gipsy Lane, Headington, Oxford, OX3 0BP. Tel. 01865 483249 or email: ajweatherby@brookes.ac.uk

Royal Society for the Protection of Birds (RSPB) - *Ponds for Wildlife* - leaflet from tel. 01967 680551

English Nature (2005) *Garden ponds and boggy areas: havens for wildlife.*

Booklet free from tel. 01733 455101 or email: enquiries@naturalengland.org.uk

Flora Locale – the Knowledge Zone: www.floralocale.org

CONTACT

Ruth Moffatt, Warwickshire LBAP Co-ordinator, Warwickshire Field Services, The Butts, WARWICK CV34 4SS. Tel. 01926 412197, email: ruthmoffatt@warwickshire.gov.uk

Based on the full action plan which can be seen on our website : www.warwickshire.gov.uk/biodiversity



2.4.2 RIVERS & STREAMS

INTRODUCTION

The sub-region straddles two major water catchments of middle England. These are the Avon Catchment which takes water from the south and east of the sub-region into the River Severn and Bristol Channel via the Avon and its tributaries (e.g. the Sowe, Leam, Dene, Stour, Alne and Arrow), and the Tame Catchment which takes water from the north-west of the county (as well as much of the W. Midlands) into the Trent, Humber and North Sea via the Tame and its tributaries (e.g. the Blythe, Cole and Anker). A tiny part of the Thames Catchment also lies within the extreme southern tip lies of Warwickshire. There are over 2000 km of rivers and streams in this sub-region of varying ecological character and quality. That diversity relates both to the watercourses themselves and to their immediate surroundings, referred to as river corridors.



River Leam © Steven Falk

Few truly natural watercourses now exist in the sub-region as nearly all rivers and most streams have been severely modified by resectioning, straightening or deepening. This was mainly carried out to allow land drainage for agricultural intensification during the period 1945 to 1990. In addition some schemes were carried out to alleviate flooding or to allow pleasure boats to use rivers and there has been a major increase in riverside development. In most cases in-stream habitat diversity has been virtually eliminated.

Ecologically the best watercourses are those that exhibit the natural channel features typical of lowland watercourses. These include a variety of flow patterns (riffles, runs, glides, pools and marginal deadwater), a variety of channel features (side bars, point bars, silt deposits and islands) and meanders and associated erosion/deposition features. These and the natural variation of bankside habitats create a large range of niches upon which a huge range of species depend.

Water quality in urban rivers in the area has improved immensely in recent decades but diffuse pollution remains a serious problem in many rivers. Although some riparian wildlife is relatively pollution tolerant, e.g. fennel pondweed and blanket-weed, other species such as trout and plants like river water crowfoot cannot survive where pollution levels are high. One indication of the general improvement in water quality is that otters are making a slow return following the banning of harmful pesticides that once contaminated their food, and helped by a reduction in persecution.

Watercourses are among the most important wildlife corridors within the intensively farmed local landscapes and within many urban areas. They also contribute much to local landscape character, both through place-names like 'Stratford-upon-Avon' and their physical presence in many local villages, towns and beauty spots.

OUR OBJECTIVES & TARGETS

TARGET

- | | | |
|----|---|----------------|
| A. | To identify the most important stretches of water course for wildlife and ensure they become protected through the designation process | ongoing |
| B. | To ensure that the quality of water courses and their corridors does not undergo further deterioration and to mitigate/compensate for necessary loss | ongoing |

Warwickshire, Coventry and Solihull Local Biodiversity Action Plan

- | | | |
|-----------|---|----------------|
| C. | To enhance the extent and quality of water courses with priority given to those holding UK Biodiversity Action Plan Priority Species & Red Data Book species | by 2009 |
| D. | To identify sites suitable for river restoration and endeavour to carry out at least two schemes | by 2008 |
| E. | To promote good management practice and to share knowledge | ongoing |
| F. | To raise public awareness of the importance of rivers and streams | ongoing |

ASSOCIATED ACTION PLANS	KEY FACTORS AFFECTING THE HABITAT
<ul style="list-style-type: none"> ▪ Ponds, Lakes & Reservoirs ▪ Reedbeds ▪ Fen and swamp ▪ Quarries and Gravel Pits ▪ Canals ▪ Snipe ▪ Great Crested Newt ▪ Water Vole ▪ Bats ▪ Otter ▪ White-clawed Crayfish 	<ul style="list-style-type: none"> ▪ Pollution ▪ Excessive water abstraction causing low flows ▪ Land drainage and flood defence works ▪ Inappropriate bank management ▪ Introduction of invasive plant and animal species ▪ Development within the floodplain ▪ Changes in agricultural land use ▪ Recreation ▪ Lack of information

WHAT YOU CAN DO

- **Carry out a survey – ASK PERMISSION FIRST! - and tell landowners of any special interests in their area**
- **Ask the Warwickshire Museum if surveys are required of particular groups of organisms**
- **Volunteer for the Warwickshire Wildlife Trust at one of its river catchment nature reserves along the rivers Swift, Arrow and Leam**
- **Alert landowners to the Environmental Stewardship Scheme (see below)**
- **Monitor local planning applications and comment on any plans which may affect watercourses**
- **Increase awareness amongst parishioners of the importance of and threats to local rivers and streams, and encourage conservation activities**
- **Where parish council land abuts a river or stream, include a buffer zone to enhance the habitat along the banks**

USEFUL INFORMATION

Farming & Wildlife Advisory Group - information on the new Environmental Stewardship agri-environment scheme. Tel.01926 318280 or email: warwickshire@fwag.org.uk

Warwickshire Museum Field Services, The Butts, Warwick CV34 4SS. 01926 418060

Environment Agency (see below)

Warwickshire Wildlife Trust. Tel. 02476 302912 or email: enquiries@wkw.org.uk

CONTACT

Emma Broad, Biodiversity Officer (Upper Trent):- Sentinel House, 9 Wellington Crescent, Fradley Park, Staffordshire. WS13 8RR emma1.broad@environment-agency.gov.uk

Giles Matthews, Biodiversity Officer (Lower Severn):- Riversmeet House, Newtown Industrial Estate, Northway Lane, Tewkesbury, Gloucestershire, GL20 8JG giles.matthews@environment-agency.gov.uk

Based on the full action plan which can be seen on our website : www.warwickshire.gov.uk/biodiversity

3.0

SPECIES ACTION PLANS (SAPs) OF MOST RELEVANCE TO PARISH COUNCILS, PARISH PLAN GROUPS AND WOMEN'S INSTITUTES

When the Local Biodiversity Action plan was planned in 2002, the selection of species for SAPs was based on the following criteria:

- *Listed in UK Steering Group report* (as internationally or nationally threatened)
- *Keystone species* for which management action will benefit in a number of associated species.
- Of *cultural value* or locally characteristic, including species which are familiar to local people.
- Species which are locally/nationally *scarce or declining*, especially if the species "should" be more widespread locally.
- *Specific action* needed over and above general habitat conservation.
- *In rapid decline locally*.

Out of the total of 26 SAPs in the full Local Biodiversity Action Plan, the following 8 action plans have been selected for inclusion here:

- 3.1 Barn owl
- 3.2 Bats
- 3.3 Black poplar
- 3.4 Farmland birds
- 3.5 Great crested newt
- 3.6 Rare bumblebees
- 3.7 Scarce arable plants
- 3.8 Song thrush

The full Local Biodiversity Action Plan with copies all 50 individual action plans can be viewed on the website:

www.warwickshire.gov.uk/biodiversity

*There is also a **bibliography web page** and another page giving the **web sites of all the organisations** cited in the plans.*



3.1 BARN OWL

Tyto alba

INTRODUCTION

The ghostly white form of a barn owl searching hedgerows, ditches and rough, grassy fields for small mammals was once a familiar sight in Warwickshire. As agriculture intensified, however, many such habitats disappeared and the barn owl vanished with them. The barn owl's widespread decline has been attributed primarily to this change in the landscape, with pesticides and road mortality as further negative factors.



© Steven Falk

Development, especially the conversion of barns into residential property, has also contributed to the barn owl's decline by reducing the number of sheltered nest sites within buildings, especially old hay barns.

The food supply and feeding habitats of the barn owl are crucial to its success. It relies heavily on small mammals (e.g. voles and shrews) for much of its food and these are most abundant in open areas of rough grassland, or fields with wide, rough grassy margins. The barn owl also requires fence posts, dense hedgerows or hedgerow trees for perches. Being a specialist small mammal feeder, its presence is a good indication that the area is also a rich habitat for a range of small mammals and other animals.

Eggs are laid from March or early April and the clutch size is normally four to seven, but may be larger when food is especially abundant. Currently single-brooded in the UK, but two broods are possible in years of plentiful food. Juvenile mortality is always quite high, with 80% surviving less than one year. Requires several roost sites, as the male roosts away from the female during the breeding season, while the female herself may roost away from the nest site once the young are about a month old. Barn owls reuse their nests in successive years.

OUR OBJECTIVES & TARGETS

	Target
A. To restore the breeding range to its 1972 range	2020
B. To restore the breeding population to 100 pairs (with medium-term objective of 60 pairs by 2010)	2020
C. Increase the area of suitable barn owl habitat to 5000ha (with medium-term aim of 3000ha by 2010)	2020

ASSOCIATED ACTION PLANS

- Grasslands(all types)
- Field Margins
- Hedgerows
- Rivers & Streams
- Built Environment
- Bats

KEY FACTORS AFFECTING THE SPECIES

- Loss and fragmentation of rough grassland
- Loss of nest and roost sites
- Possible poisoning by rodenticides
- Road mortality
- Changing climate
- Disappearance of stack yards and straw-bedding

WHAT YOU CAN DO

- **Encourage people to look out for barn owls and report sightings to the Warwickshire Biological Record Centre**
- **Report any sightings on Warwickshire Wildlife Trust reserves to WWT so that nest boxes can be erected**
- **Let landowners know if they have a barn owl on their property**
- **Interest landowners in barn owls so that they may protect and re-establish rough grassland**
- **Persuade landowners to link up areas of rough grassland to create corridors for hunting**
- **Alert landowners to the damaging effects of fragmentation of rough grassland**
- **Monitor local planning applications and comment on any plans which may affect barn owls**
- **Find out about nest box schemes and persuade landowners to get involved in them**

USEFUL INFORMATION

Warwickshire Wildlife Trust (WWT) Tel. 02476 302912 or email: enquiries@wkw.org.uk

Barn Owl Trust: Waterleat, Ashburton, Devon. Tel. 01364 653026
Email: info@barnowltrust.org.uk. Website: www.barnowltrust.org.uk

Royal Society for the Protection of Birds: The Lodge, Sandy, Bedfordshire SG19 2DL
Tel: 01767 680551 Website: www.rspb.org.uk

WBRC, Warwickshire Museum Field Services, The Butts, Warwick CV34 4SS. Tel. 01926418060

CONTACT

Graham Harrison, 'Bryher', Hatton Green, Hatton, Warwick. CV35 7LA.

Frank Lucas, Conservation Manager, RSPB Central England, 46 The Green, South Bar, Banbury, Oxfordshire, OX16 9AB. Tel: 01295 6764



3.2 BATS

INTRODUCTION

Sixteen species are currently known in Britain and over half of these have been recorded in the sub-region. Each species has its own ecological niche, but they share certain basic features and requirements: insect-rich feeding habitat; summer roosting sites and winter hibernation sites.

Bats forage where insects are most abundant: woodlands (especially broad-leaved), over ponds, lakes and slow flowing water, meadows and along the margins between these habitats.

Bats are generally most abundant where these habitats are unpolluted (there is some evidence that Daubenton's bat hunts in greater abundance below sewage discharge points) and managed to maximise general species richness. Some species are aerial hawkers (eg. pipistrelle species), some glean their food from vegetation (eg. brown long-eared) and others take most of their food on the ground (eg. lesser horseshoe). There is good evidence that the smaller species rely on linear landscape features, such as hedgerows, to commute from their roost sites to foraging areas.



Whiskered bat © Paul Elliott

From spring to late autumn bats are active. During this time they occupy summer roosts. A summer roost may be home to a small number of males, or, especially during June to August, quite large maternity colonies composing mostly of females and their single pups. A maternity colony may consist of several hundred females and their young. Summer roosts are usually found in tree holes or buildings. Bats make use of all sorts of human structures, including houses, churches, farm buildings and bridges.

During the winter months insects are in short supply and bats enter hibernation. During this time they need a site that is safe from predators, with a high humidity, at a low temperature (ideally 4°C.) but frost-free. Such sites are often underground (eg. caves, mines, grottoes) but hibernating bats are also found in wall cavities or substantial tree hollows.

Although bats represent a significant portion of the British mammal fauna they are under-recorded; what data exists indicates that the populations of most species have suffered severe declines in the post-war decades. Some bat species will happily live in urban and suburban areas of the sub-region, feeding in gardens and parks. Others are associated areas of woodland and other semi-natural habitats and are therefore more likely to be found in areas such as Local Nature Reserves. The Daubenton's bat, for example, feeds almost exclusively over water and so is associated with lakes, ponds, rivers, reservoirs and canals. The lesser horseshoe bat needs a roost site with an entrance large enough to fly through and easy access to broad-leaved woodland.

The following species have been identified in the subregion: common pipistrelle, soprano pipistrelle, brown long-eared, noctule, Daubenton's, whiskered, Brandt's, Natterer's, Leisler's, serotine, lesser horseshoe and barbastelle. Bechstein's and Nathusius's pipistrelle may also be present.

OUR OBJECTIVES & TARGETS

	Target
A. Maintain and enhance, and where possible restore the available / important feeding habitats	ongoing
B. Maintain and increase opportunities for roosting (particularly in buildings, trees and underground sites) as maternity roosts, hibernation roosts and as roosts for other purposes	ongoing
C. Ensure adequate landscape elements to provide flight lines between roosts and foraging sites: hedgerow protection	ongoing
D. Establish a sub-regional programme to monitor populations at key sites to supplement data from the National Bat Monitoring Programme	2006

ASSOCIATED ACTION PLANS	KEY FACTORS AFFECTING THE SPECIES
<ul style="list-style-type: none"> ▪ All the habitats covered by habitat action plans are relevant to bats 	<ul style="list-style-type: none"> ▪ Loss of summer roosts ▪ Loss of hibernation sites ▪ Loss of, and degradation of, habitats for feeding ▪ Loss of linear landscape features, in particular, hedgerow removal ▪ Use of timber treatment pesticides

WHAT YOU CAN DO
<ul style="list-style-type: none"> ▪ Encourage people to record bats and report to the Warwickshire Biological Records Centre ▪ Help householders to accept and appreciate existing roosts ▪ Check your parish trees for roosts, particularly by water ▪ Persuade landowners of the importance of roosting and hibernation sites and feeding areas for bats ▪ Monitor local planning applications and comment on any plans which may affect bats ▪ Find out about bat box schemes and persuade farmers to get involved in them ▪ Join the local bat group and train to help in its work ▪ Volunteer with the WWT, surveying and monitoring programme on the reserves

USEFUL INFORMATION

WBRC, Warwickshire Museum Field Services, The Butts, Warwick CV34 4SS. 01926 418060
 Warwickshire Wildlife Trust. Tel. 02476 302912 or email: enquiries@wkw.org.uk
 Warwickshire Bat Group c/o Paul Elliott, p.elliott@warwick.ac.uk
 English Nature (2005) *Development of good practice guidelines for woodland management for bats*.
 Report no. 661, available from 01733 455100 or email: enquiries@naturalengland.org.uk.
 Website: www.naturalengland.org.uk

CONTACT

Paul Elliott (University of Warwick), email: p.elliott@warwick.ac.uk. Website: www.warksbats.co.uk



3.3 BLACK POPLAR

Populus nigra betulifolia

INTRODUCTION

The black poplar (*Populus nigra*) is Britain's rarest native timber tree and the native race *betulifolia* is special to Great Britain and N.W. Europe, though other forms of *P. nigra* extend across southern Europe and across middle Asia. Fully-grown trees are often highly majestic with massive down-arched, side branches and very rough bark that often bears bosses. Constable often featured them in his paintings. The densely clumped, upturned twigs and leaning trunk are another good clue to this species and it never supports mistletoe (unlike hybrid poplars).



© Warwickshire Museum

Natural populations grow in river and flood plains but they have been widely planted elsewhere for timber and landscaping, and good specimens can be seen at Coombe Countryside Park and at the Moathouse Car Park in Stratford-upon-Avon. Most trees are males, but females can be distinguished by green catkins followed by fluffy seeds. Almost all the specimens in Warwickshire, Coventry and Solihull have been deliberately planted, but some of the oldest ones may be part of the genetic stock of those which once naturally occurred here.

OUR OBJECTIVES & TARGETS

	Target
A. To maintain a complete directory of black poplars in the sub-region and to safeguard them	review biannually
B. To identify gaps along river valleys and encourage new plantings there	2010
C. To raise local awareness of the rarity, location and appropriate management of black poplars in the sub-region	ongoing
D. To raise awareness of the black poplar, its life cycle and habitat requirements	ongoing

ASSOCIATED ACTION PLANS

- Rivers & Streams
- Parks & Public Open Spaces
- Gardens
- Roadside Verges
- Hedgerows

KEY FACTORS AFFECTING THE SPECIES

- Development pressures
- Safety considerations & insurance
- Cross-pollination from hybrids
- Planting of limited genetic variety
- Planting in unsuitable places
- Scarcity of female trees
- Hedgerow removal & garden management
- Lack of regeneration from rootstocks
- Lack of management of old pollards
- Poor quality tree surgery

WHAT YOU CAN DO

- **Take part in the CPRE / WWT hedgerow survey to identify black poplars in your parish and report back to the Warwickshire Museum Big Tree Hunt**
- **Talk to landowners with black poplars about the importance of promoting the longevity of the trees**
- **Monitor local planning applications and comment on any plans which may affect black poplars**
- **Seek the protection of black poplars where necessary through Hedgerow Regulations and Tree Protection Orders**
- **Encourage communication between black poplar owners and the Warwickshire Museum**
- **Persuade landowners to plant female trees close to males**

USEFUL INFORMATION

Warwickshire Wildlife Trust. Tel. 02476 302912 or email: enquiries@wkw.org.uk

Campaign for the Preservation of Rural England (CPRE), Hedgerow Survey Campaign and Training Days. Contact John Wharam on 01926 494597 or email: office@cprewarwickshire.org.uk

Warwickshire Museum - *The Big Tree Hunt* – an initiative to promote the appreciation of trees. To become involved contact Steven Falk on 01926 412481 or email: stevenfalk@warwickshire.gov.uk

CONTACT

Steven Falk, Senior Curator of Natural History, Warwick Museum, Market Hall, Market Place, Warwick CV34 4SA. Tel. 01926 412481 or email: stevenfalk@warwickshire.gov.uk



3.4 FARMLAND BIRDS

Grey Partridge, Skylark, Tree Sparrow & Corn Bunting

INTRODUCTION

A substantial number of our characteristic farmland birds have declined dramatically in range and number over recent decades. This action plan considers four that have shown particularly serious declines in the sub-region, namely the grey partridge, skylark, tree sparrow and corn bunting. Each species has its own unique ecological needs but the causes of their declines and the appropriate remedial actions, are sufficiently similar to warrant bringing them together under one action plan.



Corn Bunting © Steve Falk

Grey partridge

A species of open country, preferring low-intensity, mixed farmland, with small fields and hedges on grassy banks to provide nesting cover (Potts, 1986), the grey partridge also favours bare areas of dry soil for dust-bathing. It feeds on plant material and insects with the latter, especially sawfly larvae, being particularly important for the development of young chicks.

Skylark

A bird of open habitats such as pastures, arable fields and naturally regenerated grassland which is best known for its distinctive song-flight, the skylark nests on the ground, amongst crops or in grass, but prefers spring-sown cereals, young grass leys and rotational set-aside. Invertebrates form the bulk of the diet but outside the breeding season, cereal grain and weed seeds are important. As summer wanes, the birds often gather in large flocks to feed in stubble fields.

Tree sparrow

Generally found on lowland arable or mixed farms with scattered trees and mature hedgerows and occasionally round the edge of settlements, but unlike the other birds in this action plan it nests in holes, traditionally in old trees or farm buildings though occasionally it will nest in dense bushes. Tree sparrows feed amongst crops or farmyards and are particularly dependent on rotational set-aside, winter stubbles, root crops, wild bird cover, weeds in the crop margins or areas of spilt grain as a source of seeds. They are largely sedentary and faithful to one nest site, which means recolonisation is extremely slow and their population has historically been very variable, with numbers increasing and decreasing over short time periods for no clear reason. Chicks are fed on insects for the first two weeks of their life which come from a wide range of habitats, including hedges, crops and waterside vegetation.

Corn bunting

Corn buntings are found on open arable and mixed farmland, generally preferring treeless areas with fences, stone walls, bushes or overhead wires for song posts. They nest on the ground in cereal fields, set-aside, grass field margins or unimproved grassland. Nesting starts late, usually June or July, and pairs can still have flightless chicks in August. Adults feed mainly on seeds, especially cereal grain. They search for these in rotational set-aside, harvested root crops, winter stubbles, newly-sown crops, weeds in the crop margins, areas of spilt grain or places where cereals are fed to outdoor cattle. During the breeding season, they also take insects from crops, set-aside, grassland and field margins to feed to their chicks and breeding success relates directly to the availability of this insect food.

OUR OBJECTIVES & TARGETS	Target
A. To arrest the declines in grey partridge, skylark, tree sparrow and corn bunting	2008
B. To maintain the 2002 distribution and, where possible, extend the range and increase the density of grey partridge and skylark	2010
C. To expand the range of corn bunting and tree sparrow from that of 1996	2008

ASSOCIATED ACTION PLANS	KEY FACTORS AFFECTING THE SPECIES
<ul style="list-style-type: none"> ▪ Field Margins ▪ Hedgerows ▪ Lowland Neutral Grassland ▪ Lowland Calcareous Grassland ▪ Song Thrush ▪ Rare Bumblebees ▪ Scarce Arable Plants 	<ul style="list-style-type: none"> ▪ Loss of mixed and rotational farming ▪ Reduced crop diversity and structure ▪ Autumn sowing of crops ▪ Lack of winter stubbles and weed seeds ▪ Use of herbicides & summer insecticides ▪ High fertiliser applications on grassland ▪ High stocking rates ▪ Mowing during the nesting season ▪ Loss of landscape features ▪ Climatic factors such as dry summers

WHAT YOU CAN DO

- Report any sightings to the Warwickshire Biological Record Centre
- Participate in surveys of farmland birds through the West Midlands Bird Club
- Find out about nest box schemes for tree sparrows and encourage their use
- Ask landowners to consider the Environmental Stewardship Scheme as a way of helping improve habitat for farmland birds
- Ask walkers to keep to footpaths when crossing fields and avoid the conservation strips alongside field hedges, these are left as rough grass to help ground-nesting birds
- Likewise for dog walkers and keep dogs on leads when crossing farmland, especially from March to July to avoid them disturbing ground nesting birds and flightless young

USEFUL INFORMATION

WBRC, Warwickshire Museum Field Services, The Butts, Warwick CV34 4SS. Tel. 01926418060

Farming & Wildlife Advisory Group - information on the new Environmental Stewardship agri-environment scheme. Tel.01926 318280 or email:warwickshire@fwag.org.uk

RSPB Conservation Management Advice: *Farmland Bird Feeding Stations*. Leaflet can be ordered from Peter Smith, tel. 01234 211522 or email: peter.smith@rspb.org.uk

RSPB advice sheet on 'skylark plots' (small undrilled patches), available from Unit 17, St Martin's Business Centre, St Martin's Way, Bedford. Tel. 01234 211522 or email: st.orders@rspb.org.uk (ask for 'skylark plots').

Game Conservancy Trust: 'Restoring wild grey partridge to farms' - 5 free fact sheets. Also offers an on-farm advisory service. Tel. 01425 652381.

CONTACT

Graham Harrison, 'Bryher', Hatton Green, Hatton, Warwick CV35 7LA. (West Midlands Bird Club)



3.5 GREAT CRESTED NEWT

Triturus cristatus

INTRODUCTION

The great crested newt is the largest of our three newt species (up to 18cm long) and males in breeding condition have a well developed, jagged crest along the back which is indented at the base of the tail; this is more jagged and less continuously formed than in the commoner smooth newt. The skin is also much wartier than the smooth newt and often appears black. Most of the life cycle is spent on land, adults returning to their breeding sites, typically ponds (but occasionally canals and large water bodies) in early spring.



© English Nature

Eggs are laid singly on submergent leaves, which the female folds up around the eggs like a concertina. During the winter, adult and immature newts hibernate in frost-free areas such as well-drained soil, hedgerow bases and piles of rubble. This species prefers relatively large ponds (50-750m²) with a variety of aquatic plants. Closely-spaced ponds, or pond clusters (ponds within 500m of each other), supporting metapopulations can result in greater population viability in an area.

Populations require suitable terrestrial habitat adjacent to their breeding ponds and long-term survival in an area may depend on movement between neighbouring populations (or breeding ponds). Great crested newt dispersal abilities are limited, the maximum dispersal distance is estimated to be up to 1km. Rough grassland, tall herb, scrub and hedgerows around breeding ponds are very important, especially where these create patches or corridors of continuous habitat. They do not cope well in the built environment, intensively farmed countryside or areas subject to regular mowing. Tadpoles and very young newtlets are sensitive to fish predation and so ponds lacking fish or that are seasonally ephemeral (and therefore inhospitable to fish) can provide especially suitable breeding habitat. The great crested newt has not benefited from the creation of garden ponds and remains largely dependent on ponds associated with farmland and those created by quarrying activity.

OUR OBJECTIVES & TARGETS

	Target
A. Determine the distribution and status of the great crested newt within the county and designate known breeding sites as SINC as minimum	2010
B. Maintain the range, distribution and viability of existing great crested newt populations within the sub-region	ongoing
C. Restore 10 degraded sites within the sub-region	2010
D. Encourage new populations through the creation of new ponds/pond clusters and restoration of neglected ones wherever opportunities arise	ongoing
E. Maximise the quality of terrestrial habitats around breeding ponds through the use of agri-environment schemes and other mechanisms	ongoing
F. Raise awareness of the great crested newt, its life cycle and habitat requirements	ongoing

ASSOCIATED ACTION PLANS

- Ponds, Lakes & Reservoirs
- Quarries & Gravel Pits
- Parks & Public Open Spaces
- School Grounds
- Wood Pasture & Parkland
- Lowland Grassland (all types)
- White-clawed Crayfish
- Water Vole

KEY FACTORS AFFECTING THE SPECIES

- Infilling of ponds
- Changes in farming practice
- Water table reduction
- Introduction of fish
- Pond loss and deterioration through neglect
- Chemical pollution and nutrient enrichment
- Degradation, loss and fragmentation of terrestrial habitat
- Creation of new breeding ponds
- Ongoing pond management and the increasing use of funded pond plans
- Legal protection

WHAT YOU CAN DO

- **Join WART to find out more about great crested newts**
- **Train to be a volunteer surveyor with WART**
- **Survey your parish ponds to find if crested newts live in them and if they are breeding sites – ASK PERMISSION FIRST! – and you will need a licence so liaise with WART**
- **Report all records to the Warwickshire Biological Record Centre**
- **Encourage landowners with breeding sites to liaise with WART**
- **Do not introduce fish into ponds with known newt colonies**
- **Create piles of logs beside ponds to provides shelter for great crested newts**
- **Work with landowners to create new ponds close to existing great crested newt ponds**
- **Persuade landowners to help newts spread to new sites by creating or restoring habitat between and around ponds**
- **Monitor local planning applications and comment on any plans which may affect great crested newt breeding sites**

USEFUL INFORMATION

WBRC, Warwickshire Museum Field Services, The Butts, Warwick CV34 4SS. Tel. 01926 418060

Warwickshire Amphibian and Reptile Team (WART) Tel. 02476 506416

Herpetological Conservation Trust , 655A Christchurch Road, Boscombe, Bournemouth, Dorset BH1 4AP.
Tel. 01202 391319. Website: www.herpconstrust.org.uk

Great Crested Newt Conservation Officer, email: Dorothy.wright@herpconstrust.org.uk

English Nature - 'Great Crested Newts on Your Farm' – booklet available in pdf format from the EN Suffolk Team. Tel. 01733 455000 or email: enquiries@naturalengland.org.uk

CONTACT

Jan Clemons. Email: janclemons@wartsoc.co.uk



3.6 RARE BUMBLEBEES

Bombus humilis and *B. ruderatus*

1. INTRODUCTION

This action plan focuses on two of the sub-region's rarest surviving bumblebees, the brown banded carder bee (*Bombus humilis*) and the large garden bumblebee (*Bombus ruderatus*). Both species have shown severe national declines and are therefore national BAP species. Warwickshire, like many other parts of central Britain, once supported fifteen species of bumblebee, and most of these were widespread here if not actually common. Today only six species remain common.



B.ruderatus © Warwickshire Museum

Bombus humilis (the brown-banded carder bee) closely resembles the chestnut-coloured common carder bee (*B. pascuorum*) but queens emerge later (typically May). It nests at the base of long vegetation such as coarse grasses. *Bombus ruderatus* (the large garden bumblebee – but not a garden species!) has huge and distinctive queens, but workers are difficult to distinguish from the common small garden bumblebee (*B. hortorum*) and like *B. humilis*, it emerges relatively late. In both species, worker production seems to be timed to take advantage of the mid-summer flowering peak of plants with particularly deep corollas such as birds-foot trefoils, kidney vetch, clovers and labiates. Queens of *B. ruderatus* also favour white dead nettle and late spring shrub blossom (e.g. late willow and crab apple). Males of both species favour thistles and knapweeds. These bumblebees seem to require very large flower-rich sites or landscapes that provide much flower-rich habitat (especially in coastal districts).

Other scarce bumblebees still present in Warwickshire are *B. ruderarius* (the red-shanked carder bee) which has requirement similar to the above two, and *B. jonellus* (the heath bumblebee), which has been recorded at some acidic sites in the north. The extinct species here are *B.distinguendus*, *B.muscorum*, *B.soroensis*, *B.subterraneus* and *B.sylvarum*. *B. subterraneus* is believed to have become extinct in Britain as a whole in the late 1900's.

2. OUR OBJECTIVES & TARGETS

	Target
A. To maintain up-to-date listings of sites scarcer bumblebees in the sub-region	ongoing
B. To conserve known populations of Warwickshire's scarcer bumblebees	ongoing
C. To expand scarce bumblebee populations, doubling number of sites	by 2010
D. To raise awareness of rare bumblebees, their life cycles and habitat requirements	ongoing

ASSOCIATED ACTION PLANS

- Lowland Neutral Grassland
- Quarries & Gravel Pits
- Field Margins
- Disused Industrial & Railway Land
- Small Blue
- Dingy Skipper
- Cuckoo Bee
- Chalk Carpet
- Dotted Bee-fly

KEY FACTORS AFFECTING THE SPECIES

- The threat of development
- Continuing loss of flower-rich, semi-improved grasslands
- Scrub encroachment
- Land-filling or unsympathetic landscaping
- Excessive disturbance of sites
- The lack of formal designation

WHAT YOU CAN DO

- **Encourage the conservation of flower-rich habitats in and around your parish, including any unimproved meadows, flowery roadside verges, field margins and the banks of water courses**
- **Plant and encourage native flowers in your garden, especially those known to benefit scarcer bumblebees such as comfrey, ground ivy, spear thistle, birds-foot trefoils, white dead-nettle, and other members of the pea and mint families, e.g. broom and selfheal**
- **Record bumblebees in your garden and the rest of the parish and send records to the Keeper of Natural History at Warwickshire Museum who is a national bumblebee expert (see Field Guide below for identification, which is not easy)**

USEFUL INFORMATION

The Farmed Environment Company Buzz Project about the value of creating wildlife habitats on farmland.
Low Road, Sweffling, Saxmundham, IP17 2BU. Tel.01728664149
or email: rgooch@farmedenvironment.co.uk . Website : www.farmedenvironment.co.uk

National Bumblebee Nest Survey, Rothamsted Research, Harpenden, Herts. AL5 2QJ. Tel: 01582 763 133

Edwards, M. & Jenner, M. (2005) *Field Guide to the Bumblebees of Great Britain & Ireland*. Countryside & Garden Conservation Series. Ocelli Ltd.

Benton, T. (2006) *Bumblebees*. New Naturalist Series. Collins.

Feltwell, J. (2006) *Bumblebees*. Booklet about attracting bumblebees to the garden. Wildlife Matters, Henley's Down, Battle, E.Sussex

Bumblebee Conservation Trust: www.bumblebeeconservationtrust.org.uk

CONTACT

Steven Falk, Senior Curator of Natural History, Warwick Museum, Market Hall, Market Place, Warwick CV34 4SA. Tel. 01926 412481 or email: stevenfalk@warwickshire.gov.uk



3.7 SCARCE ARABLE PLANTS

INTRODUCTION

Arable plants have shown the greatest decline of any group of British plants over the past 25 years (Price, 2005). This is an inevitable process, as farming practices and the climate change (Lockton, 2004). This action plan discusses methods to preserve the scarcest of these plants and increase their diversity, while recognising that a balance needs to be kept between agricultural productivity and the potential harm caused by competitive plants. We need also to remember that arable plants do not only grow in arable fields but are to be found in small-holdings, on roadsides, in waste-places, allotments, parks and gardens.



© Warwickshire Museum

Many of our arable plants became extinct or declined when farming and horticulture became more intensive in the middle of the last century. The sub-region still has a moderately diverse range of these plants, comparing very favourably with other British counties in a survey of arable plant distribution in 1986/7 (English Nature).

Many arable plants have an impact on agricultural and horticultural operations mainly by their competitive growth. Perennial plants (couch grass, horsetails, creeping thistle etc.) compete particularly by their persistent root systems and are hard to eradicate by cultivation which often distributes them further. Annual plants compete especially during the germination of crops when their speed of growth and great numbers stifle the crop seedlings. Seed production of these wild plants can be prodigious and seeds may persist in the soil for many years ("One year's seeds are seven years' plants"). Their presence in a harvested crop can reduce the amount of money the farmer receives for grain and even small amounts can give the mills the 'excuse' for paying a reduced rate.

Nevertheless, the presence of a wide range of arable plants encourages a diverse population of associated mammals, birds and invertebrates. This diversity will have economic benefits, such as an increase in game birds, an increase in the natural predators of crop-destroying insects and an increase in plant pollinators. Without this mixed population of plants and animals, a monoculture of an agricultural crop may be more vulnerable to pest damage and disease.

Many of these familiar plants were once a food source for humans (e.g. corn spurrey, nettles), animal feed (e.g. fat hen, chickweed), remedies and folk medicine (e.g. feverfew, yarrow) and might become so used again. For many of those living in the countryside, as well as those who visit it, its beauty was enhanced by the flowers of the arable fields such as poppies, mayweed, and pimpernel.

OUR OBJECTIVES & TARGETS

	Target
A. To survey and record changes in the populations and distribution of scarce arable plants within the LBAP region	2008
B. To manage and secure existing sites with scarce arable plants	2010

- | | | |
|-----------|---|----------------|
| C. | To increase the number of sites with scarce arable plants by 10% of the 2008 baseline figure | 2010 |
| D. | To raise awareness of and promote practices that value a diverse arable flora | ongoing |

<p style="text-align: center;">ASSOCIATED ACTION PLANS</p> <ul style="list-style-type: none"> ▪ Hedgerows ▪ Lowland Grasslands (all types) ▪ Field Margins ▪ Farmland Birds 	<p style="text-align: center;">KEY FACTORS AFFECTING THE SPECIES</p> <ul style="list-style-type: none"> ▪ The availability of agri-environment schemes ▪ Intensive management associated with cereal production ▪ The use of commercially available 'wildflower mixes ▪ Set-a-side and herbicides
--	--

<p>WHAT YOU CAN DO</p> <ul style="list-style-type: none"> ▪ Report any records to the Warwickshire Biological Record Centre ▪ Participate in the BSBI survey of scarce arable plants – ASK PERMISSION FIRST! ▪ Ask landowners to consider the Environmental Stewardship Scheme options that can pay them to protect and encourage rare arable plants. ▪ If you identify any rare arable plants advise the landowner ▪ Monitor local planning applications and comment on any plans which may affect any species-rich grassland and/or filed margins ▪ Many plants require rough/low fertility ground and to encourage them it may be necessary to temper the desire for an ultra-tidy village
--

USEFUL INFORMATION

WBRC, Warwickshire Museum Field Services, The Butts, Warwick CV34 4SS. Tel: 01926 418060

Botanical Society of the British Isles BSBI : James Partridge, Tel: 01926 427452
or email: jmpart@yahoo.co.uk

Plantlife, The Wild-Plant Conservation Charity, 14 Rolleston Street, Salisbury, Wiltshire, SP1 1DX
Tel: 01722 342730 or email: enquiries@plantlife.org.uk

Flora Locale: 'Planting for Biodiversity – Local Seeds for Local Needs'. Denford Manor, Hungerford, Berkshire RG7 0UN. Tel: 01488 680 457 or email: info@floralocale.org

Farming & Wildlife Advisory Group - information on the new Environmental Stewardship agri-environment scheme. Tel: 01926 318280 or email: warwickshire@fwag.org.uk

CONTACT

Steven Falk, Senior Curator of Natural History, Warwick Museum, Market Hall, Market Place, Warwick CV34 4SA. Tel: 01926 412481 or email: stevenfalk@warwickshire.gov.uk



3.8 SONG THRUSH

Turdus philomelos

INTRODUCTION

The song thrush is one of our better known song birds, occurring in woodlands, hedgerows with abundant trees, parks and gardens throughout the sub-region. The song, which usually involves the repetition of phrases three times, gives a good indication of breeding densities and allows easy distinction from the rather similar mistle thrush. It is a partial migrant, with some UK birds moving further south in Europe for the winter, while many Continental birds winter in Britain.



© Chris Hastie

Earthworms and snails are important components of its diet. The song thrush is a good indicator of gardens that support abundant wildlife and now have a relatively large proportion of their populations in urban and suburban areas.

OUR OBJECTIVES & TARGETS

	Target
A. To see the breeding range restored to its 1988-91 extent	2004
B. To see the breeding population restored to its estimated 1990 level	2007
C. To raise awareness of the song thrush and threats to the species	2008

ASSOCIATED ACTION PLANS

- Field Margins
- Woodlands
- Gardens
- Scrub & Carr
- Parks & Public Open Spaces
- Traditional Orchards
- Farmland Birds

KEY FACTORS AFFECTING THE SPECIES

- lack of food supply (especially earthworms)
- lack of available nest sites
- climate change
- unfavourable weather conditions
- fewer damp woods with developed shrub layers and wet ditches
- predation by cats, sparrow hawks and corvids

WHAT YOU CAN DO

- **Initiate a survey for recording and monitoring song thrushes for use in homes and schools**
- **Report your results to the West Midlands Bird Club and Warwickshire Biological Record Centre**
- **Find out about alternatives to slug pellets and encourage gardeners and allotment holders to use them**
- **Get your local authority to discontinue the use of slug pellets in public open places**
- **Encourage the use of mulch, and leave areas of fallen leaves through the winter as they harbour slugs and invertebrates on which thrushes feed**
- **Ask cat owners to keep their pets in at night, and don't let them out until 1 hour after sunrise as this is the prime time for birds feeding and young leaving the nest**

USEFUL INFORMATION

WBRC, Warwickshire Museum Field Services, The Butts, Warwick CV34 4SS. Tel. 01926418060

'Garden Organic' (Henry Doubleday Research Association - (HDRA) , Ryton Organic Gardens, Coventry, Warwickshire, CV8 3LG. Tel: 024 76 303517 or email: enquiry@hdra.org.uk

West Midlands Bird Club. Tel. 01527 852357 or email: secretary@westmidlandbirdclub.com.
Website: www.westmidlandbirdclub.com

Farming & Wildlife Advisory Group - information on the new Environmental Stewardship agri-environment scheme. Tel.01926 318280 or email: warwickshire@fwag.org.uk

CONTACT

Graham Harrison, 'Bryher', Hatton Green, Hatton, Warwick CV35 7LA.

4.0

CASE STUDIES OF LOCAL ACTION

- 4.1** Tree Planting on Parish Land
- 4.2** Management of a Churchyard for Wildlife
- 4.3** Implementing a Parish Plan
- 4.4** Starting a Wildlife Gardening Group
- 4.5** Construction of a School Pond
- 4.6** Restoring a Village Pond
- 4.7** Regeneration of a Local Conservation Area
- 4.8** Conservation on a Family Farm
- 4.9** Creation of a New Woodland
- 4.10** Warwickshire Hedgerow Survey



4.1 Tree Planting on Parish Land

INTRODUCTION – during National Tree Week (November) Stratford on Avon District Council gave the parish councils an opportunity to receive free trees for planting on parish, highway or private land providing it could be seen from public spaces.

HOW YOU WENT ABOUT IT

- Local residents applied for trees which Stratford on Avon District Council were offering as part of National Tree Week through the Tree Warden Scheme.
- 100 whips were planted on unused allotment land along the Stratford Road in Hampton Lucy. Whips included Ash, Oak, Wild Cherry, Hazel and Blackthorn among others.
- Stratford on Avon District Council's ground maintenance contractor delivered the trees to the village. Then five local residents spent three hours planting the trees.
- One former resident of Hampton Lucy aged 92 read about the spinney in the parish magazine and wanted to be taken out of his sheltered home in Wellesbourne to go and see it.
- In total Stratford on Avon District Council provided over 250 trees for Tree Wardens and the parishes to plant during autumn/winter 2005.
- There are currently around 50 Stratford District Tree wardens who are volunteers from the community who take part in tree plantings, talks and provide surveys of local trees.

WHAT THE BENEFITS TO BIODIVERSITY WERE

- 11 varieties of tree were planted
- The original land use was unused allotments, which are now being rented by the village (at £1 per year) to be used as a community open space and contained long grass and scrub
- The spinney will mature into a haven for tree-dwelling wildlife

THE COST was about £100

ADVICE – Whips (<1m) cost very little at around £1 each and give the opportunity of improving spaces by creating new future woodlands. With support of the local authority, environmental organisations or through individual efforts the money can be found to plant trees.



4.2 The Management of a Churchyard for Wildlife



INTRODUCTION – the aim of the project was to implement a management plan that would ensure long-term survival of a magnificent sward of species-rich grassland and the resident population of slow worms.

HOW YOU WENT ABOUT IT

- The project was initiated by incumbent in 1993 and continued thereafter by churchwardens and parishioners, the Warwickshire Museum and Warwickshire Wildlife Trust.
- As church warden it was easier to motivate them, by explaining the rarity and fragility of this old historic grass sward unaffected by modern farming methods, backed by statistics of a 97% loss of species-rich grassland since 1950s.
- In 1998 a successful grant application to Rural Action paid for a full survey and management plan by the Ecology Unit at Warwickshire Museum Field Services.
- The implementation of the plan is ongoing but the initiation and acceptance in the parish took a couple of years.
- Information boards were put up to stop passers-by thinking the churchyard is neglected. Label individual points of interest such as an anthill or a rare plant at the site and have a map showing management plan.

WHAT YOU ACHIEVED

- Long term survival of sward and designation of the site as a SINC (Site of Importance for Nature Conservation in Warwickshire)
- Acceptance and recognition of the importance of the project from parishioners
- An increase in visitors to the site as a result of publicity

WHAT THE BENEFITS TO BIODIVERSITY WERE

- Appropriate management has enabled the spread of wildflowers over the site
- There has been a significant increase in the invertebrate population - butterflies, bees and grasshoppers - all benefiting from an increase in nectar from native wildflowers and caterpillar larval food plants.
- An annual hay cut enabled a local farmer to spread the cuttings onto his own paddock in 2004 to increase the biodiversity there. supported by DEFRA under their agri-environment schemes.

THE COST - A grant of approximately £600 in 1998 paid for the survey and management plan. All subsequent management work was carried out voluntarily with support from local parishioners.

ADVICE

- Contact Warwickshire Museum Field Services (01926 418060) to find out if your churchyard was surveyed in 1984/85 during the big county churchyard survey. If not, find a botanist to look at your churchyard in the spring/summer. It is important to know the botany before you implement a management plan.
- Keep the locals informed of what's happening. It is not only courteous but it is an opportunity to explain the rarity and fragility of this kind of diminishing habitat and allows them to take an interest and a pride in preserving it. Explain what you're doing through notices at the churchyard and in the parish and Diocesan Magazines and send information to the Warwickshire Wildlife Trust and local papers.

Contacts for further information:

Caring for God's Acre, 6, West Street, Leominster HR6 8ES, 01548 611154 or email: info@cfga.fsnet.co.uk
Mrs Jane O'Dell, Warwickshire Museum Field Services, 01926 418060 or email: janeodell@warwickshire.co.uk



4.3 Implementing a Parish Plan

IMPLEMENTING AN ACTION IN THE PARISH PLAN

The end product is that the children help stimulate interest within the village in the natural environment, produce their own leaflet and then go on to create a wildlife area within or close to the school grounds.

WHO WAS INVOLVED

- a group had a meeting with the Head Teacher of Ilmington CE Primary School followed by subsequent meetings at private houses.
- it is hoped that the Women's Institute will become involved too.

WHAT THE SCHOOL DID

- Each if the children has adopted a Village Friend (over 60) and we have engaged the community by inviting interested people in to talk to one class about the history and geography of the area. They brought a selection of pictures. They then accompanied the children on a walk around the village. The children are now producing leaflets detailing the history of the village and an 'Apple Walk' which they intend to sell in the village shop so that visitors can enjoy the area.
- As an Eco school we are keen to encourage wildlife. We have a bird box with a camera and monitor in class which the children find fascinating. We are exploring other ways to create a wildlife area within the grounds. Our front grounds had to have 3 large chestnut trees cut down and we are looking for ways in which we could improve the area that is left.

WHAT OTHER ACTIONS WE HAVE ACHIEVED

- we now have a monthly walking group
- a website has been set up via the County Council: www.stratford.gov.uk/community/community-839.cfm
- a second dry stone wall course is about to commence, reinstating old walls along a village footpath with villagers taking part.
- the Women's Institute is hosting a visit from another Institute to show them all the ancient orchard sites within the village

Contact for further information:

The Head Teacher, Ilmington CE Primary School, lack Street, Ilmington, Warwickshire CV36 4LJ.
Email: Sally.naish@btinternet.com



4.4 Starting a Wildlife Gardening Group



INTRODUCTION – Warwickshire Wildlife Trust initiated a 'Wildlife Gardening Group' in late 2005 to consolidate increasing interest among members and volunteers of the Trust and the public.

HOW YOU WENT ABOUT IT

- A press release was issued, inviting members of the public to attend an initial meeting at Brandon Marsh where ideas could be shared and links made with staff. A fledgling group was formed from respondents to share ideas, enthusiasm and encourage others to 'promote the concept' of wildlife gardening.
- The group has organised two events - 'wonderful wildflower sales' in April and June 2006, timed with the aim of providing gardeners with spring and summer flowering plants respectively.
- Some plants (plugs) were purchased from a commercial supplier (Wiggly Wigglers) but the majority were grown very successfully from seed in glasshouses by a volunteer, who is involved with a horticultural charity who stands to benefit substantially from future events of a similar nature
- Some 9 volunteers from around Coventry were involved in the sales, with roles including growing plants from seed, talking to the public on the day, producing information sheets and potting up dozens of teasels growing in and around Brandon Marsh!
- Warwickshire Wildlife Trust will in future purchase all the plants sold at its Wildlife Gardening Events from this charity, ensuring that different organisations in the sector support each other's work in novel and imaginative ways as well as benefiting local wildlife.

WHAT YOU ACHIEVED

- A large number of visitors in the Trust courtyard which was spectacular with display boards and tables of seedlings and plants.
- A high level of communication with the public in addition to the sale of many plants.

WHAT THE BENEFITS TO BIODIVERSITY WERE

- The sale of specimens of native species (teasels, cornflowers, tansy etc) or non -indigenous plants that are of benefit to wildlife (buddleia, tobacco plants, soapwort etc).

THE COST - the first sale covered the cost of the plants and the second made a healthy donation to the work of Warwickshire Wildlife Trust.

FURTHER INFORMATION

- Warwickshire Wildlife Trust are keen to maintain this enthusiasm with wildflower events in 2007. Please see the events leaflet for forthcoming events – amongst them another 'Wonderful Wildflowers' sale scheduled for May 6th, 2007
- Contact: Eddie Asbery, Wildlife Gardening Co-ordinator, Warwickshire Wildlife Trust, Tel.02476 308984 or email eddie.asbery@wkwtr.org.uk



4.5 Construction of a School Pond

INTRODUCTION – the aim of this project was to create a school pond within the conservation area of the school grounds.

HOW YOU WENT ABOUT IT

- *who was involved?* School, Friends of, parents, children and WWT
- *how did you motivate them?* They were already motivated but I supervised, brought a cake and a parent brought bacon butties.
- *what did you do?* I designed the pond, costed the materials, and project-managed the whole project
- *how long did it take?* The winter, but in practice 6 Saturdays
- *any other information?* The project has been very successful and has been well received by both the village and school

WHAT YOU ACHIEVED

- Creation of a pond
- Improved green space for school outdoor study
- School ownership
- Improved biodiversity

WHAT THE BENEFITS TO BIODIVERSITY WERE

Common newts, lots of them not seen before and all came in the first year, plus silver back beetle.

THE COST was £1,500 for the construction of a dipping platform, gravel path to and from the pond, pond liner and some aquatic plants. All labour was free from the local village community.

ADVICE – *what would you say to other people embarking on the same or similar project?*

- Do build it into the schools ethos, schools development plan and lesson planning
- Get a friends group to manage it with support from an after school club
- Try not to let contractors in as most have no idea how to manage for the benefit of wildlife.

Contact for further information:

Phil Dickin, Director of People & Wildlife, Warwickshire Wildlife Trust.
Tel. 02476 308975 or email: phil.dickin@wkw.org.uk



4.6 Restoring a Village Pond



INTRODUCTION – the aim of this project was to restore a village pond as part of the village improvements at Bourton-on-Dunsmore.

HOW YOU WENT ABOUT IT

- *who was involved?* The Parish Council
- *how did you motivate them?* They were already motivated
- *what did you do?* Advice and consultation, also organised some tree felling around the area
- *how long did it take?* 6 days
- *any other information?* The project is ongoing with the puddling, filling and edge planting still needing to be done. They have not lined it yet and are going to leave it for a year to see what happens to the water level as there was a lot of clay on site which they have used; not sure if it will work as it's on a sand and gravel strata. Also two field drains enter the pond so the water is high in nitrates so it may be a difficult pond to get balanced once its planted up.

WHAT YOU ACHIEVED

- Restoration of a village pond
- Improved green space for the local community
- Community ownership

WHAT THE BENEFITS TO BIODIVERSITY WERE

The former pond was a summer scrape with little biodiversity and had old car batteries dumped into the hole. Open water close to trees will benefit insect and birds.

THE COST is ongoing but in the region of £3,000 for the initial consultation, removal of trees by a contractor, clay puddling, path construction and profiling with a JCB.

ADVICE – *what would you say to other people embarking on the same or similar project?*

Do it!

Contact for further information:

Phil Dickin, Director of People & Wildlife, Warwickshire Wildlife Trust. Tel. 02476 308975
or email: phil.dickin@wkw.org.uk



4.7 Regeneration of a Local Conservation Area



INTRODUCTION – a conservation area so named to commemorate the founder of the Willoughby Charity – Margaret Hayward c1437, together with the house which once stood on this site, Willoughby Lodge c1794-1951. The site was originally landscaped and planted in 1988. The aim of our project was to re-establish this site owned by the Parish Council as a wildlife friendly environment and via several projects, improve wildlife safety whilst engendering an interest in wildlife in the children of Willoughby.

HOW YOU WENT ABOUT IT

- Members of The Willoughby Society Committee established this as one of their projects meeting one of the Society's Constitution objectives
- Gained advice from Warwickshire Wildlife Trust (WWT)
- Publicised our intention within the Society and drew up a timetable and rough project plan
- Held events to raise money *e.g. Strawberry Teas, plant sales etc* emphasising that monies were being raised for this village venture
- Enlisted the help of experts for work beyond the team's resources
- Ensured everyone knew that any help is important and useful
- Accepted that this project is indefinitely ongoing

WHAT YOU ACHIEVED - SO FAR

- Layering of existing hedge and purchase and planting of new hedge plants to make the vulnerable perimeter more secure
- Cutting back of overgrown vegetation to re-establish small pathways for access
- Following WWT advice, coppicing of some trees to open up the canopy for others and the erection of an insect pile with wood coppiced
- Purchase and planting of new native trees
- Cutting back and raking off of meadow
- Construction of bird and insect boxes for children to adopt, observe and report back, including a promotional day for interested families to visit the site with advice and help from Daventry Park Rangers (*planned for late 2006*)

WHAT THE BENEFITS TO BIODIVERSITY WERE

- Safer environment
- Potential of new hedgerow and trees offering food and shelter for birds and animals
- Opportunity for struggling trees to flourish
- Encouragement of insects to shelter and increase
- Offer children of the village the opportunity to learn about (local) natural history

THE COST – so far £490

ADVICE – Don't try to run. Develop a group to encourage ideas and capability. Establish ways to fund your ideas and try to foster interest from willing hands. Draw on the knowledge of local people and publicise progress. Encourage children of the locality to learn about its natural history in the hope of sparking interest for years to come. Establish and publicise working dates in advance and agree the next plan of action at each. Lastly, provide refreshments for the workers allowing the rest time set aside for the opportunity to chat... it works wonders!



4.8 Conservation on a medium-sized Family Farm



INTRODUCTION – *the aim of your project was to. . . .*

Maintain habitat for wildlife while maximising the business potential of a 900 acre arable farm

HOW YOU WENT ABOUT IT

- *who was involved?* Farmer and son
- *how did you motivate them?* A passion for wildlife
- *what did you do?* Every time a habitat was removed (e.g. hedge, field improvement) a habitat was created on a less productive part of the farm (e.g. tree planting, scrapes, ponds)
- *how long did it take?* A 40-year project and still ongoing- a way of life

WHAT YOU ACHIEVED

- A variety of habitats for birds insects mammals and riparian/aquatic wildlife
- Blocks of habitat linked by a network of hedgerows and field margins
- A national award for farmland conservation

WHAT THE BENEFITS TO BIODIVERSITY WERE

- The variety of ponds and wetland encourage many species of insects, waders, also nesting lapwing and warblers.
- Planting bird and game crops provide over-winter food and cover for many resident and migratory birds, showing that a small well managed shoot can have great benefits for biodiversity

THE COST Unable to start to estimate, but until last year all environmental works were funded purely from own pocket, only possible if the farm is profitable!

ADVICE – *what would you say to other people embarking on the same or similar project?*

- Look at the whole farm, assess the environmental impact of every farming operation and look at ways of mitigating any negative factors.
- Get advice from an organisation experienced in farm conservation such as FWAG who are able to help you plan and install environmental features that will be effective, and work alongside your commercial farming operations.



4.9 Creation of a New Woodland



© G.Bullen

INTRODUCTION – the aim of my project is for wildlife habitat, to give something back to Nature, to conserve ecologically and to pass it down the family generations.

HOW YOU WENT ABOUT IT

- *who was involved?* Mostly myself in the planning and planting and ongoing maintenance. The actual tree planting was helped by friends and family. On the last year of planting it was opened to BTCV and other contacts who heard by word of mouth, so that included groups like LETS and Friends of the Earth.
- *how did you motivate them?* Myself: an inner drive for a task I had always wanted to achieve. Others: their own enthusiasm for the sheer joy of doing something so worthwhile. I did not have to motivate them at all!
- *what did you do?* 1. Bought some fields and scabbled round to raise the money. 2. Spent hours and hours in research, asking questions, applying for a grant from Forestry Commission. 3. Planning it on paper, ordering trees and equipment. 4. Asking if anyone is interested in helping to plant. I do hope you can see this because it's off my screen! 5. Planning Planting Days: a bonfire, food, drink, toilet, tents etc etc. 6. Asking Higher Authority for good weather (and we had it!!!) 7. Going with the Flow of the energy of the project and everything was just about perfect. In fact on the final (3rd) Planting Day the Flow was so strong that a field double the size of the others was planted in the same time and with more ease than the other years!!!!

WHAT YOU ACHIEVED

- Three fields planted with trees
- A new woodland in a landscape where many trees have been lost in recent years
- A changing habitat for wildlife as it converts from open grassland to woodland
- Ongoing interest from friends and family

WHAT THE BENEFITS TO BIODIVERSITY ARE

- A different sort of habitat to the open fields of this area
- As few chemicals as possible, either pesticides or fertiliser
- Other habitats within the area e.g. nettles, long grass, ponds, scrapes
- Flower rich meadow and "wild" areas

THE COST

- The land purchase
- Tree planting (with grants)
- Ongoing maintenance varies year by year

ADVICE – *what would you say to other people embarking on the same or similar project?*

Go for it! Hugely rewarding. OK, it takes a huge amount of effort, time, money, is very tiring but the end results can be seen as the trees grow. That is priceless.

Contact for further information:

The website: www.gimswood.com has a section for email contact.



4.10 Warwickshire Hedgerow Survey

INTRODUCTION – The aim of the project is to raise awareness of the importance of hedgerows in the county and to train local people to carry out hedgerow surveys themselves.

HOW YOU WENT ABOUT IT

- The project is an ongoing scheme between the Campaign to Protect Rural England and Warwickshire Wildlife Trust.
- In 2006 training events were organised for local volunteers to provide them with a background into the role of hedgerows and their importance and training in carrying out a hedgerow survey.
- In 2007 we plan to provide more training for local volunteers as there are still many hedgerows to be surveyed.
- We have also been awarded a grant to extend this work to encourage wider access to the Countryside, especially to young people from urban backgrounds.

WHAT YOU ACHIEVED

- Completed survey results have contributed to the information held by the Warwickshire Museum in the Habitat Biodiversity Audit.
- Completed survey results have been fed into the Local Biodiversity Action Plan to achieve targets.

WHAT THE BENEFITS TO BIODIVERSITY WERE

- Increased awareness among the public of the importance of hedgerows as very significant wildlife habitats and their contribution to the landscape.
- The identification of ancient and species-rich hedgerow in Warwickshire.

ADVICE

We are still looking for volunteers so if you would like to get involved please contact us at Warwickshire Campaign to Protect Rural England (CPRE).

Tel. 01926 494597, or email office@cprewarwickshire.org.uk

5.0

HOW WE CAN HELP YOU TO GET STARTED

- 5.1 Resources available to parishes**
- 5.2 Possible sources of funding**
- 5.3 People who can help you**
- 5.4 Biodiversity Action Reporting System (BARS)**
- 5.5 Natural Environment & Rural Communities (NERC) Act 2006**



5.0 HOW WE CAN HELP YOU TO GET STARTED

5.1 Resources available to parishes

- **Habitat Biodiversity Audit** - Phase 1 Survey of Warwickshire, Coventry and Solihull which identifies land use and areas of importance for wildlife. Tel: 01926 412197
- **Warwickshire Biological Record Centre** - databases for ecosites and species distribution. Tel: 01926 418060
- **Assistance with preparing a Parish Plan** - contact Linda Ridgeley, Warwickshire Rural Community Council, on 02476 217345 or email: lindar@wrccrural.org.uk
- **Warwickshire Wildlife Trust** runs a variety of training courses to help with monitoring and surveying of local wildlife. The Trust also provides volunteers with training in practical habitat creation and management tasks. To find out more, telephone 02476 308998
- **Warwickshire Hedgerow Survey** - see Hedgerow Case Study

5.2 Possible sources of funding

- **Breathing Places** – www.bbc.co.uk/breathingplaces - 2nd funding strand of £4 million, launched with the BBC's AutumnWatch, to inspire people to create and care for green spaces where they live.
- **Natural England** – contact Phil Denham, External Funding Specialist, Innovation & Commercial Team, Natural England. Tel. 01392 889777 or email: phil.denham@naturalengland.org.uk
- Access the **Warwickshire County Council funding database** : www.warwickshire.gov.uk/grantnet or telephone Sarah Clay, External Funding Officer, Warwickshire County Council, on 01926 418027, for help with identifying the 'biodiversity hooks' when making an application.

5.3 People who can help you:

- **David Lowe**, Senior Ecologist, Warwickshire Museum Field Services. Tel. 01926 418060 or email: davidlowe@warwickshire.gov.uk
- **Helena Lidgate**, Countryside Officer, Nuneaton & Bedworth Borough Council. Tel. 02476 376052 or email: helena.lidgate@nuneatonandbedworth.gov.uk
- **Jodie Ball**, Planning Policy Assistant, North Warwickshire Borough Council. Tel. 01827 719499 or email: jodieball@northwarks.gov.uk
- **Chris Hastie**, Strategy Officer (Arboriculture), Warwick District Council. Tel. 01926 456219 or email: chris.hastie@warwickdc.gov.uk
- **Neil Collett**, Team Leader, Conservation & Design, Rugby Borough Council. Tel. 01788 533768 or email: neil.collett@rugby.gov.uk
- **Dave Gower**, Tree Officer / Biodiversity Officer, Rugby Borough Council. Tel. 01788 533634 or email: dave.gower@rugby.gov.uk
- **David Jones**, Planner in Planning Policy Team, Stratford-on-Avon District Council. Tel. 01789 260334 or email: david.jones@stratford-dc.gov.uk
- **Mike Murray**, Senior Planning Officer/Countryside Project Officer, Coventry City Council. Tel. 02476 831292 or email: mike.murray@coventry.gov.uk
- **Allison Crofts**, Ecologist, Solihull Metropolitan Borough Council. Tel. 0121 704 6589 or email: acrofts@solihull.gov.uk
- **Claire Cunniffe**, Community Manager, Warwickshire Wildlife Trust. Tel. 02476 550564 or email: claire.cunniffe@wkwat.org.uk

5.4 Biodiversity Action Recording System (BARS)

The **Biodiversity Action Recording System (BARS)** is a web-based information system developed in 2003 to support the planning, monitoring and reporting requirements of national and local Biodiversity Action Plans (BAPs).

BARS enables everyone involved in BAP implementation to **enter action plans** and **record progress** towards targets and actions. It also allows users to **assess what is and is not being achieved** at both UK and local levels and access information on species / habitat targets, status, trends, losses, and causes of decline both at national and local levels. Users are able to **generate a range of sophisticated reports** specific to their organisation or LBAP partnership.

Via the BARS website **members of the public** are able to search the BARS database for information about BAP implementation, for example to find out about **activities underway in their local area**. Security features ensure that confidential information (e.g. of the precise location of sites) is not available to unauthorised users or members of the public.

In July 2005, the Warwickshire, Coventry & Solihull LBAP partnership began to assist the co-ordinator in **reporting on the progress of the 742 actions** proposed in the 50 individual action plans to conserve our wildlife and countryside. Many of the partners attended training sessions to learn how to enter their own data into BARS while others chose to pass on the information they collected for entry by the co-ordinator.

By December 2005, those 28 action plans that are also UKBAPs (and therefore a priority) had been reported on, thus meeting the national deadline; reporting on the remaining 22 non-priority plans is nearly complete. Thanks to the efforts of the partnership in completing this massive task, it is now possible to see that **60 % of actions are reported as being 'completed' or 'underway'** (although not necessarily 'on schedule').

Reporting into BARS is, however, an ongoing process and people are encouraged to **inform the co-ordinator of their local conservation projects** so that the information may be added to our monitoring.

5.5 The Natural Environment & Rural Communities Act 2006

The new '**biodiversity duty**', in section 40 of the **NERC Act**, came into force in October 1st 2006. The Act now places a duty on all public bodies, including Parish Councils, to take consideration of biodiversity in all that they do. It may be viewed on www.opsi.gov.uk/acts/acts2006/ukpga_20060016_en.pdf

The purpose of this duty is to raise the profile of biodiversity and to clarify and consolidate the existing commitments of public bodies; also to help stimulate a culture change in all parts of the public sector which should lead to biodiversity issues becoming a more natural part of policy making.

This document has been designed to help public bodies fulfill their obligation to protect our natural environment. For any specific queries, advice, etc. please contact: biodiversity@wkw.org.uk



ACKNOWLEDGEMENTS

The Warwickshire, Coventry & Solihull Local Biodiversity Action Plan Partnership would like to thank the following organisations for their contributions towards the cost of this document:

**English Nature
Environment Agency
Forestry Commission
Roger Cadbury Charitable Trust
Solihull Metropolitan Borough Council
Warwickshire Amphibian & Reptile Team
Warwickshire County Council
Warwickshire Wildlife Trust
West Midlands Biodiversity Partnership**

