



## DRAFT REVISED PLAN SEPTEMBER 2015

# OLD PARKLAND & VETERAN TREES

### 1. INTRODUCTION

Old parkland and veteran trees are products of historic land management systems derived from medieval royal hunting forests, wooded commons, deer parks, pastures with trees and 16<sup>th</sup> to 18<sup>th</sup> century landscape schemes (e.g. of [Capability Brown](#)). This plan includes areas currently under agriculture, forestry or other land-uses which were formerly parkland but which still contain veteran trees of nature conservation interest. It includes individual veteran trees that might have originated in deer parks or parklands long gone, or have developed in church-yards or hedgerows. This is in response to the growing concern for Britain's important holding of old trees.



Charlecote Park © Steven Falk

The extent and richness of the UK parkland and wood-pasture habitats are outstanding in the northern European context. The habitat essentially consists of large or veteran trees of both native (e.g. English oak and common ash) and alien origin (e.g. sweet chestnut and Turkey oak) at various densities within semi-natural and amenity grassland, heathland or woodland. In some instances sites are still grazed by domestic stock and/or deer (e.g. [Charlecote Park](#)), though this has ceased at many sites to be replaced by amenity activity (e.g. golfing), tourism or arable agriculture. There are no reliable figures for the extent of the resource in Britain although a figure of between 10,000-20,000 hectares is currently being used as the 'best estimate' of the habitat in a 'working condition' where management is at a level that sustains the habitat's natural features (source: [UK Biodiversity Action Plan](#)). A much greater amount is thought to exist in an unmanaged condition or as trees within arable or improved pasture, or as managed trees within formal, ungrazed landscapes such as golf courses, historic properties and recreational parks. Some former deer parks are no longer distinguishable as such, e.g. Wedgenock Park, west of Warwick, which was reputedly one of the first ever established; it contained the 12m girth Bull Oak, one of the largest oaks recorded in Britain but sadly long gone.

Parkland may display scrub as individual plants or clumps, in some instances providing tree protection or opportunities for tree regeneration, or as matrix of secondary woodland or scrub that has developed by regeneration and/or planting in the absence of grazing animals ([JNCC, 2008](#)). This element of the parkland habitat provides a food source for many plant-eating insects (especially scrub composed of oak, *Quercus spp.*, willows, *Salix spp.* and birch, *Betula spp.*), some of which are species-specific. Scrub is a major source of blossom from March onwards, a vital source of nectar for invertebrates breeding nearby (e.g. dead wood breeding flies and beetles or mining bees nesting in open habitats). Some species will specialise on certain shrubs e.g. *Andrena praecox* (the host of the BAP cuckoo bee *Nomada ferruginata*) on willow. Scrub affords nesting and roosting sites for many birds including linnet (*Carduelis cannabina*) and shelter to adjacent habitats; in winter it provides hibernation sites and its berry-bearing species are a vital food source for wintering birds.

Veteran trees are defined as the oldest examples of a given species in an area. For pedunculate oak (*Quercus robur*) and sweet chestnut (*Castanea sativa*) this is generally interpreted in Warwickshire as those exceeding 250 years, typically with trunk girths exceeding 5m. However, many of the oldest horse chestnuts (*Aesculus hippocastanum*), beeches (*Fagus sylvatica*) and limes (*Tilia spp.*) in the county dating from the early 1700s have girths of less than 5m, especially those in clumps and avenues which reduces girth growth through competition between trees. For shorter-lived trees such as birch (*Betula spp.*) and poplar (*Populus spp.*), this might be 100 years, but the definition is a rather subjective one that can vary between a county with many such trees and one with relatively few. It is important to recognise that Britain's holding of old trees has international significance, as the frequency of them here is far greater than in most other parts of western Europe.

Aside from their intrinsic value, the veteran trees of parkland and wood-pasture in particular provide important micro-habitats for many internationally rare species, including certain fungi, lichens, bryophytes and a variety of saproxylic invertebrates (flies and beetles that feed on decaying and dead material, specifically wood). These micro-habitats include attached and detached decaying wood, sap runs, heart-rot, water-filled rot holes, rotting stumps and invisible old roots. The Saproxylic Quality Index (SQI) (NE, 2011) is one of two systems devised for the relative assessment of site quality for nature conservation using the species rarity of saproxylic beetles. The fungi associated with veteran trees and the dead wood in turn provide a further microhabitat for many insects. Parklands also provide a refuge for indigenous or otherwise valuable tree genotypes (e.g. pedunculate oak and black poplar, *P. nigra*).

Old and dead trees provide nest holes for some of our scarce birds including tree sparrow, (*Passer montanus*), greater and lesser spotted woodpeckers (*Dendrocopos major* and *Picoides minor*), nuthatch (*Sitta europaea*), marsh tit (*Poecile palustris*) and willow tit, (*Poecile montanus*), treecreeper (*Certhia familiaris*) and tawny owl (*Strix aluco*).

2.	OBJECTIVES *	TARGETS
Associated Action Plans are: 'Woodland', 'Bats', 'Otter', 'Farmland Birds', 'Great Crested Newt' and 'Black Poplar'		
<b>PLEASE CONSULT THE 'GENERIC HABITATS' ACTION PLAN IN CONJUNCTION WITH THIS DOCUMENT FOR OBJECTIVES COMMON TO ALL HABITAT PLANS</b>		
A.	<b>To achieve condition of 55 of the existing sites above 0.25ha that are currently in unfavourable condition to favourable or improving (see criteria below), giving priority to those holding UK Biodiversity Action Plan Priority Species &amp; Red Data Book species.</b>	<b>2026</b>
B.	<b>To restore 100ha of degraded habitat to favourable condition.</b>	<b>2026</b>
<b>*Derived from Regional Spatial Strategy Phase 3 Technical Report (2009) and are based on a minimum mapping unit of 0.25ha. Rationale for derivation of targets: -</b>		
<b>Restoration:</b> The extent of restorable sites was estimated by comparing sites recorded in the Regional BAP Habitat working layer with the Regional BAP Habitat final layer, and inspecting a small sample of aerial photographs of the sites that were on the former but not the latter; then 30% restoration achievement of this area was assumed.		<b>Expansion:</b> The draft expansion target was set as a proportion of the restoration figure, in the same proportion as the respective UK BAP targets to reflect relative priorities. However review of recent delivery through agri-environment schemes indicated that a lower target would be more realistic.
<b>UK targets for this habitat are set in terms of sites rather than hectares.</b> There is great variation in site size for this habitat, and an area based target would seem to give greater precision.		

## Warwickshire, Coventry and Solihull Local Biodiversity Action Plan

Criteria for favourable condition (Joe Taylor, 2014)
Average sward height should be: 2-10cm between October – November: 5–15cm between April to May:
Between 20% and 80% open grassland with a mosaic of grazed turf, both closely grazed and taller tusks.
Less than 5% cover of undesirable weed species, e.g. Ragwort , Creeping thistle.
( In designed landscapes) Tree species and cover to be as close to original historical design as possible. This facilitates the planting of non- natives as is appropriate.
There should be obvious protection of archaeological features, either through effect monitoring and management plans, or clear reference and working practice if management plans do not exist.

### 3. NATIONAL BAP OBJECTIVES & TARGETS

Wood-pasture and old parkland are on the current UK Biodiversity Action Plan (BAP) list of Priority Habitats published in 2007([Joint Nature Conservation Committee](#)). The targets and objectives for the [Lowland Wood-pasture and Parkland](#) BAP, updated in 2010-11, may be seen online.

### 4. CURRENT STATUS

Historically, parkland is associated with large country estates and wood-pasture is associated with common grazing land. Veteran trees can also be found within plantation woodland or in coppiced woodland, as well as in hedgerows, churchyards, village centres or fields. The West Midlands region holds approximately 9% of England's wood pasture and parkland resource according to the [Regional Biodiversity Audit](#) (Annex A1.2, 2008). However, it is believed that in Warwickshire no wood pasture remains although Tasker (1990) notes a few fragments.

In Warwickshire, the locations of 81 historic parklands have been identified via desk research of current OS maps. In 2002 the resource was estimated to be 1500-2000ha (pers. comm. Harrison, G.R.) but how much was of nature conservation interest is uncertain; most such sites lacked veteran trees and were unremarkable areas of countryside. The Warwickshire Historic Landscape Characterisation (HLC, 2010) recorded 142 individual areas of large parks and gardens with a designed nature (not necessarily individual parks) forming 5340 hectares. It should be noted that some of these could be smaller areas close to or within urban areas and that although this includes Solihull and the north western rural part of Coventry it excludes the area of Warwickshire that falls within the [Cotswolds Area of Outstanding National Beauty](#) (AONB). The average size was around 37 ha. The HLC report (2010) noted that the Biodiversity potential for the 142 recorded areas was high as was the Archaeological potential.

Historically the area of Parks and Gardens, Deer Parks and Common Grazed Woodland (wood pasture) was much greater. The extent of loss is illustrated by figures for the [Feldon & Dunsmore National Character Area](#) (NCA) where in 1918 about 4% was historic parkland. By 1995 it was estimated that two thirds had been lost. The HLC records 700 areas recorded forming an area of approximately 13,000ha. This should form some basis for further investigation for the potential to identify additional areas that should be included in this action plan.

The Habitat Biodiversity Audit (HBA, 2012) figure for 'parkland with scattered trees' is

316ha. The number of sites listed in the NE National Inventory in 2012 was 93, and included both historical and some urban parkland sites. Provided the target for restoration is met, this area will increase to 336ha by 2020 and to 366ha by 2026.

Important collections of old trees in the sub-region county are at:

- [Stoneleigh Deer Park](#) - the best former wood pasture site in the county, it has a large number of oaks and sweet chestnuts over 300 years old (with several approaching 1000 years) plus important old specimens of hornbeam (*Carpinus betulus*), beech and common lime (*Tilia x europaea*).
- Also [Baddesley Clinton](#), Charlecote Park, [Compton Verney](#), parts of [Coombe Country Park](#), [Coughton Court](#), [Farnborough Hall](#), [Packington Park](#), [Packwood House](#), [Ragley Park](#) and [Warwick Castle Park](#).

The [Warwickshire Biological Record Centre](#) (WBRC) keeps an up-to-date inventory of Warwickshire's veteran trees which shows where concentrations exist and allows analysis by age class (based on girth information), habitat and species. In addition to this data, it is thought that some willow pollards of riversides and damp areas are considerably older than their girths suggest because pollarding reduces the rate of trunk growth.

#### 4.1 Legal and Policy Status

Wood-pasture and parkland is a national and a European priority for conservation.

There are no wood-pasture and parkland sites designated as [Sites of Special Scientific Interest](#) (SSSIs) in the county, but some are afforded non-statutory designations. This includes ecosite designation within the WBRC on ecological grounds. It also includes designation of some sites on the '[Register of Historic Parks and Gardens of special historic interest in England](#)' held by [English Heritage](#) e.g. [Coombe Abbey](#), Warwick Castle Park, Charlecote Park, etc.

Others may be listed on the county [Historic Environment Monuments Record](#). No wood pasture, parkland or veteran tree sites have yet been subject to Local Wildlife Site (LWS) designation though LWS criteria include sections on parkland (which would also cover wood-pasture) and on veteran trees.

Trees are specifically protected if covered by a local authority [Tree Preservation Order](#) (TPO) or if they house species protected under the [1981 Wildlife & Countryside Act](#) (e.g. all bats and some nesting birds). The National Planning Policy Framework (2012) para 118 refers to protection for veteran trees and states that: '*When determining planning applications, local planning authorities should aim to conserve and enhance biodiversity by applying the following principles:- planning permission should be refused for development resulting in the loss or deterioration of irreplaceable habitats, including ancient woodland and the loss of aged or veteran trees found outside ancient woodland, unless the need for, and benefits of, the development in that location clearly outweigh the loss.*' Section 69 of the [Planning \(Listed Buildings and Conservation Areas\) Act 1990](#) provides the potential to include trees or parklands within formal Conservation Areas where they form an integral part of the historic built environment, though it is not fully known to what extent this occurs in Warwickshire.

The Woodland Trust [Ancient Tree Forum](#) (ATF) has had an enormous impact in promoting



the recording and conservation of veteran trees. The Forum's [Ancient Tree Hunt](#) initiative and the [Tree Register of the British Isles](#) are attempting to strengthen the protection of veteran trees in Britain and may influence planning guidelines in future.

#### 4.2 Current Factors Affecting the Habitat

- **Not all areas are protected** under statutory designation.
- **Conversion to other land uses** such as arable, improved pasture, forestry, building development, golf courses and other recreational areas. This may or may not affect the ecological value of sites, but in some cases has resulted in damaging car parking beside trees, building too close to trees, loss of the habitat mosaics associated with old trees, compaction of the soil around roots, increased vandalism to trees and a variety of other activities that damage or threaten trees. Some factors are given further coverage below.
- **Agricultural improvement** including deep ploughing (which can damage roots), use of fertilisers and herbicides (which can damage mycorrhizal fungi associated with tree roots plus any associated unimproved grassland) also pesticides (which can damage insect and bat assemblages).
- **Reduction of veteran tree numbers** through felling, neglect, loss of traditional management techniques (particularly pollarding), disease and vandalism.
- **Changes in groundwater levels** due to abstraction, causing physiological stress to veteran trees.
- **Inappropriate or unsympathetic grazing** leading to nitrogen enrichment beneath the tree canopy, overgrazing of associated grasslands, tree damage, compaction of soil, loss of nectar plants, or scrub invasion through under-grazing.
- **Safety considerations and insurance.** Landowners and managers are increasingly managing their estates in a liability-conscious manner, which may have resulted in the felling of trees and may threaten some mature specimens in the future.
- **Unsympathetic management:** dead trees, attached dead limbs, fallen limbs and wind-blown trees can support many rare species of insect, but are often removed unnecessarily. Loss of age structure of scrub due to lack of awareness of its importance for wildlife and the need for appropriate management.
- **Age gaps in tree stocks** which affects the continuity of microhabitats associated with older trees and therefore threatens key species with extinction where their requirements become scarce or absent (even temporarily).
- **Air pollution** at the sites closer to areas of urbanisation has lead to a reduction in the lichen flora and a predominance of mosses tolerant of acid rain pollution.
- **The Ancient Tree Hunt and Ancient Tree Forum** have considerably raised the profile of veteran and ancient trees nationally and have provided support and information locally

## 5. LOCAL ACTION

- An accurate digitised database of parkland in the sub-region has been established by the Habitat Biodiversity Audit (HBA) and is annually updated.
- [Warwickshire Museum](#) spearheaded the collation of records of surviving old trees in the area and produced an exhibition 'Warwickshire's Ancient Trees' (summer 2004) in conjunction with the Ancient Tree Forum (as part of the National Ancient Tree Hunt). [Steven Falk](#) has had contact with numerous key landowners and has provided data on [veteran trees](#) to various interested parties (Falk, 2001).
- Coombe Country Park has a restoration plan for 120 acres of deer-park to parkland pasture habitat with associated veteran trees, and management of 150 acres of shelterbelts. The project was originally funded by the Countryside Agency (succeeded in 2006 by [Natural England](#), NE) as one of three pilot projects nationally, looking at best practice in country park restoration.
  - Indicators of success' which relate to Higher level Stewardship payments under option HC13 are:
    - Effective and ongoing protection of veteran trees, to allow natural succession. Tree surgery limited to that required for the safety of people, where possible alternative methods to limit surgery ,e.g. fencing, should be used.
    - All dead wood left by the parent tree, where it falls.
    - Damage prevented by livestock, vehicles and people, to avoid compaction.
    - Successional veterans identified and protected through effective management planning/ monitoring.
    - Effective invertebrate monitoring
  - Survey work of the relict deer park was carried out in 2012 and standard trees are being replaced where marked on maps of the Capability Brown design of the 1770s.
  - Replanting has been undertaken where sycamores have been lost (allowing one year for natural regeneration to show, monitoring that year's growth and then assessment of planting options from then).
  - A monitoring programme of veteran trees is planned, including a two year survey of saprophytic beetles with Vane traps, with investigatory base line survey in 2013 followed by Vane trapping in 2014.
  - [Higher Level Environmental Stewardship](#) (HLS) status is being sought for most of the park, based on its strong historic heritage interest, veteran trees and grassland restoration
  - The discovery of several [Red Data Book](#) and [Nationally Notable](#) species of beetles by [Vane trapping](#), including the bright green jewel beetle (*Sternocera aequisignata*), makes the park a possible SSSI.
- Compton Verney /Scorpion estate has carried out some habitat restoration work.
- Stoneleigh Deer Park has a detailed ecological management plan for the Business Centre area of the site.

## Warwickshire, Coventry and Solihull Local Biodiversity Action Plan

- The [National Trust](#) has identified wood-pasture & parkland as the priority habitat for nature conservation action in its West Midlands Region (which holds nearly 20% of the NT's parkland resource). This is reflected in its current Regional Business Plan, which includes several actions to promote favourable condition of parklands & veteran trees and to raise awareness of their value. The parklands at Charlecote and Farnborough Hall are managed unintensively under [agri-environment schemes](#) administered by NE. Surveys of open grown trees have been undertaken at Charlecote, Baddesley Clinton, Packwood House and [Earlswood Moat House](#).
- Some entomological survey-work has been undertaken at Coombe and Stoneleigh by staff of Warwickshire Museum and [Herbert Art Gallery & Museum](#), Coventry. However, more entomological survey work is required at all sites. Surveys by the National Trust at Earlswood Moat House and Coughton Court in 2005 revealed the presence of a rich beetle fauna associated with wood-decay in veteran oaks.
- [Parklands Consortium](#), based locally at Stoneleigh, is involved in the conservation and restoration of historic parklands of national and county ecological interest. Warwickshire commissions have included Stoneleigh Abbey, Stoneleigh Deer Park and Coombe Abbey.
- Restoration of historic parklands and protection of veteran trees are identified as key priorities under the HLS scheme in the [Arden National Character Area](#) (NCA), which includes much of north and west Warwickshire.
- The Ancient Tree Forum provided a veteran tree training day (organised by Warwickshire Farming and Wildlife Advisory Group, FWAG) at [Stoneleigh National Agricultural Centre](#) in 2009.
- The extent, location, quality and management needs of all 93 sites of remaining and former wood-pasture and parkland sites and veteran trees in the county was recorded and digitised by the Habitat Biodiversity Audit team and the NE Wood- Pasture National Inventory updated in 2011.
- [Warwickshire Gardens Trust](#) was established in 1991 and works within the old boundaries of the traditional county of Warwick. It aims to record and conserve gardens and parks of outstanding quality, and monitor threats to them.

## 6. PROPOSED LOCAL ACTIONS

ACTION	Lead	Partners	By
PLEASE CONSULT THE ' <b>GENERIC HABITATS</b> ' ACTION PLAN IN CONJUNCTION WITH THIS DOCUMENT FOR ACTIONS COMMON TO ALL HABITAT PLANS			
<b>Policy, Legislation &amp; Protection</b>			
<b>PL1.</b> Ensure that any site meeting the relevant criteria is considered for designation as an SSSI.	NE	EH WWT WCC	ongoing

## Warwickshire, Coventry and Solihull Local Biodiversity Action Plan

<b>PL2.</b> Continue to select all qualifying old parkland sites as LWSs and/or Local Nature Reserves (LNR, or (if appropriate) Scheduled Ancient Monuments and enter onto database.	LWSP	NE LAs	WWT	ongoing
<b>PL3.</b> Ensure that new minor or major developments result in net biodiversity gain through adherence to the mitigation hierarchy.	WCC	NE LPAs NWBC NBBC	WWT	ongoing
<b>PL4.</b> Protect veteran trees by Tree Protection Orders (TPOs).	LAs	LWSP WBRC	WWT PCs	ongoing
<b>PL5.</b> Assess the extent of use of the <a href="#">Planning (Listed Buildings and Conservation Areas) Act 1990</a> in the sub region, regarding the inclusion of trees or parklands within formal Conservation Areas.	WCC	LAs		2018
<b>Site / Species Safeguard &amp; Management</b>				
<b>SM1.</b> Produce management plans for all priority old parkland within the county.	LOs	NE NT LWSP CLA EH CCP	WCC WWT	2020
<b>SM2.</b> Continue to achieve favourable condition of 17 priority sites by 2020 and a further 38 priority sites by 2026 by appropriate management.	tbc	NT CCP	CV	2015-2026
<b>SM3.</b> Manage or create areas of scrub with ( <b>see RM4</b> ) to achieve a varied age structure, to a maximum 10% of each site.	tbc	NT	CCP	ongoing
<b>SM4.</b> Restore 50ha of degraded habitat by 2020 and a further 50 ha by 2026, reducing the generation gap by planting new generations of open-grown trees on all priority sites. Target Coombe and Stoneleigh parks.	tbc	WWT NT CCP	FC CLA CV	2020-26
<b>SM5.</b> Confine tree surgery and tree felling to the minimum required for public safety in order to maximise the life of the trees, taking care to retain riverside trees for otter holts where safe to do so.	LOs	FC CCP	NT LAs	ongoing
<b>SM6.</b> Retain dead wood, both standing and fallen, to maximise its value for wildlife (birds and insects), and for breeding sites, e.g. for lesser spotted woodpecker.	LOs	FC CCP	NT LAs	ongoing



## Warwickshire, Coventry and Solihull Local Biodiversity Action Plan

Advisory				
<b>A1.</b> Inform all landowners of the value of their parkland and offer advice on management and environmental stewardship options.	NE	FC CLA	WWT	ongoing
<b>A2.</b> Inform landowners that felling licences must be applied when more than 5 cubic metres/quarter year of tree removal is proposed.	FC	NE LOs	CLA	ongoing
Research & Monitoring				
<b>RM1.</b> Review sources of information and research all old parkland and veteran trees, in collaboration with Historic Landscape Characterisation, to form the best understanding of the number and total area of old parklands.	HLC	Unis WWT WBRC HER	WCC HBA LAs	2016
<b>RM2.</b> Undertake a 5-yearly audit of parkland and wood pasture to maintain an accurate and up-to-date digital database on the county's parkland and veteran trees sites.	HLC	WCC HBA	CCP LOs	2021
<b>RM3.</b> Identify priority sites and potential opportunities for habitat restoration.	HLC	WWT LOs	LAs	2015
<b>RM4.</b> Identify areas of scrub with biodiversity potential (see <b>SM3</b> ).	HBA	WWT	LOs	ongoing
<b>RM5.</b> Undertake a series of parkland surveys of saproxylic invertebrates to gain further information regarding range and type of species present, e.g. using the SQI (NE, 2011) as a monitor.	CSG	Unis CCP LEs	WWT LOs	2018
<b>RM6.</b> Investigate the relocation and re-establishment of key species of saproxylic invertebrates which are dependent on veteran trees.	CSG	Unis LAs	CCP CV LOs	2020
<b>RM7.</b> Update the veteran tree database at least every 5 years.	HBA	WBRC CCP	WWT	2019
Communication, Education & Publicity				
<b>CP1.</b> Include veteran tree management at a parkland event.	tbc	CCP	LOs	2016
<b>CP2.</b> Ensure the provision of information on Good Practice guidelines for the retention of standing dead trees and associated fallen wood, and that links are made online.	CCP	NT CLA LOs	WCC ATF	2016

**Abbreviations:** ATF – Ancient Tree Forum, CCP – Coombe Country Park, CLA – Country, Land & Business Association, CSG – Core Steering Group, CV – Compton Verney, EH – English Heritage, FC – Forestry Commission, HBA – Habitat Biodiversity Audit partnership, HER – Historic Environment Record, HLC – Historic Landscape Characterisation, LAs – Local Authorities, LEs – Local

**Warwickshire, Coventry and Solihull Local Biodiversity Action Plan**

entomologists, **LNPIG** – Local Nature Partnership Implementation Group, **LOs** –Landowners, **LPAs** – Local Planning Authorities, **LWSP** – Local Wildlife Sites Project, **PCs** – Parish Councils, **NBBC** – Nuneaton & Bedworth Borough Council, **NE** – Natural England, **NT** – National Trust, **NWBC** – North Warwickshire Borough Council, **Unis** – Universities, **WBRC** – Warwickshire Biological Record Centre, **WCC** - Warwickshire County Council, **WWT** – Warwickshire Wildlife Trust.

## 7. PROGRESS WITH ACTIONS

From 2015–2020 there will be a rolling programme of reporting on progress, of 10 action plans per year with an annual summary of results. Results will be entered onto the national Biodiversity Action Reporting System [BARS](#). Progress with this plan up to 2008 can be seen at [www.warwickshirewildlifetrust.org.uk/LBAP](http://www.warwickshirewildlifetrust.org.uk/LBAP).

## 8. BIBLIOGRAPHY

Tasker, A. (Ed). (1990). The Nature of Warwickshire. Barracuda Books Ltd.

Kirby, P. (1992). [Habitat management for Invertebrates](#): a Practical Handbook. RSPB.

Keith Alexander (2001) [Invertebrate report](#) for the Gloucestershire Naturalists Society - focusses on importance of wood-decay fauna.

JNCC (2008) UK Biodiversity Action Plan: Priority Habitat Descriptions.

Falk, S.J. (2009) [Warwickshire's Wildflowers](#) - provides habitat-specific species lists, and explanations of habitats from a botanical viewpoint.

Treweek Environmental Consultants (2009) Regional Spatial Strategy (R.S.S.) Phase 3 [Regional Habitats Targets Review](#), Technical Report pp.71-94, prepared for the W. Midlands Regional Assembly.

Lawton, J.H. (2010) [Making Space for Nature](#): a review of England's wildlife sites and ecological network. Report to Defra, advocating a landscape-scale approach guided by four key principles, summarised as '*more, bigger, better and joined*'.

[Biodiversity News](#) (2011) Wood-pasture and parkland in the UK. Autumn, no 55.

DEFRA (2011) [Biodiversity 2020](#): A strategy for England's wildlife and ecosystem services.

[The Trees of Warwickshire, Coventry & Solihull](#) Falk, S.J. (2011). This catalogue is a collection of species accounts for all the trees that have been recorded in the modern administrative areas of Warwickshire, Coventry and Solihull between 2005 and 2011.

Falk, S.J. (2011) [The Veteran Trees of Warwickshire](#)

NE (2011) Report NECR072 [A review of the saproxylic invertebrate assemblages at SSSIs](#).

RSPB (2013) The State of Nature – a stocktake of all our native wildlife by 25 wildlife organisations.

HBA (2013) The State of the Habitats of Warwickshire, Coventry and Solihull.

## 9. FURTHER INFORMATION

Habitat Biodiversity Audit (HBA) for Warwickshire, Coventry & Solihull – mapping data set and associated information. Phase 1 ([JNCC](#)) 1996-2002 and Phase 2 (Local Wildlife Sites) ongoing.

[Biodiversity Planning Toolkit](#) - a new online resource to help incorporate biodiversity and geodiversity into the planning system and new development.

[Plantlife](#) - a charity which carries out plant species and habitat conservation, owns and manages nature reserves, campaigns, and raises awareness through education.

[Woodland Trust](#) Ancient Tree Guides: no.1- Trees & Farming from Dysart Road, Grantham, Lincs. NG31 6SW.

[Warwickshire Biological Record Centre](#) (WBRC) is the most comprehensive data bank of species and habitat records in Warwickshire, Coventry and Solihull.

[English Heritage](#) exists to help people understand, value, care for and enjoy England's unique heritage.

[Warwickshire Historic Environment Record](#) (HER) is a record of all the historic and archaeological sites and finds within the county.

## 10. CONTACT

**Historic Environment Record Manager:** Ben Wallace

Warwickshire Historic Environment Record Archaeological Information & Advice,  
Regeneration and Special Projects,  
Economic Growth, Communities,  
Warwickshire County Council  
Phone: 01926 412734

**County Recorder for Veteran Trees:** Steven Falk, Entomologist  
and Invertebrate Specialist for Buglife, Email: [steven.falk@buglife.org.uk](mailto:steven.falk@buglife.org.uk)