Ancient and Veteran Trees
(including wood pasture and parkland)
Habitat Action Plan

1. Introduction

This Action Plan is concerned with ancient and veteran trees and their ecological value, together with the sites that contain them, and covers:

- Lowland wood pasture and parkland that contains ancient and/or veteran trees.
- Ancient and veteran trees in the wider landscape such as field and hedgerow trees, including old coppice stools and pollards, together with those in orchards, churchyards and within settlements and urban situations.

Definitions

Ancient trees are at an ancient stage of their life and are old relative to others of the same species.

Veteran trees may not be ancient in terms of age but will show similar ecological characteristics as an ancient tree due to premature ageing or as a consequence of natural damage, management operations (such as pollarding) or pressures of the surrounding environment.

For greater detail of the definitions of ancient, veteran and other heritage trees see the Ancient Tree Forum website www.ancienttreeforum.co.uk.

The UK BAP identified wood pasture and parkland as a priority habitat and defined it as sites derived from medieval Forests and emparkments, wooded commons, parklands and pastures with trees in them. Some sites may have had a designed landscape superimposed in later centuries. Parkland may originate from the landscaping of estates around country houses. Often this landscaping will have incorporated already mature trees into the design, but some species of tree planted during the greatest period of English landscape park development (roughly 1740-1820) will now be becoming ancient themselves. The same habitat definition was subsequently included within Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006.

2. Current Status

2.1 Description of habitat

Lowland wood-pasture and parkland represents a vegetation structure rather than being a particular plant community. Typically this structure consists of large, open-grown or high forest trees at various densities, in a matrix of grassland or woodland ground flora maintained by grazing livestock or deer. Sites are frequently of national historic, cultural and landscape importance. The old trees and deadwood components of wood pasture have some similarities to the original 'wildwood' and parkland and wood-pasture trees may also preserve indigenous tree genotypes. The land use of such sites may have changed to arable,

woodland or amenity uses but may still retain the old trees and be of value for nature conservation where the specialist species supported by the trees have survived.

Ancient and veteran trees also occur throughout the wider landscape in both urban and rural situations. In Worcestershire they are particularly prevalent in hedgerows and along watercourses. They can also be found in traditional orchards when fruit trees have been retained and allowed to reach an age of decay and decline.

Ancient and veteran trees are of particular value for the fungi, lichens, bryophytes and huge range of saproxylic invertebrates[1] (1700+ species) associated with decaying timber. Since ancient and veteran trees are often hollowing, they are also important nesting and roosting sites for bats and birds.

2.2 Distribution and extent

The UK Biodiversity Steering Group report, published in 1995, estimated there to be 10-20,000 hectares of 'working' wood-pasture habitat remaining, defined as habitat where the level of grazing is such to maintain the open grassland aspect. Relict wood pasture and parkland, where surviving features are unmanaged or where scattered trees now exist within arable farmland or improved grassland situations, may be much greater in extent, possibly over 200,000 hectares (Natural England Wood-pasture and Parkland Inventory 2017).

Worcestershire is recognised nationally as an important county for ancient and veteran trees. The thousands of willow (*Salix* sp.) pollards found throughout the major floodplains and associated with even the smallest ditch or watercourse is matched only by East Anglia and represents an unknown, but probably highly significant, habitat resource for saproxylic invertebrates. Similar numbers of farmland hedgerow trees occur: pollarded oak (*Quercus* sp.) and ash (*Fraxinus excelsior*) trees are particularly notable in Worcestershire's hedgerows. Densities of old black poplar (*Populus nigra*) pollards, a nationally scarce tree, are similarly only comparable with East Anglia.

Worcestershire has only small patches of ancient woodland remaining with the exception of the Wyre Forest. Most of these woodlands have had a history of coppice management, so ancient and veteran trees are infrequent within woodlands, although they may be found along the boundaries of such woodland, and in the hedgerows associated with former woodland boundaries. Grafton Wood, for example, has 20–30 such trees along its boundary. Ancient and veteran wild service (*Sorbus torminalis*) and small-leaved lime (*Tilia cordata*) occur in the boundaries of Monkwood. In the Teme Valley and other dingle woodlands, there are an unknown number (but probably hundreds) of pollards of small-leaved lime and the nationally scarce large-leaved lime (*T. platyphyllos*).

[1] Species dependent upon dead and/or decaying wood for all or part of their lifecycle

2.3 Protection of the habitat

The saproxylic species violet click beetle (*Limonicus violaceus*) is listed on Annex ll of the EU Habitats and Species Directive: the beetle is recorded from three sites within Britain, of which Bredon Hill is one and for which the site is designated a Special Area of Conservation (SAC).

All bat species are fully protected under the Conservation of Habitats and Species Regulations 2017 (as amended) and the Wildlife and Countryside Act 1981 (as amended) making it an offence to disturb them while they are occupying a place of shelter or protection or intentionally or recklessly obstruct access to a place of shelter or protection. Under the Wildlife and Countryside Act it is an offence to intentionally take, damage or destroy the nest of any wild bird while it is in use or being built and to take or destroy their eggs.

Legal protection can be granted to a site through the designation of a Site of Special Scientific Interest (SSSI) under the Wildlife and Countryside Act 1981 (as amended).

Sites not meriting SSSI status can be listed as a Local Wildlife Site (LWS). Although not a statutory designation LWS status does confer some protection through the planning system.

Wood pasture and parkland is listed in Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006.

Tree Preservation Orders (TPO) can be used by Local Authorities to protect individual trees, groups of trees or woodland where it is in the interests of public amenity to do so.

Important trees can be recorded on the county Historic Environment Record and considered as a non-designated historic asset due to their age or cultural significance.

Historic England maintains the national Register of Historic Parks and Gardens, many of which will contain specimens of native or non-native trees that are ancient or with veteran characteristics. Inclusion within the Register is a material consideration within the planning process.

For any woodland component of wood-pasture and parkland, national forestry policy includes a presumption against clearance for conversion to other land uses and felling licences are normally required.

Trees are subject to some protection when located within a conservation area. Willow pollards and other veteran trees are protected along the River Severn floodplain via the Riverside Conservation Area.

Arboricultural advice is available from the local planning authority where an ancient or veteran tree is protected by a TPO or within a conservation area. Where there may be a serious public safety issue landowners should obtain advice from an arboricultural consultant.

2.4 Summary of important sites (note that the terminology 'sites' relates here to wood pasture or parkland sites and not individual veteran trees)

Work by a number of eminent entomologists since the 1970s[2] has developed statistical methodologies for interpreting the 'importance' of a site in terms of its provision of ecological niches associated with ancient woodland systems (including wood pasture and parkland) with specific reference to habitat provision for saproxylic coleoptera. Bredon Hill ranks in the top 10 sites in Great Britain within the Index of Ecological Continuity[3] (IEC). Croome and the Kemerton Estate both rank within the top 30 sites in the IEC. Bredon Hill, Croome and Longdon Marsh are given Saproxylic Quality Index[4] (SQI) scores ranking them amongst the top ten best sites in Britain and they are the top three in Central England. Hanbury Park ranks in the top 25 sites in Britain under the SQI.

- **Bredon Hill SSSI/SAC** is the major site of interest in the county, with an outstanding assemblage of saproxylic invertebrates. The site was designated an SAC in 2005 due to the presence of the violet click beetle and the site is therefore of international importance. Much of the interest is in the ash trees, but field maple, oak, beech (*Fagus sylvatica*), apple (*Malus domestica*) and willow are also important. The site includes surviving parkland, veteran trees in regenerating woodland, possible remnants of undisturbed woodland and hedgerow and field trees.

- **Croome Park** is an example of former parkland within a landscape of changing land use (from pasture to arable farming, but now in process of returning to pasture). Croome has an outstanding assemblage of saproxylic invertebrates but the ancient and veteran trees have been damaged in the past by inappropriate agricultural activity such as ploughing up to the trunk and chemical application under the tree canopy. An historic failure to plant replacement generations of trees also damages the habitat continuity value. Croome is now under the ownership of National Trust, who have reverted 160 hectares of the park to permanent grassland and planted a significant number of trees and shrubs. However, the veteran tree and associated saproxylic invertebrate interest extends beyond the National Trust-owned formal parkland into the surrounding intensively farmed landscape.

- Once Worcestershire's most extensive area of wetland, parts of the historic **Longdon Marsh** contain large numbers of ancient and veteran oak and willow pollards. The Worcestershire Wildlife Trust reserve at Hill Court Farm contains over 80 such trees within hedgerows and along the Longdon Brook corridor.

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[2] Including Harding, 1977, 1978; Harding and Rose, 1986; Alexander 1988; Harding and Alexander, 1994; Alexander, 1996; Fowles, Alexander and Key, 1999; Alexander, 2004.

[3] The Index of Ecological Continuity scoring system is used to assess the significance of the saproxylic interest of a site with regards to beetles largely restricted to, or collectively indicative of, ancient woodland systems.

[4] The Saproxylic Quality Index is similar to the IEC but based on the national rarity status of a wider range of beetle species and so is applicable to a wider range of woodland systems.

- **Hanbury Park LWS** lies within the part of Worcestershire once covered by the Forest of Feckenham and sits within a wider landscape very significant today for its remaining ancient woodlands and ancient and veteran trees: the close proximity of the park to Pipershill Common SSSI (see below) increases its ecological significance. The greatest period of influence on Hanbury Park in terms of parkland design dates from the early 18th Century. The ancient and veteran trees within the park are mostly oak and sweet chestnut, but there are also black poplar associated with one of a number of marl pit pools, which themselves are important for great crested newts (*Triturus cristatus*). The grassland within the park is still fairly intensively grazed in parts. National Trust, who own the park, have undertaken work in the last decade to plant new parkland trees as well as restore old avenues of trees.

Other significant sites include:

- The **Kemerton Estate** is located on the south-facing slope of Bredon Hill. There are eight traditional orchards on the estate, plus a mid-19th century walled garden, which all contain veteran fruit trees. There are many other in-field and hedgerow ancient and veteran trees, including oak and ash, across the rest of the landholding.

- **Pipershill Common SSSI** is perhaps the only genuine remnant of 'classic' pasture woodland in the county. The ancient and veteran oak, beech and sweet chestnut (*Castanea sativa*) trees exist within regenerating woodland but a programme of gradual clearance or 'halo-ing' by Worcestershire Wildlife Trust has given more space and light to the veteran tree stock.

- **Castlemorton Common SSSI**, **Corse Lawn Common** and the surrounding area has substantial numbers of black poplar pollards. There are over 500 black poplars currently recorded in Worcestershire, of which only 7 are known to be female. However, data on the ages of the trees is limited.

- **Wilden Marsh and Meadows SSSI** and **Puxton Marshes SSSI**, both located in the north of the county around Stourport, are other examples of sites with veteran willow pollards.

- Woodland fragments and hedgerows, particularly in the west of the county, often incorporate ancient and veteran trees, including oak, hawthorn (*Crataegus monogyna*), ash, and large and small-leaved lime. **Hanley Dingle SSSI**, a dingle woodland in the Teme Valley, is notable for good numbers of large and small-leaved lime pollards.

- The stretch of countryside between Great Witley and Wichenford is particularly good for veteran trees, in particular hedgerow pollards.

- Sites in urban or semi-urban situations such as formal parks or arboretums may also contain ancient and veteran trees of great size and/or age and significance. These are frequently non-native species but may still have considerable cultural or amenity value.

3. Current factors affecting the habitat

- Lack of younger generations of trees is producing a skewed age structure, leading to breaks in continuity of dead wood habitat and loss of specialised dependent species.

- Neglect of traditional tree management techniques or loss of expertise relating to these techniques, e.g. pollarding, leading to trees collapsing or needing to be felled for safety reasons, or being killed by inappropriate pollarding.

- Tree diseases such as Dutch Elm disease, acute oak decline and *Chalara* ash dieback.

- Physiological stress resulting from drought, which can weaken the tree and make it more susceptible to disease.

- Storm or lightning damage impacting individual trees.

- Competition for resources with surrounding younger trees.

- Damage from agricultural operations such as the conversion of former wood pasture to arable, cultivation within the root protection zone, chemical application as a result of spray drift, ground compaction and land drainage.

- Inappropriate grazing: under-grazing leading to loss of wood pasture habitat structure through bracken and scrub invasion; or overgrazing leading to bark browsing, soil compaction and loss of nectar plants.

- Removal of ancient and veteran trees and dead wood through perceptions of safety, disease control and tidiness.

- Vandalism such as fire setting in hollows.

- Soil compaction caused by people, traffic and car parking.

- Changes to groundwater levels resulting from abstraction, drainage, neighbouring development and road building or prolonged drought.

- Climate change leading to heat and drought stress.

- Pollution derived either remotely from industry and traffic, or locally from fertiliser/herbicide application. Nitrogen enrichment from densely stocked grazing animals causes damage to epiphyte communities and changes to soils and soil fungi.

4. Current Action

4.1 Local protection

A number of Worcestershire SSSIs are designated for their significant ancient and/or veteran tree interest. Other sites are listed as county LWS.

There are 17 sites in Worcestershire on the Register of Historic Parks and Gardens. Most if not all of these are likely to contain ancient or veteran trees.

4.2 Habitat management and programmes of action

- A number of books and guidance documents on aspects of ancient and veteran tree surveying and management are available on the **Ancient Tree Forum** website.

- The restoration of historic parklands and the protection of veteran trees are identified as key priorities within **Natural England** agri-environment targeting statements. A number of significant programmes of work within the county have been or are being delivered under agri-environment agreements. In addition, the targeting of agri-environment funds to revert arable land to grassland has benefited in-field and hedgerow trees.

- **National Trust** has carried out extensive restoration of the parkland habitat at Croome through the reversion of 160 ha from intensive arable to grassland. Those areas that are still arable (25 ha) are under a minimum till system. The whole of the National Trust ownership is under various agri-environment schemes. Surveys of ancient and veteran trees (and saproxylic invertebrate fauna) undertaken in association with this restoration work have also included the wider landscape beyond the park. A programme of work at Hanbury Hall has involved restoring and replanting the ancient oak and lime avenues as well as further parkland tree planting. Improving the condition of priority habitats such as wood pasture and parkland is a national priority for National Trust and regular condition assessments of the habitat at Croome and Hanbury are carried out. Three years ago the grazing regime within the south park at Croome was altered to a holistic grazing system, which is proving successful in increasing floral diversity and thus nectar and pollen availability for saproxylic invertebrates. The value of scrub as a nectar source is also recognised and increasing the scrub component of the two properties is part of the overall aim of improving habitat condition.

- **Worcestershire Wildlife Trust** has an ongoing programme of restoration work at Pipershill Common SSSI. Selective felling has been undertaken to open up the ancient and veteran trees to more light and reverse the process of over topping by younger beech trees that had led to the death of several veterans on the site.

- In 2004 the **Kemerton Estate** initiated the creation of a new 22 ha parkland, incorporating a number of existing mature and veteran trees as well as new planting.

4.3 Survey, research and monitoring

- In February 2007 the **Worcestershire Recorders** received a £50,000 grant from the Heritage Lottery Fund for a 2-year project to raise awareness of and record the location and status of ancient and veteran trees within the wider countryside. The project trained and supported local volunteers to carry out parish surveys and contributed a significant number of records to the Worcestershire Register of Ancient Trees and the national Ancient Tree Inventory.

- The **Ancient Tree Hunt** is a national project coordinated by the Woodland Trust and forms the heart of their ancient tree conservation work. The project involves volunteers across the country finding and mapping ancient trees and contributing to the development of the national Ancient Tree Inventory.

- The **Worcestershire Register of Ancient Trees** is maintained by Worcestershire Biological Records Centre.

- The report **'Pollarded Trees and their Historical Significance: A Study in Wichenford Parish'** was published in 2008 by Jane Field. The survey recorded 229 oak pollards, 55 ash, 16 lime and 1 alder (*Alnus glutinosa*) in a 12km square area.

- **National Trust** has commissioned three specialist surveys of saproxylic invertebrates at Croome Park by Derek Lott (1996 and 2006) and Andy Foster (2016). Ancient, notable and veteran trees have now been surveyed at all NT-owned sites within the county and the data passed to Woodland Trust for inclusion in the national inventory.

- Worcestershire County Council's **Landscape Character Assessment** identifies areas of former ancient deer park and current landscapes with a parkland/estate character and those where ancient and veteran trees are notable. The county **Historic Landscape Character Assessment** (HLC), completed in 2010, comprises a GIS database that builds up a detailed picture of how places have developed over time and how the past is present in today's landscape. Parkland is identified within the Designed Landscape category of the HLC database.

5. Associated Plans

Woodland, Ponds and Lakes, Rivers and Streams, Hedgerows, Grassland, Urban, Scrub, Traditional Orchards, Violet Click Beetle, Black Poplar.

6. Conservation Aim

Worcestershire's rich ancient and veteran tree resource is well documented and appropriately managed, with good numbers of future ancient and veteran trees planted and maintained.

7. Conservation Objectives

- Establish a reciprocal arrangement with the Woodland Trust for the sharing of data between the Worcestershire Register of Ancient Trees (held by WBRC) and the national Ancient Tree Inventory

- Promote to the public and co-ordinate a second 2-year (first 2007-09) push on ancient and veteran tree recording within the county

- Target Bredon Hill and the surrounding landscape as a focus area for ancient and veteran tree recording, in particular the landscape southwards towards Dixton Wood

- Identify and target project delivery at key landscapes where tree planting, tree management and woodland creation can deliver better functional linkages between areas of high ancient and veteran tree importance, in particular:
    a. working with Natural England and the Carrant Catchment Area Restoration Project in the area between Bredon Hill SAC and Dixton Wood SAC
    b. with partners, looking at the feasibility of working in the landscape between Bredon Hill SAC and Croome Park

- Deliver a PR campaign to promote the identification or planting of ancient and veteran trees for the future, working towards the outcome of having a young tree planted and/or marked as a replacement for every hedgerow and in-field ancient or veteran tree

- Encourage the planting of disease-resistant English elm as part of the effort to secure replacement generations of ancient and veteran trees

- Undertake the 'veteranisation' of younger trees in appropriate locations to accelerate their decline and redress the imbalance of age and veteran feature distribution

- All Local Plans to have a policy promoting the protection of ancient and veteran trees and the planting or creation of future such trees

- Local Authorities to make more use of Tree Preservation Order legislation to protect ancient and veteran trees

- Use 'flagship' sites including Croome Park, Bredon Hill, Hanbury Hall and Pipershill Common for training and events relating to the ecology and management of ancient and veteran trees

- Engage with landowners to promote good available guidance on sensitive, life-extending management and care of ancient and veteran trees, with a focus on preventing avoidable damage and decline of trees in agricultural situations

- Monitor the impact of Chalara on ancient and veteran ash trees and put in place a scheme to clone saplings from trees that appear resistant

References and further information

Ancient Tree Inventory www.ancient-tree-hunt.org.uk

Ancient Tree Forum http://www.ancienttreeforum.co.uk/

Arboricultural Association advice on bats in trees https://www.trees.org.uk/Help-Advice/Public/Bats-and-trees-Who-does-what-where

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