



Woodlands for Nature Conservation

Iain Corby - Senior Conservation Officer for BBOWT writes

Woodlands are a living link to the *natural forest* or *wildwood* that covered the British Isles 7000 years ago. However the *wildwood* was far more complex and dynamic than today's woodlands, with areas of open wetland, marsh and clearings maintained by flooding, windblow and herbivores such as bison, red deer, beaver and auroch (extinct wild ancestors of modern cattle). Just as important were a wealth of smaller creatures, plants and fungi. Man's influence over thousands of years has meant that many attributes of *wildwood* have long since gone, and only small fragments of woodland remain as 'ecological islands' in a largely agricultural landscape. Thus woodlands cannot now support the array of habitats that existed in the *wildwood*, and so many species have become rare and vulnerable.



From a wildlife perspective, the best management for forest wildlife would be to abandon large areas, but this is not realistic in Southern England! As a general rule, diversity increases with the age and area of the woodland. Today woodlands must also meet our needs for timber production, game management and amenity and intervention may be required against species introduced by man, e.g. Muntjac deer. Wood is an important renewable resource and timber, charcoal or firewood production can help fund other necessary management.

Species developed to occupy all parts of the woodland ecosystem from old trees to open glades, e.g. fritillary butterflies feed on violets in woodland glades or recently coppiced areas. Coppicing (where trees are cut to the ground every 7 to 25 years) was the traditional management practice in this area. Its decline has led to once common butterflies becoming scarce (e.g. purple emperor, wood white and silver-washed fritillaries) and the loss of others from the Chilterns in recent decades (e.g. heath, pearl-bordered and small pearl-bordered fritillaries). Local extinctions have been common in recent decades, as individual fragmented and isolated woodlands cannot sustain the particular habitat requirements of all species, all of the time.

Woodlands support numerous species - nearly 4,000 have been recorded at BBOWT's Warburg Reserve of which 900 are fungi. So focussing on a few high profile species can risk the loss of overall diversity unless all species are considered. The choice of management depends on your objectives and the current status

of the woodland (tree species and age; flora and fauna). The Oxfordshire Wildlife Sites Project can help find local experts to carry out surveys. Please contact the Oxfordshire Wildlife Sites Project Officer, Deborah Sazer, for more information.

Tips for managing woodlands for wildlife

Management can normally accommodate a number of different objectives without compromising one another e.g. timber production, recreation and conservation, but the emphasis on each varies depending on circumstances. The Oxfordshire Wildlife Sites Project offers advice on how to maintain the wildlife interest in woodland Wildlife Sites and works closely with the Chilterns Woodland Project, so that this advice can be incorporated with broader multi-purpose objectives.

The best management for a woodland depends on its existing tree composition and structure, and the species it supports.

coppicing

Coppicing (i.e. the rotational cutting of trees allowing regrowth from cut stumps or stools) is a traditional practice to produce firewood and poles. It provides open clearings, followed by dense regrowth, which encourage many plants, butterflies and songbirds. Coppicing can be carried out on a 7 - 25 year or longer cycle depending on species and produce required.

Coppice stools must be protected from deer and rabbit damage. The most effective way is to manage deer populations to a level where they don't cause significant damage to the conservation value. In some circumstances fencing or 'dead hedging' around coppice areas or groups of hazel stools can help coppice regrow. Some trees (e.g. oak, ash or cherry) can be grown on as 'standards', providing they do not shade the coppice too much.

high forest management

Natural regeneration is preferable to re-planting and can result in a high diversity of trees and shrubs. However, if re-planting is necessary, ensure local native stock is used (tree and shrub species), as this will maintain and enhance wildlife.

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Retain fallen and standing dead wood wherever possible (unless a safety hazard), as this benefits a range of wildlife including birds, insects, bats, fungi, mosses and liverworts resist over-tidiness.

Brash from thinning or felling operations should be left in situ or stacked to rot down (rather than burnt) - this provides additional habitat for insects, fungi, birds and small mammals.

Ivy does not usually harm trees and provides important food and refuge for insects and birds. If considered necessary to reduce its vigour, cut the largest stem and leave the others to grow on.

The introduced grey squirrels are now a major threat to the quality of broadleaved trees and may need to be controlled. In ancient woodlands, non-native species such as conifers should ideally be removed to leave native species.

leaving some areas unmanaged

Choosing not to carry out work in the woodland is a recognised form of wildlife management. Many species benefit from the near-natural conditions that develop. It is most appropriate for large woodlands with a diverse age structure of native tree species, and is particularly appropriate for wet woodlands, where the ground is very vulnerable to damage from heavy machinery. Even in woodlands managed for timber, allow natural conditions to develop and leave a number of trees to become old 'veteran' trees.

boundary features and rides

Protect boundary and internal wood banks (which may be medieval woodbanks of historical interest), drainage ditches and streams from damage when timber extraction is taking place.

Maintain rides and glades so that they do not become shaded or choked by scrub. Ideally, rides should be at least as wide as the tallest trees on the ride sides. Phase the cutting of rides so that taller grasses, flowers and scrub are left at the edges. Grassy rides are best cut from mid-July to September, ideally raking off the cuttings. Scrub on the edges can be coppiced on a 3 - 20 year rotation.



Maintain/encourage dense growth of scrub species (blackthorn, hawthorn, dogwood) in parts of the wood and along the boundaries, as this provides good habitat for birds, small mammals, butterflies and other insects.

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general

Maintain wet and damp areas as these support different species. Do not dredge or clear woodland ponds.

Bramble is an important nectar plant and provides food and habitat for many woodland birds, mammals and insects. The flush of bramble growth that often appears after coppicing, thinning or clear-felling will decline when the regrowth has developed and cast shade.

Control invasive, non-native species such as rhododendron, laurel, Japanese knotweed, Himalayan balsam and snowberry, by cutting and/or restricted use of herbicides.

Avoid any tree works during the bird nesting season (generally March to July inclusive) to limit disturbance.

For information on conservation management of other habitat types, check out the Berks, Bucks & Oxon Wildlife Trust's website: www.wildlifetrust.org.uk/berksbucksaxon

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