



Position statement: Ancient trees

- ◆ Definitions
- ◆ Conservation importance of ancient trees
- ◆ Ancient trees and the Woodland Trust
- ◆ References

Definitions

The terms veteran trees and ancient trees are often used interchangeably but there is a generally accepted distinction between the two. Veteran trees are taken to be those trees beyond their normal economic life (Sanderson 1998a). They are characterised by branches which are beginning to die-back from the tips, and by colonisation of the heartwood with fungi and other primary saproxylic organisms, that is - organisms that depend for part or all of their life cycle on dead and decaying wood.

Ancient trees are those of greater antiquity. They are frequently hollow or their heartwood is colonised by a greater range of saproxylic organisms. They contain a high proportion of dead wood including large dead limbs. There is no single point at which a tree becomes veteran or ancient. Some, like birch, may become veteran or ancient at a relatively young age compared with longer living trees such as oak.

Where concentrations of ancient or veteran trees occur in a woodland context these can form 'old growth' woodland. In the UK the term old growth woodland has been defined as 'stands with more than 200 years growth' (Peterken 1996) with a continuity of trees reaching back into the past (Rose 1992). Old growth woodland is distinct from ancient woodland. The latter is defined as woodland which has existed continuously without disturbance for more than 400 years but individual trees or stands need not be more than 200 years old. These distinctions are subtle but are given here to focus on the longevity and continuity of individual trees rather than the continuity of overall woodland cover.

Conservation importance of ancient trees

Whilst statistics on the numbers and locations of ancient trees in the UK are poor, it is clear that the UK has a greater abundance of ancient trees than many other parts of the world (Sanderson 1998a).

Ancient trees have a special conservation value. As they age and become hollow, they provide particular niche habitats including decaying wood, loose bark, sap runs, rot holes and tree humus. Typically ancient trees support many species of epiphytes and an important range of invertebrates and fungi. They also provide a habitat for other animals including owls, woodpeckers, other hole nesting birds and bats. Many specialist woodland species are almost wholly confined to old growth stands including more than 70 species of lichen (Rose 1992).

Many of the species characteristic of ancient trees are rare and declining, are poor colonisers and have disjunct distributions even within one wood (Peterken 1996). For poor colonisers, the presence of other ancient trees is vital to their survival. Management of woodland, which removes ancient trees and deadwood, can seriously reduce the opportunities for some of these species to move from one tree to another and may lead to local extinction (Sanderson 1998b).

For example, following clearance of old growth stands many lichens are unable to return for 200-300 years (Gustafsson et al 1992, Rose 1992) and can only do so if there are other old growth stands within 2.5km (Sanderson 1998b).

The following are example of species that are dependant on the presence of ancient trees or old growth woodland in the UK; Daubenton's bat, Bechstein's bat, violet click beetle, stag beetle, brassy tortoise beetle, wasp mimic crane-fly, redstart, tree creeper, nuthatch, lesser spotted woodpecker, tree lungwort, beefsteak fungus and royal bolete fungus.

Ancient trees are also present in the wider countryside, often as a surviving component in hedgerows of a previous land use, as boundary markers on ancient wood banks, marking parish boundaries or in open fields. The isolation of these trees makes them, and the species they support, especially vulnerable both to effects such as inputs of agricultural chemicals and over-grazing, and to reduced opportunities for species to colonise similar trees close by.

Ancient trees may also be important cultural features with strong historical links. The great age and physical presence of ancient trees captivates peoples' imaginations and makes them symbolically significant e.g. the 'Major Oak' in Sherwood Forest.

As our towns and cities expand ancient trees often remain but become subsumed in the urban landscape, surviving as isolated specimens and street trees. Whilst the historical and cultural symbolism of these trees is important, their isolation in a hostile environment undermines their ecological value.

Ancient trees and the Woodland Trust

In *Keeping Woodland Alive – The Woodland Trust's plan for action*, we recognised the importance of ancient trees and the associated deadwood habitat. The vast majority of specialist woodland species are associated with old trees, decaying wood or open ground within woods and are restricted to ancient woods. When considering woodland biodiversity we want to see an increase in the deadwood component of woodland, in particular ancient woodland. One of the four key measures of biodiversity potential that we identify is the area of old growth.

The Woodland Trust also owns and manages many sites characterised by ancient trees and pockets of old growth woodland such as Penn Wood in Buckinghamshire, Binns Wood in Hampshire, Glen Finglas in the Trossachs, Staffhurst Wood in Surrey, Little Doward and Cadora Woods in the Wye Valley.

We believe that positive action is needed to conserve ancient trees and the distinctive wildlife they support. Our attention focuses on ancient trees as a part of woodland ecosystems or where they occur in sufficient numbers elsewhere in wood pasture or parkland situations to offer real opportunities for conservation of their ecological value. We will target our action on the ground where there are known concentrations of ancient trees, where habitat continuity is threatened, and where opportunities to 'recruit' the ancient trees of the future through colonisation of maturing trees and deadwood, are greatest. We will therefore tend not to focus on isolated single trees or street trees in urban areas though we support the efforts of others to protect them on amenity grounds.

The Woodland Trust aims to promote the conservation of ancient trees, the wildlife they support and their cultural significance through;

- Managing our own sites to ensure continuity of ancient trees and deadwood where appropriate
- Working in partnership with other organisations with an interest in ancient trees and old growth, in particular with the Ancient Tree Forum www.woodland-trust.org.uk/ancient-tree-forum)
- Co-operating with others to develop a UK inventory of old growth and concentrations of ancient trees
- Lobbying for better protection of ancient trees and old growth woodland
- Publicising the importance of ancient trees, old growth woodland and deadwood to other woodland owners, land managers, opinion formers, local authorities and the general public

Working with others

We work in particularly close co-operation with the Ancient Tree Forum and agree with them an annual programme of work for the conservation of ancient trees. We recognise that there are many other organisations doing valuable work for ancient trees including the Tree Register of the British Isles, the Wildlife Trusts, the National Trust, the Forestry Commission, English Nature, Countryside Council for Wales, and Scottish Natural Heritage.

References

- Alexander K. Green E. & Key R. (1996) The management of over mature tree populations for nature conservation – the basic guidelines. In Read H., ed. *Pollard and Veteran Tree Management* II Corporation of London.
- English Nature (2000) *The future for Veteran trees*
- Green E. (1996) Thoughts on pollarding. In: Read H., ed. *Pollard and Veteran Tree Management* II Corporation of London.
- Gustafsson, L., Friskesjo, A., Ingelög, T., Petterson, B & Thor, G. (1992) Factors of importance to some lichen species of deciduous broadleaved woods in southern Sweden. *Lichenologist* Vol. 24, pp. 255-266.
- Harding, P.T. & Rose, F. (1986) *Pasture Woodlands in Lowland Britain*. Institute of Terrestrial Ecology, Abbots Ripon
- Peterken, G.F. (1996) *Natural Woodland*. Cambridge University Press
- Read H (2000) *Veteran Trees: a guide to management*. English Nature
- Rose F. (1991) The importance of old trees, including pollards for lichen and bryophyte epiphytes. In Read H., ed. *op cit*.
- Rose, F. (1992) Temperate Forest Management: its effects on bryophyte and lichen floras and habitat. In Bates, J.W. & Farmer, A.M. eds. (1992) *Bryophytes and Lichens in a Changing Environment*. Oxford University Press
- Sanderson, N.A (1998a) *Veteran Trees in Highland Wood Pasture*. Scottish Woodland History Discussion Group Notes III
- Ed. T.C. Smout, Institute of Environmental History, St Andrews,
- Sanderson, N.A (1998b) *New Forest Epiphytic Lichen Database*. Hampshire Wildlife Trust
- The Woodland Trust (1998) *Keeping Woodland Alive*
- The Woodland Trust (2000) *Expanding our Horizons*