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Wood-pasture and veteran trees in the UK: Where have they come from and where are they going?



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Wood-pastures are of major nature conservation importance in many parts of England frequently because of the veteran trees that they contain. Their origins are reviewed briefly, including consideration of how they may relate to the former 'wildwood'; how they evolved during the medieval period, and their decline (for the most part) during the nineteenth and twentieth centuries.

ORIGINS

Our appreciation of their significance for biodiversity has increased dramatically over the last decade, not least because many species of saproxylic invertebrates and epiphytic lichens depend on veteran trees in wood-pastures for their survival. In addition many areas considered to be near-natural old growth woodland in Europe are now recognised as having in

part a history as wood-pasture (Peterken 1996; Vera 2000).

Until recently the conventional view was that the natural vegetation cover for much of the UK and north-western Europe was predominantly closed-canopy high forest. In places however open parkland or savanna may be a better model, because of the influence of large herbivores such as aurochs and bison (Vera 2000). While the extent of open habitats is the subject of debate, old trees were undoubtedly common in the wildwood. Various saproxylic species now extinct or very rare in the UK have been identified from archaeological excavations (Buckland & Dinnin 1993). These old trees were not necessarily the squat, open-grown type found today in parks, but would have included tall forest-grown individuals such as have been found in bogs and old buildings (Peterken 1981). The flora and fauna that we associate with wood-pastures now may have been dispersed among a number of different types of situations: modern-day assemblages and communities did not necessarily evolve together, or transfer en bloc from the natural to the cultural landscape.

As humans and their grazing animals became more abundant and spread so there developed what we recognise as wood-pasture systems. By the early medieval period, these were sufficiently well-developed to have accepted customs and laws attached to them. Three distinct types are generally recognised particularly in the UK (Rackham 1980): parks, commons - where people had the right (amongst other things) to graze their animals without being owners of the land - and royal hunting Forests - areas where the monarch had rights to maintain and hunt deer.

The parks tended to be areas enclosed by a fence usually of a few tens to a few hundred hectares. They were often relatively open with scattered trees. The royal Forests and commons were more likely to contain some areas of closed canopy woodland, albeit this was grazed. Deer were less abundant as grazing animals on commons because they competed with the graziers' animals, compared to in Forests and parks where the monarch or park owner benefited from the deer.

During the nineteenth and twentieth centuries many wood-pastures disappeared completely; a few survive more-or-less in forms that would be recognisable to medieval eyes; others have been transformed in various ways, but still retain at least some of their distinctive characteristics and associated flora and fauna.



Veteran sweet chestnut trees at Hatch Park. (Photograph : Keith Kirby).



Hatch Park showing old pollarded trees, some younger trees protected by guards and a dead tree. (Photograph: Keith Kirby).

Many parks were landscaped and altered through amenity planting. Old trees might be kept as attractive “primeval” features, but they were often removed as unattractive, untidy eyesores. Even if the veteran trees were kept, the previously unimproved grassland or heath between them has often been ploughed or re-seeded. The roots of the veteran trees may be damaged in this process; lichens on their trunks are exposed to pesticides and fertilizers. Some parks have also been neglected and allowed to scrub-up, or they have been deliberately planted with conifers.

The combination of open semi-natural habitats and old trees, that is one of the characteristics of many wood-pastures is lost through such clearance or competition from younger trees.

Former royal Forests and commons that escaped complete clearance have often become more wooded as deer numbers went down in the nineteenth century; grazing by stock has also become less economic in the twentieth century because of the poor nutritional quality of the vegetation. As in parks the open ground might be improved (in agricultural terms) through fertilisation or reseeded, or be densely planted with trees with deleterious consequences for veteran trees and the species associated with them.

Former Medieval parks, royal Forests and commons are valued because they are where the main concentrations of veteran trees still occur, for example in the New Forest, Staverton Park and Ebernoe Common. However, veteran trees may be found in a variety of other situations: in hedges, along riversides, sometimes as isolated trees in fields or in towns and villages. Little is known about how well the more specialised flora and fauna survive on such scattered trees, but there is no doubt as to their contribution to

the landscape and to people’s perception of place and history. They may also be important for the spread of species between the major concentrations of veteran trees.

Because of the different degrees of modification that have happened to wood-pastures, as well as their variety of origins, it is not possible to say how much is left in England and how many veteran trees they contain. Assessing the number of veteran trees elsewhere in the countryside is even more difficult. However they are not uncommon and the total UK population of veteran trees is believed to be of international significance in nature conservation terms.

RECOGNITION AND DEVELOPMENT OF WOOD-PASTURE CONSERVATION

Wood-pasture was described by Oliver Rackham (1976, 1980, 1986) and listed as one of the forms in which ancient woodland survived by Peterken (1977); a major review of the most important areas for nature conservation in Britain in the early seventies listed some parkland sites (Ratcliffe 1977). Major surveys of what were then called ‘sites for mature timber habitat’ were carried out for the Nature Conservancy Council (Harding and Rose 1986). However, for much of the 1980s the emphasis was more on the conservation of young growth species and coppices. In the late 1980s there was the start of a revival of interest in old trees: Peter Mitchell (1989) proposed the term ‘veteran’ for old stands and did a brief review of re-pollarding. Ted Green at Windsor Great Park and the staff at Burnham Beeches (Buckinghamshire) were promoting awareness of how veteran trees might be managed. The breakthrough was the 1991 meeting at Burnham Beeches and subsequent conferences (Read 1991, 1996; Kirby



A Veteran Trees Initiative training day at Hatch Park.
(Photograph: Keith Kirby).

& Drake 1993). These led to the growth of the Ancient Tree Forum and the development of the Veteran Tree Initiative. The Ancient Tree Forum is a charity devoted to the conservation of old trees: it brings together specialists and enthusiasts with a wide range of interests. Since 2000, its web-site has provided a lively discussion page (www.woodland-trust.org.uk/ancient-tree-forum) on topics to do with veteran trees, their management and conservation.

The Veteran Tree Initiative was set up by English Nature (the Government advisory body on nature conservation in England) as a partnership with other government and non-government bodies in 1995 to support the growing interest in veteran trees and turn this into practical information and advice.

The Veteran Trees Initiative organised a series of training days, meetings and workshops (at which the main speakers were often Ancient Tree Forum members). These brought together the owners and managers of sites containing veteran trees, specialists in the wildlife that depend on them and arboriculturalists skilled in managing old trees. A wealth of practical experience was drawn together and summarised in the Veteran Trees Management Handbook and associated publications on grants and the safety issues (English Nature 2000a,b; Read 2000). (Owners of veteran trees may, under UK law, be liable for damages if branches fall on to people, cars etc). These key publications are available under the publications section of English Nature's web-site (www.english-nature.org.uk). A standardised method was developed for recording the important characteristics of veteran trees and a slide pack pre-

pared for use by those giving talks on veteran tree conservation. The other very significant achievement of the Veteran Tree Initiative has been the immense interest in and increased awareness of veteran trees that it helped to generate amongst both those concerned with nature conservation and the general public.

The increased attention paid to wood-pasture and parkland (where most veteran trees occur) led to its inclusion as one of the priority habitats in the UK's Biodiversity Action Programme. This programme is part of the UK Government's response to UN Conference at Rio in 1992 (HMSO 1994). For each priority habitat a plan has been produced setting out the main issues relating to the habitat and targets to be achieved (for the most part) by 2010-2015. For wood-pasture and parkland these targets relate to improved protection for veteran trees as well as better management of the land around them, for example by re-instating grazing on some commons. Parallel to the production of priority habitat plans, similar plans are being developed for key species, including for species such as the violet click beetle (*Limoniscus violaceus*) associated with veteran trees.

WHERE IS WOOD-PASTURE AND VETERAN TREE CONSERVATION GOING?

The habitat and species action plans are being put into effect by a range of different public and private bodies. Examples of work in England are considered under three broad headings: survey and recording, site management, and tree management. These need to be supported by ongoing programmes of publicity and awareness.

There are many well-known sites for veteran trees, but equally many that have not been identified as significant yet or have not been surveyed in detail for their biological and historical interest. We need to improve our understanding of the ecological requirements of the different sets of species found in wood-pastures particularly those associated with veteran trees.

Three different projects illustrate how these survey issues are being tackled (Kirby & Reid 2000).

- A national (UK) data-base is being developed, that will enable someone to find out what is known (and where the data are held) about different sites.
- Many Local Wildlife Trusts (NGO's) are organising county-wide surveys of wood-pasture and veteran trees: for example a recent survey of the county of Staffordshire has identified and surveyed over a thousand hectares of wood-pasture in the last three years.
- Research is being done on the requirements of saproxylic invertebrates and other species particularly associated with veteran trees; in some cases new sites for rare species, such as *Limoniscus violaceus* have been found.

Important sites for veteran trees have also been put forward as Special Areas of Conservation under the EU Habitats and Species Directive, as part of the Natura 2000 series. Wood-pasture is not identified as such in Annex 1 of the Directive, but these sites are also good examples of types (such as the *Ilicio-Fagion*) that are covered by the Annex. Within the UK other sites receive protection as Sites of Special Scientific Interest (the main mechanism for protecting sites of high biodiversity value).

These are protected sites, often privately owned, where the management is subject to consultation with, and approval by, the state wildlife service. This protection is not absolute: little can be done to stop insidious changes due to long-distance air-pollution or climate change. However, particularly with the stronger legislation introduced in February 2001 (Countryside and Rights of Way Act) the nature conservation agencies are well placed to promote sympathetic management of these sites even though they may remain in private ownership. Examples of such positive management include the following:

- Clearance of plantations from around veteran trees at Castle Hill (North Yorkshire);
- Restoration of grazing being considered or underway at Felbrigg Hall (Norfolk), Ebernoe Common (Sussex), Savernake Forest (Wiltshire);
- Use of Countryside Stewardship (a government run grant scheme) to fund restoration and expansion work at various sites across the country including at Moccas Park (Herefordshire).

Tree management work includes ongoing programmes of pollard restoration and creation at Burnham Beeches and Epping Forest (Corporation of London), Hainault (Woodland Trust) and holly pol-

larding in the New Forest (Forest Enterprise). Similar survey and management work is going in Wales and Scotland.

The publicity and awareness raising work started under the Veteran Trees Initiative is being taken forward by the Ancient Tree Forum. They are continuing with the programme of training days in different parts of the country and are promoting distribution of the various publications produced by the Veteran Tree Initiatives.

CONCLUSIONS

Awareness of veteran trees and the habitats, particularly wood-pastures, in which they occur, has increased considerably in the last ten years through the Veteran Trees Initiative and the Ancient Tree Forum.

The number of known wood-pasture sites has increased greatly and we have a much better understanding of the species associated with veteran trees and their requirements. Much work is now being done to ensure the conservation of the most important sites.

There are however still many sites with veteran trees that have not been surveyed in detail and more work is needed on linking the biological value of these sites to their historical and cultural values. English Heritage and Countryside Agency (both Governmental organisations) are working on this. Finally, the systems for supporting work on these sites through government grants need to be simplified •



Moccas Park. There are many old trees in the park and some younger ones have been planted, these are protected from grazing animals by tree guards. (Photograph: Keith Kirby).

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A Veteran Trees
Initiative training
day at Hatch
Park.
(Photograph :
Helen Read).

