

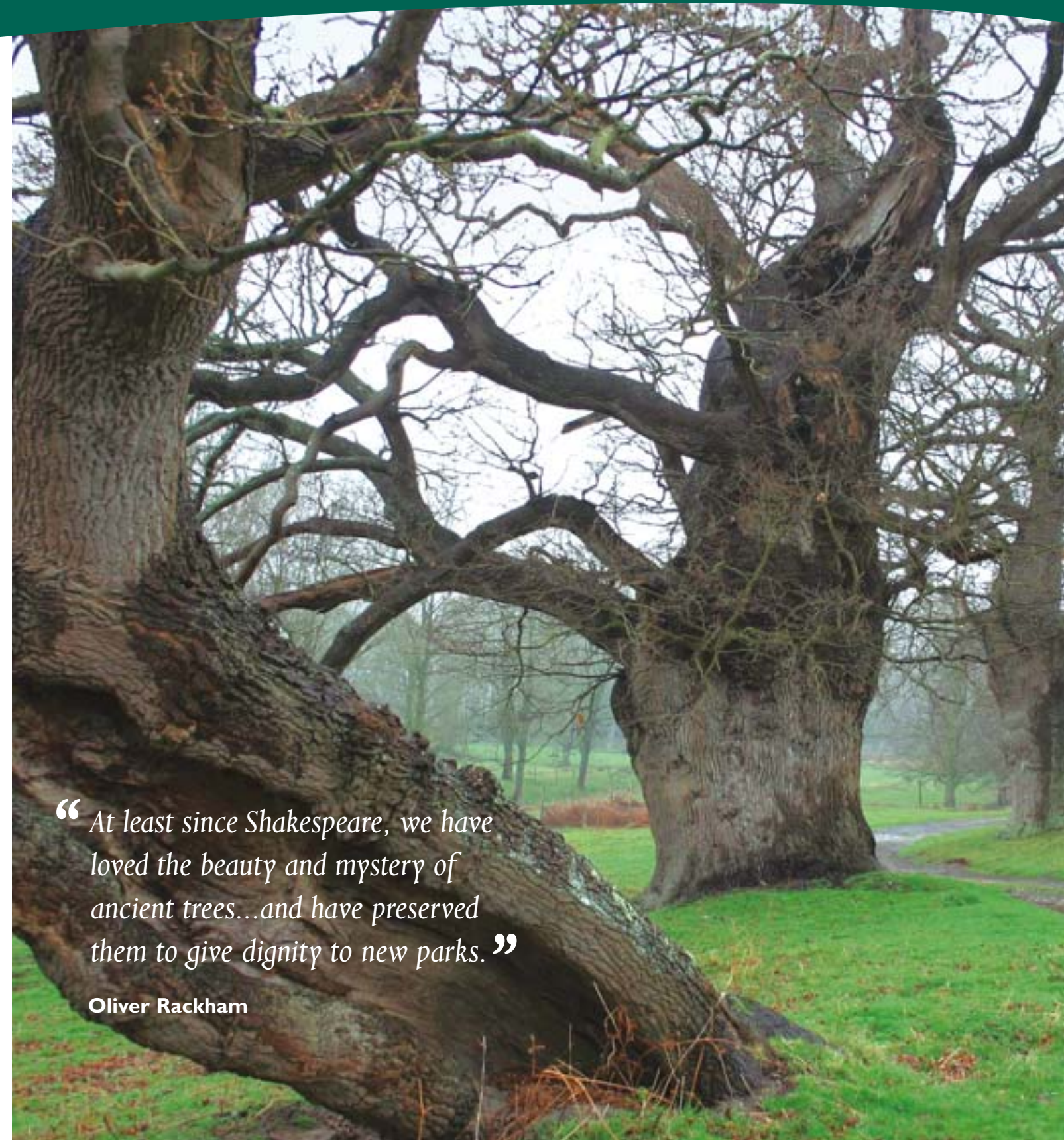
Chris Beardshaw taken by Phillip Tull

“ Ancient trees tell us much about our past. Through them we can glimpse a landscape seen by Robert the Bruce or even Alfred the Great. Old, fat and rotten they may be, but these remarkable trees help give the UK countryside its unique character. ”

Chris Beardshaw, TV Gardner

“ As the late Queen increased in age she grew ever more conservative in her tastes, and scarce would permit even the dead and rotten timber to be removed...Queen Victoria appears to have had a great dislike to cutting down anything. A great deal can be said in favour of that. ”

From an article published in 1902



“ At least since Shakespeare, we have loved the beauty and mystery of ancient trees...and have preserved them to give dignity to new parks. ”

Oliver Rackham

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Parks have been a status symbol from mediaeval times when they were originally places that were enclosed to keep deer. They were commissioned and subsequently cared for by many generations of families, often those of influence and wealth. They capture the changing fashions in landscape design down the centuries. The immense heritage value of our great houses and other fine buildings, the fabric, furniture and the treasures they contain as well as their parks and gardens, is widely recognised. Remarkable and rare ancient trees have survived and deserve equal recognition. They contribute to ‘the air of respectable antiquity’ and add a distinctive quality to our landscapes that helps to distinguish them from much of Northern Europe.

The great landscape designers – William Kent, Capability Brown and Humphry Repton, as well as less well-known ones, frequently incorporated into their plans features the pre-existing landscape of mature and ancient trees such as old hedgerow trees and pollards. Many of those original trees still thrive today and because of their increasing age have become of even greater historic significance. This guide provides information and advice for those restoring, conserving and farming designed landscapes with ancient and ageing trees. It is intended for landscape designers and gardeners, owners and property managers of historic parks and gardens as well as their agents and advisers. It should be read in association with the first guide in this series “Ancient Trees Guides No.1: Trees and Farming” because some farming activities can have a significant impact in historic parks too.

Crown retrenchment may prolong a tree's life ►



▲ Kilravock beech – a wonderful layering tree.

▼ Mature trees need as much protection as the young trees planted to replace them.



In the 16-19th centuries when most of our historic parks and gardens were designed, the British countryside was far richer in old and ancient trees than it is today. Recent changes in agriculture and the decline in the value of ‘working’ trees, especially pollards and coppice have led to many losses. Dutch elm disease resulted in the disappearance of millions of mature and ancient elms. Fortunately storms, like the one in 1987, often have less of an effect on our oldest trees than younger ones because they have already lost their crowns.

As a result, historic parks and gardens have become refuges for some of our oldest and culturally important trees and the specialist wildlife associated with them. To conserve them and the distinctive character they give our landscapes we need to:

- Nurture ancient trees, living or dead, to retain the special ‘air of antiquity’ they provide.
- Establish young trees to provide continuity into the future and revitalise the design concept.
- Perpetuate the lives of specimen and feature trees.

Discover the beauty in a tree with decay

Some common management issues in historic parks and gardens that affect ancient trees

1. Managing the living tree and its surrounds

Recent advances in knowledge of how trees grow, how they age and new tree management techniques mean that we are now better able to take action to safeguard and prolong the lives of trees in the landscape. In many cases there is no need to intervene at all other than to prevent damage to the tree's roots. However, what we do know is that too much cutting in too short a timescale will often hasten the demise of a tree. All species of trees, including introduced species, can play a vital part in providing the continuity of habitat that is so special in ancient trees.

How can you help?

- Where possible reduce risk by keeping people away from the tree that is causing concern.
- When cutting a tree, only remove the minimum necessary. Felling to ground level is rarely required.
- Seek specialist arboricultural advice before cutting ancient trees or old pollards that are well out of a pollarding cycle and plan the reduction of canopies in stages over decades rather than a few years .
- Leave torn or broken branches where possible to respond naturally.
- Allow windthrown trees and low or broken branches that are touching the ground to layer or continue to grow by protecting them from grazing animals.
- If felling is the only option, retain the stump and protect it from grazing if it has potential to regrow.
- Leave cut material on site in as large pieces as

possible and ideally close to where it is cut.

- Retain mature trees so they become the next generation of ancient trees.
- Avoid the removal of deadwood for no reason other than tidyness'.



A fallen tree may regenerate if given the chance.

“ We should do everything we can to prolong the lives of ancient trees. They are witnesses to the past, survivors in historic landscape; each has its own significant story. ”

Penelope Lively, Writer



Before: Visitors, the 'target', are too close to this 500 year old oak.



After: Visitors are no longer at risk, the path and car park have been relocated.



This Moccas Park oak was at one time thought the only tree in the country that was host to a particular species of beetle.

2. Re-evaluating the dead and dying tree

There is a prevailing view that designed landscapes, especially the gardens nearest the main house, should not retain any dead standing or fallen trees or limbs for aesthetic reasons. Yet there are many documented instances where leaving ancient trees and decaying wood was encouraged and some landscape designers, such as William Kent, even went so far as to relocate and re-erect whole dead standing trees. By the late 18th- and early 19th-centuries the works of many artists who painted in the Romantic style featured dead standing trees and fallen wood for their intrinsic beauty and qualities of naturalness.

Some ancient trees are living Noah's arks; they are host to a precious cargo of rare and vulnerable organisms which rely on a continuity of old trees in our landscape if their future is to be sustainable. For many species it is the natural process of decay, of hollowing and ageing that is important. Where cavities, splits and flaking bark are formed they provide nesting and roost sites for birds and bats.

Ecosystems rely on the recycling of nutrients from fallen wood by micro-organisms. Such wood should be retained as close as possible to where it has fallen. It can then slowly decay back into the soil and the nutrients become readily available for the tree to reuse.



Leave limbs where they fall.

“ The man of science and of taste will...discover the beauties in a tree which the others would condemn for its decay. ”

Humphry Repton "Observations on the Theory and Practice of Landscape Gardening" 1803

How can you help?

- Retain dead and dying trees as they provide important habitats for wildlife.
- When reducing dead trees, consider ‘coronet’ cutting limbs (leaving jagged ends that look like a limb broken by the wind) or turn retained standing trunks into a feature or sculpture.
- Leave cut or fallen branches as complete as possible. Leave them where they fall or move them closer to the tree to decay naturally and even artistically – decaying wood is too valuable to be burnt.
- Stumps are important reservoirs of biodiversity and provide an historical record of a tree. Leave them to decay naturally.
- Where potential health and safety concerns exist, remember felling is rarely the only option. Encouraging people to follow alternative access routes so they are kept away from the tree or reducing the extent of the tree canopy are often acceptable alternative strategies.

“ Ni thyn y dydd... Ei phen o geubren gobraff... ”

Y Dylluan

“ ...Nor will she by day withdraw her head from the great hollow tree... ”

The Owl, Dafydd ap Gwilym 1320 – c1370



Owl in hollow tree.



Stumps can provide valuable habitat

3. Managing the land around important trees

The designers and managers of the original historic landscapes did not have to contend with the damaging effects of 20th-century farming, forestry and game management or development such as new leisure facilities or to cater for the use of cars. They did however often consider the impact of grazing animals. Many individual landscape trees and clumps were originally fenced, often with iron railings. Large numbers of these railings are said to have been removed as a source of scrap metal during the Second World War and at the same time many herb-rich parkland grasslands were cultivated for arable production.



Remnant iron railing embedded in an ancient oak

Since the Second World War, root damage from cultivation, compaction from vehicles and modern stock and inappropriate grazing regimes (including deer and horses) have all been major factors in the decline of ancient trees. The use of modern agricultural fertilisers, pesticides and animal veterinary medicines is believed to have compounded these effects.

Grazing animals are an essential and very beneficial part of the sustainable management of parkland, however it is vital that the right mix of grazing and browsing animals are involved and are managed to enhance biodiversity and the landscape.



Whittlebury Park is divided by a main road. One side of the road is still an historic deer park designated an Site of Special Scientific Interest.



On the other side it has been converted to a golf course. As many of the old trees have been incorporated into the design, it is possible to maintain and enhance the continuity of the landscape by caring for the trees and planting for the future.

How can you help?

- Protect the roots of trees from damaging land management practices. For further details about these impacts and how to prevent them, see the first leaflet in this series: “Ancient Tree Guides No.1: Trees and farming”.
- Avoid damage to the bark of the tree trunks, buttress and surface roots from grazing animals, grass cutting and other equipment.
- Avoid supplementary feeding of stock as it encourages overgrazing, trampling and dunging which affects the ground vegetation and the roots of trees.
- When restoring grassland seek advice about the management of the ancient trees to avoid conflict.
- Prepare a grazing management plan to ensure there is sufficient grazing to enhance the composition of the ground vegetation and to create a balanced mosaic of scrub and trees.

4. Keeping the design alive – renewing the trees and shrubs

Conservation and restoration projects in historic landscapes should always retain as many of the existing trees as possible. The ancient trees will enhance the quality of the design and younger trees will be ready to replace them in time. The role of new trees and shrubs is to rejuvenate the original design. Ideally there will be sufficient trees growing and becoming old in the future as part of a well-researched restoration plan.

Planting is often now the only option for establishing new trees whereas in the original parks the trees self-seeded as part of a traditional woodpasture system. Where trees are regenerating too freely or the planting is too dense they may out compete the old trees or not be able to develop a full canopy. Many large trees at maturity will have at least a 30m diameter canopy. Even at the planting

stage the spacing between trees needs to be thought about to avoid one tree overtopping the canopy of another. As trees age their canopy retrenches – it may be thought of as ‘growing downwards’. The shrinking canopy of the aging tree needs to be free from competition from younger trees or its demise will be hastened.

How can you help?

- Establish more replacement trees and shrubs where there will be a gap in the supply of ancient trees.
- Establish future parkland trees – in line with a carefully researched restoration plan, sufficiently widely spaced so they can develop open crowns which are of great amenity value and also important for wildlife.
- When selecting new trees consider long term influences such as climate change and the suitability of different trees for the site.



Young tree protected by traditional parkland railing.



Ancient Tree Guides No.2: Trees in historic parks and landscape gardens

5. Perpetuating avenues

Across the UK a large proportion of our great avenues are ageing and there is considerable debate about how to manage them. Oliver Rackham, the eminent landscape historian, has lamented that too often in the past entire avenues have been grubbed up when they became uneven rather than allowed to develop and decay. Over-emphasis on visual uniformity will often lead to conflict with other interest groups who value the importance of the mature and aging trees and believe that a certain amount of unevenness enhances the interest of the avenue.

Circumstances will vary from case to case. However, before the decision to fell a whole avenue and replant a new one is made, the intrinsic historical interest of the original trees should be fully considered. Designers often planned for avenues in all stages of growth, including decline, and accepted that achieving perfect uniformity was an ideal rather than a reality. Avenue trees should also be evaluated for their part in providing valuable cultural and biological continuity. Management of ageing trees in avenues is now possible using modern arboricultural techniques. They can be retained for much longer and this may give younger trees on the site the time to age and

become ancient before all the original ancient trees have been lost.

How can you help?

- Manage avenues to secure their heritage, design, amenity, landscape and habitat values over the longest possible timescales.
- To give all trees the best possible chance, ensure the roots of existing or replacement avenue trees are looked after with the greatest care.
- Consider the role of ancient avenue trees in relation to the population of trees across the whole site, as it may be possible to replace them or create new avenues with trees that benefit biodiversity as well as the design objectives.
- Plant new avenues to become landscape features of the future and to provide new generations of future ancient trees near to existing aging avenues.
- Plan replacement of trees in avenues with care taking into consideration the choice of species, type and source of stock material and maintenance of the intrinsic proportions and structure of the avenue.

▼ Managing historic avenues presents many challenges

Photos left to right: Peter Quelch, Liz Fleming, William



An ancient surviving sessile oak in Dalkeith Park, Midlothian, which was once a medieval hunting park.



Churchyards, are a stronghold for ancient yews such as this one at Strata Florida in Wales, said to stand over the burial site of Dafydd ap Gwilym.

What makes an historic park or garden?

The registers and other inventories of parks and gardens in the UK record designed landscapes of special historic interest and include many different types of sites. Registered designed landscapes are of national significance and as such are a material consideration for local planning authorities in determining planning applications. The oldest surviving parks and gardens are likely to be considered for inclusion on the registers, and later Georgian and Victorian parks if they are representative of an important design and relatively intact. Specimen trees, shrubberies, parkland clumps, shelter belts and woods may all be features of designed landscapes.



Ancient oak in the historic park at Cadzow, Hamilton.

Registers

Register of Historic Parks and Gardens, England. (Statutory). English Heritage
www.english-heritage.org.uk/server/show/nav.l410

The Inventory of Gardens and Designed Landscapes in Scotland. (Non-statutory). Published jointly by SNH and Historic Scotland
www.pastmap.org.uk

The Cadw/ ICOMOS Register of Parks and Gardens of special historic interest in Wales. (Non Statutory). www.cadw.wales.gov.uk

The Register of Parks, Gardens and Demesnes Northern Ireland (non statutory). www.ehsni.gov.uk



Peter Quelch

Sources of further information and advice



The handbook *Veteran Trees: A guide to good management* was produced in 2000 as part of the Veteran Trees Initiative. It is available from English Nature priced £15 or can be downloaded for free from the English Nature website.

For general and specific advice on ancient tree management and sources of funding, contact www.ancient-tree-forum.org.uk via the email enquiry link. There is a discussion forum for sharing of information, ideas and concerns. Alternatively phone the Woodland Trust information desk on **01476 581135**.

This leaflet is the second in a series on the management of ancient trees. The first one in the series is titled: *Ancient Tree Guides No.1: Trees and Farming*. It is available from the Woodland Trust or can be downloaded as a pdf file in English and Welsh from www.ancient-tree-forum.org.uk. Further leaflets are planned including one on trees in relation to construction.

This leaflet is available in Welsh as a pdf. Mae'r daf len hon ar gael yn Gymraeg fel pdf o wefan www.ancient-tree-forum.org.uk

For further information about partner organisations go to their websites:

- www.english-heritage.org.uk/parksandgardens
- www.english-nature.org.uk
- www.forestry.gov.uk
- www.snh.org.uk
- www.historic-scotland.gov.uk
- www.cadw.wales.gov.uk
- www.ehsni.gov.uk
- www.ccw.gov.uk
- www.treecouncil.org.uk
- www.countryside.gov.uk
- www.nationaltrust.org.uk
- www.fwag.org.uk

Further reading

- Richard Muir (2005) *Ancient trees, living landscapes*. Tempus Publishing Limited.
- Oliver Rackham (2004) *Pre-existing trees and woods in Country-House Parks. Landscapes 2*, 1-16
- AAIS (Arboricultural Practice Note no 9) – *Management of Avenue Trees*, Tree Advice Trust, Forestry Commission (2002)
- There's life in the deadwood.pdf* – www.forestry.gov.uk/pdf/lifeinthedeadwood.pdf
- Lambert D., Goodchild P. & Roberts J. (1994) *Researching a garden's history: A guide to documentary and published sources*. Landscape Design Trust.

“ A society grows great when old men plant trees whose shade they know they shall never sit in. ”

Greek proverb