Chapter 2 What are Veteran Trees and w hy are they important?

2.1 What is a veteran tree?

- **The term veteran tree is one that is not capable of precise definition but it encompasses trees defined by three guiding principles:**
  - trees of interest biologically, aesthetically or culturally because of their age;
  - trees in the ancient stage of their life;
  - trees that are old relative to others of the same species.
- **The girth of a tree is not a reliable criterion because different species and individuals of tree have very different life spans and grow at different rates.**
- **Veteran trees can be identified by the presence of specific characteristic as listed in the main text.**

A veteran tree can be defined as: '**a tree that is of interest biologically, culturally or aesthetically because of its age, size or condition**'. Some trees are instantly recognisable as veterans but many are less obvious.

An alternative approach used by some people is to consider that the veteran, or ancient, stage is the final one in the life of a tree when the cross-sectional areas of successive annual rings in the main stem begin to decrease progressively. (Before this stage, successive rings will have already narrowed, but their areas will have been roughly constant, owing to their increasing girth.) In turn, the amount of leaf area that can be supported by the reduced annual increment eventually results in dieback of the crown. For this reason veteran trees are rarely tall with large crowns. In theory this definition sounds fine but in reality this growth phase may not be clearly recognisable even though it may be the longest one in the tree's life. Dryden describing oaks is reputed to have said, 'three centuries he grows and three he stays, supreme in state, and in three more decays'.

Size alone is a poor characteristic for determining veteran status, although some rules of thumb exist (see box). Different species of tree may grow to very different maximum sizes. The simple comparison of a huge mature oak tree (Figure 1) with a small gnarled veteran hawthorn (Figure 2) illustrates this point. In addition the same species can grow to very different sizes in different situations and conditions.

Figure 1. *See colour plate page 81.*
Figure 2. *See colour plate page 81.*

A rough rule of thumb can be adopted for species, eg oak, in relation to size:

- **Trees with a diameter at breast height of more than 1.0 m (girth 3.2 m) are potentially interesting.**
- **Trees with a diameter of more than 1.5 m (girth 4.7 m) are valuable in terms of conservation.**
- **Trees with a diameter of more than 2.0 m (girth 6.25 m) are truly ancient.**

Absolute age is also a poor indicator of ancient status for trees. Different species tend to live for varying numbers of years;thus age can only be used when considered in comparison with other trees of the same species. At 100 years of age a birch would be old and a willow extremely old. At 200 a beech would just be starting to become interesting, an oak just maturing and a yew still beginning.One age-related definition sometimes used is that of an individual older than about half the natural life span for that species (but defining the natural life span is also a challenge!)

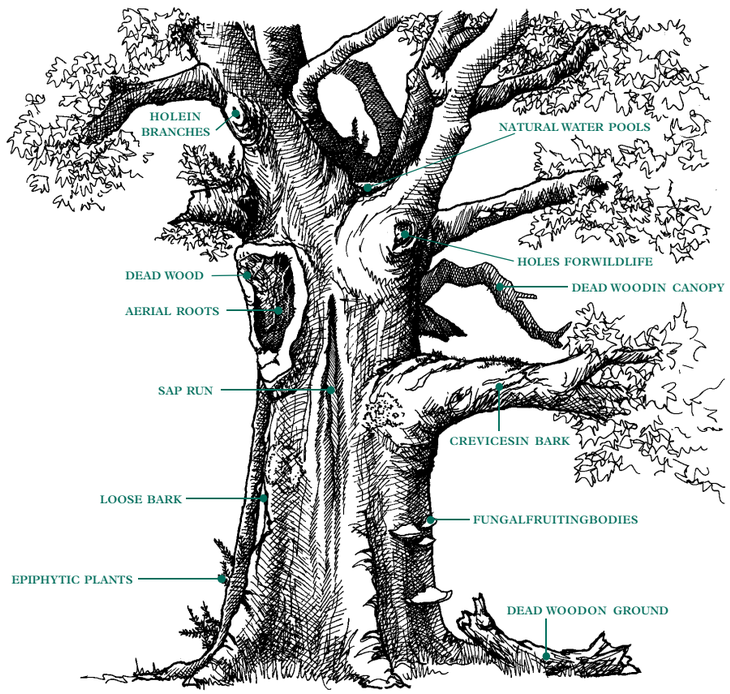
The increasing complexity of the tree with age results in a range of features in root,trunk and branch; these features are often good indicators of old age.

2.1.1 Characteristic features found on veteran trees

Listed below are characteristic features of veteran trees (see also Figure 3).The more the tree has, the stronger the indication that it is a veteran:

- **Girth large for the tree species concerned**
- **Major trunk cavities or progressive hollowing**
- **Naturally forming water pools**
- **Decay holes**
- **Physical damage to trunk**
- **Bark loss**
- **Large quantity of dead wood in the canopy**
- **Sap runs**
- **Crevices in the bark, under branches or on the root plate sheltered from direct rainfall**
- **Fungal fruiting bodies (e.g. from heart rotting species)**
- **High number of interdependent wildlife species**
- **Epiphytic plants**
- **An 'old' look**
- **High aesthetic interest**

Figure 3*. *Diagram to show the features characteristic of a veteran tree.*



In addition the tree may also:

- **Have a pollard form or show indications of past management**
- **Have a cultural/historic value**
- **Be in a prominent position in the landscape**

One of the difficulties of using the above list as an indicator of veteran status is that young trees which have been physically damaged; eg by fire, can show these features, whereas some veterans may exhibit very few.

While a veteran tree is alive, part of its value for wildlife is that it is a self-renewing resource. However, dead veteran trees continue to be valuable for wildlife because of their slow rate of decay. Such trees are often greatly under-valued but they should be treated with almost as much respect as living ancient trees.

It is not surprising that different people or organisations have slightly different ideas about how to recognise veteran trees. (Several surveys have used size as the sole, or major, criterion but this can be misleading, as demonstrated above.) On the whole it is best to err on the side of caution and remember that, even though your tree might not quite be a veteran yet, with care it will become so, helping to ensure the continuity of ancient tree habitats.

How have veteran trees survived in Britain?

A variety of factors have helped some veteran trees to persist in the British countryside (although there have been huge losses in the past):

- **Many (if not most) trees were 'working trees' (Green 1994), ie their wood and leaves were used, as an essential part of everyday life, for much of the recorded history of Britain. The management methods that predominated may have helped individual trees to survive (eg pollarding and coppicing).**
- **Very large trees were time consuming to fell and if the tree was rotten inside then the timber value was considerably reduced. This helped the survival of, for example the oaks at Birklands in Nottinghamshire, and Windsor Forest.**
- **Continuity of ownership on many estates. Changes of ownership may lead to decisions to remove old trees.**
- **Common land rights. Many veteran pollards were situated on common land and were owned by one person while others managed them (unlike coppice woodlands). This situation helped perpetuate their survival.**
- **Veteran trees have been incorporated into successive changes in the landscape. This occurred prior to and during the enclosure of land to form parkland and during the creation of design landscape parks by Lancelot (Capability) Brown and Humphry Repton. The retention of veteran trees was considered to give the parks an air of respectable antiquity (Rackham 1991).**
- **In Britain veteran trees have generally been revered and respected. Some old trees and some species of tree are regarded as sacred, which helped in their survival (eg yew trees in churchyards).**

2.2 Why are veteran trees important?

..those grey old men of Moccas, those grey, gnarled,low-browed,knock-kneed,bowed,bent,huge, strange, long-armed, deformed, hunchbacked misshapen oak men that stand awaiting and watching century after century biding God's time with both feet in the grave and yet tiring down and seeing out generation after generation.

The Reverend Francis Kilvert,1876.

The 'grey old men' from all over Britain have inspired artists and writers throughout the centuries. They have featured in the paintings of Thomas Hearne and John Peddar while Thomas Gray thought of them as *'Reverend vegetables .. always dreaming out their old stories to the wind'* (in a letter to Horace Walpole 1737). Notable specimens have been revered in the past and some have become tourist attractions, the Major Oak at Sherwood being a famous example. Through their individuality, veteran trees have high intrinsic appeal and are strong 'characters'. A few people have found the distorted shapes of old, repeatedly cut, pollards grotesque but even then they still managed to inspire, as seen in the comments of a journalist writing about Epping Forest. *'Short,shabby, scrubby, indescribably mean and ugly they were - something like warty railway sleepers with a shock head of twigs'* (journalist in Cole 1894).

All veteran trees are of historic interest; each is a survivor from the past, a relict of a former landscape. In addition to their importance as natural habitats,they are a valuable part of our cultural heritage. This historic interest lies both in the individual trees, each of which is a living document telling us of past management practices and ways of life, and in the tree's place in the wider countryside. The distribution of veteran trees in the landscape gives an insight into former land use patterns. Each tree, or group of trees, deserves individual consideration and study, perhaps combined with document-based research in local and national archives to enable us to understand fully its historic context and importance.

Within the existing agricultural landscape, veteran trees are most frequently found as markers along old boundary banks and occur in long established hedgerows. As such they contribute to our knowledge of historic land divisions. Other veterans, particularly pollarded willows, chart the course of rivers, or other water channels such as mill-leats, now often dry, visible on the ground only as archaeological traces. Veteran trees are closely associated with wooded commons, now almost lost as a form of land management, and are also frequent in churchyards where their existence and location can be of great significance, sometimes pre-dating Christianity.

Some of the highest concentrations of veteran trees are found in current and former parkland. However early in date the origins of a park, all parks were developed from an existing landscape and in most cases features of the pre-park landscape were incorporated into the new enclosure. Parks as they are today are invariably the result of several changes in ownership and fashion with each phase leaving its mark on the landscape. Successive designs tended to incorporate valuable features that were already present and veteran trees were often considered to add maturity (see Figure 4). Our generation is not the first to treasure their presence.

Figure 4. *See colour plate page 82.*

Some oaks alive today can be traced back to the medieval period or, in the case of some yew trees, before the start of Christianity. Many more trees predate great architectural structures of the 17th and 18th centuries that we admire and conserve.

Despite surviving centuries, they are now largely at our mercy through the rapid pace of change brought about by modern technology. It only takes a few minutes to condemn a tree that has lived through more changes in its time than we can ever imagine.

In brief, veteran trees are of importance because:

- **They have aesthetic appeal and cause inspiration.**
- **They may have a particular historic link, ie be associated with a specific person or event.**
- **They often illustrate past land use or cultural landscapes. For example veteran trees are often found on wooded commons, in parkland, as boundary or field markers and in ancient farmland landscapes.**
- **They may be part of a designed landscape or garden. Many formally laid out gardens contain veteran trees, and avenues may be comprised of them.They are also especially abundant in some of the landscapes designed by Lancelot Brown, Humphry Repton and other landscape architects of the 18th and 19th centuries.**
- **They are especially important for biological reasons, providing conditions suitable for a wide range of other plants and animals, many of which require the very special environment created in an old tree. They have been likened to a block of flats.**

Fungal rotting of the heartwood and dead limbs results in a diversity of micro-habitats suitable for other organisms including a potentially very wide range of invertebrates, dependent on such different micro-habitats, and birds such as woodpeckers which prey on them. Epiphytes such as mosses and lichens may require the old bark characteristic of veteran trees to grow on. Although some of the organisms are generalists, many are extremely specialist and are confined to veteran trees. Old trees, as a consequence of their rarity, harbour large numbers of rare and threatened species. The biological importance of a tree is greater if it lives long enough to perpetuate the continuity of habitats for future generations.

- **They provide an air of stability in an ever changing world.**
- **Very old trees are more likely than younger trees to be descendants of the trees of the natural wildwood that colonised Britain after the last ice age.This makes them a reserve of important genetic material. (However, some veteran trees have been demonstrated to be of introduced origin.)**
- **They may be an important gene pool of trees showing particular characteristics, eg disease resistance or good epicormic growth (beneficial for good growth after pollarding but not for good quality commercial timber).**
- **The annual rings of old trees are historical records in their own right. They illustrate past climate changes or cutting treatments, and the chemical nature of the wood is a potential resource for research into past climates,pollution levels etc. (However, the decay process removes the rings as the tree becomes hollow).**

In addition, Britain has one of the highest populations of veteran trees in Europe (along with Greece and Spain).

Why populations of veteran trees are more important than isolated trees

- **The more trees, the more alternative niches there are.**
- **Organisms that require precise micro-habitats are more likely to find enough to support viable populations.**
- **Groups of veteran trees can yield more information about past practice, and their population structure than single trees.**
- **Groups of veteran trees are less threatened by change than single trees.**

2.3 Types and locations of veteran trees

Veteran trees found in Britain today can be described and assigned to categories according to their origin and past management. There are three widely found types of veteran tree: maidens, coppice and pollards.

2.3.1 Maiden trees

These are trees that have a trunk extending from the base to the upper crown and have not been cut in any way other than perhaps minor tree surgery. They may be woodland trees that have grown up with other trees close by and thus tend to have a 'narrow' profile with a tall stem and small canopy, or they may be open grown with a much wider crown and bigger branches lower down the trunk. Open grown trees may subsequently be surrounded by younger woodland and a woodland grown tree may be exposed by the felling of surrounding woodland. Trees planted and left to grow without intervention, for example as part of an avenue or designed landscape, are usually maidens.

2.3.2 Coppice stools

A coppiced tree is one cut near ground level, then allowed to produce new shoots from the stool. The shoots from a block of woodland are cut repeatedly in cycles of varying length depending on the size of sticks or poles required. A range of tree species produce coppice growth, some much more readily than others. Although the growth from a coppice stool is usually quite young, the stool itself can be extremely old. These veteran trees can be very different in shape to maidens or pollards. Generally speaking, the larger the stool width or height, the older the stool (within species). For example, an ash stool 2 m in diameter has been estimated to be over 500 years old and a 16 m diameter lime stool was estimated at 2000 years old (John White pers. comm.). Very old coppice stools may rot out in the centre, leaving a circle of apparently younger stools. Coppice largely occurs in woodlands managed specifically in this way but is also found on ancient wood or boundary banks, along rivers and in hedges. Some coppice has not been cut for many years and may take on a tree-like appearance.

2.3.3 Pollards

A pollard is a tree cut like a coppice but well above the ground (Figure 5). Usually, the reason for cutting high up was to allow animals to graze among the trees without damaging the next crop of branches by browsing them. Thus the height of the pollard was partly determined by the type of animal (that to deter sheep did not need to be as high as that where cattle were grazed). The products of pollarding were leaves, twigs and bark for animal fodder, bark for tanning and wood for fuel and charcoal. Pollards were probably first cut when the maiden tree was quite young and small in girth with subsequent cuts made at regular or irregular intervals. In some places it seems unlikely that pollarding was carried out in such a formal and regular cycle as occurred with coppicing. The proportion of branchwood removed at each cut was probably also variable. In the case of willow trees all the growth was removed each time. For other trees, e.g. beech, it seems likely that some branches were cut while others were left (see also chapter 4). Pollarding is sometimes taken to be the total beheading of the tree, but here a pollard is taken to mean a tree cut back once or more (to a similar point) by removing a substantial number of branches. The presence of a number of pollarded trees in a group is often a good indication that the area was wood-pasture or parkland at some point in the past, though willow pollards are not necessarily associated with grazed systems.

Many, but by no means all, of the veteran trees in Britain today have been pollarded at some stage in their life. However, pollards are not necessarily old trees. The majority of young trees pollarded in recent years can be found in urban situations and on some sites with veteran pollards where owners/managers are now starting to create new pollards.

Figure 5. *See colour plate page 82.*

2.3.3.1 Where are veteran pollards found?

- Wooded commons where commoners had rights to graze animals and cut or collect wood (eg Ashtead Common, Surrey). Village greens are another form of common where veteran pollards may be found.
- Parklands. Private, enclosed, land usually grazed by deer, occasionally cattle (eg Moccas, Herefordshire).
- Wooded Royal Forests. Land governed by special laws where deer owned by the Crown or a wealthy land-owner were kept. Often these forests incorporated existing areas with commoners' rights (eg Hatfield Forest, Essex)
- As farm trees for a local wood supply, scattered about the farm and sometimes in hedges. Some farmsteads almost had miniature 'parks' around them (eg in the Lake District). In places this can produce a pollard landscape (eg parts of the Cotswolds).
- Upland grazed woodlands. Most upland woods were unenclosed and grazed by sheep, cattle or deer especially during the winter months. This practice continues today, although in the 18th and 19th centuries many woods were enclosed. The trees in these woods were sometimes pollarded, especially oak and ash. Some upland woods were summer grazed and may have contained a wider range of pollarded species, including alder, hazel, birch, ash and rowan.
- As boundary markers between, for example, parishes or areas of different ownership (eg East Anglia and Kent). Also as boundaries between different 'panels' of woodland, where at least some were grown out from layered hedges (D. Maylam pers. comm.).
- As elements within the designed landscape (eg clumps, avenues and pleasure gardens).
- Churchyards. Although not pollarded, yew trees are associated with churches, other species such as lime were frequently planted and may have been pollarded to keep them manageable. In addition, many churchyards were grazed in the past.
- Beside rivers and in withy beds (for the production of willow branches for baskets, etc.) Often these trees are in grazed meadows but sometimes they are low pollards, cut above ground for the ease of cutting rather than to protect shoots from grazing animals. Black poplars were pollarded in damp meadows close to rivers. Pollards were also used to help stabilise banks along roadsides in areas of wet fen and bog.
- As urban or street trees. Cut regularly to control the size for safety reasons and to reduce the risk of soil shrinkage that might cause subsidence of buildings.

Lapsed pollards

There are considerable numbers of pollards, and coppice, that have not been cut for many years. As the importance of fuel wood and fodder declined and coal became more widely available the need for actively managed wood-pasture decreased. This resulted in lapsed pollards, ie those that have not been cut for many years. The branches have grown for many more years than would have been the case in the past and have become large and heavy (Figure 6). The trunk or bolling of the tree may not be able to support the weight and it becomes vulnerable to wind damage either lifting the root plate or splitting the bolling. This presents one of the most difficult management problems, which will be addressed in chapter 4.

Figure 6. *See colour plate page 83.*

Wood-pasture

Silva pastilis *or wood-pasture (Figure 7) is distinguished from* silva minuta *(underwood) in the Domesday Book. In most wood-pastures the trees were actively managed.*

A wood-pasture can be defined as a land use combining trees and grazing animals (either stock or deer) where often (not always):

- **The trees are old and at low density.**
- **The trees are frequently managed by pollarding.**
- **The grazing tends to be long and sustained,leading to a different structure and species composition than ungrazed woods in similar soils.**

Wood-pastures vary between very open and very dense,and three broad types are found:

- **Grazed high forest with woodland type flora.**
- **'Parkland' with a ground flora showing few woodland elements.**
- **Grazed coppice in which livestock are temporarily excluded until the regrowth is out of reach.**

Wood-pastures that are no longer grazed are termed 'former wood-pastures'.

Figure 7. *See colour plate page 83.*

Why ancient wood-pastures are good for wildlife

- **They tend to have a wide range of tree age classes with veterans well represented (even though the veterans are often the result of management).**
- **They tend to have a mosaic of glades, open and dense woodland.**
- **The tree boles are often well lit and not heavily shaded by scrub or brambles (unlike ungrazed woodland), a condition favoured by many species.**
- **There tends to be a high quantity of dead and dying wood on the living trees.**

These conditions are better represented in wood-pasture than other modern managed woods. Sites with a combination of wood-pasture and old growth woodland tend to be the most valuable in terms of nature conservation.

2.3.3.2 Regional variations

Pollard form varies between regions owing to different management. In more northerly countries the importance of the trees for winter fodder (from the leaves and bark) was greater and in many situations the land under the trees was used for making hay (see Bergendorff & Emanuelsson 1996 and Hæggström 1998). In northern areas of Britain this practice of pollarding was sometimes called cropping. Leaves from pollards may have been used as fodder less frequently when agricultural techniques provided a wider range of winter fodder crops. In recent times hedgerow trees were pollarded in Nottinghamshire as a 'last resort' for cattle in bad years (N. Lewis pers. comm.). Holly is also currently cut in the New Forest for winter pony fodder and in Killarney for sheep.

2.3.4 Other types of veteran trees

In addition to the three main categories several other types may be found (see also Figure 8).

2.3.4.1 Bundles

The term bundle is used to describe a tree, which by design or accident has originated from two or more seedlings or plants grown in close proximity. Bundles are normally, but not always, of the same species. As the young trees grow the individuals become very closely pressed together. Some single boles show natural fluting and convolutions and it is rarely possible in single species groupings to be confident of their origin by visual inspection. Because of the way that they grow, bundles often have many of the characteristics associated with veteran trees. Reasons for planting bundles are not always known but broadly speaking three main types can probably be distinguished:

- **a naturally occurring bundle, the result of an accident of seed fall or an animal burying a cache of seeds that then germinate;**
- **a forester planting trees who slips several in a hole together to finish the task quicker;**
- **the result of a planned decision to create a bundle or multi-stemmed tree. This can be for several reasons, for example:**
  - for landscape purposes, often in designed landscapes to create a wide spreading crown more quickly. For example, it was recommended by Evelyn in the 17th century and is a technique known to landscapers;.
  - for agricultural purposes. In some wood-pastures a few bundles can be found. This may of course be accidental but it has been suggested that they might have been deliberately managed to confer distinct benefits, eg produce seed (when all the other trees around them were pollarded regularly and did not).

2.3.4.2 Fused coppice stools. These are abandoned coppice stools where the stems have grown close enough together to have fused for some distance above the original stool.They can be difficult to distinguish from bundles.

2.3.4.3 Shredded trees. A tree where the side branches are cut back repeatedly with a small tuft sometimes retained at the top of the tree. These are now very rare in Britain, though relics occur in the New Forest (N. Sanderson pers. comm.), but they still occur in other countries such as France. Most shreds are probably not particularly old.

2.3.4.4 Coppards. Trees coppiced and then later pollarded (or bundle planted trees later pollarded), a feature of parts of Epping Forest (Essex) and Dalkeith Old Park (Mid Lothian).

2.3.4.5 Singled coppice stools. A coppice stool where one limb has been retained, when the others were cut, and is left to grow on as a tree (ie is stored).

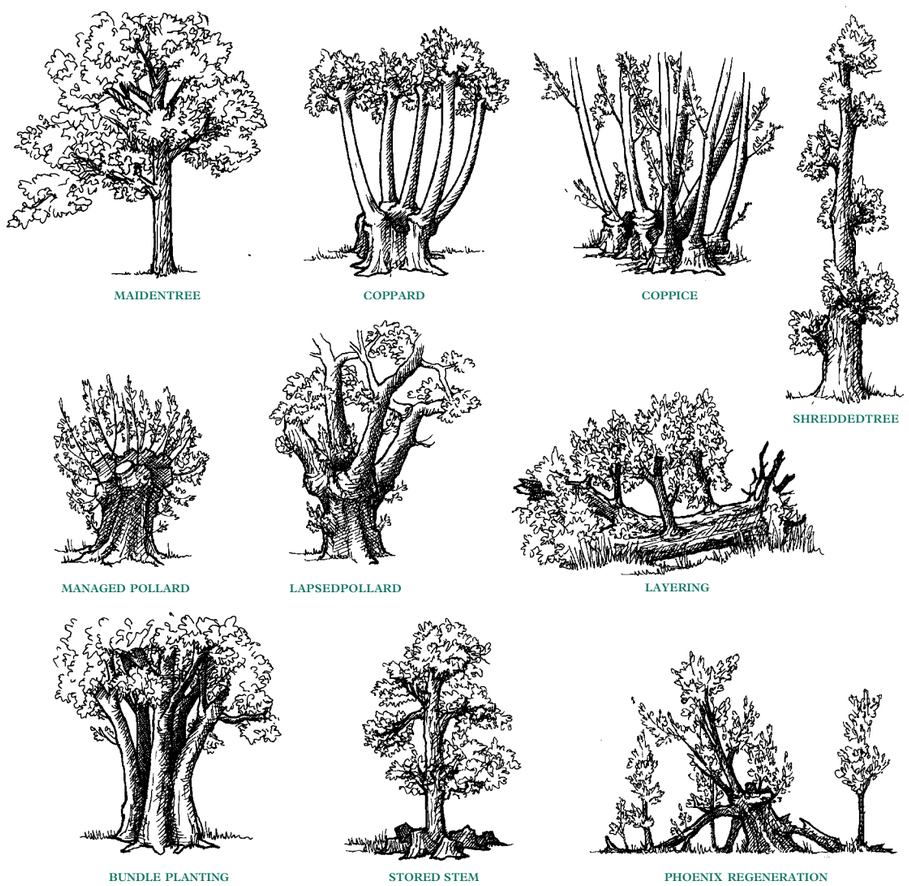
2.3.4.6 Layered trees. Layering is a means by which some tree species naturally regenerate. Old trees may fall over completely and then re-grow or collapse and layer well away from the original base. This is characteristic of lime, willow, alder, black poplar, medlar and bird cherry but can occur in any species. A particularly notable example is the Tortworth Chestnut. The term phoenix regeneration has been applied to trees that have fallen over, or split apart, and successfully continued growing.

2.3.4.7 Orchard trees. These trees are pruned to encourage fruit production and for ease of management but the act of pruning will enable the trees to live longer than they otherwise might. Veteran orchard trees have a very distinct invertebrate fauna associated with them.

2.3.4.8 Naturally damaged trees. The effect of browsing, wind, fire, grey squirrel or oak scale insect damage can act in a similar way to pollarding. Usually these events shorten the life of the tree but they can create similar conditions to those found in veteran trees. Where the top of a tree has been removed by an agent other than man it is often referred to as a natural pollard or having been self-pollarded.

The categories are differentiated according to management practices and if these have changed or ceased for long periods it becomes difficult, if not impossible, to assign trees confidently to a particular category. For example, a tree pollarded once or twice, then grown on for over 50 years may be indistinguishable from an open grown maiden with a multi-stemmed crown.

Figure 8. *Diagram to show some of the types of veteran trees.*



2.4 Threats to veteran trees

There is a tendency to view old trees as immutable and immortal. They have demonstrated their resilience to past threats but some of the potential threats of today have no precedents or are on a scale, or are taking place at a rate, that may outstrip the ability of the trees to adapt. Vigilance is needed to identify future threats. Those most frequently encountered today are:

- **felling - to obtain the wood and timber, for safety reasons, to increase tidiness, for change in land use (eg development or agriculture) or for landscape reasons;**
- **competition from surrounding trees both planted and naturally occurring (or sudden release from competing trees);**
- **neglect (lapsed pollards having heavy branches that the tree is unable to support);**
- **inappropriate past management (eg filling cavities with concrete, girdling with chains and iron bands);**
- **unskilled tree surgery (eg cutting into the bolling, uncontrolled major limb removal, damaging retained limbs);**
- **inappropriate management of surrounding land (eg ploughing close to the trees, use of agricultural sprays and fertilisers or damage to roots by development, trenching and cable installation);**
- **inappropriate grazing levels (too little results in tree cover that can shade out the old trees, too much does not allow any tree regeneration and can lead to bark stripping, soil compaction, enrichment etc.);**
- **rapid changes in water table levels or surface water causing drought (eg owing to increased abstraction or naturally induced) or water-logging owing to raised levels;**
- **fire - externally, eg through fires in the surrounding land, bonfires, or internally owing to vandalism;**
- **pollution - remote, from industry and traffic, or localised, eg toxic rubbish such as oil and chemicals close to the tree, salt on roadside trees or nitrogen enrichment owing to manure and compost heaps;**
- **trampling/soil compaction - caused by livestock, people or vehicles (see Figure 9);**
- **bark damage - caused by people, vehicles or livestock;**
- **disease - eg Dutch elm, oak dieback;**
- **lightning strike.**

Often some of these threats are accelerated when land changes ownership.

Populations of old trees and their associated wildlife are also threatened, in additional ways by:

- **isolation and fragmentation;**
- **lack of a new generation of old trees;**
- **removal of standing dead trees and dead wood.**

Figure 9. *See colour plate page 83.*

2.5 Why manage veteran trees?

Management of veteran trees is often needed to ensure that the threats, identified before, do not cause loss of the trees and the value associated with them. Active management may not involve doing very much for most of the time. **The essential point is that the trees and their situation are checked at regular inter vals and management car ried out only if it is necessar y**. Each situation must be assessed individually.

The broad reasons for managing old trees have changed quite considerably over the years. From Neolithic times until the 18th century the chief reason for the management of woodlands and trees was for their wood, timber, bark, leaves etc. In the 18th and 19th centuries the recreation of the wealthy started to become an influence and people desired places for quiet walking, picnics and exercise. In the 20th century reasons for management have changed again. As the need for small-scale wood (pollard products) declined many existing trees were just neglected. Others were removed in the process of urbanisation and agricultural intensification. Those that remain have become valued for amenity and biological values. Coupled with this, an interest in repairing landscapes has developed, especially designed ones.

In the last decade the importance of biological value has been further focussed by the Rio Convention on Biological Diversity and so current management aims to provide a continuation of habitat. If no management is carried out habitats associated with veteran trees will be lost. Dependent specialised species of limited mobility will die out. Management may also take place for landscape, economic, or cultural reasons or a combination of several of these. An opposing pressure has come from a different quarter; as Britain becomes an increasingly litigious society the 'management' of trees for safety reasons has also grown substantially.

Reasons for managing old trees:

- **to safeguard the genetic resource;**
- **to provide continuity of habitat for wildlife;**
- **to keep individual trees alive for as long as possible, enabling a new generation of trees to replace the old ones;**
- **to maintain traditional practices;**
- **to perpetuate maturity and continuity within landscapes;**
- **to perpetuate aesthetic values eg characteristic landscape features;**
- **to increase the landscape value;**
- **for historical reasons - association or landmark trees;**
- **to fulfil safety responsibilities.**

Continued management today and into the future depends upon those who have stewardship of veteran trees acknowledging their present value and ideally finding new values.

Further reading: Alexander, Green & Key. (1996), Barwick (1996), Bergendorff & Emanuelsson (1996), Damant (1996), Debois Landscape Survey Group (1997), English Nature (1996), Green (1994, 1995c, 1996a, 1996b), Hæggström (1992, 1994, 1998), Le Sueur (1931), Peterken (1996), Pott (1989), Quelch (1997), Rackham (1986, 1991), Rush (1999), Sanderson (1998a, 1998b), Smout & Watson (1997), Watson (1997).