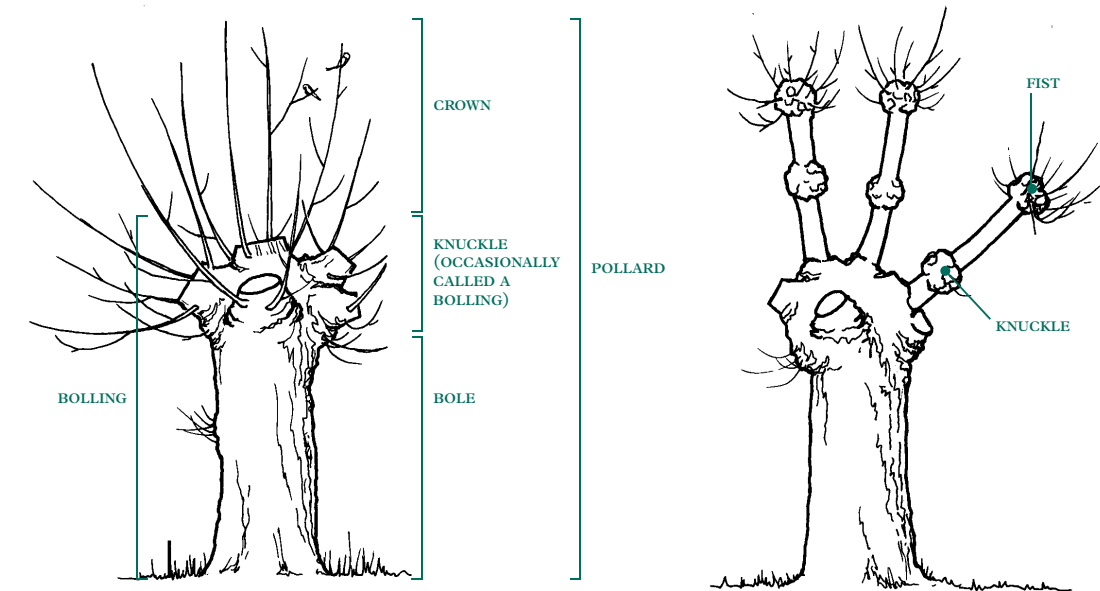


Glossary

Figure 48a. *Features of a Veteran Tree.*



ancient tree -

The final stage in a tree's life.

adventitious buds -

Secondary buds arising in already existing tissue, often as a result of damage.

aerial roots -

Adventitious roots, developing from bark tissue on the above-ground parts of a tree, sometimes into a decaying trunk.

bolling -

The permanent trunk and stubs of a pollard consisting of the knuckle and the bole. It can take many different shapes depending on the form of the tree. Sometimes used for the knuckle alone.

(see figure 48a)

bole - (see figure 48a)

The main trunk of a pollard.

branch bark ridge -

The area of raised bark tissue that forms at the junction of a branch and the main stem.

branch collar -

The swelling at the base of a branch formed when the growth of the branch is disproportionately slower than that of the main stem. The term is also used for the growth pattern of the cells of the main stem, around those of the branch, even if no swelling is visible. That where the cellulose is degraded but the lignin is only modified. Also called red rot, orange rot, etc.

brown rot -

bundle -

A tree that has, naturally or by planting, originated from two or more seedlings of the same or different species, in close proximity. As the individuals grow they become closely pressed together.

burr -

A tumour-like swelling on a tree resulting from any number of causes, sometimes associated with epicormic growth.

buttress -

A swelling or spur at a base of a trunk where a root differentiates into the stem. Collectively the buttresses form a flare.

callus -

An undifferentiated mass of cells, for example on the surface of wounded living plant tissue. Also a fold of differentiated wood and bark that forms around a wound on a tree.

cambial zone -

A multiple layer of meristematic cells, which divides to form the increments (rings) of bark and/or woody tissues.

cambium -

The layer of cells that develops into the cambial zone (see above), existing as a single layer during dormancy. The vascular cambium forms wood on its inside and bark on the outside, whereas the cork cambium lies within the bark and forms corky cells on its outside and sometimes a secondary cortex on its inside.

canker -	An area where the bark and the cambium have been killed by disease; it is usually occluded by new bark and wood forming around its edge.
canopy -	The coverage of leaf area of one or more trees. Open canopy where the trees are spaced apart, closed canopy where they overlap. Also the uppermost layer of woodland.
case hardened -	When the surface of exposed wood dries rapidly and seals in internal moisture. The underlying wood may be functional or decaying.
cavity -	Hole in a tree caused by the removal or destruction of wood.
cellulose -	The main component of plant cell walls; a carbohydrate composed of long filaments, made up of glucose molecules.
chase -	Unenclosed land where wild animals were preserved for hunting, usually owned by a subject rather than the Crown.
coarse woody debris (CWD) -	An American expression referring to dead wood with a diameter of more than 2.5 cm.
compartmentalisation -	The physiological isolation of columns of wood within the tree.
coppard -	A tree coppiced and, later in life, pollarded.
coppice -	An area of trees cut near ground level and left to regenerate from the stool. Often cut as a block, usually as part of a fairly formal rotation. Also used as the verb to coppice and as an intransitive verb meaning the response of the tree.
coppice stool -	See stool
copse -	A wood used for cutting coppice (variant of coppice) but also used more loosely for a small wood.
cork cambium -	A layer of cells within the bark, laying down corky cells on the outside.
coronet cut -	Irregular cuts made in the stub left after a branch has been removed, the aim of which is to give the cut surface a more natural appearance.
crown - (see figure 48a)	The spreading branches and foliage of a tree.
crown thinning -	The systematic pruning of small diameter branches throughout the crown. With the aim of reducing weight or wind load.
crown reduction -	The reduction of branch length in part or whole of the crown.
cubical rot -	A form of brown rot, where the decayed wood breaks apart in cubes.
cuboidal rot -	As above.
dbh -	Diameter at breast height. Usually 1.3 m above the ground unless the tree shows abnormal swellings at that point.
deadwood -	Wood which no longer fulfils any function for the tree. It may still be attached or have fallen from the tree.
dead wood -	Wood that no longer contains living cells. Includes deadwood (as defined above) and also heartwood etc., which may have a structural function in the tree.
decay -	The chemical breakdown of wood by micro-organisms.
dormant buds -	Those formed during the development of the current year's shoots but which do not develop unless later stimulated to grow.
doted -	See spalted.
dottard -	A tree that has lost its top or branches, is dead and in a state of decay.
dozed -	see spalted.
dieback -	The death of a part of the tree, usually from the periphery inwards.

dysfunctional wood -	Wood that has lost all or part of its original function (eg it can be structurally important but not conductive).
early-wood -	The wood produced by trees in their main flush of growth, in the spring. The wood may have better water conduction ability than late-wood but is often less resistant to dysfunction and decay.
endophytic fungi -	Fungi living within plant tissues without causing overt disease.
epicormic growth -	Literally, growth 'upon stem', initially appearing as twiggy growth apparently from the bark surface. There are two types, that from dormant buds and that developing adventitiously.
epiphyte -	A plant or lichen growing on a plant.
flush cut -	A cut that cuts into the branch bark ridge, which injures the trunk.
flux -	Liquid emissions from within the tree, leaking to the surface, often colonised by yeasts sometimes emerging under gaseous pressure.
fist - (see figure 48a)	A collection of knuckles.
former wood-pasture -	Wood-pasture that is no longer grazed.
forest -	A tract of land, usually owned by the Crown, and subject to special laws, mostly concerned with the preservation of game.
fused coppice -	A coppice stool with mature stems that have fused to give the appearance of a single stem.
girdling -	See ring-barking.
grazed high forest -	A form of wood-pasture where the trees are maidens; not coppice stools or pollards. The canopy is usually quite dense.
heartwood -	The dead, or predominantly dead, wood in the centre of tree species (eg oak) whose living sapwood has a determinate lifespan.
knuckle - (see figure 48a)	The top of the bole on a pollard. The point where branches have been repeatedly cut back which has become swollen.
hulk -	The remains of a large ancient tree, living or dead, with very little crown.
lapsed pollard -	A pollard that has not been cut for many years.
late-wood -	The wood produced by trees after the main flush of growth in the spring. The wood may have poorer water conduction ability than early-wood but is often more resistant to dysfunction and decay.
layering -	When aerial parts of a tree (or the whole tree) touch the ground and roots form new, but initially connected, plants. This can be natural or as a result of human influence.
leader -	The main (or topmost) shoot(s) of a tree.
lignin -	A component of wood cells that is cement-like and hard. The process of lignin deposition within the cellulose cell walls is called lignification.
lopping -	Cutting the lateral branches of a tree, but not the top.
maiden -	A tree that has not been modified by cutting. Unless it has been damaged by wind etc., it has its original natural crown.
mature -	A tree that has attained peak crown size and a shape that is different from the developing stage. The maximum point in the mature stage of a tree is also the pivotal point after which the ancient stage starts.
monolith -	A managed standing dead tree, usually with very few limbs.
mycorrhizal fungi -	Fungi forming an intimate and mutually beneficial association with the roots of trees.
natural pollard -	A tree that has been pollarded by 'natural' means, eg by wind or squirrel damage, sometimes also called a self-pollard. It will have originated from a maiden tree.

old growth woodland - Woodland stands that have not been managed for over 200 years. Many of the trees have a large girth, and dead and dying trees are present.

old tree - Any tree in the ancient phase.

open grown - The form of trees grown in the absence of competition and shading which tends, in many species, to be squat and spreading.

over-mature - A tree beyond full maturity. Usually used in commercial forestry to mean a tree past its commercial peak.

Park (or Historic Park) - An area of enclosed land where domestic animals or, more usually, deer were, or are, kept among widely spaced trees. (Not a municipal park.)

parkland - A form of wood-pasture where the trees are mostly open grown.

pasture woodland - See wood-pasture.

pastured woodland - A form of wood-pasture where the use by animals is periodic or seasonal, for example used as shelter in upland areas.

pathogen - A micro-organism causing disease (adjective: pathogenic).

phloem - The conductive tissue, composed of special cells, through which the products of photosynthesis are translocated throughout the tree.

phoenix regeneration - A tree that has fallen or split apart that has successfully continued growing.

poll (v) and polling - The formative process of removing the crown of a young maiden tree creating a pollard. Often now referred to as pollarding.

pollard (n) - (see figure 48a) A tree cut once or repeatedly at a height above which grazing animals can reach the regenerating shoots. Usually cut on a semi-regular basis, with the whole or part of the crown removed.

pollard (v) - The act of cutting an already created pollard. (Originally a noun derived from the transitive verb 'to poll', now used as a verb in its own right.)

pruning - Cutting a tree with the intention of modifying its form or growth.

releasing (trees) - Clearing competing younger trees from around a veteran.

relict pasture woodland - Wood-pasture that is no longer grazed, also used for small remnants of a larger area of wood-pasture that are still grazed.

repollarding - A confusing word, used in the past for both pollarding and restoration pollarding, best not used.

residual wood-pasture - As former wood-pasture.

restoration pollarding - The re-establishment of a cycle of pollarding on trees that have not been in a regular cycle for many years.

retrenchment - A process whereby a tree with crown dieback forms a smaller, lower crown.

ring-barking - The removal of a strip of inner and outer bark down to the cambium, all round the stem or trunk.

ripe wood - Older wood in the centre of tree species (e.g. beech) where the sapwood gradually ages and is not converted to heartwood.

root spurs - Equivalent to individual buttresses.

rot - See decay.

sail area - The amount of tree canopy that is exposed to the wind.

sap-flux - See flux.

saprophyte - As saprotrophic but pertaining to plants (adjective: saprophytic).

saprotrophe - An organism obtaining nutrients from dead organic matter (adjective: saprotrophic).

sapwood - The living xylem found in a woody plant. It either gradually loses viability over a number of years or is converted to a distinct heartwood which is largely dead.

saproxylic - From the Greek Sapro (dead) and xylos (wood). Organisms that are dependent, during some part of their life cycle, upon wood or bark, usually dead or dying.

self-pollard - See natural pollard.

singled coppice - A coppice stool where all the limbs except one are removed.

shred - A tree where the branches are periodically removed up the side of the trunk and then left to re-grow. A tuft is usually left at the top and occasionally an upper branch.

slime flux - Flow of fluid out of the bark, partly due to microbial action.

snag - In the USA a standing dead tree. Also used for a dead branch stub.

soft rot - The wood decay that results from degradation of the cellulose in the cell walls, but without general erosion of the wall, by a fungus.

spalted - A term used by wood workers to describe wood patterned by decay fungi.

springwood - see earlywood.

stag headed - The state of the crown of a tree when the dead branches protrude above the canopy. Often as a result of retrenchment and not a sign of ill health.

stool - A tree that has been coppiced. Also used for that part of the tree which is retained after coppicing.

stored coppice - A coppice stool retained beyond its normal coppice cycle.

stub - A truncated limb on a tree, either cut or natural. Also used for a tree intermediate between a coppice stool and a pollard.

stow - A pollard (local name).

sucker - A shoot arising from a root.

summerwood - see latewood.

timber - Large tree trunks, suitable for sawing into planks.

topping - cutting off most or all of the crown of a mature or semi-mature tree.

tree pool - A pool of water on a tree, often where a branch or root joins the trunk. The bark may remain intact under the water or some decay may be taking place.

veteran tree - A human valuation applied to trees in the ancient phase. The implication is that the tree has 'gone through the wars' and is a survivor.

water sprout/w ater shoot - Epicormic growth.

white rot - Decay where the lignin and cellulose are both broken down.

wildwood - Woodland unaffected by neolithic or later civilisations.

withy - Willow of 1-2 year old growth, used for baskets.

withy bed - A group of willows used for withy.

wood - Poles and branches of trees, smaller in diameter than timber.

wood mould - The end result of the decay process, a rich, humus-like substance.

wood-pasture - Land with trees that is grazed (often called pasture-woodland).

working tree - A tree that is managed so that parts of it are used as a renewable resource for various purposes by man.

xylem - Plant tissue that has the function of translocating water and mineral nutrients. In trees and shrubs the xylem is heavily lignified and has an additional function in providing structural support.