



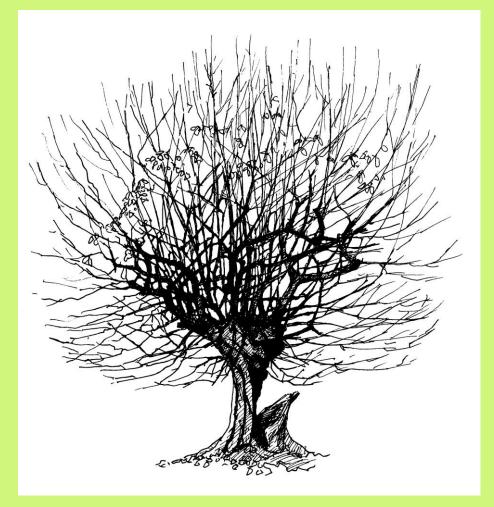
Pruning techniques

Illustrations to show some techniques that may be used on veteran trees





1. Pole thinning



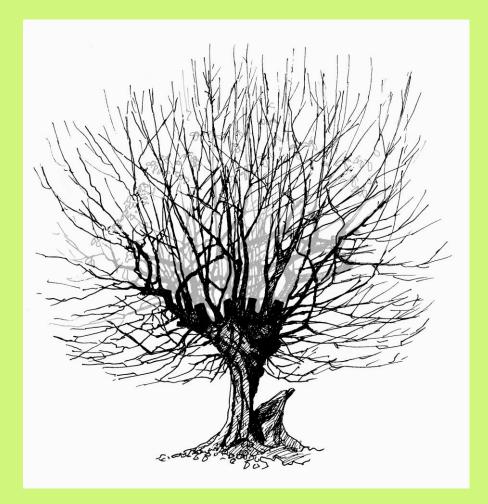
When?

- On trees that have been pollarded and
 - Are out of a regular cycle but where the branches are relatively young/small (less than 20-30 years old) or
 - Are lapsed, were cut hard and produced a lot of new shoots but have substantial decay in the cut branches but with apparently good vitality.





First cut



How?

- Prune the largest diameter branches leaving stubs that are at least 5-10cm
- Ensure that there are retained branches evenly distributed around the bolling
- Do not remove more than 50% of the live crown



Tree response to first cut



If the tree responds by producing good growth, with many strong new shoots, it can be pruned again after 5-10 years. However, the period of time between cutting depends on the species, location and response

Erasmus+

If it does not respond well,
 do not prune further unless
 the stability is compromised;
 prune as little as necessary to
 ensure it does not fail





Second & subsequent cuts

If tree responds well to pruning it can be cut again. Each time:

- Remove the larger/older branches and retain the smaller ones
- Do not remove more than 50% of the live crown
- Leave stubs of 5-10cm





1a. Pole thinning in the canopy of a tree



When?

- When a veteran tree has been reduced and the subsequent growth is all clustered close to the cut point with no new shoots lower on the stem
- Leaving branches with foliage is important but it is necessary to reduce the weight on the branch as it is very fragile
- When further reduction of the large branches would harm to tree due to lack of leaf-bearing branches





2. Tip pruning



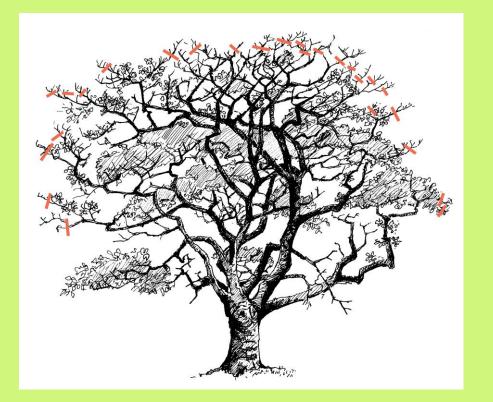
When?

The tree has limited
growth in the centre of
the crown but needs
reducing (or will need
reducing in the future)
because of issues of
structural failure that
are not urgent





Where/how to cut

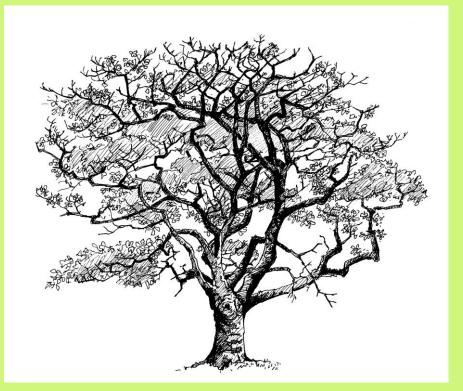


- Prune the tips of the branches all around the crown using secateurs or a hand saw.
- Removing small amounts at the tips of the crown, often not more than 10-20cm





Response to tip pruning



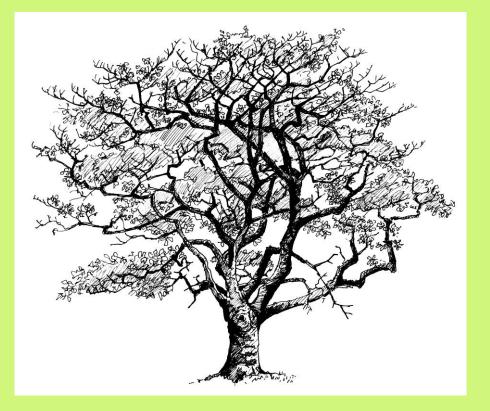
This tree has responded well by producing shoots in the lower crown

- If the tree responds well it will produce new shoots lower in the crown which will make it appear denser
- The tree can then be pruned to ensure it does not fail, such as in reduction pruning, once the lower crown has become established
- If the tree does not respond then options other than pruning need to be considered
- If the tree produces many new shoots from the cut points it is not 'ready' to retrench and other options need to be considered





3. Reduction pruning



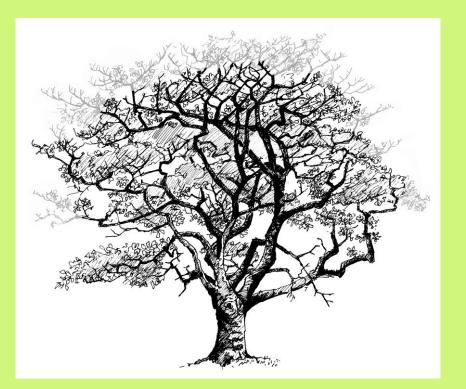
When?

The tree has structural problems and there is a high risk that major parts of the crown may be lost in the near future





Reduction pruning – whole crown



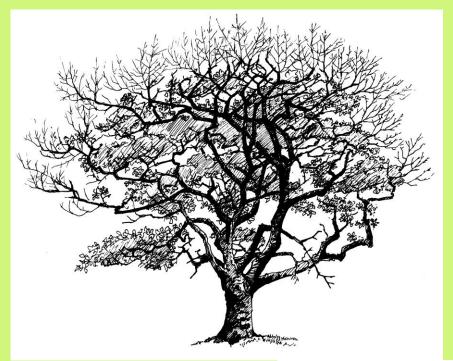
How?

- Reduce canopy between approximately 10cm and 2m depending on the tree size and how the live growth is distributed
- Focus primarily on the areas of concern, apply to whole crown only when absolutely necessary

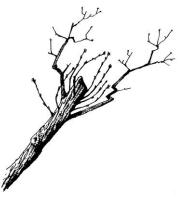




Response to reduction pruning



Positive response Inset shows a close up of a typical response from cut branches



Positive response

- Tree produces new growth. This may occur near the cut surface but ideally also lower in the canopy
- Future pruning can be carried out if necessary

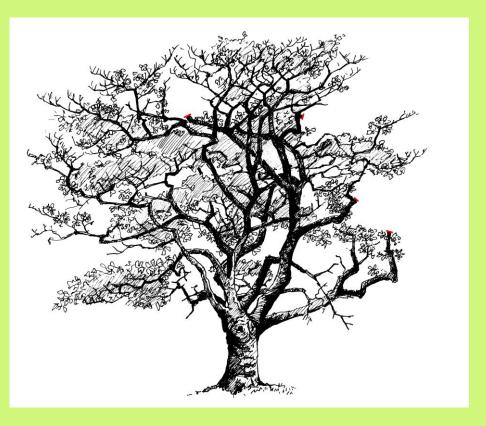
Negative response

- No response or tree decline
- Do no further pruning





3b. Reduction pruning of selected branches only



How?

- Branches with a high chance of structural failure, that are likely to compromise the longevity of the tree, are reduced by a sufficient amount to reduce the chance of failure
- Pruning wounds should be as small as possible, but for trees with a high chance of structural failure larger branches may need to be cut, leaving larger wounds
- Branches without a high chance of structural failure can be left uncut





Further information

Video: Techniques for crown reducing a veteran tree <u>https://www.vetcert.eu/node/14</u>

Video: Pole thinning https://www.vetcert.eu/node/50

Video: Unconventional pruning techniques https://www.vetcert.eu/node/51