

A close-up photograph of a person wearing a green jacket, a red scarf, a grey knit hat, and safety glasses. They are using a hand saw to cut through a thick, light-brown tree branch. Their hands are protected by dark work gloves. The background is a clear blue sky. The text 'Garden practice' is in a script font, and 'Coppicing & pollarding' is in a large, white, sans-serif font, overlaid on the lower part of the image.

Garden practice Coppicing & pollarding

For thousands of years trees have been coppiced or pollarded for timber and charcoal. Today, gardeners use these techniques to promote young stems, restrict size and rejuvenate plants that respond to hard pruning

Author: **Tony Dickerson**, RHS Members' Advisory Service. Photography: **Tim Sandall**

Coppicing is a pruning technique where a tree or shrub is cut to near ground level in early spring (before bud break) to encourage vigorous young shoots, usually done from the second year after planting. Pollarding is similar, but stems are pruned to a higher point on a trunk or 'leg'. Both techniques allow gardeners to grow trees and shrubs that would be too large left unpruned.

Suitable species

Only a limited number of trees and shrubs tolerate regular coppicing or pollarding. Good disease resistance is crucial, to allow continual recovery from the wounds of hard pruning. Plants also need to be species for which removing stems stimulates dormant buds lower down to 'break' – this excludes all but a few conifers, most notably yew (*Taxus*).

Coppicing creates multi-stemmed shrubs of new growth, and in the case of some selections of dogwood (*Cornus*) and willow (*Salix*) brings exceptional winter stem colour. As with pollarding, coppicing works best with fairly young plants pruned regularly, but it can also be used to rejuvenate over-grown yew, beech (*Fagus*) and hornbeam (*Carpinus*). Hazel (*Corylus*) coppiced every few years produces straight stems useful as supports in the garden, while coppicing birch produces twiggy 'pea' sticks. Cutting back hard also makes it easier to protect plants, such as bay, in areas with harsh winters.

Pollarding produces similar effects to coppicing, but by encouraging juvenile shoots of great vigour it can produce larger, more ornamental leaves in species such as *Catalpa*, *Cercis* and *Paulownia*. In some species of *Eucalyptus*, pollarding results in attractive rounded, blue-green, juvenile foliage markedly different to the species' mature foliage. Most species suitable for coppicing or pollarding flower on old wood, so regular cutting back is at the expense of flowers (or catkins) and fruit. ●

More from RHS Online For more, search 'Pollarding' and 'Coppicing' at www.rhs.org.uk



In February, branches of this catalpa at Wisley are cut back to two buds.



Before pollarding in early February.



New growth in June.

Pollarding trees

It is best to pollard young, rather than mature, trees as they respond more rapidly to any wounding, reducing the risk of decay. Initially the tree is grown to the desired height, usually around 90-200cm (3-6ft), with a framework of three to five branches.

Pollarding is normally carried out in late winter or early spring (late January to March) for most species, but acers and mulberry are pollarded

earlier, in midwinter, when still fully dormant to avoid the risk of bleeding.

To pollard, use a pruning saw to cut branches hard back to two buds, usually within 5-8cm (2-3in) of the main stem. Ensure all cuts are neat so they will heal quickly and shed water. After pruning, apply a generous feed of fertiliser and then mulch to ensure strong summer growth.

There is then a regular cycle of pruning every one to three years, with the new growth pruned just above the previous pollarding cuts (this avoids exposing older wood prone to decay).

As the tree matures, new growth may become overcrowded and need thinning to leave the remaining shoots evenly spaced (pictured, right). In addition, remove any shoots that appear on the main trunk or as suckers from the base of the tree.

Once a tree is pollarded it is important to continue the cycle of pruning as the weight and angle of new branches can lead to weakness, particularly where many stems are crowded together. To open up the centre of the plant, take out one or two older stems to the base each year.

Unpruned, *Catalpa bignonioides* 'Aurea' can reach 12m (40ft) but pollarding keeps it compact enough for a large border (pictured, left) and encourages larger leaves. >>



A trio of pollarded *Paulownia* in leaf in June.



Dead wood is removed first.

Pollarding a *Paulownia*: wood with no new growth is removed and stems are shortened. Pollarded plants can produce leaves up to 60cm (2ft) across.



Stems are shortened in early February.

Species that pollard well

Lopping back a mature tree to create a pollard is rarely successful. Conifers in general, with the exception of yew (*Taxus baccata*), should not be pollarded as they do not regenerate from old wood. Some popular deciduous garden trees will respond but many, including birch (*Betula*) and ornamental cherries (*Prunus*), look unattractive as pollards. Large street trees such as limes and planes are pollarded every two to four years to prevent them outgrowing their allotted space. Such work should be done by qualified arborists (see RHS Advice p29). To avoid the need to pollard, choose trees suited to your space.

Species that pollard well (f = grown for foliage; s = grown for stems) include:

- ❖ *Acer negundo* f and s North American maple with pinnate, compound leaves.
- ❖ *Acer pensylvanicum* 'Erythrocladum' s

coral-pink young bark with white stripes.

- ❖ *Ailanthus altissima* (tree of heaven) f pinnate leaves, copes well with poor soils.
- ❖ *Catalpa bignonioides* (Indian bean tree) f leaves up to 45cm (18in) wide if pollarded.
- ❖ *Cercis canadensis* (Judas tree) f large heart-shaped leaves, purple in 'Forest Pansy'.
- ❖ *Cotinus coggygria* (smoke bush) f rounded leaves with good autumn colour.
- ❖ *Eucalyptus gunnii* f rounded, steely blue juvenile foliage is retained when pollarded.
- ❖ *Liriodendron* (tulip tree) f distinctive blunt leaves, larger when pollarded, gold in autumn.
- ❖ *Morus alba* (white mulberry) f toothed leaves of variable shape. Plant used as silkworm food.
- ❖ *Salix acutifolia* 'Blue Streak' s willow with unusual purple bark and vivid white blooms.



Liriodendron (tulip tree)

The variegated tulip tree cultivar *L. tulipifera* 'Aureomarginatum' makes a fine, large-leaved low pollard in smaller spaces.



Salix (willow)

Willows have a range of stem colours: the young shoots of *Salix alba* var. *vitellina* 'Britzensis' are bold, ruddy orange-red.



Eucalyptus

These large Australian evergreens are pollarded for two reasons: to restrict size and to encourage more attractive juvenile foliage.

Coppicing and pollarding

Cutting back Cornus

Shrubs suitable for coppicing, such as *Cornus sanguinea*, can be cut back to 5–10cm (2–4in) if planted in early spring, but if you leave them unpruned in their first season they will establish a good root system. The best colour is on new growth, so shorten stems to strong buds within 5–8cm (2–3in) of the ground the following spring, before buds open. Use sharp secateurs, and loppers for thicker stems. In subsequent years, shorten back to the previous year's stubs. Over time the bases of plants thicken to form 'stools'. In time, it may be necessary to cut out congested parts and any crossing or twisted stems to maintain an open structure.

Some *Cornus* cultivars, such as *C. sanguinea* 'Midwinter Fire' and variegated *C. alba* 'Elegantissima', can be weak growers on poor soils. In this case, coppice every second year or cut out just one third of stems each spring. Depending on the species, new shoots may make 60–240cm (2–8ft) a year (the largest are some of the more vigorous willows). To create height at the back of a border, or for a tiered effect, cut stems back to a predetermined height, 60–120cm (2–4ft) from the ground. Feed well after pruning and apply mulch to conserve moisture.

Cornus sanguinea 'Midwinter Fire' coppiced in March.



March pruning of *Acer negundo* 'Winter Lightning'.



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Good for coppicing:

- ❖ *Cornus alba* 'Kesselringii' black-purple stems.
- ❖ *Corylus avellana* 'Aurea' rounded yellow leaves, and *Corylus maxima* 'Purpurea' rounded purple leaves.
- ❖ *Rhus typhina* red stems.
- ❖ *Rubus biflorus* and *R. thibetanus* white stems.
- ❖ *Salix irrorata* lavender stems.



Acer negundo 'Winter Lightning' once pruning is complete.

Making the first cuts

Sean Harkin, Horticultural Team Leader at RHS Garden Wisley, manages the winter-stem display on Seven Acres



Once the plant has settled in make the first prune in late February. Use sharp secateurs to create a flat cut roughly 8–15cm (3–6in) from the ground

above a healthy bud or pair of buds (*Cornus* buds are opposite, *Salix* alternate). If no buds have started to swell, still cut above where they will

form: there is usually a little line below the bud which helps to mark them out.

Remove weak, thin growth back to the stem, leaving pencil-thick wood. Only one or two stems will remain which may look drastic. Feed, mulch and ensure the plant has adequate water to encourage buds to break into strong, healthy growth. In subsequent years a framework/stool of short, well-spaced wood will develop to prune back to.

