

# Small Scale Coppice Production

Contributed by Anneka

This is designed to be an introduction to coppice on a small scale for practical gardening purposes rather than a rhetoric on larger scale coppice woodland or short rotation coppice for biomass fuel.

{kl\_thumbimage img="land/coppice.jpg"}  
What is coppice?

'Coppice' is the practice of routine harvesting of wood in the form of shoots arising from the tree base (also known as a 'stool'). These shoots are cut at regular intervals usually between 8 and 30 years, based on the product required and the species of tree. Another form of coppicing is 'pollarding' which involves the same principal, but the regeneration is encouraged higher up the trunk of the tree, traditionally out of the reach of cattle and horses.

Coppice is generally produced from broadleaved species, although some coniferous trees will coppice, including the Coastal Redwood *Sequoia sempervirens* and Chinese Fir *Cunninghamia lanceolata*. Worldwide, *Eucalyptus* coppice accounts for over 4 million hectares, as it coppices very well.

Vegetative reproduction will take place in most species of broadleaved trees up to a certain age, usually around 35 - 40 years, although Lime species *Tilia* and Sweet Chestnut *Castanea sativa* can in some cases regenerate after being coppiced up to 100 years. The age is relevant to the wood or timber regenerating rather than the age of the stool. This means that neglected coppice stools of some species can be re-coppiced whilst others can not. If the stools are very overgrown, it is practical to remove all but one of the trunks as this will improve the strength of the tree and you are more likely to get regeneration to the other stumps as the whole tree has not been removed. This practice is known as 'Stored coppice'.

It is worth mentioning that well managed coppiced woodlands provide an extremely varied habitat for all manner of plant, bird and animal species.

## Coppice products and species

Historically, larger coppice poles were used for building and mining timber and scaffolding.

Oak *Quercus* was grown widely throughout Europe for the manufacture of 'Bark Tan' or Tannin used in the processing of leather.

More relevant for the small scale are coppice products that can be used for crafts, home makers and gardeners tasks such as fencing, basket work, hurdles, tool handles, firewood, pulpwood (for paper making), pea sticks and bean/hop/vine poles.

Fencing which needs to be durable and rot resistant is usually made from cleft Oak *Quercus* or Sweet Chestnut - the poles for fencing are coppiced on a fairly long rotation and so may not be suitable for the small scale - but worth a mention should you find yourself wanting to cut back an existing tree.

Sweet Chestnut likes a well-drained, sunny site on a sandy loam and dislikes chalk and frost hollows. Oak will tolerate a less freely draining soil but suffers from extremes such as a parched, cracked soil in summer or waterlogging in winter. It dislikes exposed and frosty sites but will endure them and recovers well from frost damage.

Basket work 'rods' are typically harvested after one year. The species commonly used for this are Willows; *Salix triandra*, *Salix purpurea* and *Salix viminalis*, although many others can be used. Some of the most robust cultivars were and sometimes still are used in the manufacture of fishing baskets and lobster pots. Quite a lot of plants can be grown in a small area, so as long as your soil is neither too freely draining nor completely waterlogged, it should be possible to grow your own rods.

Hurdles and thatching spars are traditionally made from Hazel *Corylus avellana*. I will not go in to the how of hurdle making or thatching as I am seriously under qualified to do so. However Hazel is also commonly used for pea sticks and bean poles for the garden. Kew Gardens grow their own sticks and poles on an area of coppice woodland at Wakehurst Place (National Trust Property) in West Sussex, which produces enough to supply the gardens and have some for sale for visitors too.

Hazel is more accommodating of poorer soils and grows quickly. It is reasonable to say that space providing, you could grow a few plants on a short rotation - between 3 and 7 years, depending on the site - to provide poles and sticks for your garden. The practice is to plant a few young trees the first year and then each following year until the first planted

reach their rotation age (size required). Then the first year's plantings are cut followed by each subsequent yearly planting in sequence.

It is also possible that you have Hazel growing as part of a hedge, and that by leaving it a little longer before cutting it you could grow some bean poles as well as pea sticks.

#### Coppice method and equipment

The traditional tool for the task is a billhook, although I would caution you on using one as they are heavy and sharp. If you have no experience of using one it would be best to ask someone who has to show you the correct way to hold one. I am sorry but I have tried and I can not describe it with words. Swing it away from your body would be a good start!

Whilst working I have used a chainsaw to cut larger poles and then process them with a billhook; you could use a hand saw or probably better still a pruning saw. You need to cut the poles reasonably close to the ground with a clean and gently sloping surface. This prevents water from settling and halting new growth by encouraging decay.

To cut rods for basket making I would use secateurs or sturdy kitchen scissors.

The wood should be cut during the dormant season. If practical, early spring is ideal, before new growth appears but after the risk of freezing temperatures has gone. This helps avoid damaging new buds. Really, just use your best judgment.

If you want to remove the bark after you have cut the wood, it will be easier if you leave the cutting until May or June as when the sap has risen it is easier to remove the bark. Plashing - increase your coppice stock

Finally I will just mention a method of replacing old stools or increasing them. This is known as 'plashing'. It only really works with very vigorous species such as lime and ash *Fraxinus excelsior*. This is really just form of layering. When the poles on a stool are cut one or two of the poles are left longer, cut half way through and bent down to reach the ground where they are pegged and buried.