

Planting new willows

Planting new willows has excellent results!

Some points to consider before you start:

- ❖ Using cuttings taken from local stock will preserve local varieties of willow. It's cheap and easy to take cuttings from local trees, but always ask the landowner's permission first.
- ❖ With luck your tree will be in residence for a long time, so choose its position carefully. Think about how big it will be when mature, and consider the shade it will cast.
- ❖ Don't plant willows near buildings, or where their roots could reach a water pipe.
- ❖ Think before planting close to a pond: large numbers of dead willow leaves falling into the water can be very harmful to fish and other aquatic life.
- ❖ You must obtain permission from the Environment Agency before planting a tree next to a river or stream:

Environment Agency
Bromholme Lane, Brampton, Cambs PE28 4NE
Tel. 08708 506506
www.environment-agency.gov.uk

Plant in January/February when the soil is wet, but before leaves appear on the trees. Take cuttings about 2.5cm thick at the base and plant in moist soil in a prepared hole about 45cm deep where the tree is to grow. Don't just shove them into the ground, as this will damage the cut end and lead to infection. Water well in dry summers.

Old willow trees are a significant feature in our landscape. They thrive in wet soils, and their roots help stabilise river banks.

Willows are important to wildlife. Of British trees, only the oak will support more insects, providing food for birds and other animals. Bats as well as birds find homes in the holes and hollows of old willows.

Old wood itself is the most important and special feature that willows offer to wildlife. The most threatened invertebrate communities in Europe are those that live in dead or dying wood at some stage in their lifecycle. Many are found only in the mouldering interiors of old pollards, and some have such specialised requirements that at any one time they live only in a tiny proportion of the trees on a site.



Pollard willows are famed for the number of different plants they support. One hundred and fifty different plants (including mosses and lichens) have been found growing in or on the riverside willows of Cambridge. Along one stretch of the Cam there are about 800 willow trees, of which 70% are mature. These all require regular management if they are to continue their special contribution to the local flora and fauna.

Warning! Re-pollarding of old willows is extremely dangerous and should only be undertaken by trained operators. Always consult a tree surgeon, and remember that trees may be protected by Tree Preservation Orders, so check with your Planning Authority before undertaking any work. Remember to look for wildlife that might be living in the tree – and get professional advice if you find bats: they are protected by law.

If you would like any advice or information about obtaining grant aid for care of willows please contact:



The Cambridge Green Belt Project
The Wildlife Trust for Cambridgeshire
The Manor House, Broad Street
Great Cambourne
Cambridge CB3 6DH
Tel. 01954 713500

The Cambridge Green Belt Project works with local communities in Cambridge and the surrounding area to help people to enjoy, discover and protect local wildlife and the countryside.

Cambridgeshire's Biodiversity Partnership promotes the importance of conserving our species and habitats. Cambridgeshire local authorities, English Nature, RSPB, the Wildlife Trusts and Anglian Water are all members of this Partnership. Biodiversity is described as 'the WOW factor – the Wealth of Wildlife that surrounds us'.

The Biodiversity Partnership has prepared Biodiversity Action Plans for our species and habitats in Cambridgeshire. These plans include actions agreed to be undertaken by organisations to help preserve our wildlife. Willows enter into several action plans as they are important for so many species. See www.cambridgeshire.gov.uk/environment/countryside/biodiversity/partnership



Willows



Sarah Wright



Willow trees are a familiar and beautiful feature of our riverside landscape, and are very valuable wildlife habitats. Unfortunately the number of willows in Cambridgeshire seems to have decreased dramatically over the last few years. In part this is due to changes in land use such as more intensive farming systems, road and housing developments, and alteration of traditional willow habitats such as flood meadows. We also no longer value the products of willow trees – baskets, animal fodder, wood – so those that remain are often left to grow old and die without appropriate management.

In the past many willows were *pollarded*, their trunks cut at 2-3m high, above the reach of grazing animals. The trunk produces new shoots to be cut 10–15 years later, and the wood was used for hurdle fences or fuel. Pollard management prolongs the life of a tree so it lives long beyond its normal lifespan, and it helps to create many unusual niches for wildlife. Re-growth is rapid and trees soon regain their characteristic volume.

Even after an old pollard willow dies, the trunk remains a valued wildlife habitat for many years. The wood itself decays slowly, alive with insects and fungi. Kingfishers may nest in the rootplate of fallen trees.



Photo © The Environment Agency

Pollarding for the future

Managing old pollards

The decline of pollard management has left us a legacy of neglected pollards with dense crowns of larger branches, usually on rotting trunks. These are very vulnerable to wind and ice damage, but in the modern landscape they are also more valuable than ever before. Bringing them back into a program of regular pollarding will often rejuvenate these trees, ensuring that they – and the wildlife that relies on them – survive for years to come.

- A general survey of age, health and date of last cutting will help you to decide which trees will benefit most from a pollarding program. Note that groups of willows of varying ages pollarded several years apart support the greatest variety of wildlife.
- Pollarding is a stressful operation for the tree and for the operator carrying out the work. **Always consult a qualified tree surgeon and hire a skilled operator to bring old, possibly unsafe trees back into management.** Their expertise increases the trees' chance of surviving, and after the initial re-pollarding (which may take place over several years) the work will be easier.
- If working on a group of trees, re-pollard only a small number each year, allowing time to assess the survival rate and plant new trees (from cuttings) nearby as replacements.
- A pollard is valuable to wildlife even after it dies. Unless it is a hazard, leave it to rot naturally in the place where it grew.

Creating new pollards

We must create new pollards if they are to remain part of our landscape in the future, but remember that inexperienced people should NEVER attempt tree surgery.

- Pollarding is a commitment. Once pollarded, the tree should be cut regularly, every 10–15 years. Remember that a pollard will never grow as tall as a *maiden* (an uncut tree), and will have a broader, more rounded crown.
- White willow, crack willow and common sallow are traditionally pollarded. Almond willow, bay willow, osier and others are not.

When to pollard

Pollarding is best begun when the tree trunk is less than 10cm in diameter and the tree is less than 15 years old. Cut in February or March, before the sap rises; wound sealants are unnecessary (in fact they can seal fungal spores into the cut).

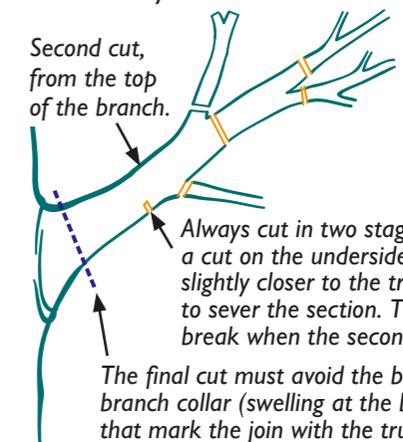
If livestock have access to the area, the height of the first cut must be determined by the neck length of the animals trying to reach the new growth; horses can reach further than cows! If browsing is not a problem, balance convenience (short trunks are easier to work on) and value to wildlife (the trunk or *boling* is the most important wildlife asset, so taller is better).



Sarah Wroot

A new young pollard cut one year ago, with older trees in the background. Not all branch stubs produce growth, but those that do make up for all the others.

Branches are removed in sections, working in from the tip of the branch to avoid the weight of the branch ripping it from the trunk and damaging the tree. Freshly cut wood is extremely heavy.



Always cut in two stages. First, make a cut on the underside of the branch, slightly closer to the trunk than you want to sever the section. This ensures a clean break when the second cut is completed.

The final cut must avoid the bark ridge and branch collar (swelling at the base of the branch) that mark the join with the trunk. Never cut flush with the trunk: this damages the tree. The surface of the final cut should be at an angle to allow rainwater to run off the cut surface.