



Coppicing, Pruning, Thinning, Pollarding

Whenever we harvest green (fresh or live) wood for craft projects in Forest school it is vital that we consider what impact that is going to have in the short and long term. If done in the correct way, cutting down and pruning trees can actually have a really beneficial impact not only to the tree but also to the wider ecosystem. However it is vital that you have permission from the land owner and that the trees are not covered by some legislation that prevents you from doing that for example a Tree Preservation Order (TPO) or a conservation area.

Coppicing and **pollarding** are traditional forms of woodland management that take advantage of the fact that many broadleaved trees make new growth when they are cut down to the stump or roots and can therefore continue to grow often longer than they would if they weren't managed in this way. Pollarding is where the trees are 'coppiced' higher up to prevent damage from browsing animals such as rabbit and deer. For the most part this is unlikely to be part of most Forest school management plans. However it is important to understand their practice to help understand their impact on trees and woodland.

The majority of green wood used in forest school is likely to come from thinning (removing smaller or less desirable trees to allow more space and light for other trees) or from pruning (removing small branches or stems off a larger tree or shrub)

Traditionally coppicing is carried out between October and the end of March. Coppicing is normally done between the October and the end of March when most trees are dormant, although with the effects of climate change birds may well start nesting earlier if the conditions are right for them.

The Wildlife and Countryside Act 1981 is the primary legislation which protects animals, plants, and certain habitats in the UK. Under the Wildlife and Countryside Act, a wild bird is defined as any bird of a species that is resident in or is a visitor to the European Territory of any member state in a wild state. All birds, their nests and eggs are protected by law and it is thus an offence, with certain exceptions (see Exceptions), to:

- Intentionally kill, injure or take any wild bird
- Intentionally take, damage or destroy the nest of any wild bird whilst it is in use or being built
- Intentionally take or destroy the egg of any wild bird
- Have in one's possession or control any wild bird, dead or alive, or any part of a wild bird, which has been taken in contravention of the Act or the Protection of Birds Act 1954
- Have in one's possession or control any egg or part of an egg which has been taken in contravention of the Act or the Protection of Birds Act 1954

- Use traps or similar items to kill, injure or take wild birds
- Have in one's possession or control any bird of a species occurring on Schedule 4 of the Act unless registered, and in most cases ringed, in accordance with the Secretary of State's regulations (see Schedules)
- Intentionally or recklessly disturb any wild bird listed on Schedule 1 while it is nest building, or at a nest containing eggs or young, or disturb the dependent young of such a bird.

There is also potential for damage to bat roosts (again against the law) and other habitats including ground nesting birds and animals. As practitioners we must avoid impacting on nesting birds and infringement of the Wildlife and Countryside Act 1981 and breaching the European habitats Directive 1992/Nesting Birds Directive. When cutting any wood down, as a rule, unless you can clearly see that nothing is nest in or around it, it should be assumed that there is something using it as a nest site.

Safety

As a general rule, the largest diameter of wood that we would normally cut would be around 3" or 7-8cm (about wrist or arm thickness for most adults) at the base or smaller. This would be good for most if not all the craft projects that we do, and is a very manageable size for most children to work with. You may consider wearing a hard hat and maybe even safety glasses and gloves depending on your risk assessment as dead branches/twigs and other debris can fall out while you are cutting below. Also consider the direction the tree or branch is going to fall and ensure that everyone else is out of the 'danger zone'. If a tree is forced over before the proper cuts are finished or often when a tree is leaning a lot there is a chance the stem will split and can sometimes cause the wood to flick up as shown in the diagram (sometimes known as barber chairing).

Thinning

Cutting/felling smaller diameter wood can be done with a single cut if it's small enough to be supported with your other hand, as long as you ensure that the saw cut is gently opened as you saw through to ensure the wood doesn't pinch the blade and cause it to jam whilst preventing it from splitting.

Cutting/felling medium and larger diameter wood is usually best done using a step cut or a directional cut (sometimes called the gob cut or birds mouth) with a felling cut for bigger material.

If you are thinning individual trees then it is important to cut the stump off as low and flat to the ground as possible to prevent it becoming a trip hazard but also aesthetically this is much better practice and will help to keep the land owner happy. If on the other hand you are thinning out a stem from a coppice stool the advice is to cut it as low as possible with the cut angled out and away from the middle of the stool. The angling of the cut is to help to prevent water sitting on the stump which may cause premature rotting.

Pruning

A saw, loppers or secateurs may be used for pruning depending on the thickness of the wood to be cut.

Pruning may be required to help keep a footpath clear or to prevent trees encroaching into clearings or roads, it may just be that you consider pruning to be the least invasive way of getting some green wood for working with.

When pruning a tree you are effectively wounding it and if it's not done correctly it can lead to trees becoming diseased, unsightly and potentially hazardous. In order for trees to recover from being cut and maintain healthy growth then good pruning practice is essential. The two main things we are looking for are the branch collar and the branch bark ridge. The branch bark ridge is the raised bit of bark seen between the union of two branches or a branch and the main stem, the branch collar is often more difficult to spot and is a thicker 'socket' type part that the branch comes out from a bigger stem.

You should be aiming not to cut through the ridge or collar and instead cutting just outside the ridge and angling down and away from the main stem whilst remaining just outside the branch collar. If you are unable to support the branch whilst cutting then we recommend that it is done with 3 cuts as shown in the picture to prevent the branch ripping off

Why use green wood?

Generally speaking green wood is easier to use for whittling, splitting, sawing and drilling as when it dries out and becomes 'seasoned' the fibres bond together and become more difficult to work. Also as wood moves on from being seasoned and starts to decay it can be an important habitat for all manner of fungi and invertebrates.

Top tips

You might be able to pollard a couple of willows along the edge of a woodland which could then give you lots of thin material for projects such as weaving or making hoops. If you have trees in your garden you may also be able to manage some of them in the same way for use with your forest school groups. This often works well with willows and elder which are often frequently used resources.