Red Squirrel Resources

Wood Harvesting Considerations for Whittling

How can we harvest materials we need for our craft projects without having an unnecessary negative impact on the trees and the woodland? In fact, is there a way to take what we need and leave the environment, the tree, better than we found it?

Context

The film on Respectful harvest of plants has many principles that also apply to harvesting wood from trees for whittling so I won't repeat those points. This film cannot be comprehensive on this topic but will offer some helpful ideas and questions as well as practical guidance and techniques on how to harvest wood in a good way.

Before we get into how to go about harvesting living wood for craft projects in a good way, if you want any significant amount of green wood for group activities, it's worth contacting local arborists who may be really happy to supply you with materials that otherwise would have been chipped or got rid of as waste.

To Harvest wood from trees where you have the land owner's permission

- *Could I leave a tree better than I found it by taking wood out of it?* If a tree has had a limb damaged then it can be beneficial to the tree to remove that limb leaving a clean cut across the grain rather than a potentially long or splintered wound that could leave the tree open to infection. Another example would be if a tree has grown in such a way that there are limbs rubbing against each other, you could look at the whole shape of the tree and its growth and ask whether taking one of those limbs out would give the other more room to thrive and reduce the possibility of the limbs damaging each other leaving them open to infection. Although damaged limbs will often survive, they will likely never thrive. If we cut it back the tree will usually heal well at the cut site and this can either give more space to other existing limbs or the tree may grow a fresh branch in its place.
- *Understanding the structure of the tree:* You have the outer bark that you would feel if you touch a tree trunk or branch. Beneath this lies the inner bark or the cambium and this contains a dense layer of fibres that are responsible for transporting sugars made in the leaf down the tree and water absorbed by the roots up and around the tree. Therefore any damage to the inner bark is a big problem. If the inner bark is damaged all the way around a branch in a circle, everything beyond this will die.
- *Understanding the grain of wood:* Wood grows up toward the light and within the wood there are thousands of tiny straws aligned in the direction of growth. If you saw

straight through a piece of wood leaving a round cross section, this shortens the straws but they can all continue to function effectively. If there is a tear or cut along the grain then this is like cutting through the side of the straws so they can no longer function effectively but leave the tree open to infection.

- *Classic Tree Form:* The main trunk of the tree grows up and the primary branches grow off of the trunk and these primary branches have secondary branches growing off of these. Know that taking a primary branch off of a tree has a significantly higher impact on the health of the tree and its potential susceptibility to being affected by any disease present to the wound than taking a secondary branch.
- *Disease:* Before doing any cuts on a tree you would ideally sterilize your tool whether it's a saw or loppers. One good way to do this is to clean the tool in a solution of 1 part bleach to 10 parts water. Some people would even recommend doing this in between each saw cut to avoid spreading any disease present on one limb to other ones. This is perhaps more pertinent when pruning a tree that is known to have diseases, but tree diseases are becoming more of a problem in the UK and so this is worth considering on all cuts to trees.
- *Awareness of the 'Collar':* Where a branch grows off of a larger branch or the trunk of a tree, the transition zone at the base of the branch is called the 'collar'. It's really important to avoid cutting into the collar. If you cut the collar, it's like cutting along the length of the tree's 'straws' or fibres in the inner bark. Aim to cut the branch off close to the collar but not damaging the collar. If you cut a horizontal branch by simply sawing from the top to the bottom, as you get close to the bottom, the remaining wood and bark is not strong enough to hold the weight of the limb and so the branch falls, tearing the remaining fibres and causing a big wound to the tree. To avoid this we use the 3 cut process.
- *3 Cut Process to harvest a tree limb:*
    - Start by cutting upwards from the underside of the branch about a quarter to a third of the way up, positioning the saw cut at least 1cm from the collar of the tree. This cut acts as a stop cut to later prevent the tree tearing.
    - Position your saw on the upper side of the branch a little further away (another 1cm) from the collar and saw downward. As you reach the stop cut below it is likely the branch will connect the cuts and come off from the tree.
    - Now the weight of the branch is no longer present, you can do one saw cut from top to bottom to leave a neat, clean cut near but not into the collar. This gives the best chance of healing.
- *Seasonality:* Avoid harvesting significant amounts of wood in early spring when the sap is rising in the UK (late February-early April). It causes least impact to most deciduous trees to harvest wood from them when their energy is in the roots when they are dormant over the winter months.
- *Consider the overall shape and health of the tree*: as a general rule you want to remove aspects of the tree that could be retarding it's growth and give space to the rest of the tree to grow into in a healthier way.
- *Spread out the impact:* Do not harvest more than 1 in 3 branches from any given area whatever the scale, whether leaves or branches or whole trees.

- *What stress factors the tree has been under:* will affect the qualities the wood will have. As a general understanding, trees growing on the edge of a woodland or an exposed area will have been under higher forces as it's grown and so the wood will be stronger, denser and potentially have more dense growth meaning more knots in it. Those growing in the middle of a woodland tend to have less dense growth and be softer with longer lengths knot free as they've grown toward the light and been more sheltered from the impact of winds.
- *Footfall*: Be aware of how a large group surrounding a tree can compact the soil and temporarily starve the roots of oxygen. It is also common for people to want to clear around young trees however if brambles are growing and surrounding young trees this is likely the best protection they can have from browsers such as deer and rabbits, so leaving them growing there is generally best.

Respectful Legal Considerations around Foraging

- Section 13 of the **Wildlife and Countryside Act 1981** identifies measures for the protection of wild plants. Here you will find which species are currently protected.
- You are required to have a felling licence to cut a tree bigger than 8cm in diameter at 1.3m of height on the main stem.
- Certain trees have preservation orders due to their size, age or location.
- National Parks and some Private Estates may well have their own rules and regulations about harvesting wood. If you're intending to harvest, you'll need to ascertain what these may be.

Related reading

- Braiding Sweetgrass by Robin Kimmerer
- Ted Talk by Robin Kimmerer: Reclaiming the Honorable Harvest
- Tending the Wild by MK Anderson

Equipment Needed

Pruning saw or loppers.

Invisible Learning

- Understanding about form and structure of trees
- Learning about the seasons and cycles of your place
- Empathy for other species
- Caretaking Principles of leaving a place better than you found it

Hazards to Highlight

- Hazards of cuts from tool use
- Potential hazard of falling debris from trees

Risk Assessment Considerations

These are the risk assessment consideration documents to be referred to for this activity.

- Safe Tool Use
- Site risk assessment (specific to your site)

Links

- Respectful Harvest - Foraging Considerations 1
- Whittling crafts

Tags

- Harvesting, Wood, Whittling, Trees, Caretaking, Looking After Nature