

## Proper Pruning

When people think of forestry equipment, they tend to focus on chainsaws, winches and large harvesting equipment. Yet one of the most effective (but often overlooked) tools are pruners. Pruners, either hand held or small saws on the end of long poles, are used to clip off unwanted branches and they can be very useful when managing forest trees for high value wood products.

For example, go to a hardware store and look at the prices of knot-free lumber. Then compare them with the costs for similar boards that contain at least some knots. In most cases, the knot-free lumber will cost as much as 100% more. This is because knots are defects which decrease the wood's strength and load-bearing capabilities and often its aesthetic values too.

Knots are basically a section of side branch imbedded in the wood. As a tree grows, its lower branches eventually die. After several years, most of these branches will drop off but sometimes the trunk of the tree begins to grow over and around the old branch. Live branches can also form knots but in both cases, they create flaws in the wood that reduces the strength and look of the wood.

Many land owners have come to understand that proper pruning can create higher value products that will often fetch a premium price. They have come to learn that proper pruning allows the tree to start producing knot-free wood over the site of the old branch. Many begin by selecting the trees with the highest potential economic return based on species, and the tree's straightness, diameter, height and lack of other defects or damage.

However before any pruning starts it is very important to locate the branch collar - a raised ring next to the trunk and surrounding the branch. This collar helps the tree to heal the pruning wound quickly and effectively, so it is important to avoid cutting or damaging it.

Begin to prune when the lower 6'-8' of branches start to die off naturally. Dead branches can be pruned at any time of year but live branches should be pruned when the tree is dormant. Most operations prune up at least 8' from the base of the tree and often they will go to 16', 20' or more. However, it is important to retain about 2/3 of the live crown intact in order to keep the tree healthy and growing. Many owners also keep a record of when the pruning was done and the diameter of each pruned tree at that time. This allows them to show potential buyers that the tree has had 10, 20 or more years of knot-free growth and is now 2", 4" or 6" greater in diameter.

Proper pruning can also help reduce problems with diseases. For instance, Eastern White Pine often suffers from a fungal disease known as White Pine Blister Rust. Pruning dense branches permits more wind to circulate and increases the drying effects of sunlight, reducing the chances that the fungus can become established.

Each tree species has its own special pruning requirements but with a little time and understanding you can improve the quantity and quality of solid wood growing on your land. The Forest Enhancement Program ([www.gov.pe.ca/go/fep](http://www.gov.pe.ca/go/fep)) provides information and incentives to help land owners manage their lands for any number of values including producing high value wood products.