

Missouri Chapter News

Walnut Council: Growing Walnut and Other Fine Hardwoods



Preparing to Prune

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The wise farmer greases the combine and replaces worn parts before fall harvest. Tree farmers need to prepare for pruning season as well. Do not roll out of bed and decide one morning to prune a few trees without first preparing your equipment AND yourself!

This article on pruning will be unlike anything we have provided before. Hopefully, by now you know what to prune, when and how to do it. If you have watched a Harlan Palm presentation you should be good to go on the science of corrective pruning. However, if you missed that go to our chapter website at: <http://walnutcouncil.org/state-chapters/missouri/> and view technical articles posted there on “pruning”.

Primary Pruning Tools -

Depending on the sizes of your trees, you will need certain tools to get the work done correctly. For purposes of this article, I will assume you have all sizes of trees needing your help. For saplings be sure to have a pair of pruning shears that will remove limbs up to 3/4” in size. They can be “bypass” or “anvil” style. Buy quality tools, especially *pruning shears* that will not break when

you attempt to cut a 1” diameter limb!



You will also need a *hand pruning saw*. Corona makes a very nice folding saw that fits in a pocket. Silky makes a better one that also folds and includes a plastic case to attach to your belt. However, a must-

have, in my opinion, is a quality 13” curved hand-pruning saw with a scabbard that can be attached to your belt.

The smaller, folding pruning saws are very handy, but they do not replace the need for the longer,



Making undercut with 13” hand pruning saw.

heavier hand pruning saws such as those made by Fanno. A.M. Leonard Tool & Supply Co. is a good source for quality hand tools. Forestry Suppliers is another source of forestry tools and equipment. Hand saws are tough on the hands so be sure to wear light-weight leather gloves or a pair of warm gloves on those cold days.

Because of the aggressive set on these pull-stroke hand saws, do NOT rake your hand over the blades to clear away clinging saw chips. Very painful. You will only make this mistake once!

If your corrective pruning includes taping limbs to form a better central leader, you will need a tape product that can hold the pressure from bending limbs. That tape also must withstand extreme weather conditions and “release” from the tree tissue and not strangle the branch when its job is done. The roll of tape should also be small and light enough to be easily carried and the tape can be torn by hand. Unfortunately, that product has eluded me. Old fashion duct tape meets most of those criteria, and it is preferred by those of us doing corrective pruning. It does not hold long enough, in my opinion, to allow limbs under tension to completely harden in position. So, I prefer using a bright color electrical tape. The color is important to find taped limbs the following pruning season and remove the tape! Otherwise, tightly wrapped electrical tape can strangle branches. You will also need a sharp knife to cut the tape. The roll is small and lightweight making it easy to place in a pocket. If you opt to use duct tape, find a roll that has been half used already making the size and weight easier to carry around. It does come in bright colors and I always have some nearby when pruning.



Moving up the stem of the tree, another valuable pruning tool is “*tree loppers or lopping shears*. (See picture above.) Refer to *Forestry Suppliers* to view several options in style, length and price. Use this tool to remove limbs under 1 3/4” in diameter that are higher than you can reach with a hand pruning saw. This is not a high priority tool, but they are handy when you need them. Because of the size and weight, using lopping shears may alter how you move all this pruning hardware from tree to tree. I carry my loppers on a belt hook or keep them in a 5-gallon plastic bucket with all of my pruning tools. If you use the bucket approach, tape the handle up so you don’t have to bend over so far to grab it every time you move it.



16’ Corona pruning pole with chain drive shears

When you hear someone talk about pruning tools they always focus discussion on the “*pole pruner*”. This is the primary tool in getting the complete pruning job done. It is also the most expensive and the most challenging to transport from tree to tree or from the shop to the woods. Hopefully, you have been diligent about corrective pruning on your sapling trees so the amount of time with a pole pruner is spent improving crop trees versus pruning every tree in the plantation. Why? Pole pruning is a lot of physical work and that practice chews up a lot of time! Plus, there are physical issues I will address later.

Prune only your better trees that show potential to produce veneer quality saw logs. Pruning will improve sawlogs too. Just be certain those saw-log trees will not be thinned out in a few years to reduce competition on your primary veneer trees.

Purchase a pole saw that includes a high carbon precision steel blade AND chain drive pruning shears on the same head. In my view, the best value is a 16' unit made by Corona. It carries a lifetime limited warranty and costs \$72 at Lowe's. Speaking from personal experience, these units do break, so the warranty feature is important. When transitioning from saplings to pole size trees, you will frequently need to use both the saw blade and the shears on the same tree. If the limbs to be removed are too small in diameter and near the top of the tree, they tend to be whippy and difficult to saw even with a sharp blade. Instead, use the shears with pull chain drive to easily and quickly remove those smaller limbs. I do not know how this happens, but somehow the pull rope forms a knot or becomes tangled in tree limbs. Take your time and untangle the rope. Do NOT pull or jerk the rope which only makes the situation much worse! Be careful where you place that pole pruner when it is not in use. Leaning them into trees can be dangerous because they tend to come down when least expected and the blades are very sharp!

Many of my trees have been pruned for several years, and they are over 25' tall. I purchased a Stihl pole saw to better manage my target pruning height of 21'. This unit is very strong and has push button and snap segments that lock sections securely, yet it is lightweight. It also costs \$219, so don't put that item on your Christmas list until you absolutely need it. The Corona style pole saw will be ideal for possibly all your higher pruning needs. Some advice in using the Corona pole saw...keep a Philips screwdriver and adjustable Crescent wrench with you in the field. The screws and nuts can loosen with use over time and you do not want to outrun a falling saw blade! I place electrical tape on the screw heads and nuts to help keep them in place.

Right: The Stihl 18.5' pole saw becomes 20' with the precision saw blade.

Power pole saws have improved greatly in the last couple of years. They are lighter, include a touch start feature, now offer rechargeable battery powered units and they extend further. If you are faced with the workload of removing many 1"-2" limbs over 8' above ground, consider investing in a power pole saw. They are very expensive, but the volume of work you can do in a day when working larger limbs makes their cost more affordable. Be sure to purchase the harness and compare prices. Stihl makes several excellent units.

Do NOT purchase a ladder or mechanical lift devices. Keep your feet safely on the ground and let the pole saw do its work.



Pruning Fitness -

Pruning is a very physical task we only carry out a few days a year. Plus, it is done at a time when weather conditions are often cold and may include snow on the ground while you are focused on looking up into your trees walking through brush, vines and previously pruned limbs. It is hazardous! Prepare yourself for this workload well in advance. Getting **you** in condition is more important than getting the tools ready. Those tools are only as good as their primary “power unit” and that’s you. Having all the right tools sitting in the shop waiting on you to get healthy wastes valuable time. So, focus on getting physically fit because pruning is a lot of work!

Pruning shears tire your hands and non-power pole saws will wear out your shoulders, back, arms and abdominal muscles. Prepare by doing daily stretches focusing on raising your arms above your shoulders, stretching your back muscles and abdominal muscles. Much of the power for the pull stroke using a pole pruner requires toned abs. Use gripping and squeezing exercises to strengthen your hands and wrists to operate pruning shears.

Do not overlook applying sunscreens, even during the winter. Remember to hydrate during the day and keep a well-stocked first-aid kit handy. Stick a couple of energy bars in your pockets for mid-day snacks. And, all the trees do not have to be pruned in a day or even a week. Schedule your pruning workload over time to reduce your physical stress. I like to vary my pruning tasks from day to day working one day low on smaller trees and the next day with a pruning saw in taller trees. I suggest that you not use a pole saw for three days in a row until you have the strength and agility that tool requires. Give your body a little rest by switching to another tool for a day or so before going back to the high work. These pruning tools will find muscles you did not know you had!

Right: Stihl pole saw blade and sheath.
Cutter stub severs bark preventing tearing.

Pruning Clothing & Safety Gear -

Wear appropriate safety clothing to include brush pants or chain saw chaps, long-sleeved shirt or work jacket, safety glasses or goggles, heavy work shoes, safety gloves and a certified helmet with chin strap to help protect you from falling limbs. Dress for the weather conditions. Pruning is hard work that generates a lot of body heat. Wear clothing that gives you the flexibility to maintain a reasonable body temperature, and if you get sweaty and cold return home to come back another day.

Remember, pruning is a management practice that must be done annually over a period of several years! Hopefully, these tips will help you make good progress in corrective pruning without a lot of aches and pains. Take a few minutes to admire your accomplishments at the end of the day while also planning the next day’s workload.

