

Missouri Chapter News

Walnut Council: Growing Walnut and Other Fine Hardwoods



A CASE FOR POWER POLE SAWS

Jim Ball, NW Region Landowner Representative

Technological improvements in powered pole saws have made using them versus manual ones a good idea under many circumstances. Assuming you have at least a few hundred trees to prune, in my opinion, the labor-saving efficiency and productivity of gas or battery powered pole saws make either style a good investment. This is true with walnut trees and even more so in harder species like oak. The ergonomic advantages of a powered saw (especially gas powered) make it easier on the shoulders and arms than a manual one. Power pole saws are not cheap, but I believe they are worth the cost.

Mike Trial and I collaborated on his article published a few weeks ago and this one as well. He made the case that for his situation a specific power saw that does not extend made sense. Here, I am addressing a different situation involving more trees, additional species, and the desire to prune a bit higher than Mike, so I will be recommending different solutions.

I formed my opinion through personal experiences with pruning hardwood trees over 25 years. Most of my pruning has been done in my plantations which are largely oak and maybe 10% walnut, but also includes pruning black walnut in my native timber. In the case of plantation trees, I started using manual pole saws about 15 years ago, then transitioned to an earlier generation Stihl gas power pole saw in some circumstances.

The big breakthrough that eventually caused me to leave the manual ones in the shop came about four years ago. I discovered the new higher torque engines and small kerf Stihl pole saws really make a difference. The improvement was manifested in being able to put the saw blade exactly where I wanted it before pulling the trigger. The higher torque allows a smooth startup that reduces vibrations to the point a small limb can be cut off



a small bole yet there is enough power to quickly cut a multi-inch oak limb. My pruning productivity increased several times over immediately.

Also, in the case of a tight V between the bole and a limb, which can be a challenge for a manual saw, these powered units make that cut a breeze. The **photo above and on page 3** illustrate the issue. Two techniques will both work to make this cut. Put the nose of the saw bar on the limb to be cut and do a little plunge cut; or alternatively, first cut the limb high enough to where the separation is great enough to get the entire bar in, make the cut, then do an undercut on the stub. A little experimentation will help you determine which technique works best in tight branch configurations.



The main drawback with powered pole saws is their weight. A Stihl model **HT 103** weighs 15.5 lbs. empty, but it comes with a harness that transfers most of the weight to the large core muscles. I find using this saw much less fatiguing than the back and forth sawing needed with a manual pole saw. I still get tired, but my shoulders are less tired, and my daily productivity is much greater.

I have done some data collection and find when I am sawing oaks where the target limbs are between 10 and 13 feet high, I can prune about 50 trees an hour. I can readily prune limbs 16 feet high, but productivity slows down and fatigue goes up because the weight is extended out much farther. My limited data says I can do about 40 trees an hour for 16 feet pruning on oaks with several limbs of 2 +/- in. (I am sure young guys and gals can work more hours a day than I can at nearly age 78.) Pruning limbs to a height of 16 feet (**see photo above**) will, in most cases, yield a 17 foot or more limb-free bole which will render two 8 ½ foot logs.

The maintenance on the saws is not much different than a regular chain saw except the chains

on the pole saw stay sharp much longer. I feel this is because the chain is never down where it can get dirt and grit on it. A sharpening lasts several hours at least. The saws are easy on gas and oil, partially because the engine is idling most of the time and the chain is not moving until the trigger is pulled. I usually try to work in zones when pruning so I can get back to my vehicle every hour or so to fuel up and get a drink of water and just take a little break.

I have been experimenting with a **backpack rig** by Stihl (\$120) that has a lanyard attached to an over-the-shoulder bar. I have found this harness does not have much utility except in the fully extended pole configuration going after those higher limbs. But, in those situations, the backpack rig makes a real improvement. The **photo below** shows how the over-the-shoulder bar on this rig allows the left arm to rest while walking between trees.



I have been using a Stihl model **HT 133** for the last few years and really like it, but Stihl is no longer producing it for reasons not applicable to our type of use. I am told It is still available at many dealers,

but probably not for long. Parts are available for an unknown time-period. Stihl has two other models that are capable of our type of work, the **HT131** and the **HT 103**. I rented a 103 for a day and found it to be a great saw and even a little lighter than my 133. The HT131 is a heavier saw, 1.7 lbs. more. It is designed for larger limbs with a beefed-up pole, bar and a larger kerf chain that I feel is not necessary for our use. I have not tried one in the field, but even in the store the weight difference is enough to deter me from buying one.

My general recommendation is buying a Stihl HT 103 pole saw for the circumstances I describe above. It is listed at \$599.99. If my 133 calls it quits before I do, I will buy a Stihl HT103.

An alternative to consider is a battery powered saw. I have used a Model **HTA 85** battery powered saw over the last two years. This is an extended pole saw that I find quite top heavy in the extended position. It is OK for short periods of time but is a challenge over extended use. The reason for the imbalance is that the head contains the motor in addition to the bar and blade assembly. (The backpack rig mentioned above helps). The imbalance is not so noticeable if the pole is not extended. If you are only pruning to a height of 10 feet or so, like Mike mentioned in his article, there is no need to buy an extension model for that application. If you want to go to 16 feet pruning, the Model HTA 85 will do the trick just beware of the imbalance issue.

If possible, go to the dealer and handle a battery powered unit and then compare the weight and balance with a gas-powered saw.

We know many tree farmers are falling behind on their pruning workload due to a lack of time and energy. I believe converting to a power pole saw will help solve those problems.



Photo Above: A tight V between the bole and a limb, can be a challenge for a manual pole saw, but these powered units make this cut a breeze.