

## Firewood Tips from a Warmth-Loving Tightwad

By: John Peterson, Virginia Tech

Living on the farm for the last 5 years has yielded some tremendous perks. For the first time in my adult life, I have a glut of firewood. Not enough to sell – I don't produce at THAT level – but it is definitely a glut. While not quite at energy independence, I suppose we could call this glutted state heat independence. For you to fully appreciate the joy surrounding my newfound wood security, you will need some background.

I started burning wood in 1994 and have never reconsidered. I remember this date precisely because a character trait, a deduction, and a weather event all collided that winter. First the character trait. I'm a tightwad, and as such, it always irked me to write that monthly check to the electric company. A new homeowner, I quickly deduced that the annoying whir of my spinning electric meter was intensified by my electric baseboards. Even more annoying than the whir of the meter was the sudden cessation of that whir with the two horrific ice storms Montgomery County experienced that winter. After 10 days with no power, I swore to never be cold (or even chilly) again. As soon as the weather lifted, I inspected the abandoned chimney and begged my father to bring over his old wood stove.

I suppose that I had actually earned that woodstove with my child labor. Way back then, it was expected that children participate in chores, and my chores included helping cut the 4 full cords of firewood that we burned every year. I even had my own Stihl 021 and splitting maul.



*The woodshed midway through winter 2020-21.  
Photo by Jennifer Gagnon, Virginia Tech.*

Although happy with my decision, I soon realized I had a supply issue. While the ice storms provided an immediate source of wood in the neighborhood, there was no sustainable way to cut enough firewood from my half-acre suburban yard.

In my quest for fire over the intervening years, I have burned wood from almost every imaginable local source and species. Local wood was not necessarily selected for forest health reasons, but for tightwad reasons. And I had to haul it with my minivan-pulled trailer. Consequently, if friends needed an apple tree removed, I was there with my minivan. Wood scraps discarded from a Virginia Tech study? "I'll take them!" Trimmings from under power lines were hauled away. Ad in the paper for a pickup truck full of split wood? Too pricey, but from the local logger I bought a load of full-length hardwood junk trees and cut them up in the yard. In hindsight, the neighbors were patient folks.

Moving out of suburbia to a 70-acre farm has afforded me the luxury of having an infinite amount of wood to cut. From trees that have fallen across roads, been struck by lightning, and removed in forest management activities (such as invasive species, poorly formed trees, and undesirable species), I can't keep up with cutting it all. Hence, the glut,

### ***Lessons Learned:***

Unless you have a woodstove with a catalytic converter, it is fine to burn some pine. Mix it in with hardwood for best results. Pines have high heat content per unit weight and are great to heat up a house quickly. To reduce creosote, allow pine to burn with a little more air. Do not, under any circumstances, burn a large amount of pine taproots. Taproots in small quantities are called fatwood and are prized for lighting fires. If you should luck into a large discarded study of loblolly pine taproots you should keep walking and avoid this nearly certain chimney fire.

Tree-of-heaven is a common nonnative pest species that seeds into the landscape and can take over old fields. It grows straight and is easy-splitting, with burning qualities that are similar to maple. Avoid this species for firewood, even if a friendly logger offers it for free. The creosote produced by tree-of-heaven coats your chimney like obsidian, and it is really hard to scrape off.

Silver, red, and Norway maples get to be large trees with massive trunks and are common street trees. While maples are fine firewood for chilly days, urban maples have often been repeatedly topped and they are full of reaction wood, especially in the lower bole and in the big branches. This reaction wood can be very difficult to split. I've pushed several large bole sections into the woods and called them "wildlife habitat."

Use caution when splitting blackgum and sourwood. While they are locally abundant trees that can often be had for firewood, split them at your own risk. Some stove length pieces split fine, but random pieces will have an interlocking and twisted grain that will rattle your teeth and might make you lose a filling. Surprisingly, I have seen this phenomenon in cucumbertree, which is related to the VERY easy-splitting tulip-poplar.

Black walnut and hickory are closely related but burn very differently. The various hickories are some of the best firewood you can burn. Hickory wood is heavy and the smoke is so flavorful that people use it to smoke pork. Walnut seems to be flame-retardant unless it is very well seasoned, and it produces a thick acrid smoke that almost always seems to make its way back into the house.

Beware black locust because it can cost you future help. I had a friend pursuing his PhD who wanted to help with firewood for the exercise and outdoor time. I selected a standing dead locust and we set to work. After cutting and splitting this tree, he never came back. Green black locust splits relatively easily, but standing dead black locust apparently turns to iron as it dries. This tree was so tough that it prompted me to give in and start looking for a wood splitter.

Learning the characteristics and barks of your stove wood is very important. You can actually match the species with the temperature for the day. For cool days that need just a quick warm-up, pine, tulip-poplar or yellow buckeye work great. Save cherry, maple, and (emerald ash borer-killed) ash for cooler days, and burn your hickory, oak and locust on the coldest days. I have learned to layer these in the woodshed, so that the light species are in the front. As the days get colder I mine back to the white oak. Likewise, I try to mix small diameter stove wood with large diameter. Small to get the fire going, large to sustain it. Small diameter stock is more important at the beginning and end of the season.

I write this essay at the end of a long winter that saw around 150 fire lightings and rekindlings and the burning of more than three full cords of wood. I might hang my head at the thought of going home to rekindle yet another fire tonight, but this writing is actually making me nostalgic for the curl of smoke from the first fire of the year on a cold and wet October night. Or maybe that first fire will be in September. I do have a glut.

***John Peterson is a Laboratory Specialist, Advanced, in the Department of Forest Resources and Environmental Conservation; jopeters@vt.edu, 540-231-8942.***