

Green wood, Seasoned wood - Post-season Wood

by Stephen Bushway
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It doesn't take long for folks who burn wood to tell the difference between green and seasoned firewood. Green, or unseasoned firewood has a way of reminding one of his/her vocabulary of four letter words. There's the way it lights - or not: the way its sizzles in the firebox and the lazy, unproductive way it burns.

But when it comes to seasoned wood, we're all happy campers! Easy ignition, cheery vigorous fire with long flames, and the best and final way wood heats.

Many of my heater clients clear their own land and are actively involved in the building of their house. Often, in order to get the land cleared and ready for excavation, wood is cut and stacked in "rounds" between trees on the edge of the clearing and into the woods. They'll point to it with admiration and tell me "I'll have a 2 or 3 year supply of nice, dry firewood by the time the heater is ready." Maybe.

Several factors can conspire to render this assumption false. First, wood doesn't dry much except at the ends of the pieces until its split open. Bark is generally not porous. In addition, the trees between which this wood is held are also keeping sunlight and breezes from surface drying rain water and dew. So, what often starts out as a savvy plan to get ahead on firewood, ends up on being man's early intervention with nature's process of turning a dead tree back into nutrients for the soil.

I learned this deductively as part of troubleshooting a smoking problem in a heater complex and chimney had just built.

3 or 4 weeks after the owner started his "break-in" period, he called to say the heater didn't seem to be drawing, no matter what he did. My first reaction was that his wood wasn't dry, so I brought over a load of seasoned wood and kindling. The fire started fine, but never developed the 'momentum' a typical heater fire exhibits.

My brain went through all the exotic pressure issues I was taught as a chimney sweep. I suggested the vapor barrier just above the sheetrock in the 2nd story ceiling might be letting conditioned air escape, causing the tall house to act like another chimney, competing with the one the heater was connected to.

And, indeed, the owner found and sealed some gaps around the 2' x 6' chimney in the attic. But that didn't solve the problem.

Though I conscientiously refractory mortared the flue tiles in the chimney, I wanted to prove the vent system was air tight, so I brought over a video inspection camera and ran it up from the cleanout to the top of the flue, carefully examining each tile joint as I went. No leaks.

In desperation, on my 3rd trip to the house, I opened one of the soot doors and reached in with an inspection mirror and flashlight, expecting to see the capping slab at the top of the core. Instead I saw a black, irregular mass. The

old (but not seasoned) wood he had been using was not burning hot enough to consume the volatiles and what accumulated on the heat exchanger walls was no different than the acrid creosote I'd removed from chimneys venting dirty burning wood stoves.

Fortunately, the owner had an oil boiler in the basement and a brush with a long, coiled wire handle and small enough diameter that I was able to put into a lazy "U" shape and run up into the channel far enough to remove the creosote that had built up and bridged across the narrowest part. Problem solved. And a valuable lesson learned. Its been years now since I've heard from this homeowner but he was later happy to write for me one of the nicest testimonials that is on my website.

Once a stick of wood is dead and down, it should be kept well off the ground in a sunny, well ventilated place - preferably split if too large to burn un-split. "Old" wood turns black at the ends, as mold is starting to help it decay. It also loses some of its baseball bat 'ring' when 2 pieces are struck together. In a masonry heater, where combustion is allowed to happen un-dampened, fuel is still an important factor in clean combustion. Once the trouble is taken to drop a tree, it still needs the follow-up steps necessary to become fuel worthy of the firebox.