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Is All Firewood Created Equal?

AGRI-VIEWS

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If you want to start an argument with people, tell them that all firewood has the same heat per pound of wood. I will guarantee you that there will be, at the very least, an interesting discussion. The key in that is the phrase, "per pound of wood". When you burn wood you are burning cellulose. Cellulose, for all practical purposes, is cellulose and has the same amount of heat units (BTU), on a per weight basis, regardless of what plant produces it. The difference comes down to how a particular plant packs the cellulose together. A pound of dry balsa wood, however, is going to be a lot bigger than a pound of dry bur oak.

Is all firewood created equal? There is no correct answer on this because it's going to come down to your need, your personal preference, and your experience. Many homeowners think oak is the best wood when many times, there are other options that will work just as well. Species like hickory, black locust and Osage orange (hedge) are denser and actually have more BTUs than oak. But hedge is hard to cut, hard to split and sparks a lot so not suitable for a fireplace, but can work well in a wood stove.

All oak is not the same either. Red oak is about 96% as dense as bur oak, and post oak which we don't have around here, is 103% as dense as bur oak. Mulberry is as dense as oak, honeylocust is slightly denser than oak. Both make good firewood but you have to be careful of the long thorns on honeylocust. Green ash is about 92% as dense as oak and if emerald ash borer arrives here we will likely have a lot of ash to be burned!

Then we get into the very common tree species that are often just ignored for firewood and shouldn't be. Hackberry, which was one of my favorites when I had a wood stove, is 84% the density of oak. The elms are in the low 80% range. Elms need to be split when green as the they can really become tough to split once they dry down. Sycamore, which can be a really big tree, is also at 80% and even the much aligned silver (soft) maple is 76%.

I mention these lower end but common species because many people don't need a firewood that will burn all night long and produce a lot of heat. They want a fire for a little extra warmth or perhaps for a social gathering. Even if you are just using it in an outdoor fire pit, many of these species will work very well for your purpose.

Always remember to cut wood well in advance of when you need it so it has time to dry down properly before using. Firewood should not be in direct contact with the ground because termites will get into it. Do not stack firewood leaning up against the house for the same reason. It can serve as a conduit for termites to get into your house. Stacking it on crushed rock will help drainage or putting it on rails elevated slightly off the ground will help. Don't bring more firewood into the house than you will use in the next day or two. Firewood left in the house too long, especially this time of year, ends up with adult insects, usually borer species of some kind, emerging from the wood. While not a threat to you or your house, their presence can be rather unsettling.

Finally, because of the risk of moving insects and diseases into an area that aren't there yet, like emerald ash borer, don't move wood from a long ways away. Leap frog infestations of damaging insects often occurs when firewood is brought in from more than 50 miles away. Only use locally grown wood to avoid this potential problem!

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