

Firewood: how and what to buy

By Ray Lagoe

Like any business the firewood industry has developed a language all its own. For the novice wood buyer this terminology can be complicated and sometimes downright misleading. And like any profit-making business, there are honest dealers and those who are just out to make a quick buck. Your first line of defense is understanding the business and its language.

In the early '80s my wife and I fled the city and bought our dream home in the country. Soaring energy costs due to the energy crises coupled with our new found status as "country folk" convinced us to install a combination wood/oil furnace in the basement to heat our new home.

This led to my first experience in buying firewood, and it was a disaster. When I needed fuel oil, all I had to do was call and have it delivered — so why not the same with the firewood? Big mistake.

Delivery of my first load came while I was at work. My wife checked the truck, assured herself that it was what we ordered, paid the man and asked him to put it by the garage door. Did I mention that it was a dump truck? He backed up to the garage door, and you can guess the rest.

So here I am in the second week in December with the season's first big snowstorm filling my driveway with big snowflakes, and I have 6 cords of "green," wet, unsplit firewood blocking the garage door. And my snowblower, of course, is inside.

So after my crash course in the school of hard knots (sorry about that) I talked with a few old-timers, read up a bit, and familiarized myself with the firewood business. Hopefully this information can help you avoid some of the mistakes I made.

How it is sold

Firewood is sold in several different ways: cut and split, in chunks, as logs, and as slabwood. Cut and split is the least amount of work. Pieces are cut 12 to 24 inches long and split to a reasonable size, so all you have to do is stack it. Some dealers will even do that for a small additional charge. (You may have to do *some* splitting, depending on the size of your stove.)

Chunks (sometimes called billets) are pieces cut 12 to 24 inches long and delivered unsplit. These are usually a little cheaper to buy, but leave you with the task of splitting. Some people feel you get less wood per load this way, but I haven't noticed a big difference once it's split and stacked.

The most economical way to buy firewood is in log length. You have the advantage of cutting pieces to any lengths you want, and you save as much as 30 to 40% a cord. The disadvantage is the time, labor, and equipment involved. If you have the tools and are handy with a chain saw, this is the best way to go. A load of logs runs around \$300 (prices vary by area) and will average around 16 face cord — less than \$20 a cord. (I'll explain *face cord* shortly.)

Slabwood is the cheapest to buy — saw mills will sell it as cheap as \$10 a pickup load. Slabwood is the pieces cut from the sides of the logs at the mill. They are two to four inches thick and of uneven lengths. This is usually a mix of hard and soft woods and makes excellent kindling and fuel for small woodstoves.

What is a cord?

The traditional measure for firewood is the *cord*. A standard cord measures four feet high, four feet wide, and eight feet long — an average of 128 cubic feet of wood and air space. The actual volume of split firewood in a

cord is between 75 and 95 cubic feet, depending on how small it is split and the skill of the stacker.

Today the term *cord* often refers to a *face cord* (sometimes called a *run* or a *rick*)—a *face cord* is a pile of firewood cut 12, 16, or 24 inches long, stacked four feet high and eight feet long. This varies from state to state, and since there are no consumer laws regulating firewood, measurements can be very confusing to the buyer. If you don't know the dealer, ask for specific measurements.

For the remainder of this article, the word *cord* will refer to a *face cord*.

When buying more than a cord or two, you may be quoted a price by the size of the truck. A six-wheeler load (six-wheel dump truck) cut and split averages about five to six cords of wood. Unsplit chunks average closer to five cords and are a little cheaper.

If you buy wood in log lengths, you have two choices, ten-wheeler load or tractor trailer load. Jerry Graham, the foreman at Black Creek Lumber, says the average ten-wheeler load will be 15 to 16 cords of wood (when cut 16 to 20 inches long). A tractor trailer load will average about 24 cords cut the same length.

Jerry suggests finding a dealer that has a crane mounted on his truck so the logs can be stacked instead of dumped. Stacked logs are much easier to separate and cut. A ten-wheeler load of logs can get pretty tangled up and just about doubles the bull work.

Choices of firewood

(See the Nov./Dec. 1993 issue of *BHM* for an article on low cost firewood.)

Firewood is almost always sold as mixed hardwoods; a lot depends on the types of wood native to your area. Bottom line: the denser the wood, the better the heat (see chart) and the less trouble you'll have with soot and creosote build-ups in your chimney.

Most softwoods are lightweight and resinous, they burn quickly and pro-

duce few coals. The resins present in many softwoods (especially pine, fir, and cedar) create dangerous build-ups of creosote in chimneys and flues. These build-ups greatly increase the risk of chimney fires. If you have to burn softwoods, try to mix them at a two to one ratio (two hard to one soft) with hardwoods.

Never be afraid to inspect a load before it is unloaded. I once had a load of logs delivered that was almost 50% softwood. I refused to accept the load and sent it back. The dealer called the next day to apologize and sent a new load out the same day. Always be sure you get what you're paying for.

Stacking and drying

Half the weight of unseasoned wood is water. After seasoning under outdoor conditions it will be less than 20%. Check the ends of your wood: green wood will show growth rings and saw marks but the surface will appear solid. As the wood dries, it shrinks and cracks. If the cracks run from the center to the bark you can be pretty sure the wood is seasoned.

Some old-timers say you can tell if wood is seasoned by the sound it makes when you bang two pieces together. A soft dull thud means the wood is still green, a sharp crack means it's dry.

Firewood that is cut, split, and properly stacked will dry twice as fast as unsplit wood. Some stove owners like to cut and stack their wood a year in advance to ensure a good supply of seasoned wood. Properly stacked wood will dry in about four months.

The best way to stack your wood is in a long running row, but few people have that kind of room. If you have to stack your piles side by side, leave at least one foot between rows to allow for good air circulation. If you want to cover the pile, cover only the top, never the sides. Don't worry too much about rain and snow — sitting out in the snow will have little effect on the moisture content of your wood. The

top and bottom layers may have damp bark, but any surface moisture will dry in a day or two once indoors.

A couple of final cautions: always remember "safety first"— wear safety equipment when cutting, splitting, and stacking. Gloves, steel-toed shoes, and eye protection are a must. Clean your

woodstove regularly and never leave a woodstove unattended for long periods of time.

If you don't know your firewood dealer, pay him a visit and talk to some of his customers. Most of all don't be afraid to ask questions. Δ

Density of wood and heat produced by various tree species

An air-dried cord of these types of firewood produces the equivalent in heat of from 218.6 gallons of fuel oil (hickory) to 121 gallons (fir).

Species	Rel. density	BTU/Cord
Shagbark Hickory	72	32,800,000
Black Locust	69	31,400,000
White Oak	68	31,000,000
Bitternut Hickory	66	30,000,000
Chestnut Oak	66	30,000,000
American Beech	64	29,100,000
Laurel Oak	63	28,700,000
Northern Red Oak	63	28,700,000
Rock Elm	63	28,700,000
Sugar Maple	63	28,700,000
Yellow Birch	62	28,200,000
White Ash	60	27,300,000
Southern Red Oak	59	26,900,000
Black Walnut	55	25,000,000
Oregon Ash	55	25,000,000
White Birch	55	25,000,000
Black Tupelo	50	22,800,000
American Sycamore	49	22,300,000
Silver Maple	47	21,400,000
Sassafras	46	21,000,000
Yellow Poplar	42	19,000,000
Red Alder	41	18,600,000
Eastern Cottonwood	40	18,200,000
Black Willow	39	17,800,000
Quaking Aspen	38	17,300,000
Softwoods		
Tamarack	53	24,100,000
Western Larch	52	23,700,000
Douglas Fir	48	21,900,000
Bald Cypress	46	21,000,000
Red Pine	46	21,000,000
Hemlock	45	20,500,000
Cedar	44	20,000,000
Fir	43	19,600,000
Pine	41	18,600,000
Spruce	40	18,200,000