

Firewood Facts

Cooperative Extension Service
College of Agriculture and
Home Economics



Guide G-102

Reviewed by Constance Kratzer, Extension Family
Resource Management Specialist

This publication is scheduled to be updated and reissued 4/08.

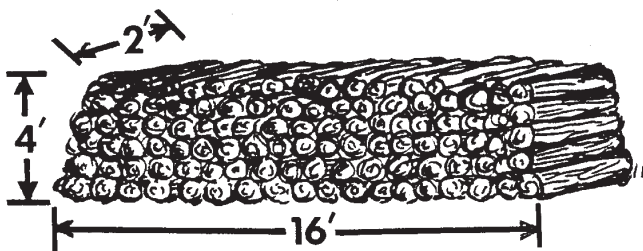
Wood was man's first fuel source. It's popularity waned as more convenient sources were developed. However, recent price rises in gas, L.P. fuels, and electricity have generated a renewed interest in wood as an energy source in home heating.

This fact sheet answers some of the most frequently asked questions about wood?

Question: How is it sold?

Answer: Wood has historically been sold by a unit known as a cord. The cord is actually a measure of the volume of a stack of wood. It represents a volume (length x width x height) of 128 cubic feet. Since most firewood is cut in two-foot pieces to accommodate stoves and fireplaces today, a cord is usually thought of as a rectangular stack of 2-foot pieces, 4 feet high in a 16-foot long stack yielding $(2 \times 4 \times 16 = 128)$ 128 cubic feet.

Around large towns where apartment dwellers might have a fireplace, but practically no place to store a cord of wood, it can be purchased on a weight basis for a few pieces at a time. This is usually for the convenience of the buyer, and the price per pound is usually slightly higher than if it had been bought as a cord.



Question: Where do I get wood?

Answer: Wood is generally obtained two ways. Wood brokers are the most common source. They are people who seasonally advertise in the newspapers just before cold weather starts in an area. Normally they quote a price for wood cut into two-foot lengths and delivered to your house. They may quote an additional \$10 to \$15 per cord if they are expected to stack the wood, since this is more time-consuming than dumping a load of wood in your driveway. A word of caution is in order here. If you choose the cheaper route of having the wood delivered but not stacked, you have no immediate way of knowing if you have received a full cord. Be sure you know how to get in touch with your supplier at a later date in case you did not get a full cord. This is rarely a problem with resident brokers, but it does happen in some transient operations.

Another way to obtain wood in many areas of New Mexico is to cut your own wood in nearby national forests. The actual cost to you may be significantly less if you choose this method. Most of the cost of a cord of wood is the labor involved and the hauling expense. There may be considerable savings in using your own resources to obtain wood. Forest offices, ranger stations, etc. designate certain cutting areas for "do-it-yourselfers" and issue permits to harvest firewood for minimal fees. They require that you use certain equipment such as spark arresters on power saws, and they must approve your equipment before you are allowed to cut in the national forest areas. Depending upon your proximity to these areas, you may save as much as \$40 a cord by being your own supplier.

Question: What kind of wood should I use?

Answer: The economic answer to this question lies in your nearness to a source of wood. Generally, you use that wood which is available relatively close to your geographic location because of hauling expense. Surely, some woods burn better and cleaner than others. For instance, pine burns better than cottonwood, but if cottonwood is available locally and pine must be hauled several hundred miles, the price differential quickly overcomes the burning differential. In New Mexico, pine, oak, piñon, juniper, and mesquite are popular choices. Pecan wood is an excellent wood for fires if you live in the vicinity of a large orchard that does systematic pruning. In general, hardwoods are better for fires than soft woods.

The following chart for the relative rating of several different kinds of firewood was developed by the U.S. Forest Products Laboratory. It gives an excellent overall picture of the merits of different species of wood.

Question: How should wood be prepared for use in a stove or fireplace?

Answer: Possibly the most important item in preparing wood for use is seasoning it. It is best to use wood that has air dried for about six months or more rather than to use freshly cut or green wood. Since some woods are susceptible to fungi or rot while curing, if you do obtain green wood for later use, stack it so air can circulate through the stack. Remember also that there is about 20 percent more heat value in seasoned wood than in freshly cut wood due to the lower moisture content.

Question: Which is the best way to burn wood, in a fireplace or a stove?

Answer: Generally speaking, stoves give off about three times the amount of usable heat as fireplaces do. There are several different types of wood stoves such as the Franklin stove, the pot-bellied closed type, and others. There are also two distinct types of fireplaces, masonry or metal fireplaces. Individual preferences govern, but each has its own strong and weak points.

Ratings for Firewood

Name of trees	Relative amount of heat	Easy to burn	Easy to split	Does it have heavy smoke?	Does it pop or throw sparks?	General rating & remarks
HARDWOODS						
Ash, red oak, white oak, beech, birch, hickory, hard maple, pecan, dogwood	high	yes	yes	no	no	excellent
Soft maple, cherry, walnut	medium	yes	yes	no	no	good
Elm, sycamore, gum	medium	medium	no	medium	no	fair
Mesquite	high	medium	no	medium	no	good
Aspen, basswood, cottonwood	low	yes	yes	medium	no	fair-but good for kindling
Chestnut, yellow poplar	low	yes	yes	medium	yes	poor
SOFTWOODS						
Southern yellow pine, Douglas-fir	high	yes	yes	yes	no	good but smoky
Cypress, redwood	medium	medium	yes	medium	no	fair
White-cedar, western red cedar, eastern red cedar, juniper, piñon	medium	yes	yes	medium	yes	good-excellent for kindling
Eastern white pine, western white pine, sugar pine, ponderosa pine, true firs	low	medium	yes	medium	no	fair-good kindling
Tamarack, larch	medium	yes	yes	medium	yes	fair
Spruce	low	yes	yes	medium	yes	poor

Source: Most of these ratings are from the U.S. Forest Products laboratory. The ratings for mesquite, piñon, and juniper were added in New Mexico.

New Mexico State University is an equal opportunity/affirmative action employer and educator. NMSU and the U.S. Department of Agriculture cooperating.