



# Get the Most Value from Your Firewood Choices



Many people burn wood to save money and for the enjoyment of a wood fire.

Whether you cut your own wood or buy it, there is always a cost involved. Different types of wood have different heat values and burning qualities, so it pays to know what you are getting before selecting firewood. While all wood species have nearly the same heat content on a weight basis, firewood is usually measured and sold on a volume basis. A given volume of oak, hickory or locust has nearly twice the weight and heat value as the same volume of basswood, willow or cottonwood.

An excellent website [ISU Extension Forestry Department](http://www.extension.iastate.edu/forestry/forest_products/fuel.html%20) entitled [Wood for Fuel](http://www.extension.iastate.edu/forestry/forest_products/fuel.html%20) [http://www.extension.iastate.edu/forestry/forest\_products/fuel.html%20] lists the heat content of many Iowa tree species. The publication "Firewood Production and Use" has a table on other properties of firewood such as ease of splitting, ease of starting, burn rate, and amount of sparks produced. The publication "Cost of Cutting Your own Firewood" is also useful.

To compare the cost of heating with wood to heating with other fuels, both the energy content of the fuel and the burning efficiency must be considered. For example, one cord of oak firewood burned in a 60 percent efficiency wood stove would provide the same heat as 200 gallons of LP burned in an 80 percent efficiency furnace. With current LP prices of about 90 cents per gallon, this would make the cord of oak firewood worth about \$180.

Keep in mind that firewood needs to be "seasoned" or dried before use. Freshly cut wood can have up to 45 percent water, while the amount of water in well seasoned firewood generally is only 20 to 25 percent. Well seasoned firewood is easier to start, produces more heat, and burns cleaner.

The important thing to remember is that the water must be gone before the wood will burn. If your wood is cut six months to a year in advance and is properly stored, the sun and wind will do the job for free.

If you try to burn green wood, the heat produced by burning must dry the wood before it will burn, using up a large percentage of the available heat energy in the process. This results in less heat delivered to your home and literally gallons of acidic water in the form of creosote deposited in your chimney.

By Greg Brenneman, ISU Extension Agricultural Engineering Specialist



## CONTACT US

### Nebraska Extension Acreage Team

Nebraska Extension in Lancaster County  
Lincoln, NE 68528

Phone: (402) 441-7180

Email: [sbrowning2@unl.edu](mailto:sbrowning2@unl.edu)

## RELATED LINKS

[Backyard Farmer](#)

[Master Gardener](#)

[UNL Entomology](#)

[Plant Disease Central](#)

[Turfgrass info](#)

1000 Grass Roots

Nebraska Forest Service

Nebraska Statewide Arboretum

UNL Water

## CAMPUS LINKS

[Directory](#)

[Employment](#)

[Events](#)

[Libraries](#)

[Maps](#)

[News](#)

[Office of the Chancellor](#)

[Report an Incident](#)

 **UNL Report**

## POLICIES & REPORTS

[Accessibility Statement](#)

[Emergency Planning and Preparedness](#)

[Institutional Equity and Compliance](#)

[Notice of Nondiscrimination](#)

[Privacy Policy](#)

[Security and Fire Safety Report](#)

[Student Information Disclosures](#)

UNL web framework and quality assurance provided by the [Web Developer Network](#) · [QA Test](#) ★

UNIVERSITY *of* NEBRASKA–LINCOLN

Established 1869 · Copyright 2021