A Guide to Buying and Storing Your Winter's Wood

Why Use Wood?

With proper forest management, burning wood does not deplete the earth's resources. Heating with wood usually does not contribute to global warming. The young trees that replace the trees in your wood stove absorb carbon dioxide from the air.

The key is that wood is renewable.

Another advantage to wood is that it is produced locally, which creates local employment, and more tax revenues stay in the province. Besides being environmentally friendly, the heat from a wood stove warms you like the warming rays of the sun, and it is aesthetically pleasing.

Wood is generally less expensive than alternative sources of energy.

Top

Obtaining Your Wood

You have three options to obtain wood: cut your own, buy it in eight-or four-foot lengths, or buy it already cut and split. Your choice depends upon the availability of standing wood and suitable equipment, and how much energy and time you are able to put into obtaining your source of heat.

Unless you buy your wood cut and split, you will need some basic equipment to process the wood for burning. Besides a safety-equipped chain saw, you will need a hard hat with hearing and face protection, and safety pants, gloves, and boots. Unless you are competent with a chain saw, you should contact your nearest Department of Natural Resources office to see if a course is offered in your area.

Other useful equipment includes a wood splitter, a chain saw work bench (Fig. 1), and a splitting maul (Fig. 2).

Figure 1: Chain Saw Work Bench

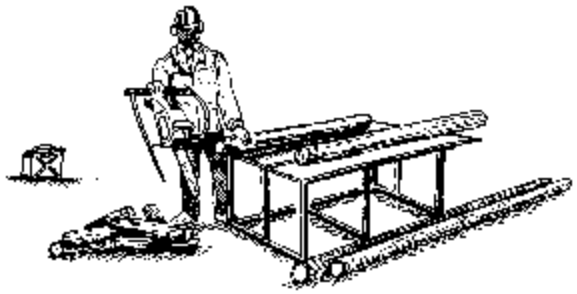
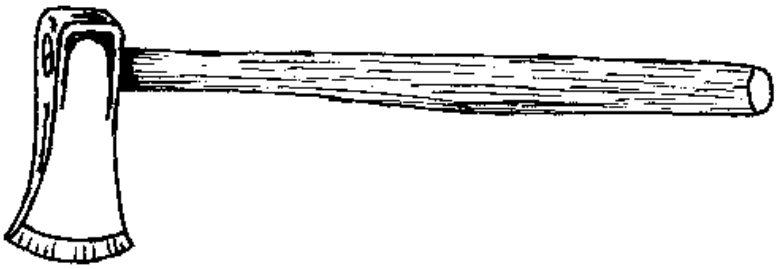


Figure 2: Splitting Maul



Top

What to Consider When Buying Wood

Seasoned versus green wood. If you buy in the fall, make sure the wood has been properly seasoned, but keep in mind that it does not dry properly until it is cut and split. Consider buying green wood in the spring or summer when you may get a better price.

Species mix. Each species has its own heat values (Table 1). Softwood provides less heat per cord because it is less dense (lighter) than hardwood, but it still makes good firewood.

Keep in mind that unless you pay a premium price, you will probably receive a mix of firewood species. Use lower-heat species such as softwoods in the fall and spring or split your wood into smaller pieces.

Table 1: Number of litres of #2 oil or kWh of electricity required to produce the same heat as a cord of wood.

Species Group	Litres of Oil	kWh of Electricity
Ironwood, Apple	500-600	5350-6400
Sugar Maple, Yellow Birch, Red Oak, Beech	430-490	4600-5250
Ash, Red Maple, Larch, Elm, White Birch	360-420	3850-4500
Spruce, Aspen, Pine	250-300	2650-3200

Top

To compare costs for the three alternative heat sources, multiply each value by cost per cord, cost per litre, or cost per kWh.

Quantity. Most people buy wood by the cord, which is 128 cubic feet of wood, bark, and air space, regardless of whether it is cut into firewood lengths or split. However, a cord of eight-foot wood will occupy less space when it is bucked into firewood lengths or split. However, a cord of eight-foot wood will occupy less space when it is bucked into firewood lengths and split.

Storing Your Wood

The full potential for heat will not be realized if you neglect the simple chore of piling and protecting your wood. Proper storage is

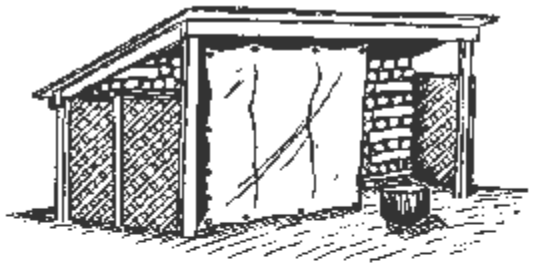
essential to avoid moisture, bacteria, and insect problems in your home.

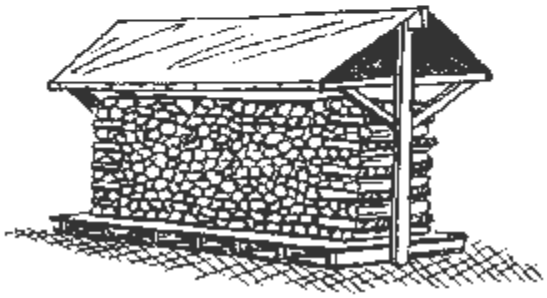
Most insect species living in firewood, such as carpenter ants, sawyer beetles, and wood lice, are harmless, but they can be a nuisance. However, the powder post beetle (Fig. 3) can cause serious problems to hardwood in a home, and bark beetles can spread Dutch elm disease. If elm is used for firewood, remove the bark before storing the wood. Burn or bury the bark to kill the bark beetles.

Figure 3: Powder Post Beetle

To avoid problems with insects and moisture, store the wood as far from your house as is practical. Do not store wood in your basement; one cord of wood can give off more than 500 litres (110 gallons) of water. The basic rule is to hide the wood from water, but not from the sun or wind (Figs. 4 & 5). Green wood will dry slowly or not at all if unprotected, while seasoned wood left unprotected may become unseasoned.

Figure 4 & 5 Storage Shed





There are three basic rules to follow when storing wood:

1. Allow air circulation by piling one tier wide if possible;
2. Protect wood from rain and snow by covering with a tarp or woodshed roof; and
3. Pile wood off the ground on scrap lumber or wooden pallets.

The time-honoured way to cure wood is to buck, split, and stack wood off the ground for one full year. However, wood can generally be reduced to a 20 per cent moisture content in two to three months. The ideal 10 to 12 per cent may take longer.

Top

A Word on Woodlot Management and Safety

If you cut your own wood, make sure you practise sustainable harvesting. Practising good management wherever you harvest will ensure that your children have the same privilege you enjoy.

Harvesting wood or preparing it for storage are very satisfying activities which put you in closer contact with nature. Don't let a careless accident spoil it for you. Always wear the proper safety equipment and know how to use the equipment properly.

Top

References

A Guide to Measuring Stacked Firewood.N.S. Department of Natural Resources.

10 Good Reasons to Heat With Wood. Canadian Wood Energy Institute.

Heating With Wood. 1987. N.S. Department of Mines and Energy.

Home Heating Workbook. Essential Facts About Home Heating Choices. 1992.N.S. Department of Natural Resources.

The Weekend Woodcutter: A Firewood Safety Guide. Nova Scotia Forest Products Association.

The Harrowsmith Guide to Wood Heat. 1992. Dirk Thomas.

Woodlot Management Home Study Course # 6. Chain Saw Use and Maintenance. 1992. N.S. Department of Natural Resources.

A Guide to Residential Wood Heating. 1996. N.S. Department of Natural Resources.

Introduction to Home Heating - A Homeowner's Guide. 1996. N.S. Department of Natural Resources.

For more information contact your nearest Department of Natural Resources office or

ENERinfo,
N.S. Department of Natural Resources,
PO Box 698, Halifax, NS
B3J 2T9.

ENERINFO 1-800-670-4636