

**W**ood is one of the most abundant and useful natural resources on earth. One-third of the United States is forested. Forests cover 45 percent of New Jersey. To sustain this renewable natural resource, it must be managed with proven regeneration methods. These methods include harvesting mature, diseased, and hazard trees.

### **BENEFITS OF CUTTING TREES FOR FIREWOOD**

enhances habitats for different species of animals and plants

improves forest health; trees resist insects and disease

sustains a healthy forest resource that provides clean air and water

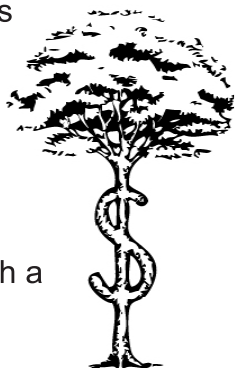
reduces wildfire hazards

opens up the canopy of the forest for new growth

reduces competition for water and sunlight among existing trees

allows healthier trees to remove more carbon from the atmosphere and produce more oxygen

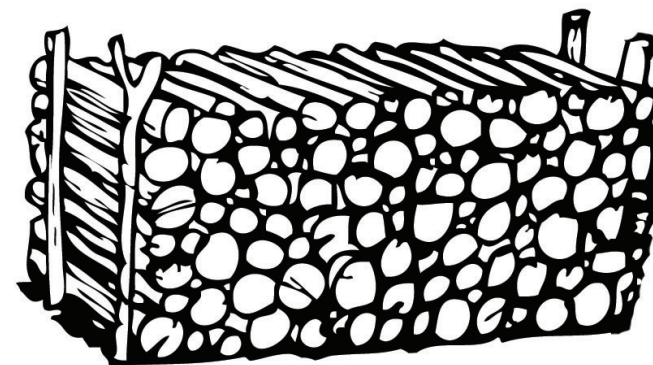
heats your home with a renewable resource



## 10 STEPS TO EFFICIENTLY BURN WOOD

1. CHOOSE THE PROPER SIZE STOVE
2. BUY THE MOST EFFICIENT DESIGN YOU CAN AFFORD
3. BURN ONLY FUEL DESIGNED FOR YOUR STOVE
4. BURN SEASONED WOOD
5. MAKE FIRES SMALL AND HOT
6. INSTALL A STACK THERMOMETER
7. REMOVE EXCESS ASHES
8. INSULATE YOUR HOUSE
9. CLEAN YOUR SMOKESTACK
10. INSPECT YOUR STOVE TWICE A YEAR

# FIREWOOD FOR HOMEOWNERS



HEAT YOUR HOME WITH A  
RENEWABLE NATURAL RESOURCE.

The Homeowner Firewood Program provides New Jersey residents with an inexpensive firewood source and an outdoor recreational opportunity during the fall and winter months.

Department of Environmental Protection  
Division of Parks and Forestry

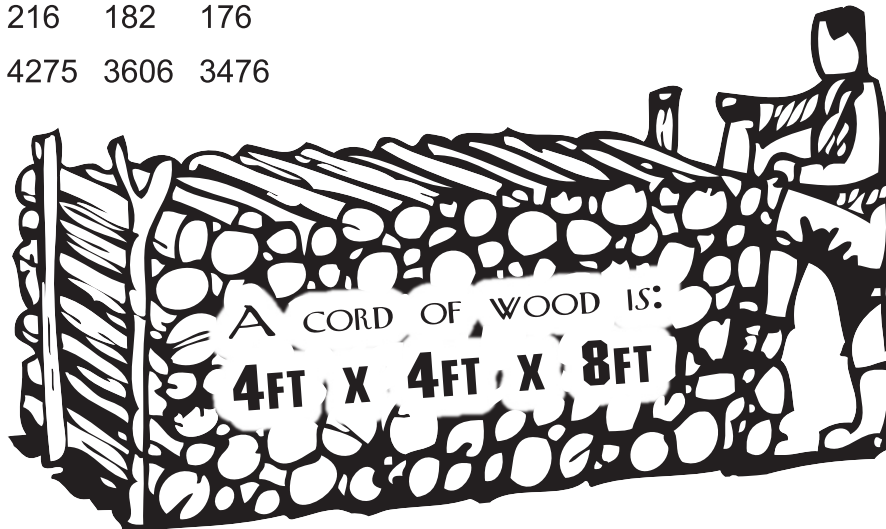
State Forestry Service  
State Park Service



# FIREWOOD HARVESTING

With the price of oil on the rise, many homeowners have begun to use a woodstove or fireplace as the primary or supplemental heat sources in their homes. As shown in the chart below, it would take 135 gallons of oil to equal the available heat of 1 cord of Red Oak.

	Black Locust	Red Oak	Hard Maple
Available Heat Per cord (million BTUs)	14.6	12.3	11.9
To get the equivalent BTUs of one cord of wood you would need:			
Coal (tons)	1.46	1.23	1.19
Fuel Oil (gallons)	160	135	130
Natural Gas (100 cubic ft)	195	164	158
Propane (gallons)	216	182	176
Electricity (kilowatt hours)	4275	3606	3476



## SAFETY EQUIPMENT



**FRESH CUT (GREEN) FIREWOOD IS HEAVY. PLAN ACCORDINGLY.**

### WEIGHT OF A CORD OF GREEN WOOD

WHITE OAK	5600 LBS
HICKORY	5700 LBS
SUGAR MAPLE	5300 LBS
RED MAPLE	4300 LBS

## “SEASON” WOOD TO MAXIMIZE EFFICIENCY

Dry wood is lighter, produces more energy, starts easier, and is safer to use. To season wood, split and stack in a sunny location.

Cover so airflow is not restricted. It takes at least one summer to season wood properly.

This chart compares the energy produced by wood of differing moisture contents.

Moisture content	Energy (by volume)	Energy (by weight)
0% (oven dry)	100%	100%
20% (air dry)	97%	81%
50% (green)	92%	62%
100% (wet)	85%	42%

## HOW MUCH WOOD DO YOU NEED PER YEAR?

Recreational Use	1/2 cord
Partial/Supplemental Home Heating	1 1/2 - 4 cords
Total Home Heating w/ high efficiency stove	4 1/2 - 10 cords