

# How Do We Benefit From Our Forests?

## Forests Are Recycling Centers

Trees absorb nutrients from the soil through their roots and transport nutrients to cells in their leaves, branches, and trunk. When the leaves or needles fall and decay, they return nutrients and other materials to the soil.



## Forests Are Oxygen Factories

To grow a pound of wood, a tree uses nearly 1.5 pounds of carbon dioxide and gives off more than a pound of oxygen. On an annual basis, an acre of trees might grow 2,000 pounds of wood, use 2,940 pounds of carbon dioxide, and give off 2,140 pounds of oxygen.

## Forests Are Air Conditioners

On a summer day, a large tree can release several hundred gallons of water through *transpiration*, the process of taking water in through the roots, up the trunk, and out the leaves. This process cools as much air as six air conditioners. As a result, the temperature in a forest can be 15 degrees cooler than adjacent open land.

## Forests Are Water Filters

Almost 50 inches of precipitation fall on New Hampshire in a year, much more than is needed to grow trees. Forests filter and store much of this precipitation and in the process provide clean drinking water.

## Forests Are Maple Sugar Factories

Maple sugaring has been a New England tradition since Native Americans learned how to boil the sweet sap to make maple syrup and sugar. During Colonial times and well into the 20th century, maple sugar was an important cash crop for New Hampshire farmers. Today, state sugar producers gather more than 4 million gallons of sap each year to make about 90,000 gallons of maple syrup. Maple sugaring contributes almost \$5 million to New Hampshire's economy each year.

## Forests Are Important Employers

The forest industry is the third largest manufacturing industry in the state. Nearly 70% of the economy in Coos County is supported by the North Country's long tradition of forestry and logging. Statewide, the forest industry employs 16,000 people who manufacture paper products, produce finished lumber for building, cut wood for home fuel, and build furniture, fixtures, and other wood products. Indirectly, the forest industry supports another 21,000 people who work in retail, repair, restaurant, and other services. The forest industry contributes \$1.7 billion to the state's economy each year.

## Major New Hampshire Species And Their Uses

### Hardwoods

Sugar Maple, Red Maple, Yellow Birch, White Birch, Beech, Red Oak, White Ash, Aspen (Poplar)

### Softwoods

White Pine, Spruce, Balsam Fir, Hemlock



## Wood Products

doors	boxes
pallets	boats
snowshoes	caskets
paper	toys
reels	syrup
paddles	spools
oars	clocks
shoe trees	crutches
stairs	barrels
baskets	buckets
flooring	furniture
handles	picture frames
housing	tongue depressors
cabinets	clothes pins
windows	

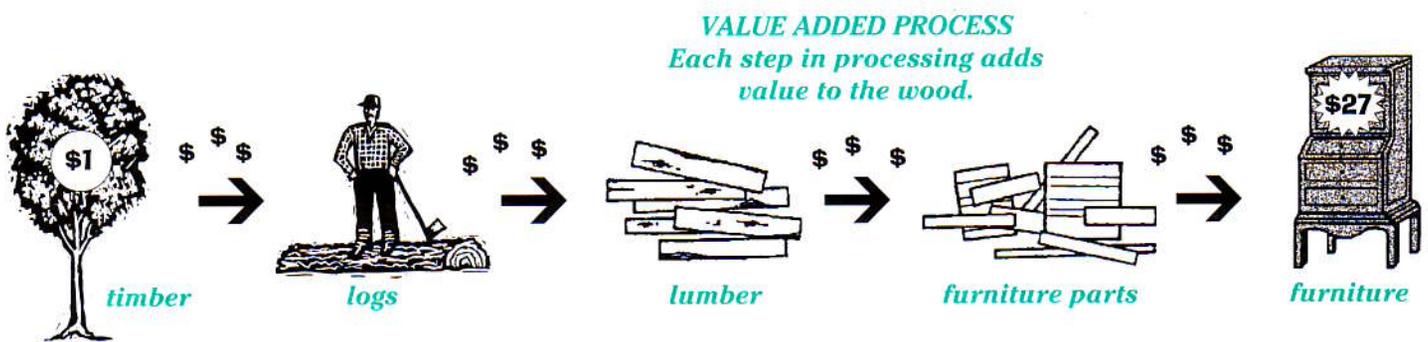


In addition, the forest provides more than 80,000 jobs in travel and tourism. Millions of vacationers, hunters, hikers, tourists, skiers, and others are drawn to the forest for recreation, sightseeing, and wildlife viewing. These forest visitors contribute almost \$3.5 billion a year to the state's economy.



## Forests Are Economic Engines

New Hampshire's forests are part of a global economy; our wood products travel to Canada, Europe, and Asia. With each step in processing from tree to finished product, the value of wood increases. A sawed log has greater economic value than the wood in a standing tree, and a finished product has greater economic value than a sawed log. For every dollar's worth of wood in a standing maple tree there is a potential \$27 worth of finished product.



## Question

Brainstorm all the ways you benefited from trees today. Your list might include firewood on a winter day, shade on a hot day, shelter in your home, syrup on your pancakes, an apple in your lunch, a rubber band in your hair, crayons on your desk, your baseball and bat, or your rayon shirt.

To help interpret the information on this factsheet, turn to the *Project Learning Tree PreK-8 Activity Guide!*

## PLT Activity #12: Tree Treasures

People are often surprised to learn how many different products come from trees. This activity helps students learn just how much we depend on trees in our daily lives.

## PLT Activity #13: We All Need Trees

It is easy to see that items made of wood come from trees. However, many tree products are not obvious. In this activity, students discover the diversity and multitude of products that are in some way derived from trees.

## Fun Facts

Most Christmas trees today are grown especially for market in carefully tended Christmas tree plantations. Each year 100,000 trees are harvested.



The forest provides wood to burn for home heating and to generate electricity in wood-to-energy plants. Nearly 6% of the state's energy needs come from wood supplies.