

Activity 13: We All Need Trees

Overview

Students are often surprised to learn how many different products we get from trees. Use this activity to help your students learn just how much we depend on trees in our daily lives.

How to Use This Information

This supplement enhances the information provided in the Background section of this activity. Use this material in addition to the information contained on page 65 of PLT's Pre K-8 Activity Guide.

Resources

Little, Elbert L. National Audubon Society Field Guide to North American Trees: Eastern Region. New York: Alfred A. Knopf, Inc., 1998

Petrides, George A. and Janet Wehr. Peterson Field Guides: Eastern Trees. Boston: Houghton Mifflin Co., 1998.

Wildlife Habitat Activity Kits for New Hampshire. Durham, NH: UNH Cooperative Extension, 1999. This kit contains an extensive reference library and animal tracks, skins, skulls, and puppets. All or part of the kit may be borrowed from the NH Fish and Game Department in Concord. To see the publication online, go to www.wildlife.state.nh.us

An Educator's Guide to NH Forests. Concord, NH: New Hampshire Project Learning Tree, 1998. To see the publication online, go to www.nhplt.org/EducatorsGuide.htm

Correlations to NH Frameworks

Literacy:

Reading Strategies: 2.1

Written and Oral Communication:

Oral Communications:

1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.2

Science:

Life Science: LS1.1, LS5.1

Science Process Skills:

SPS1.1, SPS3.1, SPS4.6

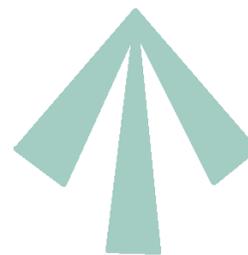
Correlations found at www.nhplt.org/correlations.htm

Tree Uses Then and Now

Trees play a significant role in the cultural and natural history of New Hampshire. During colonial times large forests were claimed by the English as royal or "Crown" forests. The tallest and straightest eastern white pine from these North American virgin forests were marked by a symbol called the King's Broad Arrow. This mark designated these trees be cut for masts for the British naval fleet. Familiar remnants of this history are today's "Mast Roads," found in towns throughout New Hampshire. These straight roads were the original roads for hauling harvested mast trees to the sea ports. (Today eastern white pine is used for construction and paper making.)

White oak was also used in ship building. The deck planks and keel of the USS Constitution—Old Ironsides—were built with white oak. It remains an important tree today: its strong wood is used for making furniture.

Throughout history, trees have served important purposes for people and wildlife. People use trees primarily for their wood. For example, most hardwood species are used for firewood. All species (except white and red cedar) are used in papermaking.



The King's
Broad Arrow



Eastern White Pine



"Old Ironsides" is the oldest commissioned warship afloat. It was ordered by President George Washington in the 1790s. The deck planks and keel are white oak.

HARDWOODS

Red Oak

- ...was used by Native Americans: flour (acorns)
- ...was used by Colonists through 1800s: coffee (acorns), construction
- ...is used by industry today: flooring, furniture, railroad cross-ties, landscape timbers, fence posts
- ...is used by animals: squirrels, deer, blue jays, and wild turkeys eat acorns

White Oak

- ...was used by Native Americans: food from acorns
- ...was used by Colonists through 1800s: ship building, plank roads in early 19th century, barrels
- ...is used by industry today: furniture, boxes, crates, veneer, barrels
- ...is used by animals: squirrels, deer, and wild turkeys eat acorns

Red Maple

- ...was used by Native Americans: lye from wood ashes
- ...was used by Colonists through 1800s: inks and dyes from bark
- ...is used by industry today: kitchenware, clothespins, pallets, furniture
- ...is used by animals: mice and other rodents eat seeds

Sugar Maple

- ...was used by Native Americans: maple syrup from sap
- ...was used by Colonists through 1800s: wooden ware, soap made from ashes
- ...is used by industry today: furniture, boxes, crate veneer, maple syrup from sap
- ...is used by animals: mice, other rodents, and birds eat seeds

American Beech

- ...was used by Native Americans: food from beech nuts
- ...was used by Colonists through 1800s: mattress stuffing from leaves, soap making from ashes
- ...is used by industry today: furniture, barrels, plates, railroad crossties, rolling pins, clothespins
- ...is used by animals: mice, squirrels, bears, raccoons, turkeys, deer, and ruffed grouse eat nuts

Paper Birch

- ...was used by Native Americans: canoes, baskets, and wigwam coverings from bark, snowshoe frames, paddles
- ...was used by Colonists through 1800s: fire tinder and lining under shingles from bark
- ...is used by industry today: ice cream sticks, toothpicks, toys, dowels, craft items
- ...is used by animals: beaver eat inner bark; deer and moose browse on twigs in winter; ruffed grouse eat buds

Yellow Birch

- ...was used by Native Americans: wigwam frames from small trunks of trees
- ...was used by Colonists through 1800s: ship building, ox yokes, wagon wheel hubs
- ...is used by industry today: plywood, spools, lumber for interior finishing, cabinets, paneling
- ...is used by animals: birds eat seeds and catkins (clusters of flowers)

Shagbark Hickory

- ...was used by Native Americans: sweet hickory milk from nut kernels
- ...was used by Colonists through 1800s: barrel and bucket hoops, barn doors, major horizontal beams in houses and barns, food from nuts
- ...is used by industry today: ax and hammer handles, golf club shafts, drumsticks
- ...is used by animals: squirrels eat nuts

White Ash

- ...was used by Native Americans: arrow shafts, snowshoe frames
- ...was used by Colonists through 1800s: scythes and hay forks, church pews, farm wagons, furniture
- ...is used by industry today: baseball bats, tennis rackets, polo mallets, handles of gardening tools, furniture, flooring
- ...is used by animals: mice and other rodents eat seeds



American Beech

SOFTWOODS

Eastern Hemlock

- ...was used by Native Americans: medicine from bark
- ...was used by Colonists through 1800s: tanning leather, dye from bark, brooms from branches, beams for barns and houses
- ...is used by industry today: structural lumber
- ...is used by animals: birds and squirrels eat seeds, deer and porcupine feed on tender bark

Red Pine

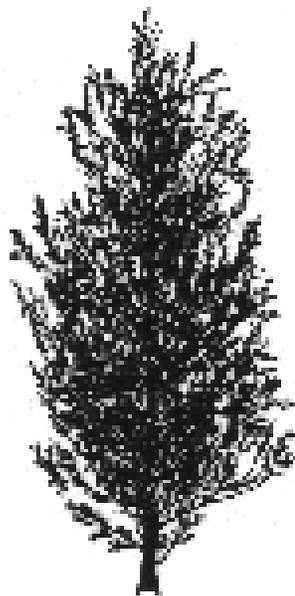
- ...was used by Native Americans: tar for canoes from resin in roots
- ...was used by Colonists through 1800s: ship decks from heartwood
- ...is used by industry today: decking and flooring, utility poles
- ...is used by animals: rodents eat seeds

Eastern White Pine

- ...was used by Native Americans: Tea from bark
- ...was used by Colonists through 1800s: ship masts, loom heddles, roof shingles, covered bridges, barrel staves
- ...is used by industry today: lumber for interior finishing, paneling, clapboards, boxes, furniture
- ...is used by animals: nesting sites for eagles, hawks, and osprey; rodents eat seeds

Red Spruce

- ...was used by Native Americans: spruce gum from resin, tea from twigs
- ...was used by Colonists through 1800s: spruce gum, musical instruments
- ...is used by industry today: structural lumber, musical instruments
- ...is used by animals: birds and rodents eat seeds; nesting sites for birds



Eastern Redcedar

White Spruce

- ...was used by Native Americans: tea from twigs
- ...was used by Colonists through 1800s: structural lumber
- ...is used by industry today: structural lumber, Christmas trees
- ...is used by animals: birds and rodents eat seeds; nesting sites for birds

Black Spruce

- ...was used by Native Americans: spruce gum from resin
- ...was used by Colonists through 1800s: spruce gum from resin, spruce beer from sap
- ...is used by industry today: structural lumber
- ...is used by animals: birds and rodents eat seeds; nesting sites for birds

Balsam Fir

- ...was used by Native Americans: tea from bark
- ...was used by Colonists through 1800s: turpentine from resin blisters used in varnishes
- ...is used by industry today: structural lumber, transparent fixative from resin for mounting and preserving specimens on slides, Christmas trees
- ...is used by animals: ruffed grouse, pine grosbeaks, and red squirrels eat seeds; moose and deer browse on foliage

Northern White-Cedar

- ...was used by Native Americans: canoe frames, cedar head and shoulder harness for carrying canoes, sap for vitamin C
- ...was used by Colonists through 1800s: cedar shingles, small craft planks
- ...is used by industry today: log cabins, shingles, fence posts
- ...is used by animals: deer eat seeds and browse on branches

Eastern Redcedar

- ...was used by Native Americans: tea from leaves
- ...was used by Colonists through 1800s: windbreaks, fences, shingles, benches, tables, coffins, boats, log cabins, pencils
- ...is used by industry today: closet and chest lining, moth repellent
- ...is used by animals: birds eat berries