



Native Trees/Native Peoples

Compare and Contrast native evergreen and deciduous trees that were used by Eastern Woodland Native Peoples to meet basic survival needs.

Arnold Arboretum, 2016

The Eastern Woodland Native Peoples were made up of many different tribes. In our area, the Massachusett, Wampanoag, and Nauset, members of the Algonquin language group, moved between fixed sites according to the seasons. This allowed them to take advantage of seasonal changes for food and shelter.



Summer Camp

fishing, hunting, planting crops, gathering wild herbs and berries for food; harvesting reeds for baskets and mats, bark for shelter, trees for boats, shells, twigs, and fire for tools









Winter: what would you need in order to survive many months?



Basic Needs: these needs were met by **trees!**

Animals fulfilled many needs as well, such as clothing, tools, and food.

Shelter	Hunting/Tools	Food	Transportation	Medicine
		 		

Which trees for what? Identification

DECIDUOUS	EVERGREEN
Drop their leaves in fall	Keep their leaves throughout year
Most leaves are broad, like those from oak, maple, birch and beech	Most leaves, called needles and scales in conifers, are from pine, hemlock and spruce
Some conifers are deciduous, like dawn redwood and larch	Some broadleaf flowering trees are evergreen, like holly and rhododendron
Bark, twigs, fruit, seeds, and nuts are used to tell flowering trees apart.	Needles, bark, and cones are used to tell conifers apart.
	

Sort the plant material

An orange envelope with a white border, featuring the word "DECIDUOUS" in black capital letters in the center.

DECIDUOUS

An orange envelope with a white border, featuring the word "EVERGREEN" in black capital letters in the center.

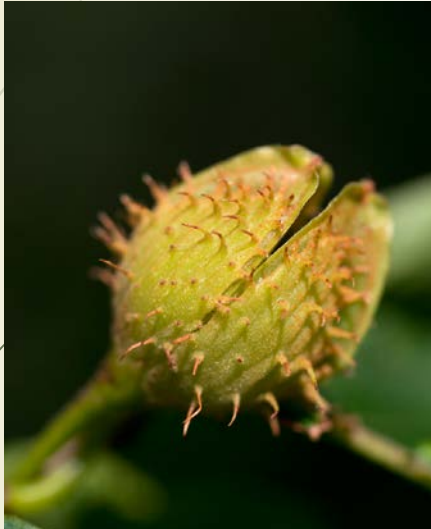
EVERGREEN

Use your senses of sight, touch, sound, and smell and learn to sort the plant material into deciduous or evergreen.

deciduous

American Beech

Fagus grandifolia



- ▶ **Nuts:** sweet and nutritious, tasting like buttered popcorn
 - ▶ Eaten raw or roasted; ground into flour
- ▶ **Wood:** flexible and odorless
 - ▶ Bent into snowshoes and bows
- ▶ **Leaves:** springy and long lasting
 - ▶ **Stuffed into Pilgrims' mattresses

evergreen

Eastern Hemlock

Tsuga canadensis



- ▶ **Bark:** pink and very acidic
 - ▶ Ground into flour
 - ▶ Ground and applied to burns
 - ▶ Soaked with animal skins to make softer leather
- ▶ **Needles:** short, deep green
 - ▶ Brewed to make tea high in Vitamin C

deciduous

White Oak

Quercus alba



Rounded lobes



- ▶ **Seed/Acorn:** nutritious; bitter taste
 - ▶ Ground after soaking to make flour and soup
- ▶ **Bark:** irregular pattern, bitter
 - ▶ Brewed to make tea for sore throats
 - ▶ Ground into powder to apply to wounds

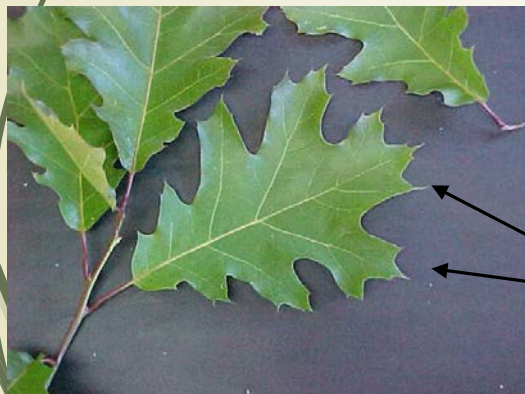
Bumpy caps, smooth body, thin and oval



deciduous

Red Oak

Quercus rubra



Pointed lobes

- ▶ **Bark:** regular, straight up and down grooves, 3-4 inches thick
 - ▶ Stripped and flattened to create shingles for wetus (homes)

Flat top, round body, fuzzy and scruffy



deciduous

Shagbark Hickory

Carya ovata



Bob Mayer; Carya ovata 22868*A at the Arnold Arboretum
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- ▶ **Nuts:** nutritious and very high in fat

- ▶ Pounded and boiled to make soup

- ▶ **Wood:** strong and hard

- ▶ Carved into bowls and wood handles



deciduous

Sweet Birch

Betula lenta



- ▶ **Twigs and Bark:** minty smell from germ-killing oil of wintergreen
 - ▶ Cleaned teeth with twigs
 - ▶ Pounded and applied to wounds

evergreen

White Pine

Pinus strobus



Kyle Port; *Pinus strobus* 1199-63°A at the Arnold Arboretum
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Bob Meyer; *Abies nephrolepis* 9133°A at the Arnold Arboretum
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Bundles of 5 needles



- **Needles:** rich in Vitamin C
 - Brewed for tea
- **Bark:** sweet tasting
 - Brewed to make tea for coughs
- **Trunk:** light, straight, up to 200 feet long
 - Burned and scraped to create dugout canoes
- **Resin:** strong smelling, waterproof, sticky
 - Used in steam baths to cure colds and coughs
 - Applied to wounds
 - Mixed with ash to create waterproof sealant

deciduous

Sassafras

Sassafras albidum



- ▶ **Roots and Bark:** smell like root beer
 - ▶ Brewed to make tea for colds and cold prevention
 - ▶ Use to lower blood pressure



Three distinct leaves on one plant!

evergreen

Mountain Laurel

Kalmia latifolia



- ▶ **Wood:** strong, dense and hard
 - ▶ Carved into spoons and eating utensils
 - ▶ Called "spoonwood"



evergreen

Arborvitae

Thuja occidentalis



- ▶ **Bark and Scales:** rich in Vitamin C, aromatic
 - ▶ Brewed for tea to prevent scurvy and colds
- ▶ **Wood:** light weight, rot resistant
 - ▶ Used in fences, shingles, and ribs of birch bark canoes
- ▶ **Bark:** red-brown, peels in strips
 - ▶ rolled up and used as torches

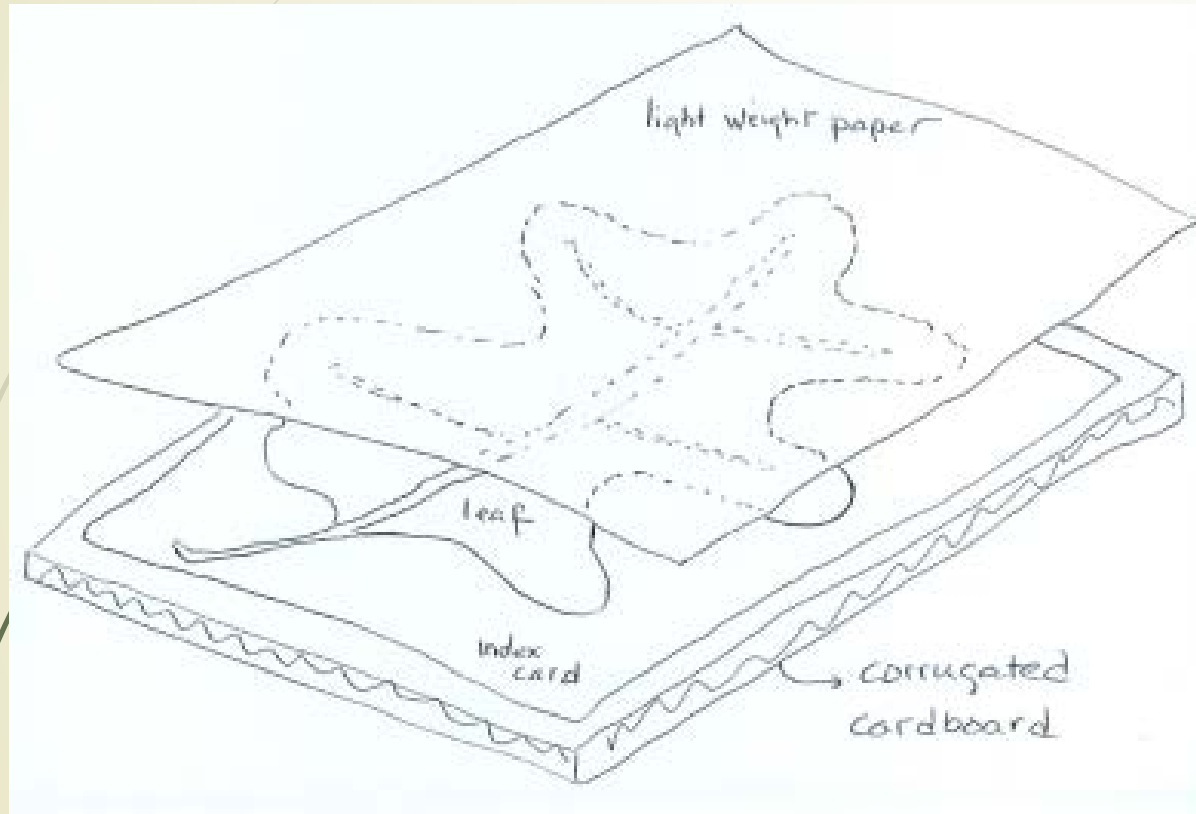
Exploring the Conifer Collection

- ▶ **Make a collection:** you can pick up any plant material on the ground to bring back to school
- ▶ **Make Leaf/Bark rubbings**
- ▶ **Bring science journal and drawing materials:** locate and sketch 3 different deciduous and 3 different evergreen trees; describe
- ▶ **Read the tree labels:** you will know if you found one of the native trees studied



Kyle Port; *Oxydendrum arboreum* 510-38°C at the Arnold Arboretum
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How To Make a Leaf Rubbing



- Choose a fresh, flat leaf
- Turn it so the veins face up
- Place paper on top
- Hold in place while you firmly rub your pencil back and forth over the leaf, starting from one end and working towards opposite end
- It helps to keep your pencil sideways to use more of the lead

Arboretum Visit Guidelines



➤ Follow our 3 Rules:

- Respect our trees
 - You may collect plant material from the ground **only**
- Listen to your chaperone
- Stay together in your group

➤ Wear field clothing:

- Tall socks over long pants
- Closed toe, comfortable shoes
- Layers according to weather