# Previous Badge 




## PINE CONE BATTLE

Have twice as many pine cones as players. Divide boys into equal teams, each about 20 yards from a dividing line and facing each other across the line. At signal, the battle starts with each player throwing cones as close to the 20-yard marker as possible, but staying on their side of the line. Those closest to the 20 -yard mark score two points. Team with the most point's wins.

## ARBOR DAY TREASURES

Find tree name hidden in the following sentences:

1. The ranger's map led us safely through the woods.
2. Will owls hoot in daylight?
3. It's fun to hike and tramp in every direction.
4. Forest rangers wear white helmets.
5. We saw a honey bee checking clover blossoms for honey.
6. Many forest fires are caused by human carelessness.

7. We got soaked when we were caught in a cloudburst.
8. The boy's face darkened when she kissed him on the cheek.

Answers: 1. Maple 2. Willow 3. Pine 4. Elm 5. Beech 6. Fir 7.Oak 8. Cedar

## ONE LEAF TRAIL

Lay a trail using one kind of leaf as a marker, letting the stem point in the direction to be followed.

## DO TREES DRINK?

A simple demonstration can be done with celery. Use a piece of celery with leaves for each boy. Place three drops of red food coloring in a glass of water and place celery in the water. Over a couple of days, the veins on the outside of the celery will start changing color, showing how the liquid goes up the stalk. The same type of activity takes place inside a tree.

## TREE PLANTING

Collect acorns or other tree seeds and plant in small Styrofoam cups filled with dirt. Keep watered. After the seeds sprout and are a fair size, plant in a suitable place like the property of your charter organization. Get permission first.

## FLAG FORESTRY

Which tree is on the flag of:

| Florida | $\square$ |
| :--- | :--- |
| Maine | $\square$ |
| Canada | $\square$ |

South Carolina
Vermont

WEBELOS

## FOREST QUIZ

Tree used by fortuneteller
Tree representing a point in time
Tree wasting away in grief
Tree that's a body of water
Tree left after a fire
Tree that will keep you warm
A crying tree
A canine tree
Tree we chew
A double tree
Fisherman's tree
Tree near the sea
Tree with a color

PALM
DATE
PINE
BAY
ASH
FIR
WEEPING WILLOW
DOGWOOD
GUM
PEAR
BASSWOOD
BEECH
REDWOOD


Word List:
BADGER
BEAR
FAWN
FERN
LICHENS
MOSS
OWLS
RABBIT
SPIDER
SPRING
STUMP
TOAD
BERRIES
BIRD
BUSH
CHIPMUNK
DEER
FOX
INSECT
LEAVES
HUMMOCK
MICE
NEST
OPOSSUM
ROCK
MUSHROOMS
RACCOON
SKUNK
PINECONE
SNAKE
WOLF
SQUIRREL
TREES
SALAMANDER
VINES
WILDFLOWER
WEB
$\mathcal{W} E \mathcal{B E L O S}$
$\mathcal{F O R E S T E R}$


## COMMON TREES OF TEXAS

These leaf drawings and general descriptions of some of the more common trees found in Texas will help with identification. You may wish to copy these pages for each of your boys before our next hike in the woods.

## COTTONWOOD

The cottonwood is an extremely large deciduous upright tree, which tends to grow into an oval shape, 60 to 100 feet tall and 30 to 40 feet wide. It is very fast growing, but has many health problems, including cotton root rot, insect galls, and leaf drop due to summer heat. The leaves are from 4 to 7 inches long. The tree has hairy white seed; many people are allergic to cottonwood pollen.


## ELM

Most Elm trees don't grow well in Texas, but here are two that do:

## AMERICAN ELM

A large, rounded tree from 60 to 80 feet tall and 40 to 60 feet wide. While young, grows very upright with the umbrella shaped crown that spreads with age.


## CEDAR ELM

An upright tree, 50 to 60 feet high and 30 to 40 feet across. Grows well in the alkaline soils of Texas.

## FRUITLESS MULBERRY

The fruitless mulberry is a rounded to spreading tree which attains a height of 20 to 30 feet. It has huge, deciduous leaves and often suffers from leaf yellowing and leaf drop throughout the summer. This is a fast growing but long lived tree. Leaves range from 5 to 10 inches long.


## MESQUITE

The mesquite is a fairly small, rounded deciduous tree which grows 35 to 40 feet tall and spreads from 30 to 35 feet wide at maturity. The foliage is very finely textured, with the leaves somewhat resembling ferns. Native to most of Texas, this tree can survive almost any weather, soil and climate. The compound leaf is 4 to 8 inches long and the seeds grow in bean pods.
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$\mathcal{F} O \mathcal{R E S} \mathcal{T E R}$


## OAK

Many species of oak trees are native or adapted to Texas. In general, oaks are excellent trees, growing slow but living a long, long time. Most oaks thrive in the tough Texas climate, regardless of the soil or weather. Some of the most common Texas oaks are:

## BUR OAK

A rounded tree 50 to 60 feet tall with large, green leaves and a rough bark. The acorns are as large as golf balls. Leaves turn yellow to brown in fall.


## RED OAK

A rounded tree also 50 to 60 feet tall. Leaves are a lustrous green in summer, turning brilliant red (sometimes yellow) in fall.

## POST OAK

Rounded tree from 40 to 50 feet tall. Leaves are smaller than those on red oaks are with smaller lobes than those found on bur oaks.


LIVE OAK


A spreading tree, attaining 30 to 40 feet in height and an amazing 40 to 50 feet spread. Live oaks are totally evergreen in the southern $2 / 3$ 's of Texas but, in the northern third, shed their small leaves in late winter to allow new growth.

## WILLOW OAK

Has a pyramidal shape while young, but eventually spreads into a more rounded shape when mature. Grows from 50 to 80 feet high, with a spread of 30 to 50 feet. Leaves are very much like those on willow trees. Leaves turn yellow in autumn.


WATER OAK
This is a slightly upright tree, attaining 50 to 60 feet in height and a spread of 30 to 40 feet across. It is a deciduous tree, but holds its leaves well into autumn before they turn yellow to brown and fall. Leaves are very different from most oak leaves.

## CHINQUAPIN OAK

This is a large, rounded tree, growing 40 to 50 feet tall and 30 to 40 feet wide. This oak has oval leaves, which are 3 to 4 inches long and look more like elm leaves than oak leaves. The foliage is a very dark green on top and silvery white beneath. In autumn, leaves turn from orange to yellow before
 falling.

$\mathcal{F O R E S} \mathcal{T E R}$

## PECAN TREE

The pecan tree is the official state tree and one of the best all around trees in Texas. Pecan trees grow very large, attaining over 50 feet at maturity. Their growth habit is rounded and they have a compound leave, which varies from 12 to 20 inches long.


## SYCAMORE



The sycamore tree is a fast growing, upright oval to round tree, growing up to 60 to 80 feet tall and wide. It has exfoliating bark, which sloughs off to expose a white bark underneath the lighter tan. Sycamores have leaves 10 to 12 inches long and distinctive brownish-yellow round fuzzy seed balls.

## WEEPING WILLOW

Weeping willows grow very rapidly and attain a height of 30 to 50 feet tall and spread from 25 to 40 feet across. The tree has a weeping habit (limbs grow out and drape toward the ground). This tree often grows in moist areas near rivers and lakes. Willows are gorgeous trees but have a host of health problems and seldom live longer than 10 years. The leaves grow from 3 to 6 inches long.


## ADOPT A TREE PROJECT

The best way to learn tree identification is to get to know one tree, or a few trees, very well. In this way, you'll become accustomed to observing those things that make each tree special. Select trees that are near your home so you can have daily contact. Find out what is going on in, under and around the trees. Select more than one kind of tree to compare the action that takes place with each type.

- With a notebook in hand, visit the adopted trees.
- Describe the trees as they are right now, today.
- Look at their physical characteristics (size, leaf shape, bark color, and other features).
- Look to see whether they are alive. How can you tell?
- Listen to find out if they make any noises.
- Smell to find out whether they have an odor. Do different parts of the tree smell differently? The leaves? The bark? Does the smell change during the day or during different seasons?
- Repeat the visits throughout the month and compare observations.
- Look to see how the trees have changed. Look to see how the trees remain the same.
- Are there any animals calling the trees home?
- Did the leaves turn colors before the fall?
- Keep your notebook and come back to the trees when you are older and see how they have changed.
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$\mathcal{F} O \mathcal{R E S} \mathcal{T E R}$



## COMMON FOREST PLANTS NATIVE TO TEXAS

This page will help you identify some of the forest plants that provide food and shelter for wildlife in Texas.


## POSSUM HAW HOLLY

A holly which loses all leaves in winter, exposing its bright red berries, which stay on the plant late until spring. The berries provide a feast for birds. May look like a shrub or small tree.

## YAUPON HOLLY

A small leafed large shrub, but some grow to the size of small trees. The foliage is evergreen and very small. This shrub bears small, bright red fruit, which birds and small mammals love. There are some yaupon hollies which produce yellow berries


## COTONEASTER

Small leafed shrubs, of which there are several varieties, including rock cotoneaster, which bears red fruit, and gray cotoneaster. The fruits are coral colored berries in the fall. Height varies from 1 to 2 feet or 8 to 12 feet, depending on the variety.

## BLACKBERRIES

Cane type shrub which often grows wild, producing berries in late spring. The canes grow upright and are very spiny.


## DEWBERRIES

A low, trailing form of blackberry. Produce at about the same time as other blackberries.

## WILD STRAWBERRIES

Look similar to cultivated strawberries but the berries are much smaller.

## MUSTANG GRAPES

Wild grapes with big broad leaves. You'll find the vines climbing over everything in the forest. The grapes are green initially but turn red before ripening, which generally occurs during June in north central Texas.

