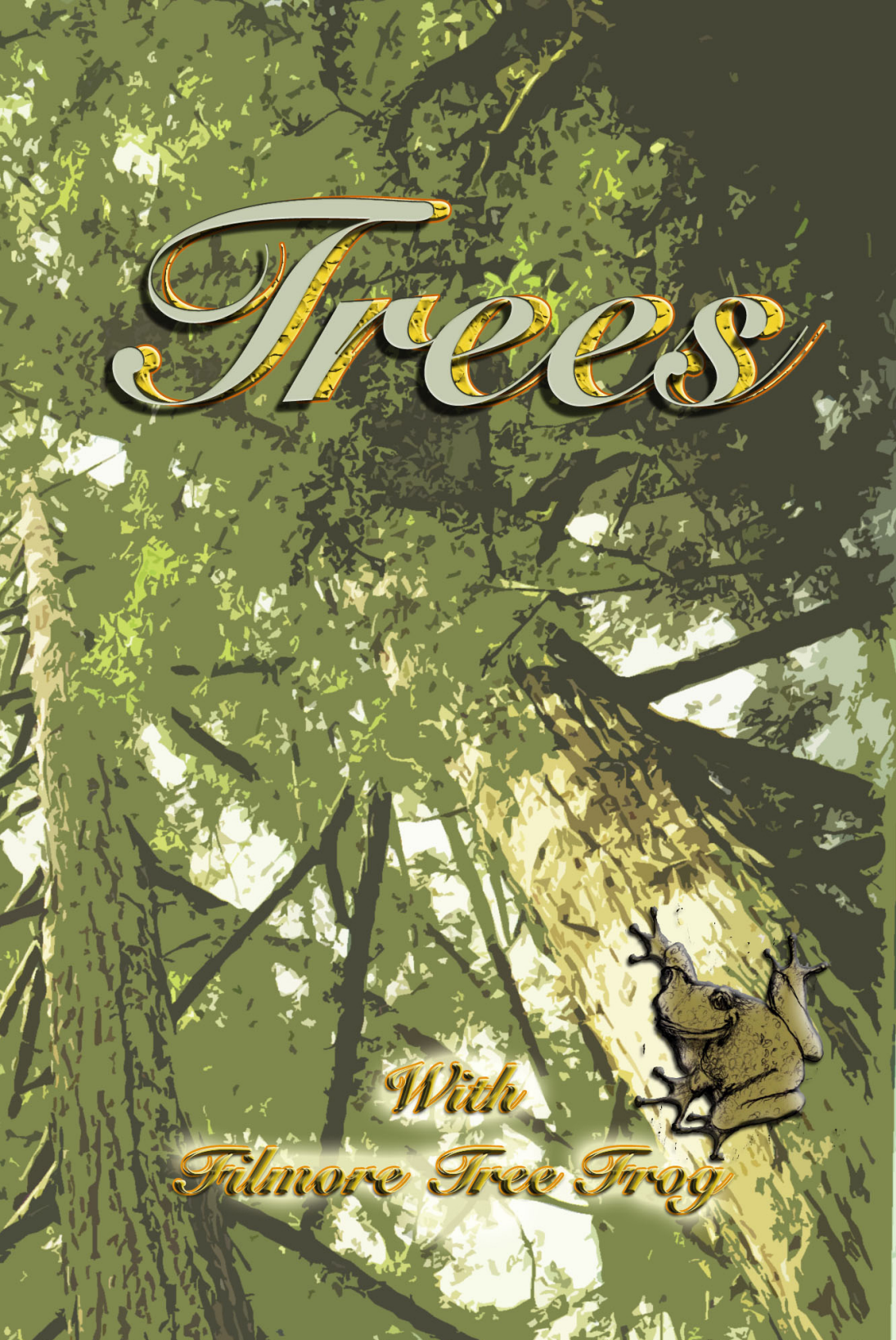

Trees
With
Filmore Tree Frog

I think that I shall never see
A billboard lovely as a tree.
Perhaps, unless the billboards fall,
I'll never see a tree at all

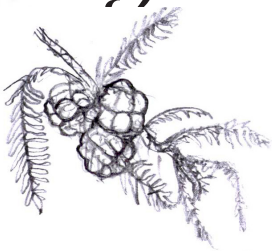
-Ogden Nash, Song of the open road

Acknowledgements

The contents of this booklet were determined by Lisa Cady, Jill Dowd, Glee Stanley, Mary Stacey and in part by the Deer Creek Watershed Friends and the Westport Garden Club's Tree Booklets. The illustrations were created by Mary Stacey. The "Word Puzzle" was done by Jill Dowd. The information given in this booklet was researched by M. Stacey, who also wrote the text (except where attributed). The above people, organizations and others contributed greatly with ideas, information and editing.

Ladue Garden Club
2010

Trees
In Your School's Backyard



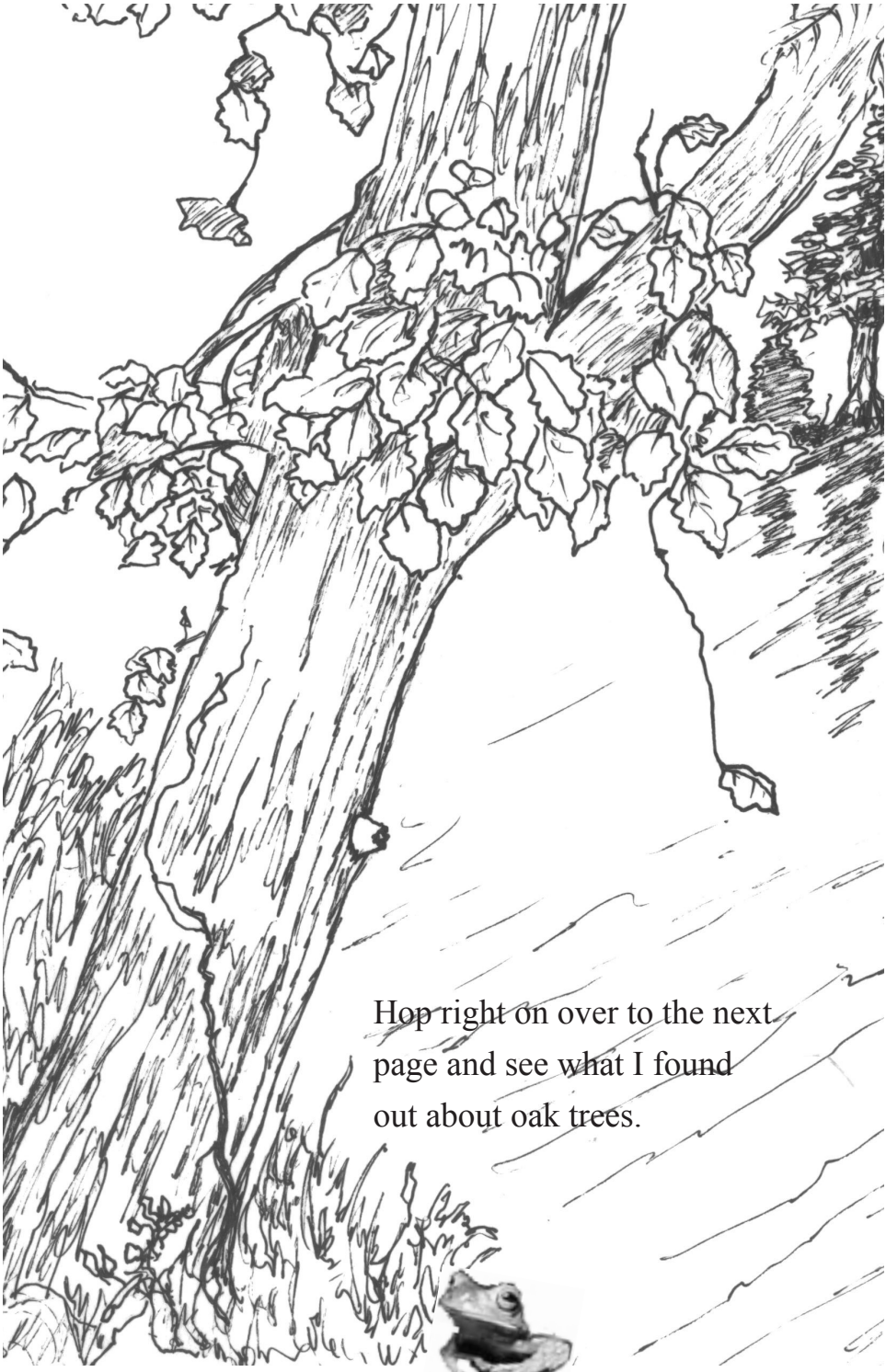
Produced by Ladue Garden Club
St. Louis, Missouri
For
The Garden Club of America
2013 Centennial Tree Project

With thanks to Westport Garden Club
For the inspiration from their booklets on
Loose Memorial Park
Kansas City, Missouri
And for the generous support of
Deer Creek Watershed Alliance
A project of Missouri Botanical Garden
St. Louis, Missouri

Hi Kids,

I am Fillmore Tree Frog and I will be hanging around on about every page of this little book to give you an idea or two about the three trees we will be planting and taking care of this year and for many years to come. If trees enjoy where they are planted they can live much longer than people do. Some baldcypress trees can grow to be more than 1,000 years old! I'm very fond of trees. They have an army of other animals living in, under and around them. You already know about the birds and the bees and squirrels and me, but my favorites are those tasty morsels: moths, ants and other insects that live here. Wow! If you had a microscope it might look like the armies in "Lord of the Rings"--remember how some of those armies looked like giant insects?

I can personally change colors. I can be the color of tree bark if that's where I am; green like a stem that I may be hanging on; rust color like fall leaves; or, I could be some of all three colors at once. You may color any of the pictures in this book. You may also draw anywhere you like, but especially in the spots saying that you should!



Hop right on over to the next page and see what I found out about oak trees.

Swamp White Oak
(Quercus bicolor)

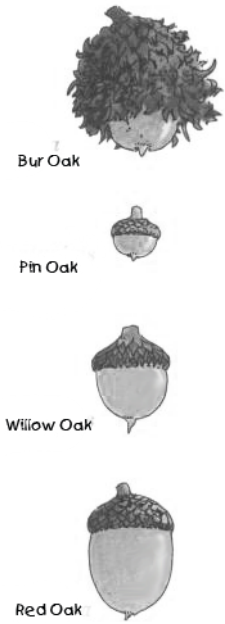
Okay, so, those two funny words right above are our Oak's scientific name. You may want to remember it because hardly anyone will know what you're talking about if you use it. Except me, of course, and your science teacher.

Our oak tree is not fully grown yet. Try to identify a large one, or come back in ten years and see what our's looks like.

Two hundred (200) different kinds of wildlife depend on oaks, including human beings. Our Founding Fathers wrote the Declaration of Independence with ink made from oak gall. Do you know what oak gall is? If so, tell me, if not, maybe you could find out.

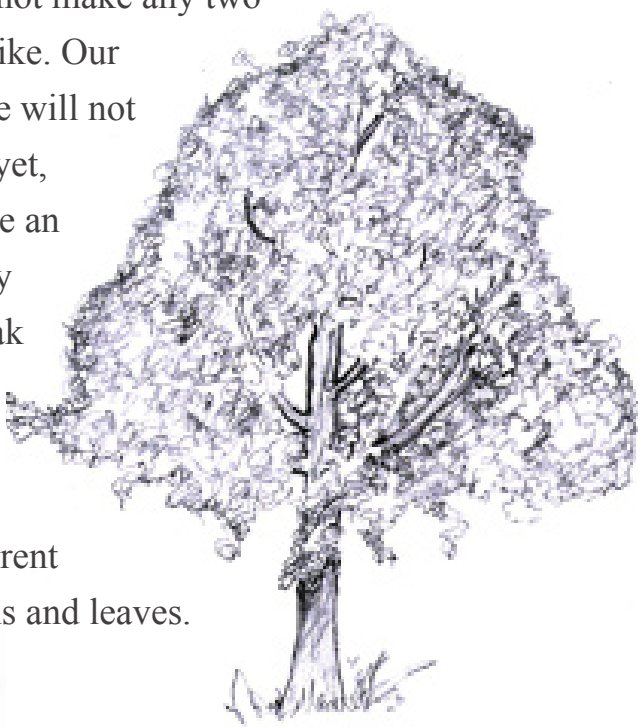
The logs of Abraham Lincoln's cabin were made from white oak.

Diffrent kinds of Acorns

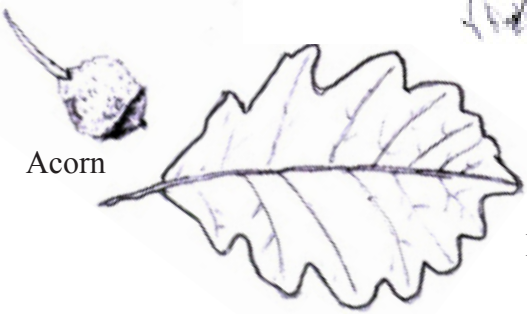


Identifying our Swamp White Oak

There are many kinds of Oak trees. Pictured below is the outline of a swamp white oak, its leaf shape and its acorn shape. These will help you to identify other swamp white oak trees. However, do not expect everything to be exactly like these drawings. Nature does not make any two things just alike. Our little Oak tree will not have acorns yet, but acorns are an excellent way to identify oak trees. Each different kind of oak tree has different shaped acorns and leaves.



Tree Shape



Acorn

Leaf Shape

Common Baldcypress
(Taxodium distichum)

I'm thinking we call this tree a baldcypress because it is one of a few conifers that drops its needles in winter. Conifers are shrubs and trees that have cones. They usually have needles instead of leaves and most of the time keep their foliage all winter.

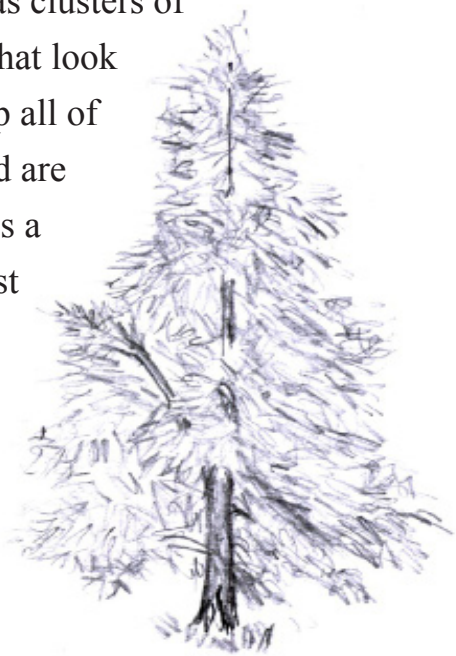
Conifers do not have flowers; instead they have cones. Cones have overlapping scales attached to a center body-stem, the seeds are held by the scales close to the body and there you have a cone, the seed holder!

If you plant baldcypress along a pond or stream some of its large roots will grow in a knee shape out of the water beside it. It is great fun to hop out of the water onto one of the knees. I sun myself for a while, then dive back into the stream.

(Here I am on a knee of a baldcypress.)

Identifying Baldcypress:

Baldcypress grow 50-70 feet high and 20-30 feet wide. They can grow 100 feet tall! They have rich green foliage in summer that turns a beautiful rust color in autumn before they drop their needles. In the summer the baldcypress has clusters of small, bright green cones that look like decorations. They drop all of their cones and needles and are bald for the winter. There is a baldcypress in the southeast corner of the Missouri Botanical Garden. It was planted by Henry Shaw about 160 years ago,



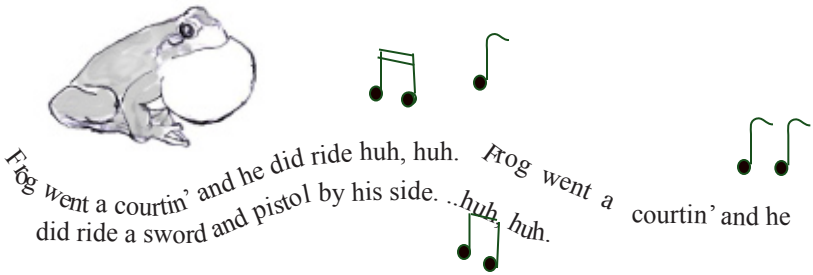
Tree Shape

Cones & Needles

Flowering Dogwood
Cornus florida

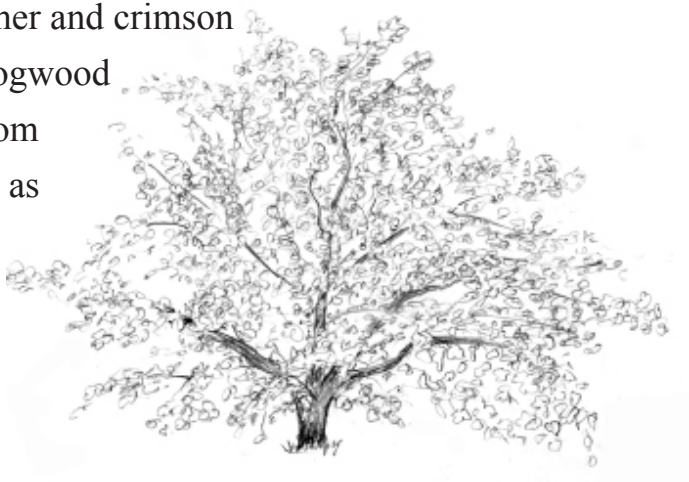
If you live in Ladue, you probably already know that the flowering dogwood is Ladue's city tree. It is also Missouri's state tree. We have a Dogwood Festival in Ladue every spring, about the time dogwoods are in full bloom--we hope. The weather does not get warm at the same time every spring, so the dogwoods bloom at a slightly different time each year.

Spring is also the time I dig myself out from under a fallen log I have been hibernating under for the winter and commence the search for a mate. You can hear me in the early spring, in the evening, calling with my beautiful voice. I puff out a big balloon under my mouth. It makes my voice work something like a bagpipe. See the picture of me below singing a very cool tune.



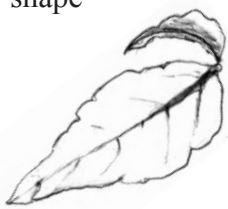
Identifying Our Dogwood

The dogwood tree grows up to 30 feet tall and just as wide. Dogwood tree flowers are surrounded by white leaves. The white leaves surrounding the yellow center are called bracts. Bracts are leaves that look like flower petals. The dogwood flower is the yellow-green, beady center. Our dogwood, Cornus florida, always has white bracts; other dogwoods may have colored bracts. The other leaves on our dogwood are green in summer and crimson red in fall. Dogwood trees may bloom when they are as small as four feet tall.



Dogwood Blossom

Leaf shape



Bark

How Do Trees Combat Flooding and Water Pollution?

Trees and forests play an amazing role in keeping rainwater from flooding while they also filter pollution from our rivers and streams.

Oak trees can gather up and save 500 to 760 gallons of water every year, while a large conifer can gather up and save as much as 4,000 gallons a year. The thirsty tree roots act like straws that suck up water which pull the water into the trees. The trees release it back into the air and back into our water supply.

By holding flood water back, trees help keep pollutants from washing into streams. They also filter out pollutants, preserving our clean water. In addition, trees help hold the soil in place and don't let it wash away. This helps keep me and my friends safe and happy by keeping the soil and pollutants out of our rivers and streams.

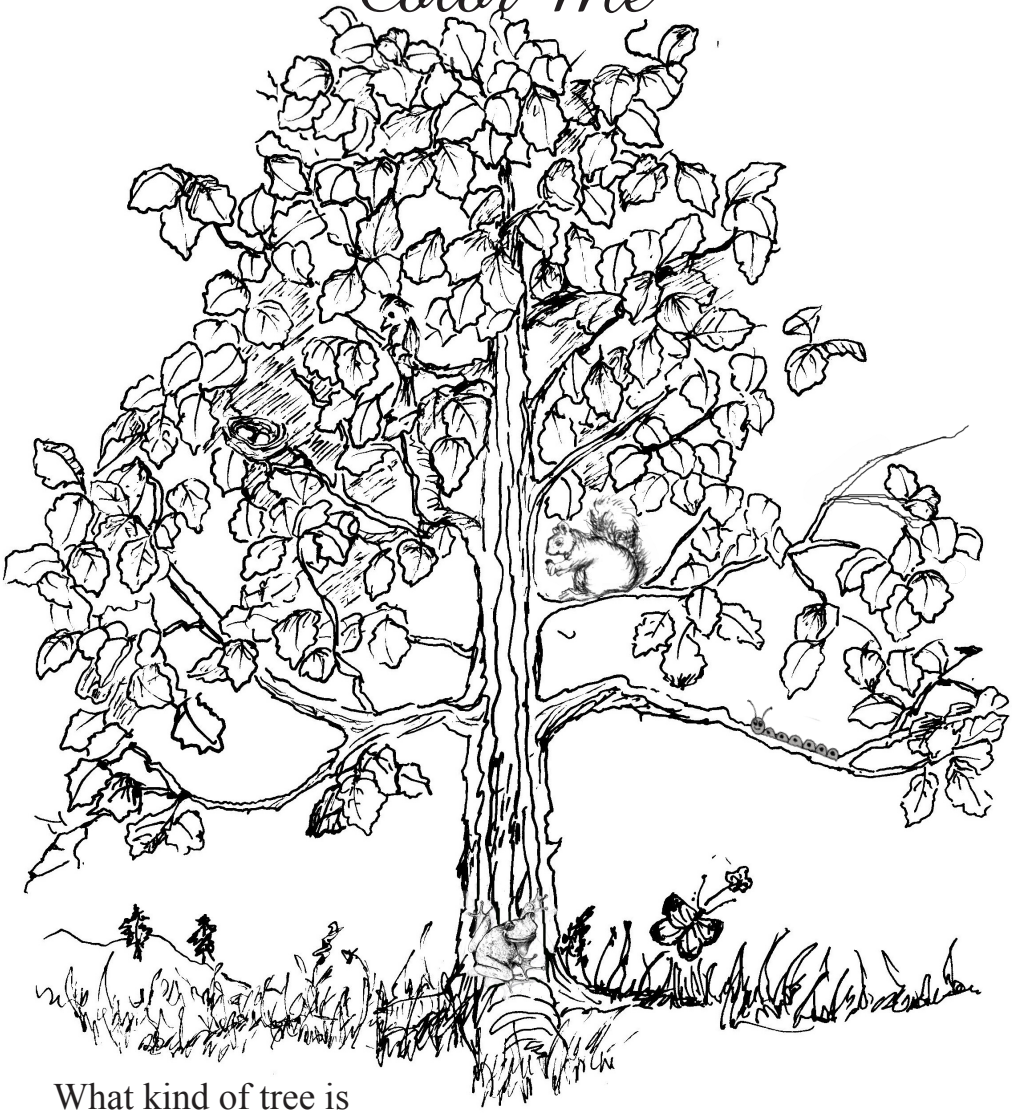
A tree releases water into the air by something like perspiration: a clean film of moisture on the leaves

constantly evaporates into the air. At the same time, the tree and the plants under and around the tree use the water to stay healthy, green and beautiful. It also allows insects and animals to be fed by the plants' fruit, which includes seeds and nuts, and moisture all around and in the tree.

Humans can have a good effect on flooding and plant and animal survival, especially by planting trees and shrubs that hold the water and keep the soil from washing away.*

*Much of the information for this page provided by the Missouri Department of Natural Resources.

Color Me



What kind of tree is this?_____

How many critters can you find in and around this tree?_____

(Please excuse me while I get that tasty caterpillar, before the bird gets him.)

Assorted, Totally Interesting, Bits & Pieces You Ought to Know About Trees

Trees rank with the elephants, giant rivers and giant whales as one of nature's most superb creations. From trees we gather food, fuel and shelter.

Trees cool the air, slow the wind, remove pollutants and hold storm water. The work that trees do is all very important for the earth and all of us living upon it.

An important and unsung hero is the earthworm. It burrows around by eating the dirt in its way. As the earth passes through the earthworm, it is made into excellent tree and plant soil. Trees love and need earthworms. Of course, robins love them too. Let's take care of them so there is enough for all of us.

The water in a stream that is lined with trees can be 10 degrees cooler than streams without trees.

Trees far out in the country can live to be 100 to 150 years old. Trees in parks that humans use a lot, may only live 25 to 30 years.

Each year in America more than 300 million trees 100 feet tall and 18 inches in diameter are cut down. That is one tree for every man woman and child.

Oak trees can live to be 500 years old.

The best baseball bats are made from ash trees. Ash does not splinter and the more an ash wood bat is used, the smoother it gets.

The paper for this booklet and most all paper is made from trees.

Much of the eastern and central United States used to be covered with huge trees: 300 feet tall white pines; oaks, elms and walnuts taller than a five-story building. We have cut them all down, almost.

Don’t forget! newly planted trees need to be watered and cared for to give them a long healthy life.

Trees

Trees are the kindest things I know,
They do no harm, they simply grow
And spread a shade for sleepy cows,
And gather birds among their bows,

They give us fruit in leaves above,
And wood to make our houses of,
And leaves to burn on Halloween
And in the Spring new buds of green.

They are first when day's begun
To touch the beams of morning sun,
They are the last to hold the light
When evening changes into night.

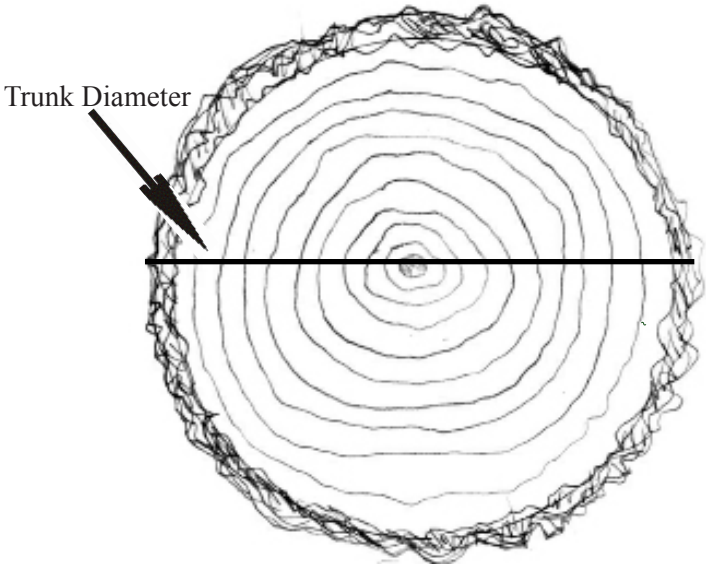
And when a moon floats on the sky
They hum a drowsy lullaby
of sleepy children long ago....
Trees are the kindest things I know

- *Harry Behn*

This poem is about trees. Do you think Mr. Behn, the author, was inspired by trees?

This is a Tree Cookie

(A tree cookie is a slice cut from the trunk of a tree.)



Each ring shows one year of the tree's life. Why do you think some of the spaces between the rings are bigger than others?

How many rings does this tree cookie have?

How old was this tree?

Pretend the above tree cookie is an actual dogwood tree cookie. Measure the diameter?_____

Which One of Our three Trees is Your Favorite? Draw a Picture of it Below

Tree Name:_____

Why is this your favorite Tree: _____

_____

_____

Your Name:_____

Speaking of Your Favorite Tree

Measure around your favorite tree trunk with a tape measure. How big around is your tree? _____ Inches.

Measure your tree from the top to the ground. You may need the help of one of your classmates to do this. How tall is your tree? _____Inches. Help some one else measure their tree.

Does your tree have any flowers, nuts or cones? Below, draw a picture of the flowers, cones or nuts on your tree. Or, if there is anything else interesting about your tree or on the ground around it, draw that too! (There are extra pages in the back for drawing and writing things you want to remember.)

Experiments

Trees have a plumbing system. Water and food are pulled up through tiny pipes, from the tiniest root hairs to the leaves.

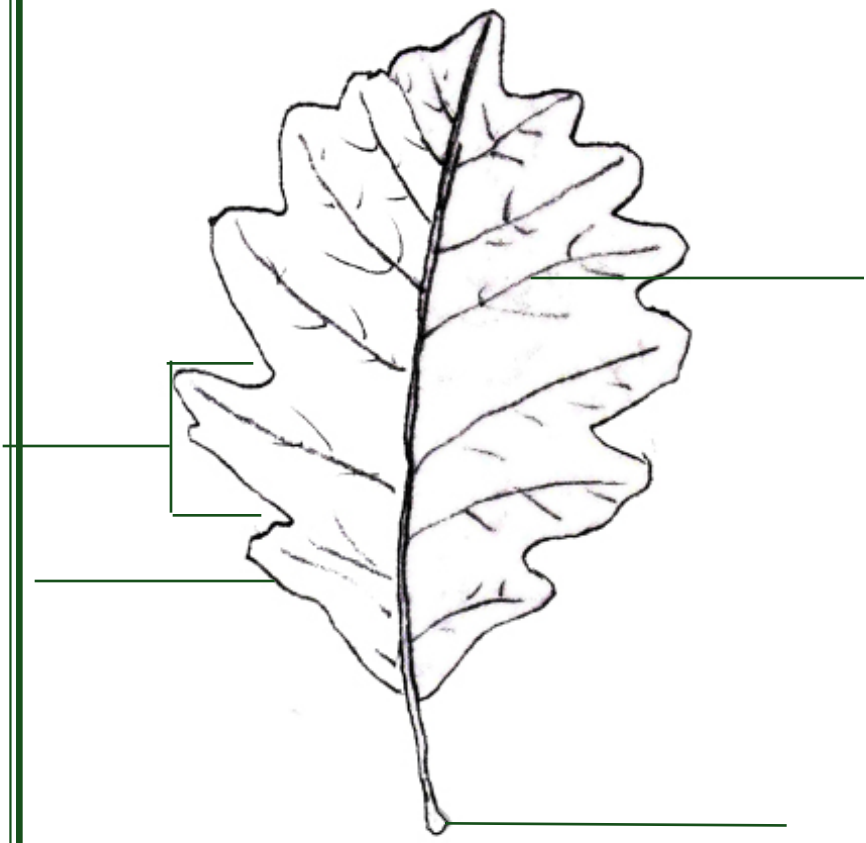
How does a tree pull water from its roots to its leaves? To see part of how a tree does this, take a paper towel, fold loosely 8 times making a long narrow towel, put some water into a bowl, put one end of the towel into the bowl of water. Hold the paper towel straight up by the other end. Do not pull the towel out of the water. Watch the water go up the towel and drain the bowl dry.

(Drawing here)

What makes a tree trunk so strong? Get a bundle of plain drinking straws. About as many as you can hold in a circle straight up in your hands. Now try to bend them using only your hands.

(Drawing here)

What kind of leaf is this?



Below are names for the parts of a leaf. Put the name of the leaf part on the blank lines above.

a. Margin (edge) b. Lobe (sticks out)

c. Petiole (foot or stem) d. Vein (rib-like)

What Have You Learned from Filmore?

How do animals use trees to survive?

How do humans benefit from trees?

How can we protect our trees and wildlife?

What is the state tree of Missouri?

What is Meant by the diameter of a tree trunk?

What are the three trees we are learning about that are planted in your schoolyard?

Did you know about our trees before this project?

My Notes

Especially For

The School Children of Ladue School District

We gratefully acknowledge the generous support of:

Deer Creek Watershed Alliance
www.deercreekwatershed.net
a project of
Missouri Botanical Garden

Deer Creek Watershed Alliance | a project of Missouri Botanical Garden

This project is partially funded by US EPA Region 7 through the Department of Natural Resources (subgrant number G09-NPS-13), under Section 319 of the Clean Water Act."


Ladue Garden Club
2010