

After printing this little workbook, fold the first (title) page in half, as shown. This will be the front and back cover of your book.

Either after or before using the remaining pages (spreads), cut or fold each of them in half to form the pages in the book. Sew or staple them within the folded cover.

Standards of Learning supported with the use of the Trees of Robious Landing Park workbook:

Grade One:

Identifying a plant as a tree, based on simple characteristics.

Learning why trees are important natural resources.

SOL Life Processes 1.4a, b, and c The student will investigate and understand that plants have basic life needs and functional parts and can be classified according to certain characteristics.

SOL 1.5a The student will investigate and understand that animals ... have basic needs

Oral English SOL 1.2 The student will expand the understanding and use of word meanings.

Grade Two:

Making detailed observations and seeing living systems through habitats and the interdependence of living and non-living things.

SOL Life Processes 2.4b The student will investigate and understand that plants ... undergo a series of orderly changes as they mature and grow.

SOL Living Systems 2.5b The student will investigate and understand that living things are part of a system.

SOL Earth Resources 2.8a, c, and d The student will investigate and understand that plants produce oxygen and food, are a source of useful products, and provide benefits in nature.

SOL English 2.2 The student will expand his/her understanding and use of word meanings.

SOL Reading 2.5 The student will use phonetic strategies when reading.

2.9 The student will read and demonstrate comprehension of non-fiction text.

Grade Three:

SOL Living Systems 3.6b The student will investigate and understand that ecosystems support a diversity of plants and animals

SOL Earth Resources 3.10a The student will investigate and understand that natural events and human influences can affect the survival of species.

Grade Four:

Students explore basic plant anatomy ... and investigate relationships among plants and animals and their environments. ... The importance of natural resources in Virginia is emphasized.

SOL Life Processes 4.4d The student will investigate and understand basic plant anatomy and life processes.

SOL Living Systems 4.5a, d and f The student will investigate and understand how plants and animals, including humans, in an ecosystem interact with one another and with the nonliving components in the ecosystem.

SOL Reading 4.4 The student will expand his/her vocabulary when reading.

4.6 The student will be able to read and demonstrate comprehension of non-fiction text.

Grades Five and Six:

SOL Reading 5.4 The student will expand his/her vocabulary when reading.

5.6 and 6.4 The student will read and demonstrate comprehension of nonfiction texts.



Use this QR code to access an interactive map of the Robious Landing Park Tree Trail.

Trees

of Robious Landing Park



A close look at some of the Virginian native trees of Robious Landing Park in Midlothian, Virginia, whose identification signs were donated and placed by the Salisbury Garden Club in 2015.

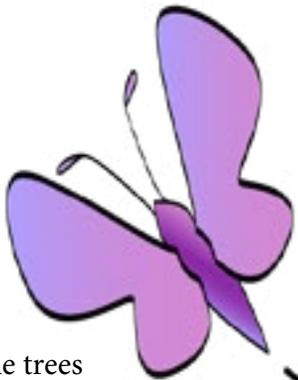


Have you ever been surprised and curious about a flower growing in an unexpected place, a butterfly, jaggedly fluttering about or a bug crawling near you? If you enjoy learning how these living things get along in our world, then you may be a naturalist! 🐛

First, let's look at some ways that all trees are alike.

All trees are woody plants with a vertical perennial trunk at least 3 inches in diameter. The entire tree is at least 13 feet high, topped by a crown of foliage.

The leaves can be deciduous or evergreen, simple or compound, narrow or broad and attached to the twig directly or with a short leafstalk.



The trees along the trail do more for our world than just providing oxygen for us to breathe (although that's pretty important!) and homes for animals (they'd consider that to be important, also). Here, you'll find some other ways that trees are helpful.

1

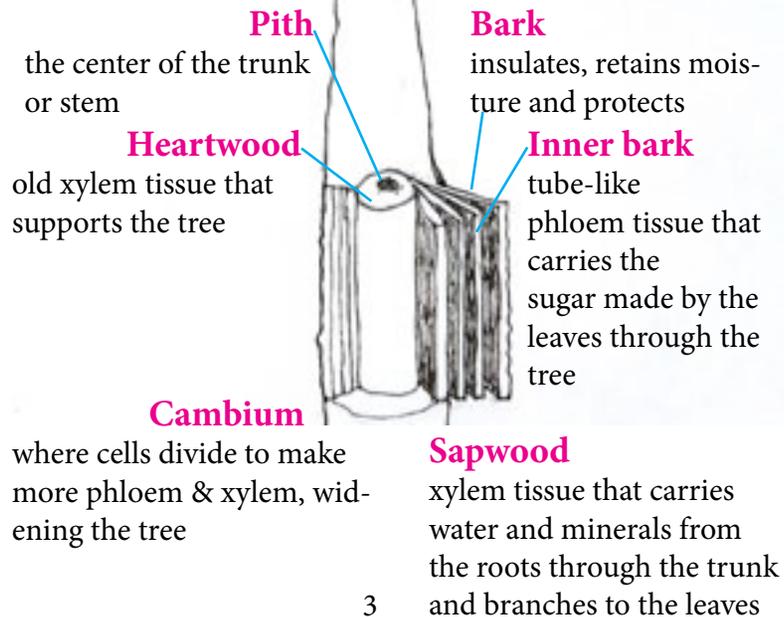
Sap (water & minerals) oozing out of the sapwood from a cut young tree.



2

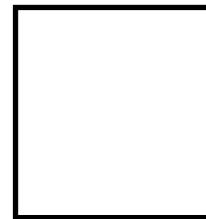
Now, on the trail, you will see some of their many differences.

On this trail there are six oak trees. There are three Red Oaks and three White Oaks, yet they are all different from each other! That is why we use their scientific names.



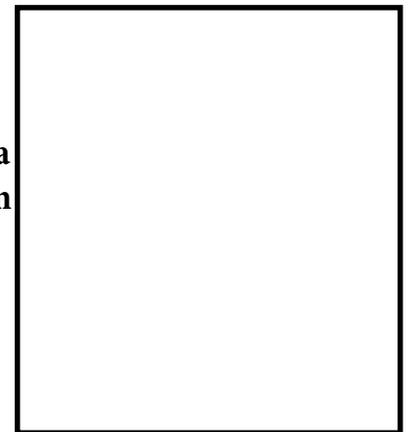
White Oak *Quercus alba*

This oak epitomizes the term “mighty oak”. Some have lived for 800 years! White oaks have rounded leaves. Their acorns are sweet and were eaten by native Americans and pioneers.



Can you find one of its acorns to draw?

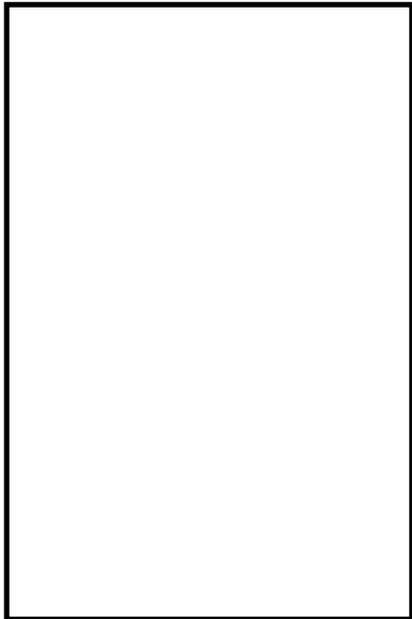
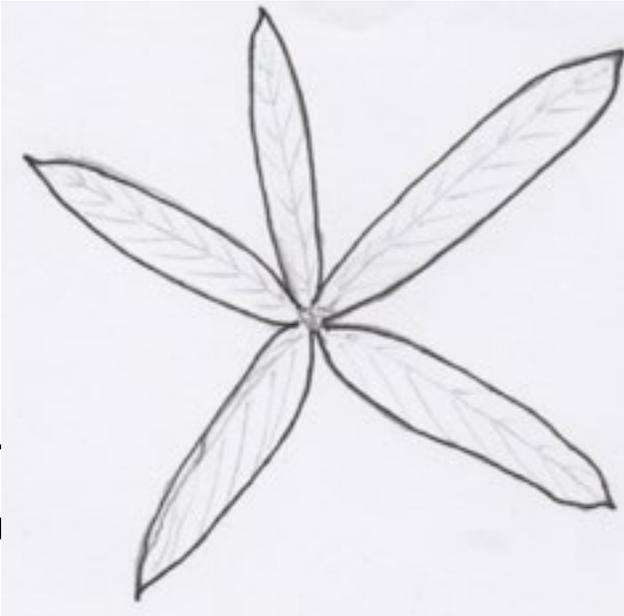
Draw a section of its bark here.



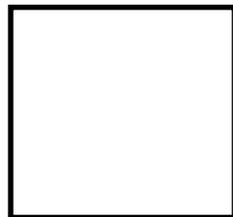
Willow Oak

Quercus phellos

The Willow Oak is a type of Red Oak. The lobes of Red Oak leaves are pointed. This tree usually grows in low moist areas or along streams. The roots of this and other trees there take up water and hold the soil, preventing erosion and flooding.



Draw a bit of the Willow Oak's bark. Is it gray, brown or reddish-brown?



Draw one of its acorns here.

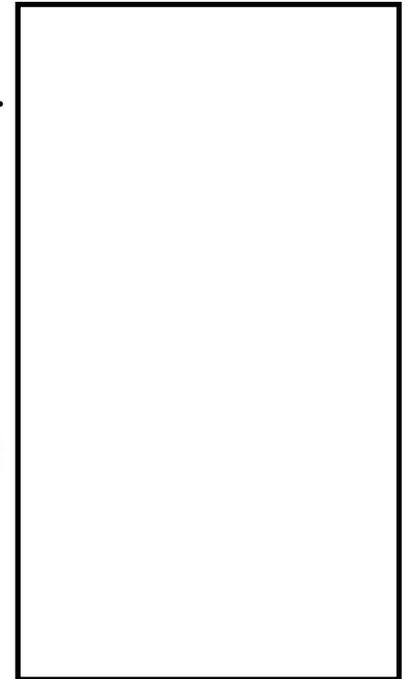
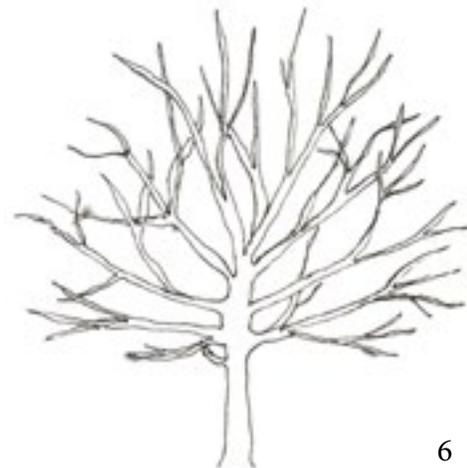
Northern Red Oak

*Quercus rubra/
Quercus borealis*

This type of oak grows faster than any other. Its bitter acorns mature every second year. Can you find one of its acorns to draw here?



Draw the bark. Is it smooth or furrowed?



**Southern
Red Oak**
Quercus falcata



Draw the bark.
Is it different?

Oak trees are deciduous. The underside of this one's leaves are rusty or hairy. The bitter acorns are only one half inch. Draw one of its acorns here.

**Chestnut
Oak**
Quercus prinus



This is another type of White Oak. Each Autumn, the fallen leaves of deciduous trees like this cover the ground, protecting plant roots and small wildlife that travel and shelter underneath.

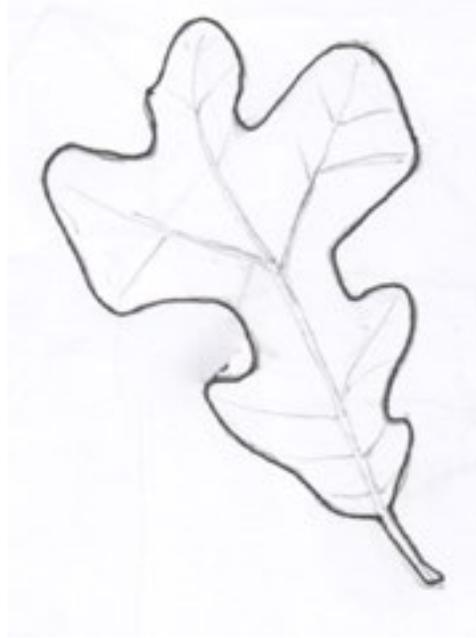
Show the chestnut Oak's bark here.

Each type of Oak tree produces its own type of acorns. Find one of its acorns to draw here.

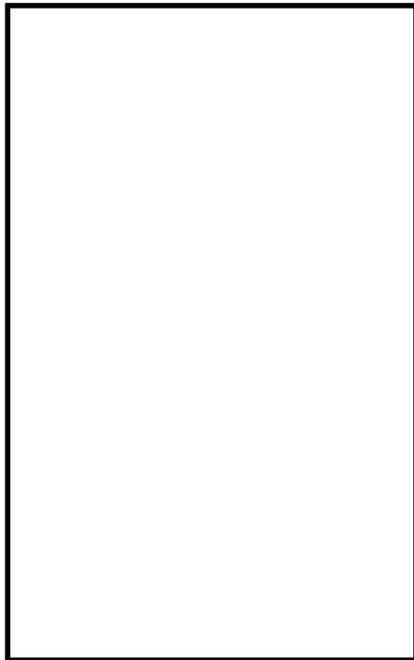
Post Oak

Quercus stellata Wangenh.

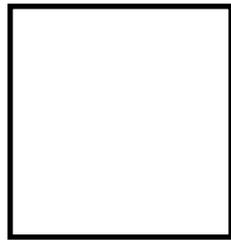
This is another type of White Oak. Squirrels like to use these leaves to build their nest high in the tree.



The bark has deep furrows. When an insect gets in, the tree releases bitter tanins to discourage it.



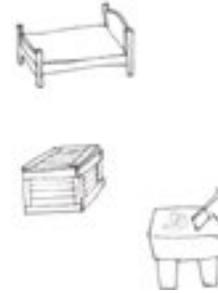
Knowing the bark of a deciduous tree helps identify it in the winter. Sketch some of the Post Oak's bark here.



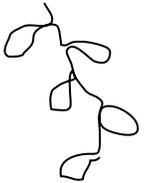
Ducks, turkeys, squirrels and deer feed on these acorns. Find one to draw.

Sycamore

Platanus occidentalis L.



The leaves are attached in an *alternate* pattern. The heavy wood of the Sycamore has many uses. It is a fast growing tree found along streams and rivers.

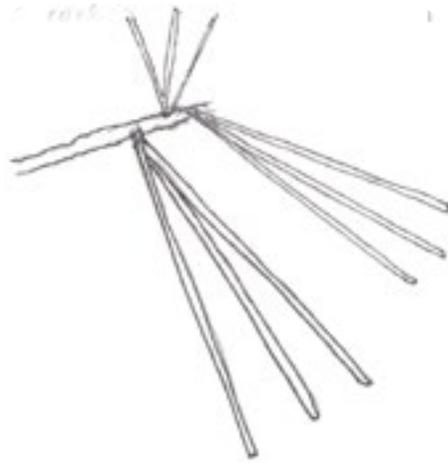


The smooth bark has a camouflage pattern due to the shedding of the outer bark as the tree grows, revealing the inner bark. Trees also shed bark to get rid of mosses and lichens that grow on them.

Draw it here.

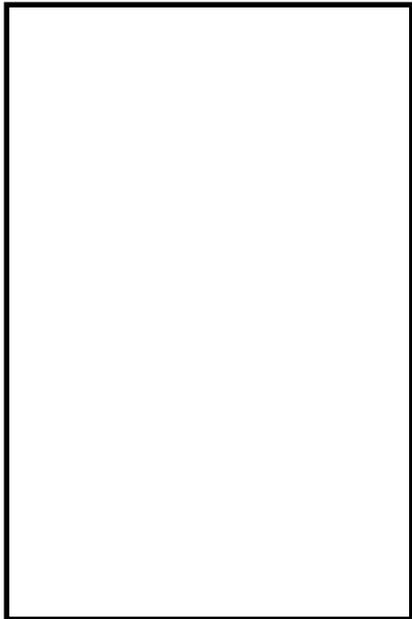
Loblolly Pine

Pinus taeda L.



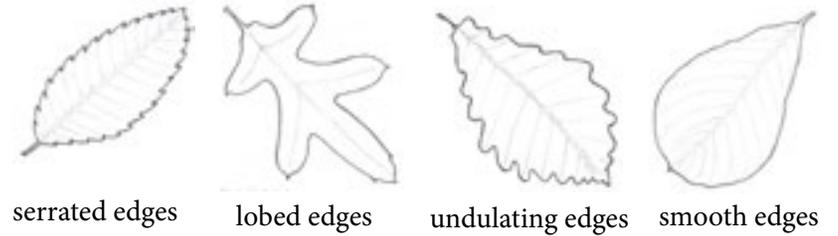
This evergreen grows in a low moist depression of land, called a *loblolly*. Evergreens with needles joined in clusters are *Pines*. No two types of Pine have the same cones. Birds from the Carolina chickadee to bald eagles find shelter in this tree. The trunk can become 6 feet in diameter. Wide boards can be cut from it.

The thick bark insulates the tree and holds in moisture. It releases sap to repel insects. Draw a bit of it with its large flat scales.



Leaf Types

simple leaf types



simple palmate leaf type



compound palmate leaf type



conifer needle leaf type

This is a **tuft** of 3 needles.