EKOKIDS: SCHOOLYARD NATURE GUIDES

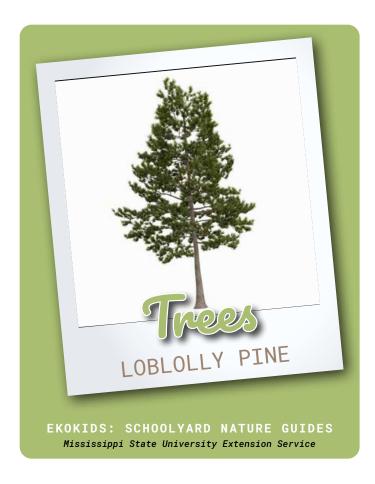




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One of the largest groups of living organisms is the Plant Kingdom, and trees are perhaps the most visible members. With the exception of extreme habitats like polar regions and deserts, trees can be found in terrestrial ecosystems around the planet.

Trees are either evergreen or deciduous. Evergreens such as pines and magnolias have needles or leaves throughout the year. In contrast, deciduous trees lose their leaves or needles over winter and grow new ones in spring. Biologists use the shape, size, color, and arrangement of leaves to identify tree species. Trees also can be identified by their fruit, seeds, bark, tree shape, and habitat. How many of the trees in this booklet can you find in your neighborhood?



Loblolly Pine

(Pinus taeda)

DESCRIPTION

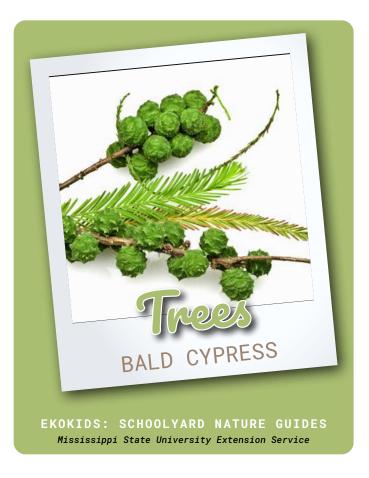
- Other names: Arkansas pine, oldfield pine
- Evergreen conifer
- Leaves: three dark-green needles per group (fascicle); needles are 6-9 inches long
- Bark: varies with tree age from reddish-brown to nearly black; plates are large, flat, and rectangular
- Seeds: reddish-brown cones are 3-6 inches long

HABITAT

The **loblolly pine**, native to the southeastern U.S., is very adaptable and can grow in a variety of soil and forest types.

FUN FACT

The loblolly pine can grow more than 3 feet each year. This is an important tree that is grown and used for lumber and paper.



Bald Cypress (Taxodium distichum)

DESCRIPTION

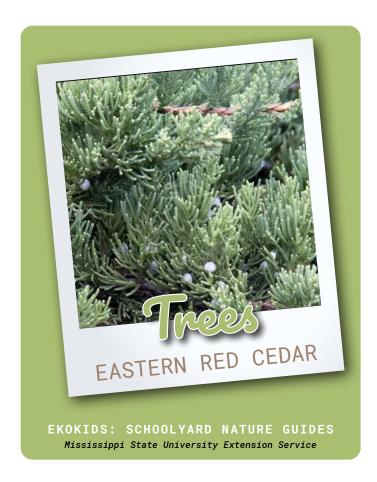
- Other names: southern cypress, swamp cypress
- Deciduous conifer
- Leaves: flat, feathery, yellow-green needles
- Bark: ashy to reddish-brown with thin, scaly plates
- Seeds: green, spherical cones about 1 inch in diameter

HABITAT

The **bald cypress** is native to wetlands and bottomlands along the Atlantic and Gulf Coasts and the Mississippi River drainage basin. It is also used in landscaping.

FUN FACT

Unlike other trees with needles, the **bald cypress** is deciduous; it loses its needles in winter. The wood of the bald cypress is highly valued in construction because it is resistant to decay.



Eastern Red Cedar

(Juniperus virginiana)

DESCRIPTION

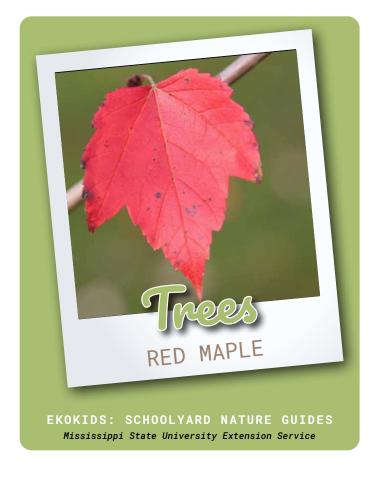
- Other names: juniper, cedar apple, savin
- Evergreen conifer
- Leaves: dark green, tightly pressed, scale-like needles
- Bark: long, thin, reddish-brown strips
- Seeds: round, purplish-blue cones resembling berries are also known as "juniper berries"

HABITAT

The **eastern red cedar** is widespread throughout the eastern U.S. and southern Ontario, often on shallow, rocky, or limestone-based soils.

FUN FACT

The wood, bark, leaves, and "berries" of the **eastern red cedar** were used by Native American people to make medicine, teas, flutes, incense, and furniture.



Red Maple

(Acer rubrum)

DESCRIPTION

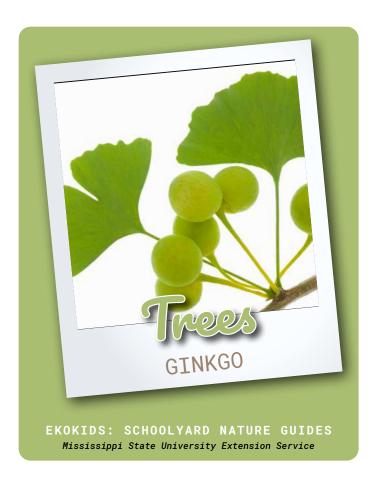
- Other names: soft maple, water maple
- · Deciduous tree
- Leaves: light green, three-lobed leaves with serrated edges
- Bark: smooth, gray, and thin when young; shallow fissures between long, scaly plates when older
- Seeds: winged seeds called samaras that "helicopter" to the ground

HABITAT

The **red maple**, native to the eastern U.S., prefers moist soils found in swamps and similar damp habitats but is adaptable to most landscaping situations.

FUN FACT

Red maples are so named because of the fiery red color of their leaves in fall.



Ginkgo (Ginkgo biloba)

DESCRIPTION

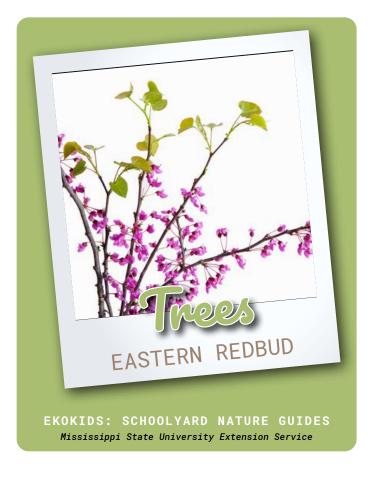
- Other name: maidenhair tree, gingko
- Deciduous tree
- Leaves: 2-4 inches in diameter; bright green and fan-shaped; yellow in the fall
- Bark: brown and deeply fissured; may look cork-like on old trees
- Seeds: small, pale yellow, foul-smelling spheres

HABITAT

The **ginkgo** was imported to North America from China about 200 years ago. It is a common ornamental tree in urban and suburban environments.

FUN FACT

Extracts from **ginkgo** leaves are used in many vitamins and medicines.



Eastern Redbud

(Cercis canadensis)

DESCRIPTION

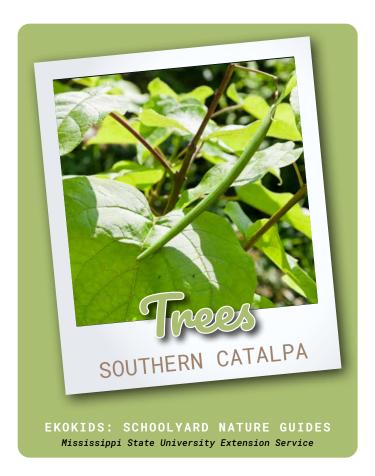
- Deciduous tree
- Leaves: bright green, 3-4 inches in diameter, and heart-shaped
- Bark: smooth and medium-brown when young: darker with long, narrow plates when older
- Flowers: clusters of reddish-purple flowers for which the tree is named
- Seeds: flat, dark brown, sickle-shaped pods

HABITAT

A native understory tree, the **eastern redbud** is commonly found growing in parks and gardens as an ornamental tree.

FUN FACT

Native Americans and early European settlers treated whooping cough (diphtheria) with a tea brewed from the bark of the eastern redbud.



Southern Catalpa

(Catalpa bignonioides)

DESCRIPTION

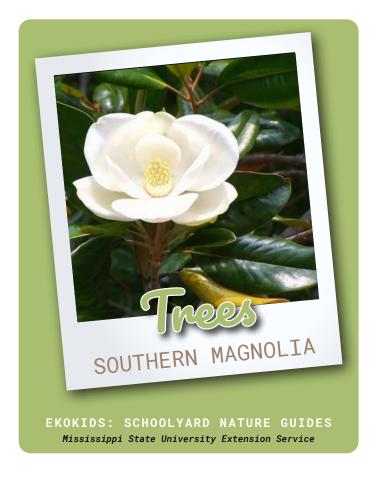
- Other names: Indianbean, caterpillar tree
- Deciduous tree
- Leaves: light green, heart-shaped, and 4-5 inches wide
- Bark: reddish-gray with long, thin, irregular scales
- Flowers: white with purple-spotted throats
- Seeds: long (6-20 inches), pale green capsules

HABITAT

The **southern catalpa** is a native species found along riverbanks in the southeastern U.S. It is also commonly grown as an ornamental tree.

FUN FACT

Southern catalpa trees are habitat for large worms called catalpa worms, which are a popular fishing bait.



Southern Magnolia

(Magnolia grandiflora)

DESCRIPTION

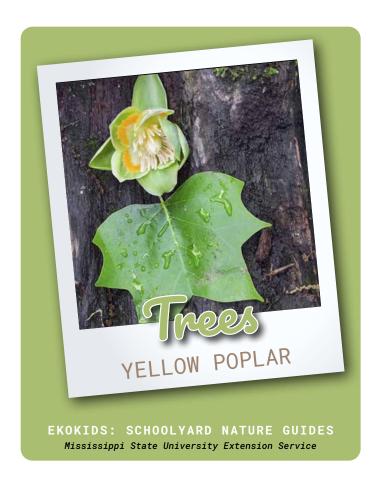
- Other names: evergreen magnolia, bull bay, big laurel
- Evergreen tree
- Leaves: dark, leathery green, rusty beneath; 5-8 inches long
- Bark: light-brown to gray-brown with flat, scaly plates
- Flowers: showy white petals are fragrant and 6-8 inches wide
- Seeds: hairy, open, grenade-shaped pods

HABITAT

The **southern magnolia**, native to the southeastern U.S., prefers rich, bottomland soils or gentle slopes. It is commonly grown in residential and urban settings an as ornamental tree.

FUN FACT

The **southern magnolia** is the state tree of Mississippi.



Yellow Poplar

(Liriodendron tulipifera)

DESCRIPTION

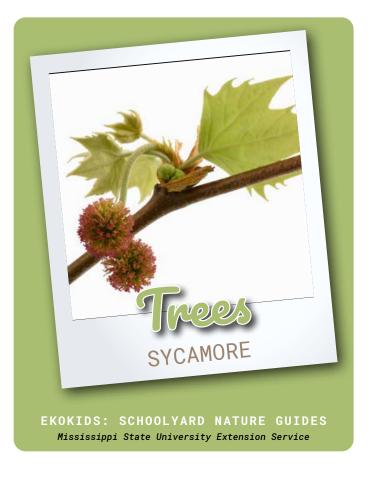
- Other names: tulip tree, tulip poplar
- Deciduous tree
- Leaves: dark green, tulip-shaped, and 4-6 inches wide
- Bark: tight, brownish-gray, and furrowed
- Flowers: greenish-yellow with an orange band
- · Seeds: cone-like cluster of winged seeds

HABITAT

The **yellow poplar** is native to the eastern half of the U.S., where it can be found in well-drained forest soils, particularly in the Appalachian Mountains, and suburban settings.

FUN FACT

The wood of the **yellow poplar** is thought to be resistant to termites and was used by early settlers and Native Americans for making dugout canoes.



Sycamore

(Platanus occidentalis)

DESCRIPTION

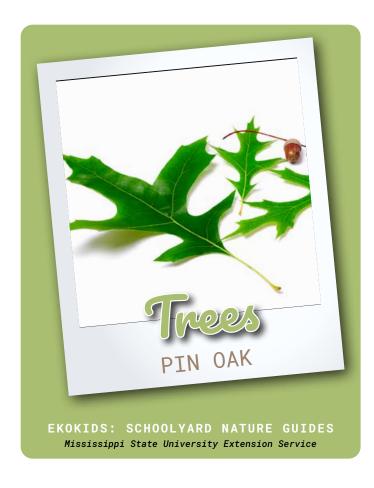
- Other names: planetree, buttonball tree
- Deciduous tree
- Leaves: bright green with 3-5 lobes per leaf and jagged edges; 4-7 inches wide
- Bark: mottled red-brown in younger trees; green-gray to nearly white in older trees
- Seeds: olive green, round, and 1 inch in diameter

HABITAT

Native to the eastern U.S., the **sycamore** prefers rich, bottomland soils near water, but it is widely grown as a shade tree in residential settings.

FUN FACT

The bark, leaves, and fruit of the **sycamore** were used by Native Americans to make medicines to treat colds, coughs, skin conditions, and other ailments.



Pin Oak

(Quercus palustris)

DESCRIPTION

- Other names: swamp oak, Spanish oak
- Deciduous tree
- Leaves: glossy green and deeply scalloped or lobed, with 5-7 lobes per leaf
- Bark: smooth gray-brown when young; scaly and ridged when older
- Seeds: light brown acorns with thin cups

HABITAT

The **pin oak** is a native tree commonly used in landscaping. Its shallow roots make for easier transplanting, and it tolerates poorly drained soils.

FUN FACT

The acorns of the **pin oak** are an important source of food for wildlife such as deer, blue jays, squirrels, woodpeckers, and ducks.

For more information on common wildlife and plants or incorporating nature into the classroom, please contact Leslie.Burger@msstate.edu or (662) 325-6686.

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