

# Troy University Arboretum Magnolia Loop Nature Trail Guide

1. Spruce Pine-- *Pinus glabra* Walter

The spruce pine is a tree found on the coastal plains of the southern United States, from northern Florida up to South Carolina and west to southern Louisiana. This pine is a straight-growing, medium-sized species, attaining heights of 20 to 40 meters.

2. Sparkleberry-- *Vaccinium arboreum* Marshall

Winter Huckleberry can be found throughout Alabama, usually occurring in pine woodlands, on sand hills, in dry hardwood forests, on fence rows, in rocky woods, along rivers and streams, and on cut-over land. It may be a multi-trunked shrub or a small tree with a single trunk. It has gray to reddish-brown, thin, smooth or flakey bark. The alternate leaves are thick and leathery. They are evergreen (in the south) to tardily deciduous.

3. American Hornbeam-- *Carpinus caroliniana* Walter

The American hornbeam is a small hardwood tree and is also known as blue-beech, ironwood, musclewood and muscle beech. It is native to eastern North America, from Minnesota and southern Ontario east to Maine, and south to eastern Texas and northern Florida.

4. Black Cherry-- *Prunus serotina* Ehrhart

This is the largest and one of the most widespread of the native cherries. Ranging from Canada to Guatemala and from the Atlantic Ocean to Arizona. The valuable wood is used for paneling, furniture and for tools and toys. Wild cherry syrup which contains hydrocyanic acid is a cough medicine obtained from the bark.

5. Southern Magnolia-- *Magnolia grandiflora* Linnaeus

Southern Magnolia is a large native evergreen tree in the Magnolia family (Magnoliaceae). It is native to the Coastal Plain of Alabama, generally south of the Blackbelt region. Southern Magnolia is a popular ornamental that is readily available in nurseries. Many cultivars have been developed, including dwarf forms that remain under twenty feet in height. Southern Magnolia prefers an acidic, sandy soil that is rich in organic matter. Although very shade tolerant, the best shape and flowering occurs on plants grown in full sun.

6. American Holly-- *Ilex opaca* Aiton

American Holly is a native evergreen tree in the Holly family (Aquifoliaceae). It occurs statewide in Alabama. American Holly grows in a variety of forest types from disturbed woodlands to mature hardwood forest, and on floodplains. Sprigs of

American Holly are often used as Christmas decorations. The fruit are slightly toxic to humans and should not be eaten.

**7. Yaupon Holly-- *Ilex vomitoria* Aiton**

Yaupon is a native evergreen shrub in the Holly family (Aquifoliaceae). It is native to the southern two thirds of Alabama. A drink made from the leaves of the Yaupon was consumed by Native Americans and was called the “black drink” by Europeans. Yaupon tea was consumed in the United States as a substitute for tea or coffee when those were unavailable.

**8. Southern Red Oak-- *Quercus falcata* Michaux**

Southern Red Oak is a large native deciduous tree in the Beech family (Fagaceae). It can be found throughout Alabama. Southern Red Oak occurs in mesic to dry upland sites mixed with other hardwoods or pines. A “tea” made from soaking the tannin rich bark in water has been used as a mouth wash and to treat dysentery. Southern Red Oak is a popular shade tree in Alabama, and is often seen around older homes. Its large size somewhat limits its use in the modern landscape.

**9. Swamp Black Gum-- *Nyssa biflora* Walter**

Swamp Tupelo is a native deciduous tree in the Sour Gum family (Nyssaceae). It is native to most of Alabama. Swamp Tupelo fruit are consumed by a wide variety of wildlife including black bears, raccoons, wood ducks, and song birds. The wood is dense with an interlocking grain making it difficult to split. It is used for pulp, inexpensive furniture, pallets, flooring, and gunstocks.

**10. Shortleaf Pine-- *Pinus echinata* Miller**

Shortleaf Pine is a native evergreen needle-leaved tree in the Pine family (Pinaceae). It can be found throughout Alabama. Shortleaf Pine occurs in sandhills, in rocky woods, in old fields, and in other dry upland habitats. It is a large tree reaching heights of 120 feet. Shortleaf Pine is occasionally sold as a landscape tree. It grows best on well-draining sandy soils in full sun.

**11. Erosion**

Erosion is the geological process in which earthen materials are worn away and transported by natural forces such as wind or water. A similar process, weathering, breaks down or dissolves rock, but does not involve movement.

**12. Heavenly Bamboo-- *Nandina domestica* Thunberg**

Heavenly Bamboo is an introduced invasive shrub in the Barberry family (Berberidaceae). It is an evergreen in much of Alabama, and semi-evergreen or deciduous in colder climates. A native of China and Japan, it was introduced into the United States in 1804 for use as an ornamental. Heavenly Bamboo is considered a highly invasive species in many Southeastern states. All parts of the plant are toxic. The fruit are particularly toxic to cats, dogs, and livestock.

### 13. Succession

Succession is the change in either species composition, structure, or architecture of vegetation through time. Vegetation has three important aspects that are subject to change. Species composition includes the roster of the species. There can be many or few species in vegetation.

### 14. Water Oak-- *Quercus nigra* Linnaeus

One of the most common oaks in the South these trees reach their greatest size on moist sandy sites. Large old trees are also often seen one on each side of an old home serving as shade trees. However, because of their large size and the trouble in cleaning up the abundant small leaves and acorns in autumn these trees have lost favor in the last few years. Large crops of acorns are produced every two years. The small bitter acorns serve as an important food source for wildlife. Water oaks and other members of the red oak group often have extremely variable leaves. Notice the different shapes and numbers of lobes per leaf-even on the same tree or limb. This makes identification difficult.

### 15. American Beech-- *Fagus grandifolia* Ehrhart

American Beech is a native deciduous tree in the Beech family (Fagaceae). It is found throughout Alabama. American Beech occurs in rich bottomland forests, on slopes, in ravines, and in coves. It can grow to a height of 120 feet, but is typically between eighty and one hundred feet in height. It is a favorite site for vandals to carve their initials, and most trees in public areas are scarred. American Beech makes a nice specimen tree, but its use is limited by its large size. It is a slow growing species and takes many years (up to forty) to begin producing nuts.

### 16. Muscadine-- *Muscadinia rotundifolia* (Michaux) Small

Muscadine is a native perennial woody vine in the Grape family (Vitaceae). It occurs throughout Alabama. Muscadine occurs in floodplain forests along rivers, in upland woods, and along fence rows and forest edges. It is a high climbing woody vine climbing by un-branched tendrils. Muscadine fruit are edible and are gathered by locals for jelly and wine or eaten fresh. They are also consumed by a variety of wildlife from birds to mammals.

### 17. Sweet Bay Magnolia-- *Magnolia virginiana* Linnaeus

Sweet Bay Magnolia is a native tree or shrub in the Magnolia family (Magnoliaceae). It can be found throughout most of Alabama. Sweet Bay Magnolia grows along streams and rivers, in seeps, in bogs, in swamps, on hardwood floodplains, and in pine savannas. In our area, it is typically an evergreen or tardily deciduous tree reaching heights of 60-90 feet. Trees are often multi-trunked. In colder climates, it is often a multi-trunked deciduous shrub. Sweet Bay Magnolia is commonly available from nurseries. It prefers a moist soil in full sun, but will grow on drier sites. Plants can be pruned to keep them shrubby.

#### 18. Springs

Springs occur when water pressure causes a natural flow of groundwater onto the earth's surface. As rainwater enters or "recharges" the aquifer, pressure is placed on the water already present.

#### 19. Switch Cane-- *Arundinaria tecta* (Walter) Muhlenberg

Switch cane is a bamboo species native to the Southeast United States. It serves as host to several butterfly species. The species typically occurs in palustrine wetlands, swamps, small to medium blackwater rivers, on deep peat in pocosins, and in small seepages with organic soils.

#### 20. Eastern Hop Hornbeam-- *Ostrya virginiana* (P. Miller) K. Koch

Eastern Hop Hornbeam is a native deciduous tree in the Birch family (Betulaceae). It can be found throughout Alabama. Eastern Hop Hornbeam occurs in mesic to dry hardwood forests, in rocky woods, along streams and rivers, in ravines, and in prairie woods. It is a small tree reaching heights of 30-50 feet. Eastern Hop Hornbeam has very dense wood but its small size limits its use. It has been used primarily for tool handles. It is sometimes used as a small shade tree.

#### 21. Sweet Pepperbush-- *Clethra tomentosa* Lamarck

Downy Sweet Pepperbush is a native deciduous shrub in the Pepperbush family (Clethraceae). It can be found in the southern third of Alabama. Downy Sweet Pepperbush prefers a moist, sandy soil and light shade. An alternate common name for this species is "Soap Bush". Crushing and rubbing the flowers together in water creates a sudsy liquid.

#### 22. Tulip Poplar-- *Liriodendron tulipifera* Linnaeus

Tulip Poplar is a large native deciduous tree in the Magnolia family (Magnoliaceae). It is found throughout Alabama. Tulip Poplar grows in coves, in hardwood forests, in ravines, and along creeks and rivers. It is a large tree reaching heights of 120-150 feet. Trunk diameter may exceed 9 feet. Tulip Poplar is commonly available from nurseries. Several horticultural selections are available. Tulip Poplar prefers a moist, organic rich soil and full sun. It is a fast-growing species and is an important timber tree in much of its range.

#### 23. Atlantic White Cedar-- *Chamaecyparis thyoides* (L.) Britton, Sterns & Poggenb.

Atlantic White Cedar is a large native evergreen tree in the Cypress family (Cupressaceae). It can be found in the southwestern portions of Alabama. Atlantic White Cedar occurs along blackwater rivers and streams, around lakes and ponds, in swamps, and in marshes. It is a large tree to 80 feet in height. Atlantic White Cedar is listed as a S3 species in Alabama (typically 21 to 100 occurrences) and globally as a G4 species (imperiled globally because of rarity, or very vulnerable to extinction throughout its range because of other factors).

**24. Florida Yew-- *Taxus floridana* Nutt. ex Chapm.**

The Florida yew is endemic to a small area on the eastern side of the Apalachicola River in mesophytic forests of northern Florida at altitudes of 15–40 m. It is listed as critically endangered.

**25. Live Oak-- *Quercus virginiana* Miller**

Live Oak is a large native evergreen or semi-evergreen tree in the Beech family (Fagaceae). It is native to the southern-most counties of Alabama, but is widely planted and persists or has escaped in areas north of the natural range. Live Oak is widely planted as an ornamental. It prefers a sunny site and requires a large space to fully develop. The wood is dense and heavy, and was once in great demand for ship building.

Information for this trail guide was prepared by the Troy University Tri Beta (Beta Beta Beta) Biology Honor Society. Funding was provided by The Wiregrass Resource Conservation and Development (WRC&D) Council General Grant program.

