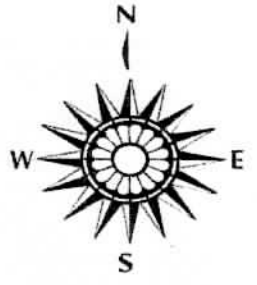


EAST TEXAS ARBORETUM AND BOTANICAL SOCIETY



13

- TRAIL SHELTERS
- TRAIL BENCHES
- ADA DESIGNATED AREAS
- RESTROOMS



PLEASE STAY ON TRAIL



Interpretive Stations

#1 – Stream: Why does this slow moving stream have water in it year-round, even during our notorious droughts? The dry, sandy ridges above act as a sponge to absorb rainfall; water filters through then rides a clay pan, deflecting it down to this stream. Willow Branch is a seep spring branch with a southwesterly flow, a tributary to Walnut Creek and eventually the Trinity River. The slightly acid water supports tadpoles, crawdads, and 8 species of fish; soft rush dots its bank.

#2 – Triplets: The three stems of this tree are not a normal configuration; they've sprouted from the roots of a young mother tree that was cut or broken back. Next to it is native yaupon holly, an evergreen often used in landscaping. Tea can be brewed from the leaves, although the species name *vomitaria* should scare off testers. Nearby you can find skunkbush, a relative of poison oak. Tea was made from its berries, and deer eat the leaves.

#3 – Huckleberry: Also known as farckleberry, this small tree is actually a blueberry (*Vaccinium*). Huckleberry's thickened form provides a refuge for birds. In spring, droplet-like blossoms attract butterflies with their pure sweet scent. Berries feed birds and small mammals in the fall. Hairy woodpeckers seem to prefer dead huckleberry limbs to search for bugs.

#4 – Grapes: An opening in the canopy above affords this muscadine grape its opportunity to flourish. Old settlers used it to make wine and jelly or jam from the fruit. Summer grape has larger, sturdier leaves, and its shaggy, strong vines can be found further along the trail. Mustang grape leaves are similar but more indented.

#5 – Ridge: This upland forest area atop dry, sandy ridges is a good example of the Post Oak Savannah ecological region that makes up the western part of the East Texas woodlands. It's characterized by black hickory, post oak, and blackjack oak. Also found are elm, eastern red cedar, and cactus in open spaces. The virgin forest was probably patchily logged several times by old settlers. This is suggested both by the absence of large trees and the diverse forest composition. Notice the spicy fragrance of the dry woods here.

#6 – Rustles: As the woods close up from thickening, you may notice leaves rustling. What's moving?! Lots of reptiles—lizards, skinks, snakes—skitter and slither by almost underfoot. A real racket may be heard further away—either from the slow but deliberate drag of a bog turtle, or the busy rummaging of a brown thrasher. In the distance, perhaps squirrels, deer, feral hogs, or armadillos are moving about. A midstory of thickets and vines abound because fire usually controls understory, but modern fire prevention promotes thicket growth. Huckleberry bushes, rusty blackhaw (*Viburnum rufidulum*) with its shiny leaves, and dogwood can be found in the midstory here.

#7 – Valley: An optional cutoff here takes you to a delightful valley carved by the wetland inflow stream. On its sandy bottom, you can see tracks of animals like opossums that come out from undercut roots to drink. Watch for the dramatic vegetation change soon to sweetgum, red maple, and waxmyrtle.

#8 – Bog: The large open area in front of you is another world. It contains specialized plants adapted for growing in a wet, acid environment. This wetland is called a "bog" in East Texas because of its plant community, but technically is not one because of the water flowthrough. Note the dank, sulfur smell from the wet soil. The plant community consists of: pitcher plant (*Sarracenia alata*), bladderwort, pipewort (bog button), southern wild-raisin (*Viburnum nudum*), iris, plume grass, cattails, ferns, mosses, and grass-type plants. Pitcher plants are unique because their leaves form tall, hooded tubes partly filled with liquid that digests trapped insects. The single nodding flower is large, intricate, and pale yellow-green. The plant blossoms in April-May.

#9 – Restoration techniques: This bog has not recently been so open. Although it had naturally acid water inflow, it was lowland quickly filling in with sweetgum, willows, and red maple due to protection from fire. But it was chosen as a mitigation site for another bog that was destroyed by construction. The developer had to "replace" the destroyed bog by upgrading this one. With the guidance of TP&W and help from the horticulture class of TVCC, pitcher plants and iris were transplanted here. Young trees, which soak up much water, were cut and stumps poisoned. When natural bog vegetation takes over the area again, it will further enhance conditions. A good specimen of American holly is farther along the trail on the left. Also watch for antler rubs on trees.

#10 – Ferns: This red maple grove provides shade in wet soil conditions for the development of a fern community at the edge of the bog. At least three species can be seen here: royal, cinnamon, and sensitive fern. Look for the rust-colored sandstone in the path ahead; old settlers who used native rock like this for building foundations may have left it here.

#11 – Cactus: The largest prickly pear specimen on the trail is found on this dry hillcock. Yellow blossoms begin in April, and purple fruit develops by late summer.

#12 – Old beaver pond: The wetland type along the low area has changed from a bog to an old beaver pond. You can tell it was flooded because of the old snags (dead trees) in the middle. Other typical vegetation includes red maple, water oak, waxmyrtle, and cattails. This and the next station provide good vistas of plume grass stands in fall. Do you know how to differentiate grass-like plants? Rushes are round, sedges have edges, and grasses have joints. Insects from these wetlands probably supply food for the many songbirds heard especially up the wooded hillsides until the end of the trail. Also, continuous vertical structure from understory to treetop provides excellent bird habitat.

#13 – Backwater: This is a little pooling of the same stream you crossed at the trailhead. It provides a still habitat for amphibians like sirens, and bull, bronze, and cricket frogs. It also acts as a nursery area for juvenile fish. The moist shoreline may harbor dwarf or tiger salamanders under decaying logs.

#14 – Seep: A permanent seep (groundwater upwelling) and ephemeral rivulet after rainfall provides enough moisture to support a patch of peat moss here. Growing amidst the moss is another wetland indicator, threadleaf (*Ptilimnion*), in the carrot family. Watch for occasional grassy open areas on the right as you head back to the bridge.

#15 – Vines: Here's an example of the two types of honeysuckle vines (*Lonicera*) you will encounter here. On the right is the native coral honeysuckle, which has a flame-colored trumpet and subtle vining form. On the left is the introduced Japanese honeysuckle with yellow or white flowers and invasive growth habit. The sweet perfume of the Japanese honeysuckle fills the air in spring along the lower trail section. Notice that the stem of the coral honeysuckle distinctively pierces the leaves just below the blossom. There's a shiny-leaved black gum tree just at the turn. Other vines you may see are Virginia creeper and greenbriar (*Smilax*); their leaves turn orange-red in fall.

#16 – Mosses: Several kinds of mosses are evident in moist areas near the trail. Here are two kinds – haircap (*Polytrichum*) and peat moss (*Sphagnum*). Peat moss usually grows in acid conditions; finding it here is an indicator of water quality from the seep supplying the moisture. Other bottomland vegetation found nearby includes: waxmyrtle (*Myrica*), red maple, willow and water oak.

#17 – Dead log: Trees are like long-term savings accounts. When they're alive, energy is locked up and unavailable. But when they die, this energy can be spent and reinvested in the ecosystem. This is a great example of the decay process in fallen timber. Fungi and lichen cover its surface. The wood provides food and shelter to insects like termites and beetle larvae, which in turn feed birds, small mammals, reptiles, and amphibians. The log also acts as a perch both for raptors consuming their prey, and for reptiles sunning to warm up. Nutrients are eventually released back to the soil.

#18 – Perseverance tree: This elm broke near its base but survived and grew through the attachment on one side. Wood in the stump eventually decayed, leaving a moss-lined cavity in which leaves and water collect. Insects and amphibians must love it. Buds that were originally destined to become lateral branches took on vertical dominance, and they continue to reach for the sun. Note that beaver stripped two trees nearby of bark all around. Trees grow on the outside, but these survived because not all growth tissue (cambium layer) was destroyed. An armadillo hole is nearby.

#19 – Clearing: Although still near the bottomland, this clearing hosts a different plant community because increased sunlight created drier conditions. Thus grasses, prickly pear cactus, holly, and cedar are found just a few steps down the trail from moss. The opening was created by the death of a large tree at its center.

#20 – Critter food: The violet berries of American beautyberry don't last long in the fall—they're a favorite food of many songbirds. And if you examine the tips of these bushes, you'll see that deer has browsed them. Crush a leaf to smell the spice scent, same as in flower and fruit. Other soft fruits eaten by birds and mammals include huckleberry, viburnum, dewberry, and blackberry. Seeds of these plants are then dispersed undigested in animal droppings. Hard mast (acorns, hickory nuts) produced in this Post Oak Savannah ecological region is a boon to small and large mammals alike.