

Lacy Point Interpretive Trail

This trail begins on the west side of Lake Waco, at the end of McLaughlin Rd. (412) north of Hwy 6.

Directions: From I-35 take Hwy 6 north for about 7 miles to Speegleville Rd., exit right, go 1 mile to stop sign, and go right to park entrance by McLaughlin Rd. dead-end. After parking, go through the iron gate on the left side of the boat ramp.

Stop 1: Poison Ivy (*Toxicodendron rydbergii*)

Be careful of stepping off the trail! The vine-thicket is Poison Ivy, a member of the Sumac Family (Anacardiaceae). This native plant grows up trees with a thick, hairy tendril, or can sprout from the ground with smooth reddish-grey stems. The shiny 3-lobed leaves are distinctive in Spring and Summer, but the irritant oil is on all parts of the plant throughout the year. In Autumn small berry clusters, in a cone shape characteristic of Sumacs, hang from the branches. Global warming computer modeling predicts the expansion of increasingly virulent poison ivy in the United States.

Even if you are not allergic to Poison Ivy now, you might be in the future! Limit your exposure. People become more sensitized to the allergic reaction caused by Poison Ivy, rather than getting used to it, so even if you don't get it as a kid, you may as an adult. Many people, especially from Native American cultures, are immune to the oil. Animals are also immune, and many love the tasty berries!

What other dangers can you think of that might occur on this trail?

Stop 2: Lacy Point (Speegleville II Park) History

This park is named after the Lacy family, who lived in the area as one of its first European settlers. The original Lacy Point is now under water since the Corps built the dam for the lake in the 1960s.

Before 1963, the lake level was even lower. If you were to dive down and explore Waco Lake's floor, you'd find an older, smaller dam built in 1936 for drinking water. Places where people lived are now underwater. The community of Speegleville had to be relocated when the new dam was put in for flood control.

And before the dam ... the Bosque river cut a canyon through the bottom of what is now Waco lake. Waco gets its name from the Native American tribe that lived in this area, raising crops in the river valley. Artifacts found around Waco Lake show this area has been used by humans for 12,000 years. Fossil shark teeth are dated at approximately 65million years, when much of Texas was covered by an inland sea.

How do you think this area will change in the future? Will it remain protected as a recreation area under the Army Corps of Engineers?

Stop 3: Hackberry Thicket (*Celtis laevigata*)

What could you find to eat out here?

Hackberries or Sugarberries are short-lived trees that grow naturally in the Waco area. They can most easily be identified by their characteristic smooth grayish bark covered in wart-like bumps. The berries provide important food for native birds, and were eaten by

Native Americans. Birds are responsible for spreading hackberries throughout our area. 3 species of butterflies (American Snout, Hackberry Emperor and Tawny Emperor) rely on this “trash” tree as the main forage for their caterpillars. Hackberries are related to Elms (Ulmaceae family), both of which have sandpaper-texture leaves.

Stop 4: Grassland

Why aren't trees growing here?

Early Spanish explorers and later settlers both described the Waco area as having extensive prairies. Many areas of prairie grassland have changed to woodland in the last 200 years. It's easy to see how trees could grow up and shade out grasses, so why didn't this happen earlier?

Fire.

Both natural and human fires were a frequent event in grasslands. Native Americans used fire to drive Bison over cliffs or to waiting hunters, and to sustain the grasses on which the Bison fed when they would migrate here. Periodic fire burns back shrubs and trees, allowing faster-growing grasses to dominate. Many animals adapted to life on this sea of tall grass, to the point that they cannot survive anywhere else. When agricultural settlers began moving into the area in the 1800s, they suppressed fire, fenced their property, and cleared fields for their crops. Bison could no longer migrate to their seasonal grazing lands, and declined from overhunting. Prairie dog colonies were extinguished because their burrows caused many broken legs in livestock. Prairie, and many animals that live in it, have become a threatened ecosystem. The Army Corps of Engineers maintains prairie areas around the lake by prescribed burning, in an attempt to provide habitat for the plants and animals needing grassland.

Stop 5: Mesquite (*Prosopis glandulosa*)

How long have these trees been here?

Mesquite is a spiny shrub or small tree in the Bean Family (Fabaceae). Like many beans, it has compound leaves and edible fruit pods. Both the sugary pods and high-protein seeds inside have been a favorite of many peoples and animals. Many tribes in Mexico and the US use Mesquite today, and the wood is a favorite for its smoke flavor. A common misconception is that Mesquite is a not native to central Texas, but was brought north by grazing cattle. While it has no doubt spread with intensive grazing and the suppression of fire, early Spanish explorer accounts do describe impenetrable Mesquite thickets in the area, and all the way north to Kansas. Pollen records show Mesquite present in the southwest since at least the last Ice Age, about 12,000 years ago.

Stop 6: Pecan (*Carya illinoensis*)

Have you sampled the local Pecan Pie made from Texas' state tree? Pecan nuts, and the nuts of most members of the Walnut Family (Juglandaceae), have been popular for thousands of years in Texas as a tasty, high-protein food source. The nuts form in late summer at the tops of the branches, covered in a hard shell. They hang on the tree through winter, splitting open when the seed is ripe. Pecans form some of the largest trees in central Texas bottomlands, despite their weak branches that often break off.

Stop 7: Live Oak Grove (*Quercus virginiana/fusiformis*)

Live Oaks are long-lived native trees (up to 1000 years) in the Beech Family (Fagaceae) that can be identified by their oval-shaped evergreen leaves and thick, tapering trunk with curving branches. The acorns are important for a variety of wildlife, as well as tribes like the Wacos that lived in this area until the arrival of European settlers. These acorns, unlike those of Post Oaks, have high amounts of tannin in them, so they are bitter when eaten raw. They were more often ground up into flour and leached with water to remove the tannin, after which oak-flour tortillas could be made. Taxonomists do not agree on whether trees in Central Texas are different species as those on the coast, or a more cold-resistant variety of the same species. However, severe freezes kill coastal trees that are planted in this area, while the native trees survive.

Why do Live Oaks form groves? Most Live Oak acorns will not grow into adult trees. Instead, mature Live Oaks can sprout new trees from their roots. Eventually the new trees will form a dense patch, motte, or grove.

Stop 8: Agriculture/Transition:

The land you see returning to its natural state used to be cultivated agricultural land. You can see corn fields on adjacent private land to the right. Some of Lacy Point was plowed for crops, some was grazed by cattle, and some areas had homes built on them. The water has changed too. The lake level was elevated in 2003 by 7 feet to 462 feet above sea level, to accommodate increased regional water needs. That resulted in a landscape change, and the presence of many dead trees at the water's edge. Dead snags provide valuable fish nursing habitat, insect food, sites for cavity-nesting birds, and perching areas for wintering water birds.

In the summer of autumn, you will see stands of "Bloodweed" or "Giant Ragweed" (*Ambrosia tridentata*), which increased dramatically in 2007 floods. Bloodweed is a coarse annual with reddish (bloody) sap that grows up to 12 feet tall in disturbed soil. As the descriptive Giant Ragweed suggests, the yellow pollen from the green flower spikes is very annoying to those with allergies.

Stop 9: Cottonwoods (*Populus deltoides*)

What's in a name?

The name cottonwood comes from the fluffy white seeds, which fill the woods with clingy "cotton" during Spring. The Latin Genus name *Populus* refers to Poplar trees to which Cottonwoods and Aspens are related, while the species name "*deltoides*" suggests the triangular Delta-shaped leaves. The Spanish name for cottonwood is Alamo, after which Texas' famous fort was named. Most forts and churches were established near rivers with an available source of year-round water, and cottonwoods are found along most Texan rivers, so it was only logical to name the Alamo after the most noticeable tree in the area.

The massive, short-lived tree, recognized by its heart-shaped leaves and whitish branches, can dominate shorelines. Cottonwoods, in the Willow Family (Salicaceae), are one of the fastest growing large trees in the country. Willow Family trees prefer wet places, where their roots soak up the water and soil nutrients, producing large, thin-walled wood cells at a high rate. The resulting wood is weak, prone to breaking, but in

the precarious existence on the edge of periodically flooding rivers and lakes, Cottonwood has an advantage over other trees. This advantage does not work with Beavers, who prefer to eat cottonwoods over all other trees.

Stop 10: Tree line

Why are all the trees growing in a straight line?

These trees were not planted by people, but by birds. Before the trees a fence ran along this line. Fruit-eating birds perch on fences to digest their berry meals, and their droppings provide fertilizer for the seeds inside the berries to grow. It is harder to remove trees and shrubs along the fence, so they survive mowing and grazing to become the living fence you see before you.

What other signs of human influence do you see around you?

Stop 11: Boisdarc, Osage Orange, Horse Apple (*Maclura pomifera*)

If you can't eat the tree, how else might you use it?

This thick tree with orange-tinted bark and roots, and shiny pointed leaves, goes by a few common names. "Bois d'Arc" is a French name which refers to use of the flexible branches of this tree for bows by Native Americans. Osage Orange and Horse Apple refer to the large green conglomerate fruits that hang from the branches in late Summer and Autumn. Though squirrels enjoy the fruit, people should not eat them, and in some areas the fruits are placed around the foundations of homes to discourage cockroaches! The tree prefers moist bottomland hardwood, but once established, will do fine in drier prairie land. The young branches have spines.

Stop 12: Mustang Grape (*Vitis mustangensis*)

Waco Lake has a few wild grape species providing summer food for many animals, of which Mustang Grapes are the most common, often forming full covers draped over their tree hosts. The grapes are edible and tasty, but are small with many seeds, better suited for making jam and wine than for eating.

Stop 13: Cedars (*Juniperus ashei* and *J. virginiana*)

Cedars are the only native evergreen conifer found in the heart of Texas. Like Mesquite, they spread rapidly over grasslands when fire is suppressed, and are considered a nuisance tree by many. The male pollen cones on the branch tips open in winter, producing clouds of pollen that can be the bane of those with allergies. The female cones, or berries, are fleshy and powdery blue-grey. The Common Juniper's berries are fermented in Europe for making gin. Tribes mixed the berries of our Cedars with other dried foods to make "pemmican," the earliest trail mix. The berries are edible and do taste a bit like gin. Toxins make it dangerous to eat large quantities of berries at one time.

Stop 14: Partnerships

The trail to your right is an example of successful local stewardship of public lands. This trail was created and is maintained by volunteers from the Waco Bicycle Club and Texas Equestrian Trail Riders Association, with improvements including the picnic table and

these interpretive posts the result of Eagle Scout projects. The US Army Corps of Engineers actively seeks community partnerships to enhance enjoyment and access to public lands while offsetting costs, resulting in many valuable projects that could not be completed without public support.

Stop 15: Wildlife Habitat

The variety and size of Lacy Point produces the best animal habitat at Waco Lake, and along with adjacent parks provides a crucial wildlife corridor linking populations north and west of Highway 185 with those south of Highways 6 and 84. Highways can isolate animals more effectively than a fence, with raised lanes and high traffic eliminating opportunities for populations to use old trails and interbreed. Having open land adjacent to water along the Bosque River floodplain allows animals a route to get under these highways.

Stop 16: Greenbriers (*Smilax bona-nox* etc.)

Briers are well known throughout the southern US as thorny vines that can form virtually impenetrable thickets for people and wildlife. When volunteers cut trails through forested areas at Lacy Point in 2006-2008, Greenbriers were one of their toughest barriers. Though not popular with humans, the small black berries produced on the vines are delicacies for many birds.

Stop 17: Wildflowers and Birds

Prairie areas are ideal for native annual and perennial wildflowers popularized throughout Texas by Ladybird Johnson. Though native flowers can be found all year, the two principal peak months are May and October, when the variety of colors can carpet the landscape. Insect eruptions often follow these floral peaks, as do bird migrants who feed on berries or the many insects that are in turn feeding on new vegetation. The 2 species of Hummingbirds found here prefer red tubular flowers such as Texas Paintbrush, Trumpet Creeper, and Coral Honeysuckle.

Due to its long growing season and central location between eastern and western bird species and migration routes, Texas has more bird species found than any other state in the Union, with 360 species reported in McLennan County. Birding recreation now contributes more to the Texas economy than hunting and fishing combined.

Stop 18: Dewberry (*Rubus trivialis*)

Dewberry is our native blackberry, which has fewer, smaller fruits and leaves than those sold commercially, but is certainly just as tasty to humans and animals. The white flowers are additionally an important early Spring nectar source for emerging butterflies, many species of which will cover a big Dewberry bush that is in flower. Dewberries are in the Rose family (Rosaceae), which has many important edible fruits including Apples, Peaches, Plums, Apricots, Pears, Cherries, and Quince.

Stop 19: Elms (*Ulmus species*)

Lacy Point hosts 3 Elm species, of which 2 can be seen here. The large-leafed Slippery Elm (*Ulmus rubra*) is similar to American Elms (*Ulmus americana*) except that its leaves are smooth. Both these water-loving Elms are known for their large leaves, fluted trunk,

and early green flowers which appear in February before the leaves. Both are also affected by Dutch Elm disease, though this introduced fungus has not affected our area as much as the northeastern US. Cedar Elms (*Ulmus crassifolia*) are a more common upland species that are especially important habitat in south Texas, and is used in landscaping due to its fast growth and sinewy trunk. Cedar Elms flower in the Autumn, unlike their larger-leaved cousins.

Stop 20: Eagle Nest

Of the many birds that nest at Waco Lake, Bald Eagles are among the most recent. Our national bird prefers fish in its diet, and usually nests close to water. Bald Eagles are a common winter visitor to the area, but were not documented nesting in the county until 2005. In 2008 summer eagle sightings were documented for the first time at Waco Lake, and in September they built this nest in a dead Cottonwood tree. After much ado, the pair laid an egg in March 2009 and fledged one baby which left the nest in June. Corps staff blocked the nest area from visitation during that time to reduce disturbance, since a successful first fledge generally results in repeat nesting at the same spot. Some eagle nests have been continually built upon and occupied for as long as 30 years, at times getting so heavy they break the host tree, whereupon the eagle pair will usually construct a new nest nearby.

Why didn't eagles nest around Waco before?

The reasons Eagles did not historically nest here include lack of habitat before the lake was created, hunting, and declines from DDT pesticide before the 1960s when Waco Lake dam was built, which put the Bald Eagle on the Endangered Species list. We hope their numbers will continue to expand westward. The smaller Southern Bald Eagle is the subspecies which nests from here to Florida, while our winter visiting eagles nest as far north as Alaska.