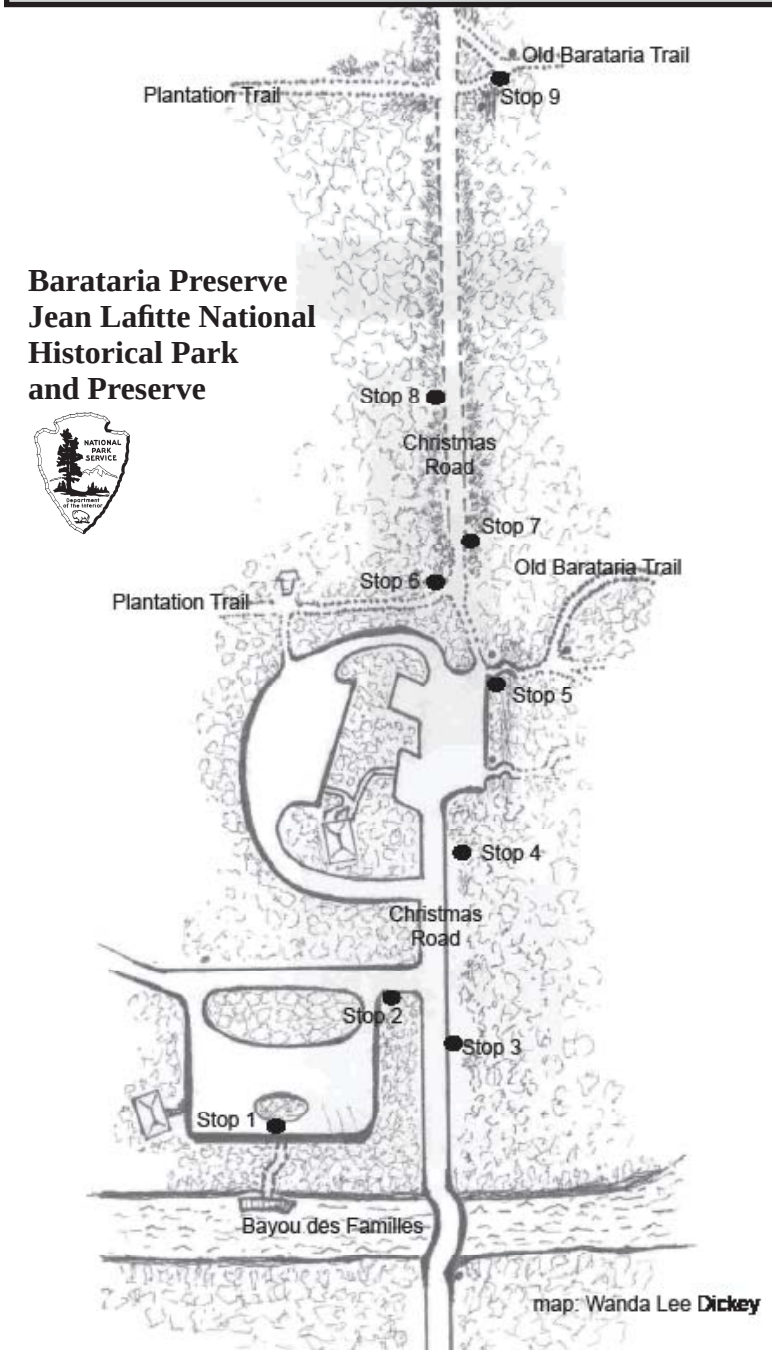
Pecan Grove Self-Guided Tour



Stop 1 - Bayou des Familles

Walk out on the boardwalk to the water's edge. This waterway is Bayou des Familles. About 2,500 years ago, it was a main distributary channel of the Mississippi River. In those days, the river ran much farther east, cutting through what is now St. Bernard Parish.

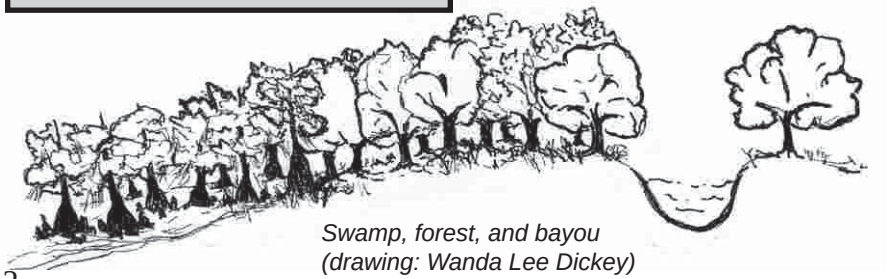
Since it was part of the Mississippi River, Bayou des Familles periodically overflowed, sometimes stretching as wide as a third of a mile. As the floodwaters covered the land, soil dropped out and created wetlands reaching into what was once the Gulf of Mexico. When the Mississippi River changed course about 1,400 years ago, Bayou des Familles was cut off from the river and its land-building silt. Subsidence (sinking) began and will continue as long as no new soil is deposited.

When France handed control of Louisiana to Spain in the 1760s, few people lived in this area. The Spanish colonial authorities feared invasion by hostile European powers (especially the British). They recruited farmers and fishermen from the Spanish Canary Islands off the coast of Africa to settle in Louisiana. These new settlers produced food and could serve as a militia in case of hostilities.

The Canary Islanders *(Isleños* in Spanish) were given land along this bayou to farm.

What's a Bayou?

"Bayou" is what streams and creeks are called in parts of Louisiana and Texas. Bayou is a French pronunciation of a Choctaw Indian word for stream or creek.



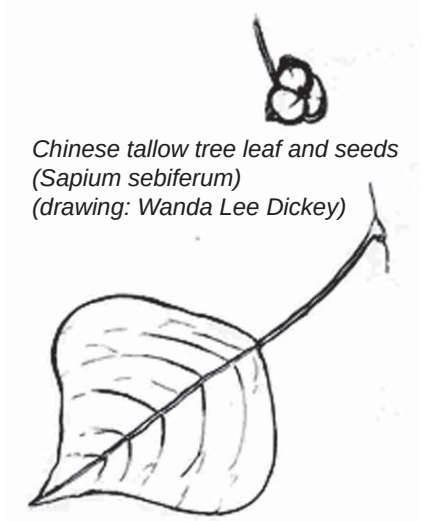
Swamp, forest, and bayou
(drawing: Wanda Lee Dickey)

Because French remained the dominant language of Louisiana even under Spanish control, the waterway became known as Bayou des Familles (Bayou of the Families). The settlement lasted only a few years. Floods and storms drove the Isleños away from the bayou and closer to New Orleans for safety.

Many of the plants you are looking at are exotic or invasive species, plants that have been introduced into the region and that displace the native plants. In the water, salvinia, alligator weed, hydrilla, and water hyacinth have displaced native duckweed, a food source for ducks. Because they are not a favorite food for local wildlife, the exotic plants often grow so thick that they clog the bayou. When they decay, so much oxygen in the water is used up that it is unfit for fish.

Growing along the banks are Chinese tallow trees or popcorn trees, another fast-growing invasive species that crowds out native oak, red maple, and baldcypress trees.

As you walk back toward the parking lot, notice that the elevation of the land is increasing ever so slightly from the edge of the bayou. Even an inch or so of elevation affects the type of trees and plants that can grow here.



Chinese tallow tree leaf and seeds
(Sapium sebiferum)
(drawing: Wanda Lee Dickey)

Trees like baldcypress and water tupelo can live in the true swamp where the soil is under water most of the year. Other trees grow only where a slight elevation of the land permits more drainage. Some of the trees of the transitional land between swamp and mixed hardwood forest are red maple, sweetgum, and dwarf palmetto.

To reach Stop 2, cross the parking lot toward the road you came in on. The sign marking Stop 2 is near the red traffic stop sign at the end of the parking lot.

Stop 2 - *Terre Haute de Barataria*

Terre Haute de Barataria (the high land of Barataria) was the French name for this land built by Bayou des Familles. This area is the inside of a curve in the old distributary that flowed from the Mississippi River. When the current rounded the curve at flood stage, it slowed and dropped its load of silt, slowly building up this piece of land.

The relatively higher elevation here made it attractive to settlement and agriculture. This area was under regular field cultivation until the early 1900s.

To reach Stop 3, cross the road and look for the sign.

Stop 3 - Pecan Grove

Pecan leaves and nuts (Carya illinoinensis) (drawing: Wanda Lee Dickey)

In front of you about 30 feet from the road is a pecan tree. It is the remains of an unsuccessful real estate project. In 1910 developers divided the plantation lands into what they hoped would become a residential subdivision. Little actual development took place, and the subdivision never went beyond the planning stage.

To promote the sale of lots - few were ever sold - the developers used one of the popular marketing devices of the day: planting pecan orchards. Although pecan trees are native to Louisiana, they are not native to the Barataria region. By the middle of the 1900s, the orchards were mostly abandoned.

Nearly all of the original pecan trees have died, but new pecan trees have sprouted in the forest. The pecan tree you are looking at is probably a second or third generation descendant of the original plantings. Hurricane Katrina blew down many of the oldest trees, and you can see their remains decaying throughout this part of the Barataria Preserve.

Walk along the road (away from Bayou des Familles) to reach Stop 4. Look for the sign on the right side of the road.

Stop 4 - Christmas Road

The road you are on was the Christmas Plantation's main road. On December 23, 1865, this land was purchased to become a large sugar plantation and the date of the sale inspired the name. The land had not been cultivated for 50 years and was mostly forest.

This road was originally made from mud and covered with shells mined from middens, piles of clam shells left by American Indians who lived in the area before Europeans arrived. The plantation's buildings and sheds were along the side of the road closest to Bayou des Familles. Rice was grown here but large-scale agriculture was abandoned early in the 1900s. After the Christmas Plantation was subdivided and became a pecan grove, the road was called the Old Road or the Shell Road.

Continue walking along Christmas Road. Stop 5 is by the little bridge to the picnic area.

Stop 5 - Old Barataria Trail

This short bridge is the entrance to the picnic grounds and to the beginning of the Old Barataria Trail. Buildings that were part of the Christmas Plantation once stood where the picnic tables are now. If you follow the trail which starts inside the picnic grounds, you will walk among oak trees and Southern shield fern. The trail curves back around to join Christmas Road near the beginning of Wood Duck Trail and Ring Levee Trail.

The name "Barataria" comes from Miguel de Cervantes' classic novel *Don Quixote de La Mancha*. In that story, Don Quixote's companion Sancho Panza was made governor of an island called Barataria. Cervantes may have been making a joke because in the old Provençal language, "*barataria*" means "fraud" or "deceit." Sancho Panza's island wasn't a real island, it was landlocked---a "fake" island.

The name Barataria appears on maps of this region as early as 1732. The area called *Isle Barataria* was an area south of the preserve that was high in elevation, but not a true island because it was not completely surrounded by water. Barataria was later used as the name for a nearby bayou, the bay it drains into, and eventually for the entire region.

Walk to the end of the paved road until you reach the crushed-rock trail. Take the trail marked Christmas Road and look for the spot where the Plantation Trail heads off to the left. Stop 6 is there.

Stop 6 - Dwarf Palmettos

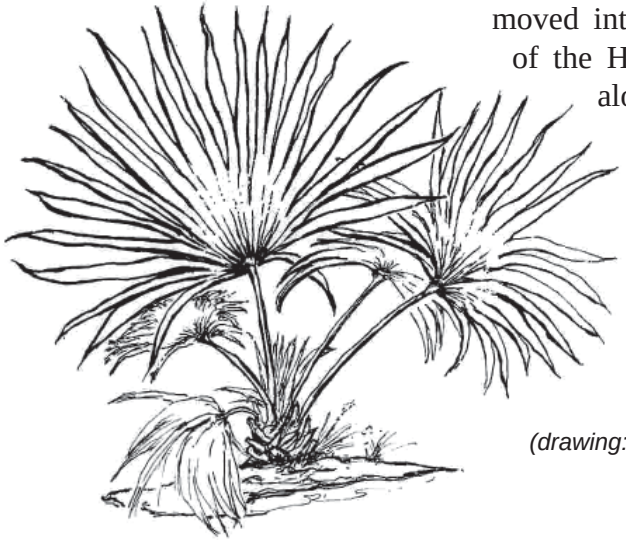
Ahead of you is an extension of the Christmas Road. In the 1960s drillers explored for oil at the end of what is now the Ring Levee Trail (Ring Levee Trail is at the end of Christmas Road). The road was improved and surfaced with clam shells from nearby middens. When the drill site was abandoned, the forest returned. Look for dwarf palmettos on either side of the road and in the forest.

The dwarf palmetto is a native plant that thrives in mixed forest in the transitional zone between swamp and higher ground. American Indians throughout the southeastern United States used the dwarf palmetto fronds to build houses. The Indians wove fronds into roofs and walls, placing them over frames made of bent-over saplings.

From the Indians, the Europeans learned to use palmetto thatch for roofs on their wood-frame houses. Some local people used palmettos as roofing material until well into the 1900s.

When the first Europeans arrived, the people living here were known as the Ouachas, the Chitimachas, and the Tchaouachas. These groups merged or were displaced and the Houma people moved into the area. Members of the Houma Tribe still live along Bayou Barataria south of here.

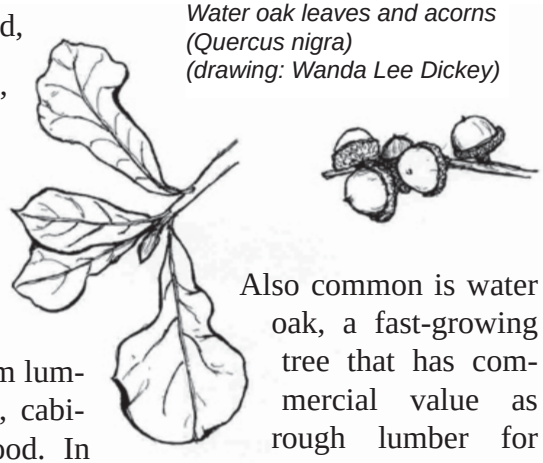
Continue along the trail. Look for Stop 7 on your right.



Dwarf palmetto
(Sabal minor)
(drawing: Wanda Lee Dickey)

Stop 7 - Mixed Bottomland Forest

This is relatively high land, even though it's called bottomland."Bottomland" identifies the soil as having been deposited by periodic river flooding.



Water oak leaves and acorns (Quercus nigra) (drawing: Wanda Lee Dickey)

Look for sweetgum trees which are very plentiful in the preserve. Sweetgum lumber is used for furniture, cabinets, veneer, and plywood. In times past, sweetgum bark was peeled and scraped. A resinlike solid was scraped off and used both for medicine and for chewing gum.

Also common is water oak, a fast-growing tree that has commercial value as rough lumber for crossties, pallets, and poles. Its acorns provide food for deer and other animals.

The Nuttall oak is a less common oak of the mixed forest. It has large acorns that are a food source for wildlife.

Sweet gum leaves and seed (Liquidambar styraciflua) (drawing: Wanda Lee Dickey)

Nuttall oak leaves and acorns (Quercus nuttallii) (drawing: Wanda Lee Dickey)

Hackberry leaves, fruit, and bark (Celtis laevigata) (drawing: Wanda Lee Dickey)

The hackberry is a member of the elm family. It is also known as "sugarberry" or "sugar hackberry" because it produces a sweetish fruit favored by songbirds. Hackberry trees have light bark, smooth when the tree is young and "warty" when it is older.

The red maple or swamp maple is also a common mixed bottomland forest tree. In years gone by, ink and dyes were made from its bark. In the commercial wood industry, red maple is known as "soft maple," not as desirable as other maples but useful for making furniture.

Continue walking along the trail. Look for Stop 8 on your left.

Red maple leaves and seeds (Acer rubrum) (drawing: Wanda Lee Dickey)

Stop 8 - The Barataria Settlement

In 1778 and 1779 the Spanish government gave the Isleños land in this area. Like the Isleños along Bayou des Familles, most left for land closer to New Orleans in a few years.

Continue along the trail to an intersection with other trails. At the intersection look to the right for the Old Barataria Trail sign and Stop 9.

Stop 9 - *El Camino Real de Barataria*

The part of the Old Barataria Trail in front of you is a remnant of the public road built by the Spanish colonial government. The Spanish called it *El Camino Real de Barataria*, the royal road of Barataria. A royal road was a main public road owned by the king. It was known in French as *Le Chemin de Barataria* and in English as Barataria Road.

Some of the Isleños settled in houses along this road. This is the other end of the Old Barataria Trail that begins in the picnic area.

The Spanish named these creatures armadillos---"little armored ones." They can often be seen hunting through the leaves, looking for insects to eat.

Conclusion - The Circle of Life

During your walk, you saw many trees that fell over, were uprooted, and died. On August 29, 2005, Hurricane Katrina blew down thousands of trees in the Barataria Preserve. Shortly after the trees fell, decay and decomposition began.

As you finish your walk, look closely for signs of change. You may see fungi growing on dead wood, branches that have lost their strength and broken away, vines and other vegetation growing around and on fallen trees, or evidence of insects invading the wood.

In a few years, the fallen trees and branches will probably be unrecognizable. As they die, the trees are returning decayed matter full of nutrients to the forest.

Those nutrients will be used by new plants growing wherever old plants fell. The new plants will have less competition for space, sunlight, and nutrients than before the big trees fell. In fact, more sunlight is available for all the plants because fewer big trees are blocking it. Everywhere you look in the forest, you can see signs of new growth springing up.

Storms after Katrina, including Gustav and Ike in 2008, felled still more trees. The process of death, decay, and rebirth---the circle of life---immediately began on them too.

You have reached the end of Christmas Road. Four other trails begin and end at this point. You may continue on the Wood Duck Trail and the Ring Levee Trail, which are both one-way trails and return you to this point. The Plantation Trail loops back to the parking lot, and the Old Barataria Trail returns you to the picnic grounds at the edge of the parking lot.

Wherever you go, look closely at the land around you and see if you can discover the stories that it tells.

More than 300 species of birds can be seen at the Barataria Preserve. Look for egrets and herons wading in the water and for black vultures and turkey vultures roosting in trees. Watch for barred owls, active even during the day, and listen for their hoots.

Barred owl

Black-crowned night heron

Black vulture

Great egret