TEXAS PARKS AND WILDLIFE

# INKS LAKE STATE PARK

# HIKING TRAIL GUIDE FOR

# PECAN FLATS

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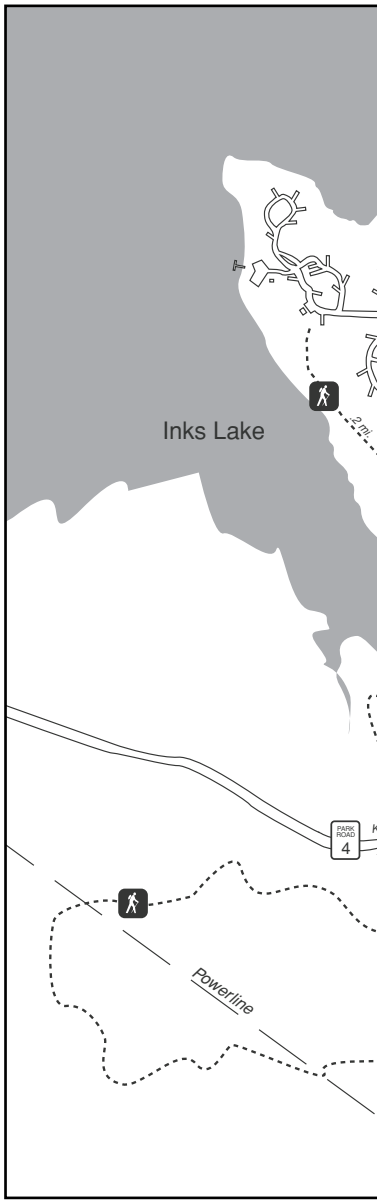
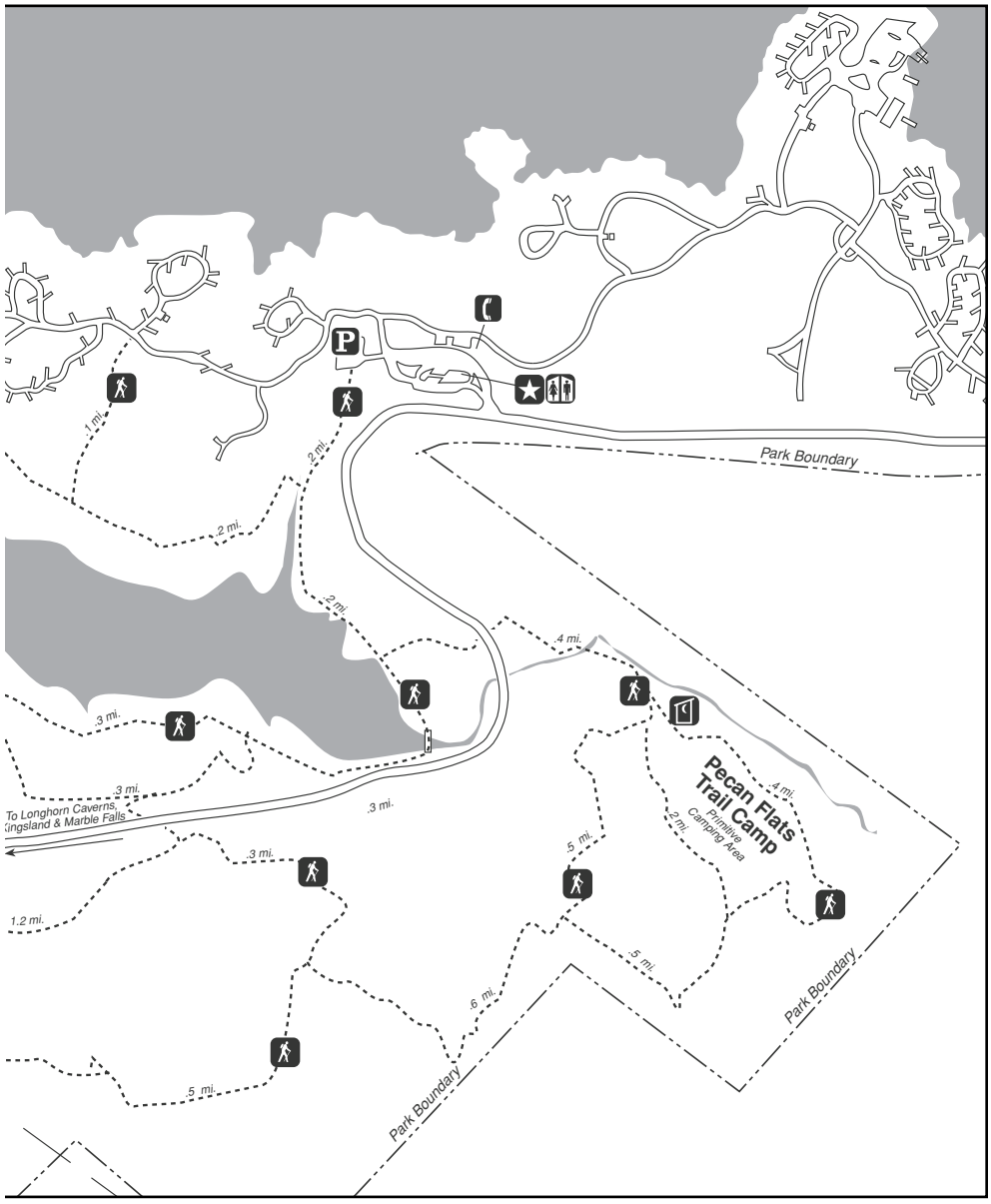
# Inks Lake State Park

Inks Lake State Park is comprised 1,201.4 acres of rolling granite hills abundant in white-tailed deer and bordering the pristine Inks Lake.

Land for the park was officially set aside in 1939 but was not open to the public until 1950. This beautiful state park is located about 10 miles west of Burnet, Texas, off Highway 29. Travel three miles south on Park Road 4 and you will enter a Hill Country haven. Inks Lake State Park offers 7.5 miles of stunning hiking trails with breathtaking views.

This trail guide was designed to share the many interesting aspects of the park and to help you become familiar with the Hill Country. We hope you enjoy your stay and come back soon.

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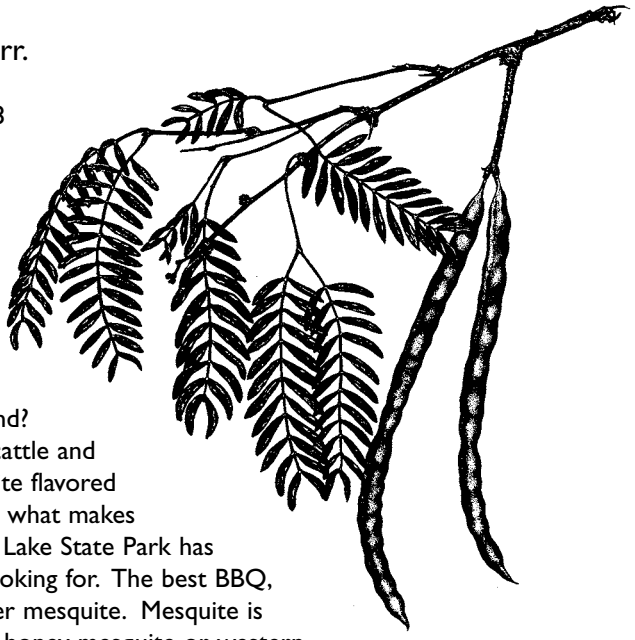
Park Boundary
Park Boundary
Park Boundary
To Longhorn Caverns,
Kingsland & Marble Falls
Pecan Flats
Trail Camp
Primitive
Camping Area

# MESQUITE

*Prosopis glandulosa* Torr.

**TRAIL NUMBER:** 1, 18



When you think of Central and West Texas, what comes to mind? Could it be big ranches, cattle and that famous Texas mesquite flavored BBQ? If you want to see what makes Texas BBQ so great, Inks Lake State Park has plenty of what you are looking for. The best BBQ, Texas style, is cooked over mesquite. Mesquite is commonly referred to as honey mesquite or western honey mesquite. It is well adapted to dry climates with taproots reaching depths of 40 feet, heights reaching up to 20 feet and thorns approximately one inch in length along the branches. Since mesquite is such a hardy plant, it makes for a great pioneer species. In the Edwards Plateau region of Central Texas, mesquite is often associated with Ashe juniper (*Juniperus ashei*), Texas persimmon (*Diospiros texana*), live oak (*Quercus virginiana*), threeawns (*Aristida* spp.), sideoats grama (*Bouteloua curtipendula*) and sedges (*Cyperus* spp.). It is also associated with xeric species (species that prefer dry habitats) such as catclaw (refer to trail number 8). Mesquite produces pods, or beans, as they are commonly referred to by the locals, which are sweet and can be eaten when cooked correctly. The Southwestern Indians ground up dry ripened mesquite pods to prepare a meal for making cakes. The leaves, bark and roots were used for eye treatments and to cure problems with the stomach. Darker sap was used to make black dye and the clear sap was used for making candy. The word "mesquite" is a Spanish adaptation of the Aztec name "*mizqitl,*" meaning tree. Mesquite pods are high in sugars and protein, but are largely indigestible for large mammals, allowing for the pods, or seeds, to pass through the digestive tract. In Texas most mesquite seeds are dispersed by cattle. Mesquite provides a great habitat for many different wildlife species including the white-tailed deer which are seen throughout the park.

# MISTLETOE

*Loranthaceae*

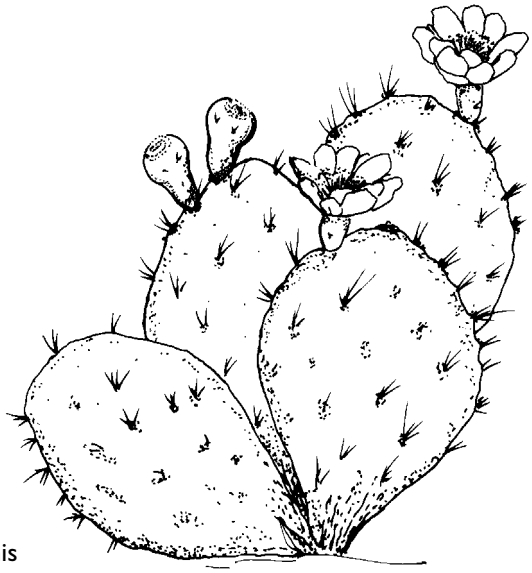
**TRAIL NUMBER:** 2, 19

Mistletoe is a favorite around the holiday season. Not only is it a pretty decoration, but as tradition goes, the custom of exchanging kisses under the mistletoe creates an opportune time to get that holiday kiss from your sweetheart. Archeologists have found fossil pollen records that show that mistletoe has been in existence for millions of years. Mistletoe is considered to be a semi-parasite. Even though it obtains most of its nutrients from its host tree, it does have green leaves which indicate that it performs photosynthesis. People began noticing that wherever birds left their dropping mistletoe would appear. This is where its common name comes from. "Mistle" is an Anglo-saxon word for "dung" and "tan" means twig, thus mistletoe means dung-on-a-twig. Mistletoe is also called witches' brooms and baskets on high. The berries of mistletoe are quite toxic to people, but to wild animals such as squirrels or deer, it is a divine feast rich in protein. It also provides a great habitat for many species of wildlife.

# PRICKLY PEAR

*Opuntia*

**TRAIL NUMBER:** 3, 20

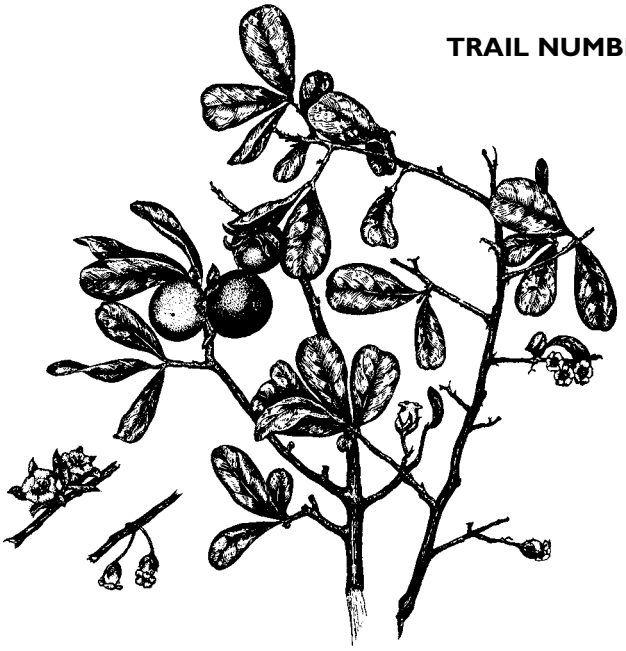


Whether you are a native Texan or a visitor to the Lone Star State, everyone should become familiar with the prickly pear cactus. The prickly pear was named the Texas state plant in 1995 and sometimes is referred to as the cactus pear or Indian fig. This native succulent is composed of flat fleshy pads, considered to be branches, which are covered in clusters of fine, tiny, barbed spines called glochids. These pads serve several vital functions including photosynthesis for food production, water storage and flower production. The prickly pear is extremely tolerant of a variety of soils, temperatures and moisture levels, which allows it to be right at home in Texas. They can grow to heights as great as seven feet in an ideal habitat. Some species of prickly pear are considered spineless, but don't let this fool you. They are not! Even spineless prickly pears have glochids that are very difficult to remove from your hand because they are so tiny. These Texas "trees" bloom in the spring, decorating the state in colors of yellow, red or purple. The fruit ripens from July through September producing a delicious native snack. The fruit of a prickly pear is edible and is sold in stores as "tuna." Prickly pear pads are also edible and eaten as a vegetable called "nopalito." A Texas favorite is prickly pear jelly made from the red fruit. The prickly pear is also very palatable to cattle so ranchers use "pear-burners" to burn the spines off so they can be foraged. The roots of a prickly pear can be used as a form of first aid treatment for splinters or infection when crushed and dipped in warm water. The prickly pear is also home to an insect similar to the mealybug, *Dactylopius coccus*. When crushed, a rich red dye known as cochineal dye is produced. Native Americans used cochineal dye for paint because it is permanent. In the 16th century this dye was used only by the wealthy such as royalty. It would take 70,000 insect bodies to make one pound of cochineal dye, making it very expensive to produce. Cochineal dye was used on the wool garments for the traditional scarlet color of the British guards until 1954.

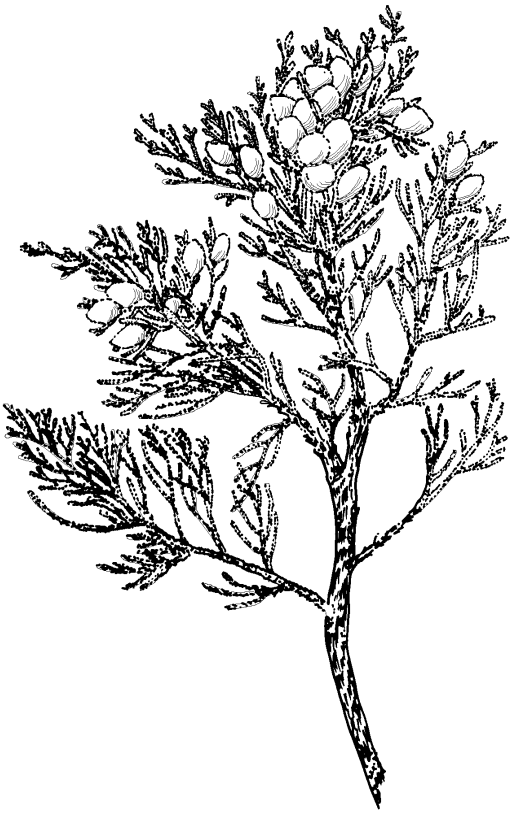
# TEXAS PERSIMMON

*Diospyros texana*

**TRAIL NUMBER:** 4, 33



The Texas persimmon is a native to Texas, living mostly in the southern portions of the state. In this area most of these trees reach to heights of 12 feet with multiple branches resembling a crape myrtle. Its leaves are thick and leathery and somewhat fuzzy underneath. Now, look carefully at the bark … what do you see? The Texas persimmon is distinguished by its unusual smooth peeling bark. Another distinguishing characteristic is its drought resistance mechanisms. The shape of its leaves and the smooth bark guide rain water down to the base of the tree so that every drop can be utilized by the roots. If drought becomes severe, the leaves of the Texas persimmon will drop until the drought is over then come back as soon as there is adequate water for survival. This unique tree is dioecious, meaning that there are male and female trees. Only the female trees produce fruit. The Texas persimmon blooms from February to June. The fruit becomes ripe late in the summer, providing a very palatable food source for native wildlife. The fruit is edible to humans, but be sure it is ripe before taking a big bite. If the fruit is still green, it has one of the most acerbic tastes of anything you may ever eat. Ripe fruit will be a dark purple to black in color. When it is like this, the fruit will be very sweet and juicy.



# ASHE JUNIPER

*Juniperus ashei*

**TRAIL NUMBER:** 5, 22

The Ashe juniper is very abundant in Central Texas and can be seen almost everywhere you look in the park. It is sometimes referred to as "mountain cedar" and is the cause of the dreaded "cedar fever" that many Texans are cursed with every year. According to many locals, if a person suffers with "cedar fever" they should eat one berry everyday for a week to cure their symptoms. The wood of the Ashe juniper is extremely rot resistant, which makes it very good fence post material. Ashe juniper is either loved or hated by those who reside in an area where it grows. It provides year-round shade for wildlife and is great for erosion control, but is considered by some to be a "water hog" and competes with other vegetation for rainwater. These trees have been a part of the Central Texas plant community for thousands of years. Native birds have taken advantage of the overabundance of this "cedar." As the Ashe juniper ages, its bark becomes shaggier and almost "fluffier" providing the perfect nesting material for birds. Older stands, or groups of Ashe juniper, are the primary habitat for endangered species such as the Golden-cheeked Warbler and the Black-capped Vireo. Big thickets of these older stands are now disjunct, or in isolated areas, creating a loss of habitat for these species.

## YUCCA

*Yucca*

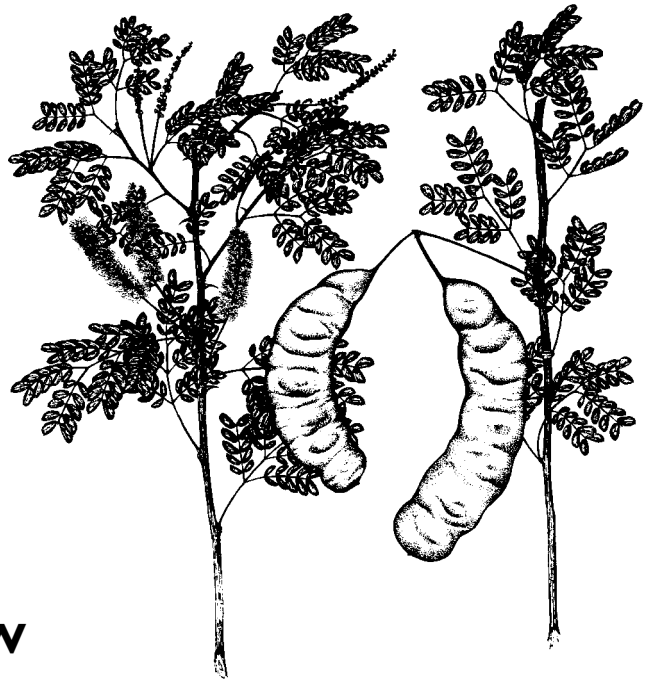
**TRAIL NUMBER:** 6, 23

The yucca's yellow-green leaves stay evergreen and are very flexible with sharp tips and fibrous leaf margins. Its flowering stalk can reach up to seven feet tall with cream-colored bell shaped blooms attracting insects from miles around. The yucca is known as the soap and rope plant or a Spanish bayonet. If you gently touch it you will know why. Imagine 100 years ago when there was no such thing as mega-mart where you could go buy shampoo or hand soap. Native Americans took yucca roots and crushed them into a pulp, then put that pulp in water to produce a lather used for soap and shampoo. Yucca roots are known as amole. The fibers of the leaves of the yucca were used by the Native Americans to weave mats, baskets, cloth, rope and sandals.

## GRANITE

**TRAIL NUMBER:** 7, 29

Inks Lake State Park is surrounded by some of the oldest rock in Texas. It is called Valley Spring Gneiss (pronounced *nice*). It was named after Valley Spring in Llano County. This pre-Cambrian pinkish granite-like metamorphic rock was formed from re-crystallized sedimentary rocks. The feldspar minerals give the granite a sparkly look. The granite that you are looking at is similar to the granite that was used to build the state capitol!



# CATCLAW

*Acacia greggii*

**TRAIL NUMBER:** 8

This is a native Texan that you don't want to tangle with! Accurately named for its claw-like spines, it is another one of those Texas treasures that will stick you if you aren't careful. Catclaw is also known as devilsclaw and Gregg catclaw. It thrives in dry rocky areas because its roots can reach as far as 18 feet below the surface. In ideal conditions, these trees can grow to approximately 30 feet tall. At Inks Lake State Park, most of the catclaw grows to about 12 feet. Catclaw is a very hardy tree that can live for many years. It also provides shade and protection for various species of wildlife. Seeds are dispersed by wildlife such as birds and grazing animals. The seeds from the catclaw were eaten by Native Americans when other sources of food were not available. Catclaw was also used for many medicinal purposes. When ground into a fine powder, it was used as a coagulant for clotting the blood. The roots were made into a special tea that was used for curing sore throats and coughing.

## LICHENS

**TRAIL NUMBER:** 9, 30

These seemingly insignificant life forms are so tiny that most people just walk right over them never giving them a second thought. A lichen is anything but insignificant. They are comprised of two different organisms, a fungus and algae, which work together in a mutualistic symbiotic relationship, meaning that they both benefit. The fungus provides moisture and shelter while the algae photosynthesizes and produces food in the form of simple sugars. There are three types of lichens. The type most commonly found in the park is called crustose lichens. If you look closely at this granite you will see areas that are covered in flaky or crust-like, yellow-green to green patches. Crustose lichens are considered to be pioneer species because they can grow where other species cannot. These interesting organisms literally eat stone, turning rock into dirt. The fungal part of the lichen produces a chemical that breaks down the rock and over many years produces enough soil for other organisms to grow.

## VERNAL POOLS

**TRAIL NUMBER:** 10

Here at Inks Lake State Park the granite that you are walking on is abundant in these temporary oases. While observing the granite you will find that it has many indentions. These indentions are identified as vernal pools. According to Webster's dictionary, "vernal" means occurring in the season of spring. Thus, a vernal pool is wet during the spring when the area receives most of its rainfall. Vernal pools are home to many unique organisms such as yellow stonecrop.

## YELLOW STONECROP

*Sedum nuttallianum*

**TRAIL NUMBER:** 11

Upon close inspection of the vernal pools, you will discover clumps of small yellow flowers on short stalks. These peculiar plants are succulents that thrive in limestone, sandstone and granite. They prefer to live in full sunlight and grow two to four inches tall. The yellow stonecrop absorbs and uses the water stored in the vernal pools.

## LIVE OAK

*Quercus virginiana*

**TRAIL NUMBER:** 12, 31

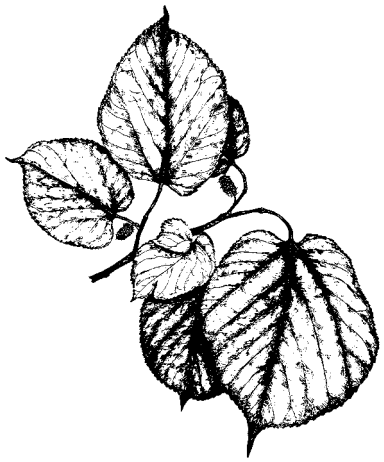
Live oak? Where did it get its name? Is it always green? The live oak is a semi-evergreen tree with wide-spreading horizontal and arching branches that can reach heights of 30-50 feet. The live oak gets its name from the fact that once it drops its leaves in the spring it immediately grows new ones to give the illusion that it stays green all year. The live oak has dark green leaves with a waxy top. It produces catkins, or flowers, in the early spring that release yellow pollen. This yellow pollen blankets everything in sight. The branches are often covered with ball moss. It is one of the fastest growing and long-lived trees and is considered the preeminent southern shade tree. Its acorns are a favorite among birds, squirrels and deer.

## LACE CACTUS

*Echinocereus pectinatus*

**TRAIL NUMBER:** 13

As the saying goes, everything in Texas either bites, sticks or stings, but don't overlook something's beauty just because of that. The lace cactus is among those that stick, but take a close look at its spines. This is where the name lace cactus was derived. The arrangement of the spines gives the appearance of lace. This cactus grows in colonies or small groups, reaches heights of about six inches, and does not like a lot of moisture or shade. Depending on where you are in Texas, the blooms take on an array of colors. Here at Inks Lake State Park the lace cacti tend to be anywhere from pink to a rich magenta color. Other names that refer to the lace cactus are hedgehog cactus, rainbow cactus, purple cactus and comb cactus.

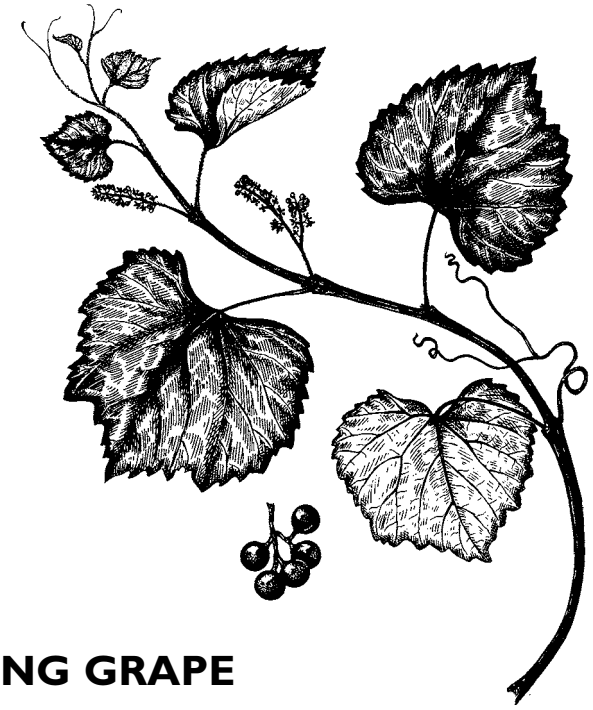


# RED MULBERRY

*Morus rubra*

**TRAIL NUMBER:** 14

This great tree has a very interesting history. The mulberry was brought to the United States from China for silk production. The leaves of the mulberry are the main diet of the silkworm. The leaves of the mulberry are heteroblastic, meaning that they have different leaf morphologies (shapes) between seedling and adult stages. These shapes range from mitten-shaped to heart-shaped. If a leaf is broken off, a white milky sap will run from the wound. The bottom of the leaf is coarse and feels like sandpaper. If the leaves, whether young or mature, are eaten without being cooked they can make a person very sick because they are toxic. The mulberry bears fruit in June that resembles elongated raspberries. These berries are both sweet and tart at the same time. But beware, these scrumptious berries will stain your clothes. So where does this interesting tree get its name? According to ancient legend, Pyramus and Thisbe, who were neighbors, fell in love but their parents did not approve. They decided the only way they could be together was to elope. They picked the white mulberry tree to be their rendezvous point. Thisbe arrived before Pyramus, and when she got there, she saw a ferocious lion and fled the rendezvous point leaving her cloak behind. Pyramus arrived shortly after, and when he saw Thisbe's cloak and the lion, he took his sword and killed himself thinking the lion had eaten her. Thisbe came back once she felt the lion had left and found Pyramus dead. She realized what had happened, so she took her life with the same sword. Pyramus and Thisbe's blood caused the white mulberries to turn red, hence the name red mulberry.



# MUSTANG GRAPE

*Vitis mustangensis*

**TRAIL NUMBER:** 15, 21

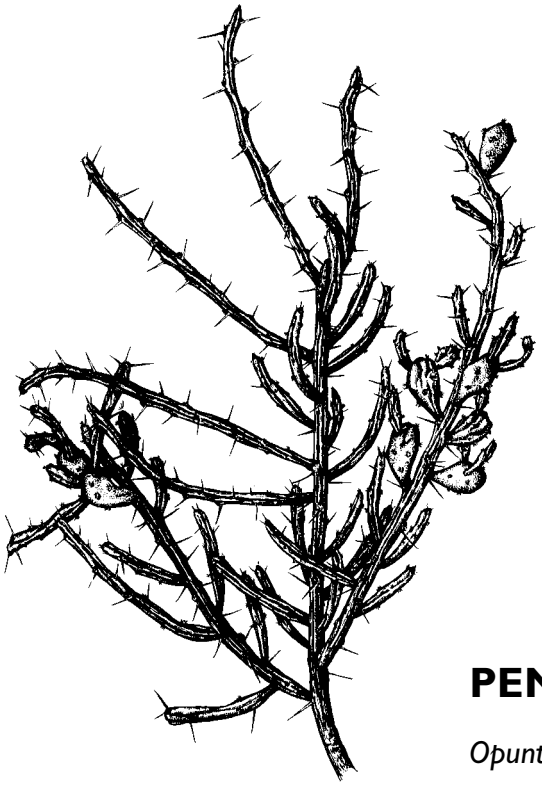
The vines here would make even Tarzan jealous. The mustang grape grows to massive sizes and covers everything it touches like a blanket. The vines droop down from the trees like a maze of rope. The fruit grows in groups, not pendant clusters, and ripens between June and August. Ripe fruit will be a deep red to black color and can be eaten. The leaves look like an upside down saucer and are covered with little white hairs. The mustang grape has forked or branched tendrils to help the vine climb up the tree or fence. The scientific species name, *mustangensis*, comes from the Spanish word *mesteno,* meaning feral or wild.

# CEDAR ELM

*Ulmus crassifolia*

**TRAIL NUMBER:** 16, 35

The cedar elm is another tree that is abundant at Inks Lake State Park. It thrives in a habitat such as the one Central Texas provides. It loves rocky, poorly drained and compacted soils. Cedar elm leaves are small and shiny green with serrated or jagged edges. In the fall the leaves turn a bright gold, but as they begin to fall, they do not contribute to leaf litter because they decompose very rapidly. The cedar elm is also considered to be a deer resistant tree.



# PENCIL CACTUS

*Opuntia leptocaulis*

**TRAIL NUMBER:** 17, 32

The pencil cactus got its name from the stem's resemblance to a pencil. The stem is only about 1/8 of an inch thick, but it is covered with spines that are about two inches long. It tends to live in areas where other shrubs are present and can sometimes grow to heights greater than two feet in ideal conditions where it is being protected by neighboring shrubs. Each new growth or branch can grow to six inches and often twists and tangles with other branches and shrubs nearby, creating a dense thicket of spines. It produces a beautiful light yellow to yellow-green flower that only opens in the late afternoon and then closes at night in the months of May and June. This cactus is commonly referred to as the desert Christmas cactus because of its bright red berries that appear after the cactus flowers.

## WET WEATHER CREEK

**TRAIL NUMBER:** 24

There are three types of flowing bodies of water: perennial, intermittent and ephemeral. This stream is considered to be an intermittent or wet weather creek meaning that the underground water or the water table is high enough that when it rains it allows for the stream to be invigorated and water to flow for a short time until it evaporates and the water table drops. It also means that it is able to maintain a riparian (area along a stream bank) habitat. Different species of flora subsist along riparian zones such as willow trees and cattails. These streams are an important water source to wildlife within the park. The quality of the water can be determined by carefully examining the insects that live in the stream. These insects are also known as benthic macroinvertebrates. Stoneflies (Plecoptera), mayflies (Ephemeroptera) and caddisflies (Trichoptera) are very sensitive to water pollution so you will only find these benthic macroinvertebrates in areas where the water is clean. Due to the area where this ephemeral stream is located, this water is not good for drinking.

## BOTTOMLAND DECOMPOSITION

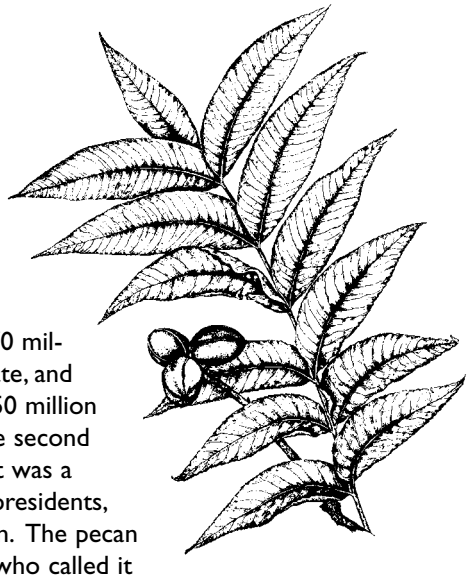
**TRAIL NUMBER:** 25

Decomposition is a very vital part of bottomland ecology. Snags, which are dead trees, and fallen logs are home to many organisms, some that can't even be seen by the naked eye. These microorganisms break down the litter on the forest floor, replenishing the nutrients in the soil. Besides being home to microorganisms, they also provide shelter for small animals. This is why firewood should not be collected in the park.

# PECAN

*Carya illinoinensis*

**TRAIL NUMBER:** 26



The United States is the only place in the world where the pecan tree grows naturally. It is so popular in Texas that it was named the state tree in 1919 by the Texas Legislature. Today there are over 70 million wild pecan trees in the Lone Star State, and the United States produces more than 350 million pounds of pecans yearly. The pecan is the second most popular nut following the peanut. It was a favorite treat among two of our famous presidents, Thomas Jefferson and George Washington. The pecan got its name from the Algonquin Indians who called it *paccan* or *pakan,* meaning "all nuts requiring a stone to crack." It was of great importance to the Native Americans because of its high fat content and high nutritional values. Native Americans made a creamy milk from the pecan by crushing the nut into small pieces and placing them into boiling water. This pecan milk is very similar to one of our vitamin enriched energy drinks today. The pecan is used in many Southern recipes including the famous pecan pie! No one knows for sure where the pecan pie originated, but it is said that the wife of one of the Karo Corn Syrup company's executives developed the recipe to help market the product. The great thing about the pecan is it can be prepared in many different ways: raw, chopped, roasted and cooked in a variety of mouth-watering Southern dishes. The meat, or the edible part of the nut, is packed with 19 different vitamins and minerals that make the pecan a healthy snack. However, the pecan is used for more than just a food source. When the pecan shell is crushed it is used to polish metal, wood and jewelry. It is even used in some facial cleansing cosmetics.

# PECAN FLATS

**TRAIL NUMBER:** 27

Sit down and enjoy the cool shade that these aged pecan trees offer. Imagine the events that have taken place since these trees have been here, from the last Native American battle at Packsaddle Mountain to the creation of Inks Lake State Park. These revered trees have provided shelter and sustenance for native wildlife for many years. They are also a favorite snack among campers and hikers in the fall. Take some time to enjoy this unique and beautiful part of Inks Lake State Park.

## BLACK HICKORY

*Carya texana*

**TRAIL NUMBER:** 28

The black hickory is the only species of hickory that reaches this far west. Inks Lake State Park is just outside of its natural range, making this tree very unique. Black Hickory cannot grow in the shade and must have moist soil. The area that you are standing in is considered a bottomland, meaning that it is in an area that is lower and receives and holds rainfall from the higher ground making this the perfect home for this tree. The black hickory nut is edible and can be eaten raw or cooked. The nut itself is very small and the shell is very thick. The seed or nut becomes ripe in late autumn.

## AGARITA

*Berberis trifoliolata*

**TRAIL NUMBER:** 34

This evergreen, small sprawling shrub is very common in the Hill Country. The stiff and pointy leaves resemble that of a holly. The agarita is very tolerant to heat and drought. It produces bright yellow flowers in the spring, followed by clumps of tiny red berries. Agarita berries are a favorite food source among the birds. Many Texans look forward to making a delicious jelly from the berries each year.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