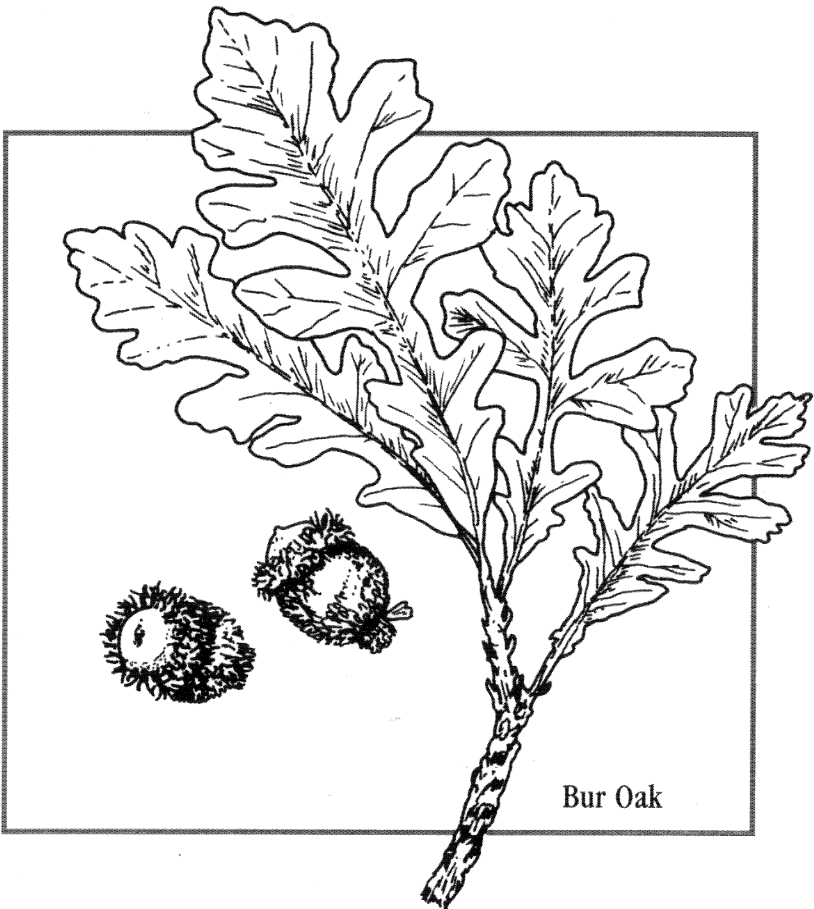


TEXAS PARKS AND WILDLIFE

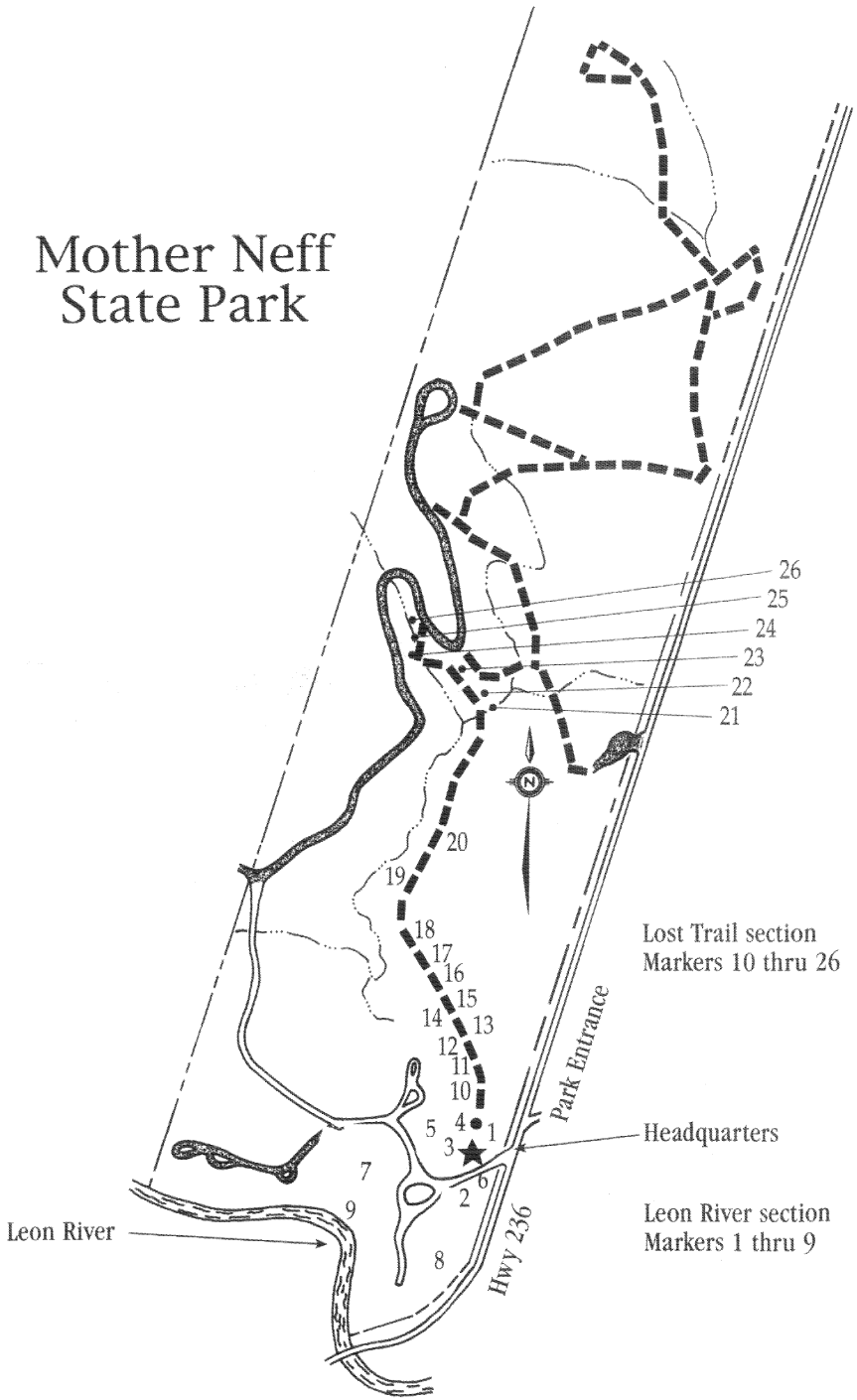
MOTHER NEFF STATE PARK

TREE GUIDE



Bur Oak

Mother Neff State Park



Leon River

Hwy 236

Park Entrance

Lost Trail section
Markers 10 thru 26

Headquarters

Leon River section
Markers 1 thru 9

- 26
- 25
- 24
- 23
- 22
- 21

- 19
- 18
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- 16
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- 14
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- 3
- 2

Introduction

Mother Neff State Park occupies 259 acres in southeastern Coryell County along the floodplain and escarpment of the Leon River. The park lies with the Lampassas Cut-Plain subregion of the Edwards Plateau Natural Region. Elevation ranges from approximately 610 feet along the bottomlands to 790 feet on the uplands.

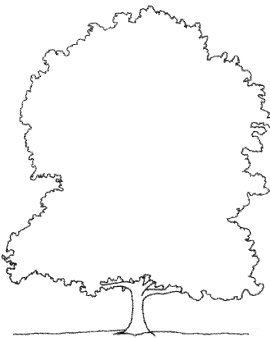
Four general plant community types can be recognized within the park boundary:

1. Bottomland hardwood forest of sugarberry and elm where bur oak and pecan also are conspicuous elements;
2. Mixed evergreen and deciduous escarpment forest where Texas oak dominates;
3. Evergreen low forest of Ashe juniper and plateau liveoak; and,
4. Rolling uplands which support mid-grass grasslands dominated by sideoats grama and little bluestem.

This booklet supports a self guided tour of the major habitats of Mother Neff State Park. It identifies some of the more conspicuous trees found within the park boundary. It is intended as a tree guide, however some perennial herbs and a few shrub species have been included because of their notable presence along the Lost Trail. Spanish names have been included in [*Italics*] where known.

This booklet will hopefully enhance the visitor's knowledge and appreciation of the park's natural resources and encourage support for the department's commitment to preserve areas such as this for all to enjoy.

Our acknowledgment and thanks go out to Dr. Walter Holmes of Baylor University, Biology Department for his assistance in providing information for this booklet.



Bur Oak



Carolina Buckthorn



Cedar Elm

The guide is divided into two sections:

- The **Leon River** section is located in the developed public facility area of the park and provides easiest access to some of the trees. Markers 1 through 9.
- The **Lost Trail** section encompasses approximately .5 miles of easy to moderate walking beginning at the trailhead and ending near the cave entrance. Markers 10 through 26.

The Leon River Floodplain

One hundred percent of the developed area of the park lies within the 10 year Corps of Engineers flood easement. Minor periodic flooding is normal during the spring as heavy rains cause the Leon River to crest its banks and, on occasion, force total closure of the park. Rich well-developed soils created by this periodic over-the-bank flooding support the bottomland hardwood forest. However, a major flood event occurred in the winter and spring of 1992 when the park remained closed for approximately 18 months. Water levels reached a record height of 634.36 feet elevation. During this period, park rangers operating from a boat measured water depth near the rock tabernacle at 23 feet. Most water-tolerant trees such as Pecan, Bur Oak and Cedar Elm survived the flood but less water-tolerant trees such as Hackberry and Ashe Juniper did not. After the floodwaters receded many of the dead trees were cut down due to safety concerns. Evidence of this can be seen throughout the river bottom area and lower slopes of the Lost Trail.



2 Mexican Buckeye



Live Oak



Mexican Plum

Beginning of Leon River section

1. Gum Bumelia.

(*Sideroxylum lanuginosa*) Sapodilla Family. [*Coma*]. Gum Bumelia is normally a small tree that may grow to 50 feet tall. The branches possess small thorns, while all parts of the plant contain a sticky white sap. Leaves are woolly on the lower surfaces. The tree produces small white flowers that eventually turn into bluish-black fruits about one-fourth of an inch in diameter. Fruits are relished by birds, especially doves. Gum Bumelia is a common tree of Central Texas. The sapodilla family yields such useful products as *chicle*, which is used in making chewing gum.



2. Cedar Elm.

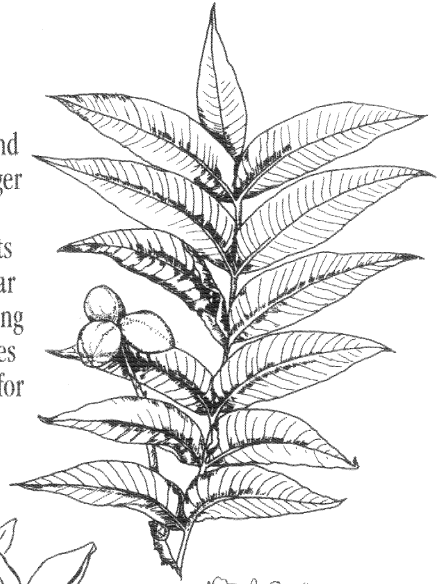
(*Ulmus crassifolia*) Elm Family. [*Olmo*]. This common tree of Central Texas may grow to 75 feet or more tall. The twigs often have corky wings. Leaves are usually about an inch long and about half as wide. Leaf margins (edges) are sharply serrate (saw-toothed), while the bases of the leaf blades are uneven. Unlike other elms that flower in the spring, this species flowers in the autumn. Flowers soon turn into wafer-like fruits that possess a membranous wing around the edge. The species is widely used as an ornamental.



3. Pecan.

(*Carya illinoensis*) Walnut Family. [*Nogal Morador* or *Nuez Encarcelada*].

Pecan is one of the largest of the hickories and may attain a height of 150 feet or more. Larger trees, as does this specimen, possess massive trunks. Leaves are compound with the leaflets being falcate (curved). The fruit is the familiar pecan that is borne in a hard, husk-like covering that splits lengthwise into 4 parts. The species is a native of Texas that is widely cultivated for its nuts. It is also the state tree of Texas.

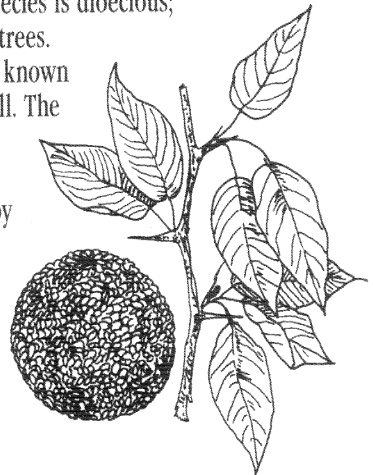


4. Osage Orange.

(*Maclura pomifera*) Mulberry Family. [*Naranjo Chino*].

This is usually a small tree that may grow to 60 feet tall. The sap is milky and the branches usually bear small, stout thorns. The species is dioecious; i.e., has male and female flowers borne on different trees.

Only the female trees produce the large, green fruits known as hedge-apples, which are about the size of a softball. The tree is often used as a "living" fence post. The wood is exceptionally hard and durable. The name Osage Orange reportedly comes from the use of the roots by the Osage Indians in making an orange dye. Hedge-apples can reputedly be used as a roach repellent. The tree is also known as horse-apple, bois d'arc (French for bow-wood), and, through corruption of the French, bodock.



5. Eastern Cottonwood.

(*Populus deltoides*) Willow Family. [Alamo].

Eastern Cottonwood is a fast growing tree that may attain a height of 100 feet. The wood is soft, weak, and of little commercial value. The triangular shaped leaves have petioles (stalks) that are flattened near the blade, which causes the leaf blades to be displayed in a vertical manner rather than horizontally as do most other trees. The name of the most cherished historical site in Texas, the Alamo, is from the Spanish name for this tree.



6. Texas Ash.

(*Fraxinus texensis*) Olive Family. [Fresno].

Texas Ash is generally a small tree that may grow to 50 feet tall.

It is characterized by opposite, compound leaves. Male and female flowers occur on separate trees. Female

plants produce a winged fruit known as a

samara that are scattered by wind.

Many botanists consider Texas Ash

to be the same as American Ash,

in which case the correct botanical

name would be *Fraxinus*

americana. White Ash occurs

throughout eastern North

America. It is used as an

ornamental, but its most

notable use is in making

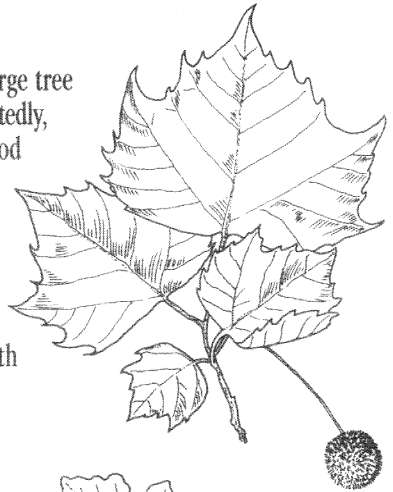
wooden baseball bats.



7. Sycamore.

(*Platanus occidentalis*).

Plane-Tree Family. Sycamore is, at maturity, a large tree that can often grow to 150 feet or more tall. Reportedly, it can attain the largest diameter of any hardwood tree in eastern North America. The species is characterized by its smooth bark that is mottled brown, white, and buff. Fruits are borne in a pendant ball. In England, sycamore is the name of the maple, while what we call sycamore is called plane-tree. That's one of the problems with common names.



8. Bur Oak.

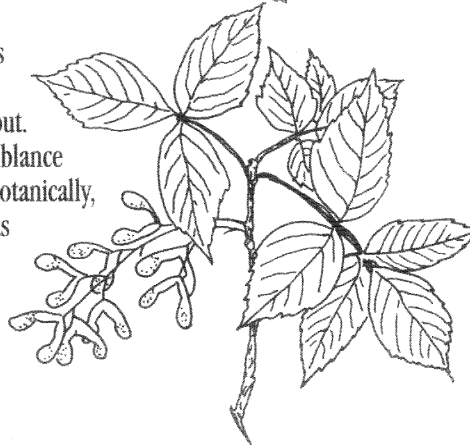
(*Quercus macrocarpa*) Beech family. [*Encino*]. This is a large tree with lobed leaves. The park has some of the finest and largest specimens known. The tree is best identified by its very large acorns that may be 1-2 inches long. The specific name, *macrocarpa*, means "large fruit."



9. Box Elder.

(*Acer negundo*) Maple Family. [*Arce*].

Box elder is a small tree that usually has twigs that are green and smooth. Leaves are compound and opposite. The trees flower before leafing out. The fruit is often called a "key" from its resemblance to a key used to wind an old-fashioned clock. Botanically, the fruit is a schizocarp, in this case, two fruits joined together, each with an elongated and flattened wing for wind dispersal. The species is quick growing and widespread in Central Texas. Occasionally, it is used as an ornamental.



10. Hackberry.

(*Celtis laevigata*) Elm Family. [*Palo blanco*]. This common tree of Central Texas is easily recognized by its bark that is covered with warty (but not sharp) knobs. Leaves usually have smooth margins while the bases are asymmetrical. The fruit is a drupe (like cherries or plums), which is pale orange-reddish and slightly sweet when mature and has a thin layer of sweet pulp enclosing a hard stone. The tree is sometimes called sugarberry.



11. Rattan Vine.

(*Berchemia scandens*) Buckthorn Family. Rattan Vine is a woody, high-climbing vine with stems usually 1-2 inches in diameter at maturity. Leaves are elliptical in shape and have a very prominent herringbone pattern of veins. The fruit is slightly less than one-fourth inch in diameter and black when ripe. This vine is also known as supplejack. It is not the rattan used to make furniture, that being a member of the palm family.



12. Deciduous Holly.

(*Ilex decidua*) Holly Family. This is a shrub to small tree that may attain a height of about 30 feet under optimum conditions. Plants are dioecious, i.e., female and male flowers are borne on different trees. In winter, the plant sheds its leaves, hence the common name. Female trees bear small red fruits that serve well for Christmas decorations, earning the plant the name of winterberry.



13. Greenbrier.

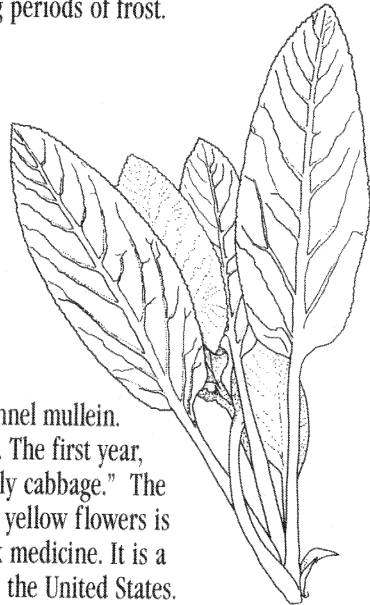
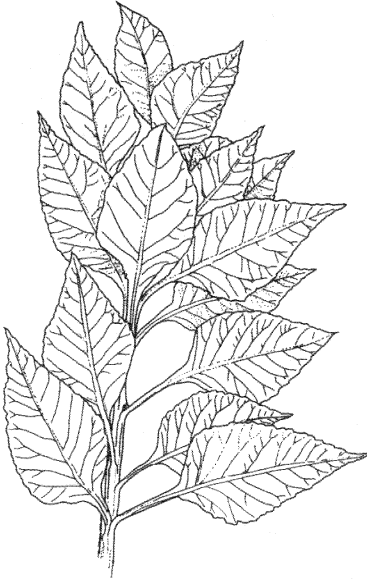
(*Smilax bona-nox*) Greenbrier Family.
[Zarzaparrilla].

This greenbrier is usually a sprawling vine, although it may also be a high climber at times, supporting itself by means of tendrils. The stems typically have a zigzag growth pattern and possess numerous sharp prickles with black points. Only the female plants produce rounded clusters of black berries. Each berry has a small stone that is covered by an elastic layer that stretches when pulled and returns to its original shape when released. This has resulted in the plant being known commonly as stretchberry.



14. Wingstem.

(*Verbesina virginica*) Sunflower Family.
Wingstem is a herb named for its stem that possesses 3-5 narrow wings. In late summer and autumn, clusters of white flowers are produced. The species is also known as frostweed from the contorted ice crystals that originate from the overwintering roots during periods of frost.



15. Turkey Mullien.

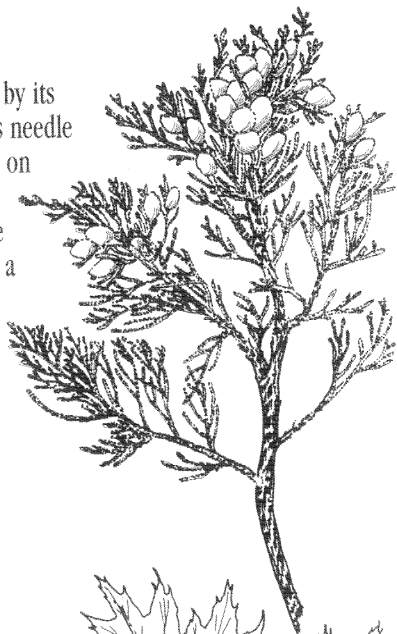
(*Verbascum thapsus*) Figwort Family.

This woolly coated plant is also known as flannel mullein. Being a biennial, it takes two years to flower. The first year, the plant resembles what looks like a "woolly cabbage." The second year, a stalk that produces numerous yellow flowers is sent up. The plant has numerous uses in folk medicine. It is a native of Europe that is widely introduced in the United States.

16. Ashe Juniper.

(*Juniperus ashei*) Cypress Family.

Ashe juniper is an evergreen tree characterized by its small, scalelike leaves. New growth may possess needle shaped leaves. Male and female sexes are borne on separate plants, with the females producing small berrylike fruits. Its primary use is to make fence posts. The shredded bark can be used as a "fire starter." Most junipers are incorrectly called cedars, and, as is this one, the male tree is a major contributor to allergy in humans. The tree is also known as mountain cedar.



17. Buckley Oak or Texas Oak.

(*Quercus buckleyi*) Beech Family. [*Encino*].

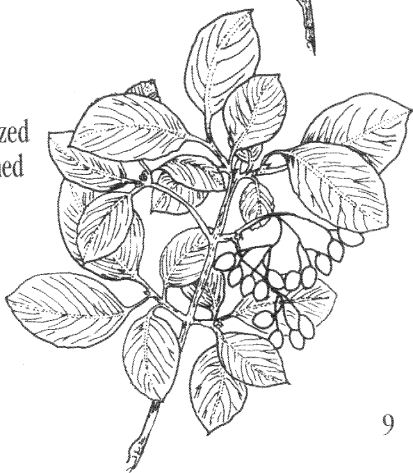
The short, squat leaves with bristle tips show that this tree is a member of the red oak group. It is one of the favored ornamental oaks of the Central Texas area. In fall, the leaves turn a bright red, if the right conditions are present. The tree is, however, subject to oak leaf wilt, a disease that usually kills the tree.



18. Rusty Blackhaw.

(*Viburnum rufidulum*) Honeysuckle Family.

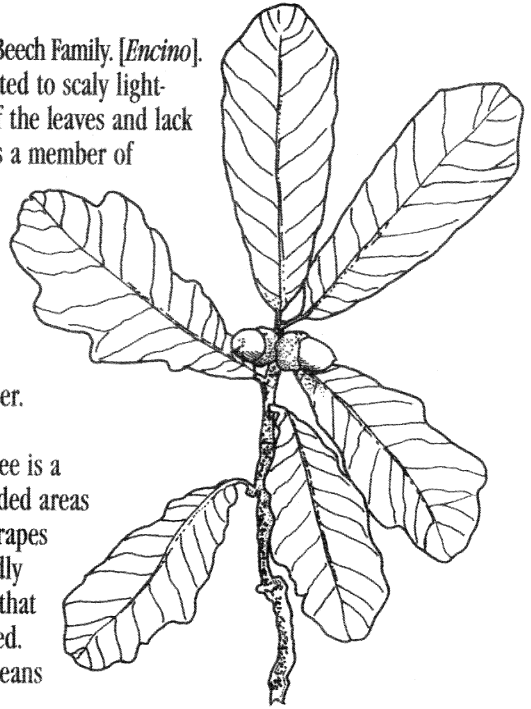
Rusty blackhaw is a small tree that is recognized by its opposite leaves that have finely saw-toothed margins. In spring, the plant produces fairly large clusters of small white flowers. These turn into bluish-black fruits, which are edible and taste similar to raisins. The tree is also known as southern blackhaw.



19. Scaly White Bark Oak.

(with grapevine) (*Quercus sinuata*) Beech Family. [Encino].

This oak is distinguished by its plated to scaly light-colored bark. The rounded lobes of the leaves and lack of bristle tips show that this tree is a member of the white oak group. It is a common tree on limestone ridges and similar areas of the Central Texas area. Most of the trees of the park are relatively small, but elsewhere the tree may produce a trunk approaching 2 feet in diameter.

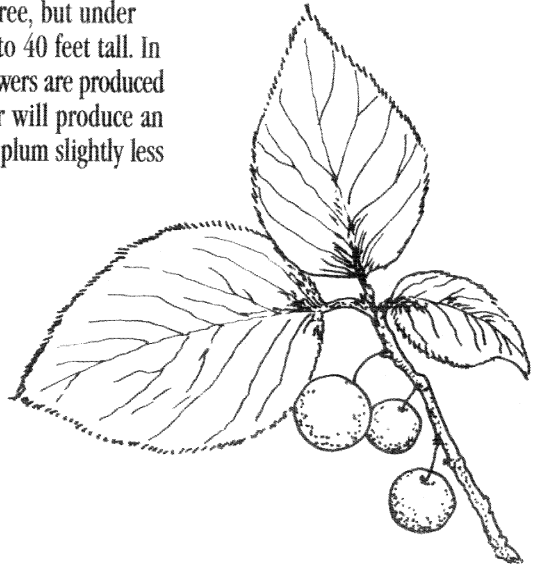


The grape vine (*Vitis sp*) on this tree is a common climbing vine in low, wooded areas of Central Texas. The fruits of all grapes are edible, but some have a decidedly musty flavor or may carry a fungus that can cause tortuous itching if handled. The vines support themselves by means of tendrils.

20. Mexican Plum.

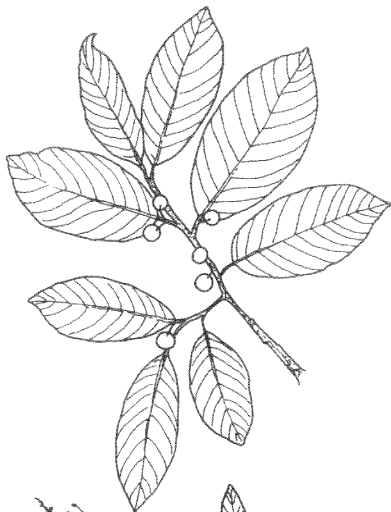
(*Prunus mexicana*) (Rose Family).

This plum is normally a small tree, but under optimum conditions may grow to 40 feet tall. In spring, small clusters of white flowers are produced prior to leafing out. Each flower will produce an edible yellow to reddish colored plum slightly less than 1 inch in diameter.



21. Carolina Buckthorn.

(*Frangula caroliniana*) Buckthorn Family.
Carolina buckthorn is a small tree that is distinguished by its elliptical leaves with a very prominent herringbone pattern of veins. It is a near relative of the rattan vine discussed above. The tree produces a small, black berry. The scientific name of the tree was formerly *Rhamnus caroliniana*. The plant is widely distributed in Central Texas.



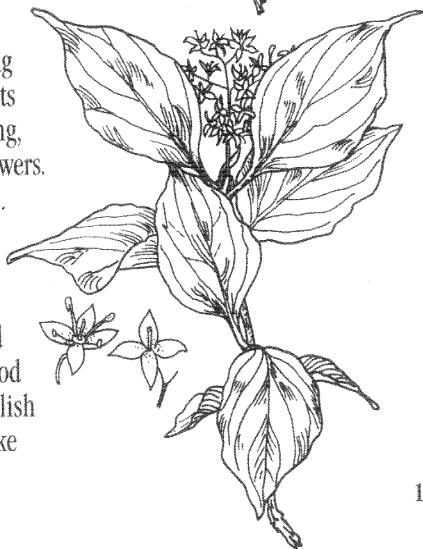
22. Evergreen Sumac.

(*Rhus virens*) Sumac Family. [*Lentico*].
This shrub is a nontoxic relative of poison ivy. This particular plant is near the extreme eastern part of its distribution. Further west, it is a common plant of limestone ridges and slopes. Leaves are compound, possess 5-9 leaflets, and are evergreen, hence the name.



23. Rough Leaf Dogwood.

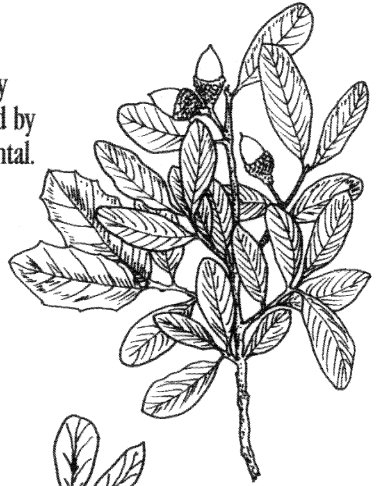
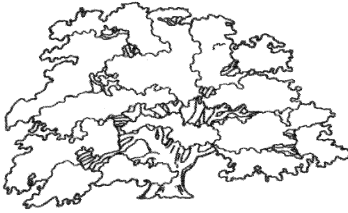
(*Cornus drummondii*) Dogwood Family.
The opposite leaves with the major veins being arched from the base to the tip are good traits that distinguish this small tree. In the spring, the plant produces clusters of small white flowers. These mature into small white, pulpy fruits. It is a near relative of the flowering dogwood, a plant limited to acid soils. This dogwood is named to honor Thomas Drummond, a Scottish botanist who collected plants in Texas in 1833-34. The name dogwood is thought to have originated from the English 'dagger' because the wood was used to make wooden daggers.



24. Live Oak.

(*Quercus fusiformis*) Beech Family. [*Encino*].

Live oak is a common plant of dry hills and rocky slopes in much of Central Texas. It is characterized by its evergreen leaves. It is much used as an ornamental.



25. Texas Persimmon.

(*Diospyros texana*) Ebony Family. [*Chapote*].

Texas persimmon is a shrub to small tree. The bark is smooth and greatly resembles that of a crepe myrtle. Leaves are spatulate in shape and have the edges turned under. Only the female plants produce fruits that are almost 1 inch in diameter and, when ripe, are black, sweet, hairy, and tasty. The plant occurs along rocky slopes from Central Texas westward.



26. Mexican Buckeye.

(*Ungnadia speciosa*) Soapberry Family. [*Monilla*].

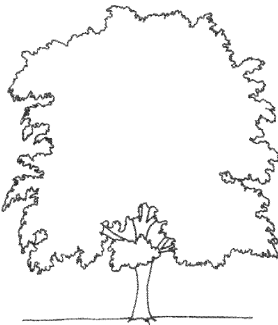
Mexican buckeye is a shrub or small tree may grow to about 30 feet tall. Leaves are compound. In spring, the plant produces clusters of small pink flowers that are suggestive of red bud. The fruit is a 3-lobed pod containing three marble sized blackish seeds that are poisonous. Mexican buckeye is a common plant from Central Texas westward. It is used as an ornamental in Arizona, where it is not native. It would make an interesting and carefree planting in limestone areas of Central Texas.



Texas State Park Rule

59.134 IT IS AN OFFENSE TO:

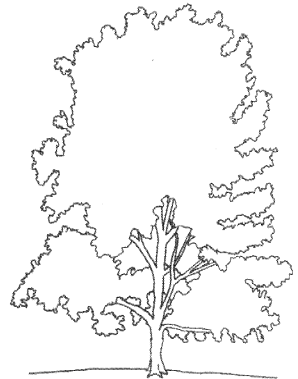
(c) Willfully mutilate, injure, destroy, pick, cut, or remove any plant life except by the permit issued by the director.



Pecan



Texas Persimmon



Texas Sycamore



Web site: www.tpwd.state.tx.us

Mother Neff State Park
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Moody, Texas 76557-3317

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