

SPRING LAKE POCKET FIELD GUIDE

The flora and fauna of Spring Lake
in San Marcos, Texas



THE MEADOWS CENTER
FOR WATER AND THE ENVIRONMENT
TEXAS STATE UNIVERSITY

SPRING LAKE POCKET FIELD GUIDE

The flora and fauna of Spring Lake
in San Marcos, Texas

Authors: Miranda Wait

Sam Massey

Design: Dyhanara Rios

Editor: Anna Huff



THE MEADOWS CENTER
FOR WATER AND THE ENVIRONMENT

TEXAS STATE UNIVERSITY

ACKNOWLEDGEMENTS

THE COMPLETION OF THIS FIELD GUIDE COULD NOT HAVE BEEN possible without the participation and assistance of many people at The Meadows Center, especially Miranda Wait for her valuable information on species at Spring Lake, Sam Massey for his amazing photos, Dyhanara Rios for her skilled design work and Anna Huff for coordinating the project. Their contributions are sincerely appreciated and gratefully acknowledged. Furthermore, the group would like to express their deep appreciation and gratitude particularly to the following:

To Cody Ackermann and Ivey Kaiser, and the REI Outdoor School for the opportunity to create this field guide through the Explore Spring Lake Connector Trail Rehabilitation Project Grant. Your ideas, input and enthusiasm were most helpful and have assisted us in making this a valuable resource for all who visit Spring Lake.

To Dr. David Lemke of the Texas State University Biology Department for sharing his insightful knowledge with us and for his time in reviewing this guide to ensure its accuracy.



TABLE OF CONTENTS

Acknowledgements.....v

Introduction.....viii

How To Use This Guide.....ix

AMPHIBIANS 1

Texas Blind Salamander.....2

San Marcos Salamander.....2

Blanchard's Cricket Frog.....3

Green Treefrog.....3

Rio Grande Leopard Frog.....4

American Bullfrog.....4

Gulf Coast Toad.....5

BIRDS 6

American Coot.....7

Gadwall.....7

Belted Kingfisher.....8

Neotropic Cormorant.....8

Yellow-Crowned Night Heron.....9

Great Blue Heron.....9

Green Heron.....10

Great Egret.....10

Cattle Egret.....11

Barn Swallow.....12

Black-crested Titmouse.....12

Carolina Wren.....13

Eastern Phoebe.....14

Scissor-Tailed Flycatcher.....14

Carolina Chickadee.....15

Yellow-Rumped Warbler.....15

Western Kingbird.....16

Northern Cardinal.....16

Northern Mockingbird.....17

Black-Chinned Hummingbird.....17

Golden-Fronted Woodpecker.....18

Osprey.....18

Red-Shouldered Hawk.....19

Turkey Vulture.....19

Black Vulture.....20

MAMMALS 21

Brazilian Free-Tailed bat.....22

Common Raccoon.....23

Ringtail.....23

Striped Skunk.....24

White-Tailed Deer.....25

Nutria.....25

North American Beaver.....26

REPTILES 27

Green Anole.....28

Mediterranean Gecko.....28

Texas Spiny Lizard.....29

Ground Skink.....29

Eastern Six-Lined Racerunner.....30

Red-Eared Slider.....30

Texas River Cooter.....31

Common Snapping Turtle.....32

Guadalupe Spiny Softshell Turtle.....32

Florida Red-Bellied Cooter.....33

Blotched Water Snake.....33

Diamondback Water Snake.....34

Texas Rat Snake.....34

Texas Garter Snake.....35

Western Cottonmouth.....35

Texas Coral Snake.....36

AQUATIC PLANTS 37

Fanwort	38
Hornwort	38
Arrowhead	39
East Indian Hygrophila	39
Eurasian Watermilfoil	40
Cattail	40
Texas Wild rice	41
Two-Leaved Milfoil	41
Red Ludwigia	42
Marsh Pennywort	42
Yellow Cow Lilly	43
Water Lettuce	43

GRASSES 44

Broadleaf Woodoats	45
Silver Bluestem	45
Johnson Grass	46
Plains Lovegrass	46
Sideoats Grama	47
White Tridens	47
Canada Wildrye	48
Switch Grass	48

TREES 49

Bald Cypress	50
Montezuma Cypress	50
Pecan Tree	51
Live Oak	51
Anacua	52
Cedar Elm	52
Bigtooth Maple	53
Texas Mountain Laurel	53
Bur Oak	54
Mexican Plum	54

Black Willow	55
Box Elder	55
Flameleaf Sumac	56
Chinkapin Oak	56
Green Ash	57
Cottonwood	57

SHRUBS AND VINES 58

Turks Cap	59
Yaupon Holly	59
Dwarf Palmetto	60
Common Buttonbush	60
American Beautyberry	61
Elderberry	61
Ball moss	62
Poison Ivy	62
Cenizo	63
Trumpet Creeper	63
Peppervine	64
Virginia Creeper	64

WILDFLOWERS 65

Tall Goldenrod	66
Lemon Beebalm	66
Horse Herb	67
Mexican Hat	67
Clasping Coneflower	68
Texas Thistle	68
Marsh Fleabane	69
White Boneset	69

INTRODUCTION


DECLARED A "CRITICAL HABITAT" IN 1980, SPRING LAKE IS HOME to eight federally listed species. Spring Lake gives life to the San Marcos River, to San Marcos and downstream communities, and to The Meadows Center for Water and the Environment at Texas State University.

The San Marcos Springs, which bubble up from the Edwards Aquifer to fill Spring Lake, are the second largest spring systems in Texas. They have never stopped flowing in recorded history and have more environmental stability and flow of any spring system in the southwestern United States. As stewards, The Meadows Center is dedicated to protecting, preserving and sharing its abundant natural, historical, and cultural history with all who visit Spring Lake.

The Spring Lake Pocket Field Guide provides information for more than 110 species found at Spring Lake, including amphibians, reptiles, mammals, birds, trees, shrubs and vines, wildflowers and aquatic plants! Weatherproof for durability, this handy guide is a great source of portable information and ideal for field use by novices and experts alike.

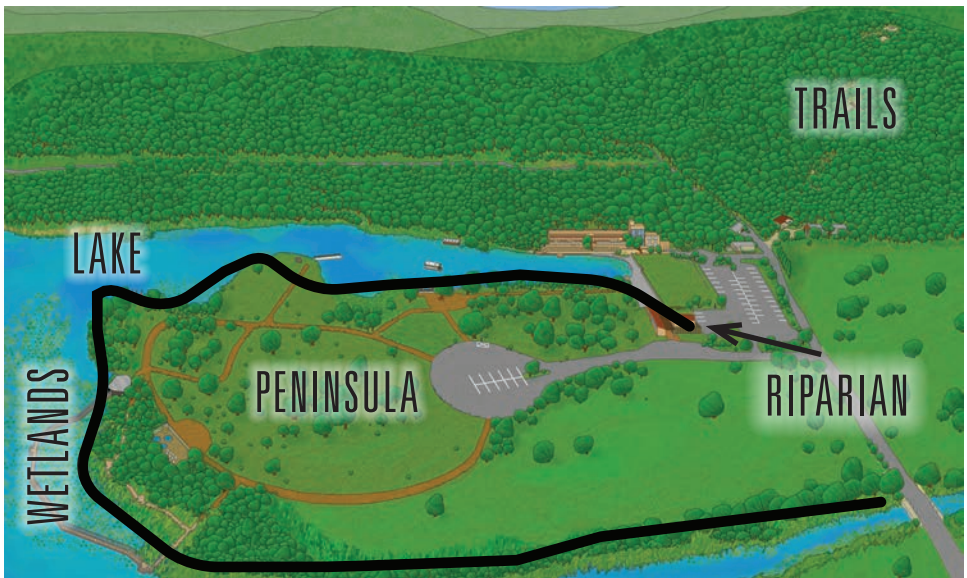
We hope readers will use this book as a way of introduction to some of the many species of the Spring Lake habitat that define the unique beauty of this place.

HOW TO USE THIS GUIDE

	COMMON NAME	SCIENTIFIC NAME	PICTURE
SPECIES INFORMATION	TEXAS BLIND SALAMANDER <i>Eurycea nathbuni</i> (endangered)		
	<p>Description: White because it has little skin pigment, no developed eyes, only two black spots which are vestigial eyes. They have red gills where they get oxygen from water.</p> <p>Habitat: Water-filled caves of the Edwards's Aquifer.</p> <p>Range: Lives only in the Edwards Aquifer underneath San Marcos, Texas.</p> <p>Additional Information: Feeds on small snails, shrimp, and invertebrates that live in the aquifer. They were listed as endangered in 1970, when the Endangered Species Act was first created because of its dependence on the clean, cool water from the Edwards Aquifer.</p>		

WHERE YOU CAN FIND THEM AT SPRING LAKE

LOCATIONS





AMPHIBIANS



Amphibians of Spring Lake

Texas Blind Salamander

San Marcos Salamander

Blanchard's Cricket Frog

Green Treefrog

Rio Grande Leopard Frog

American Bullfrog

Gulf Coast Toad

TEXAS BLIND SALAMANDER

Eurycea rathbuni (endangered)

Description: White because it has little skin pigment, no developed eyes, only two black spots which are vestigial eyes. They have red gills where they get oxygen from water.

Habitat: Water-filled caves of the Edwards's Aquifer.

Range: Lives only in the Edwards Aquifer underneath San Marcos, Texas.

Additional Information: Feeds on small snails, shrimp, and invertebrates that live in the aquifer. They were listed as endangered in 1970, when the Endangered Species Act was first created because of its dependence on the clean, cool water from the Edwards Aquifer.



RIPARIAN TRAILS WETLANDS PENINSULA LAKE

SAN MARCOS SALAMANDER

Eurycea nana (threatened)

Description: Dark, reddish-brown salamander with red gills, up to 2" in length.

Habitat: Found in the rocky substrate of Spring Lake and the upper portion of the San Marcos River.

Range: It is found only in San Marcos, Texas.

Additional Information: It eats tiny aquatic insects and crustaceans. This salamander is dependent on the clean, cool flowing water of the Edwards Aquifer that supplies Spring Lake. Reduced flow of this water from over pumping is the biggest threat this species faces.



RIPARIAN TRAILS WETLANDS PENINSULA LAKE

BLANCHARD'S CRICKET FROG

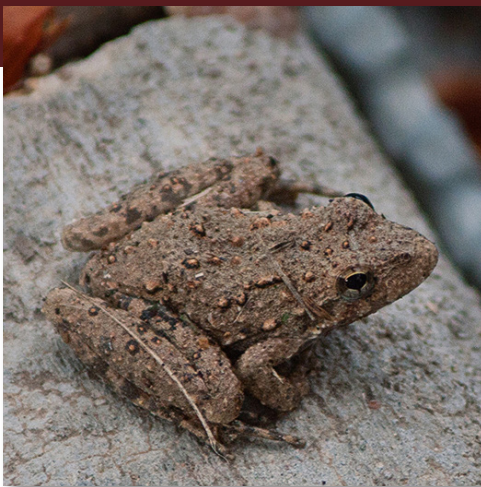
Acris crepitans blanchardi

Description: They are small, growing up to 1.5" in length and have warty skin that is brown or gray, with darker bands of color on their legs.

Habitat: Inhabit slow moving or stagnant bodies of water.

Range: Found throughout the midwestern states.

Additional Information: They feed on small insects. The males have a metallic clicking sound, which is distinctive to the species. Although it is not federally threatened, it is a species at risk in several states.



RIPARIAN TRAILS WETLANDS PENINSULA LAKE

GREEN TREEFROG

Hyla cinerea

Range: From central Texas to southeastern United States.

Description: Up to 2.5" in length. Green with a white or cream colored line that runs on each side of the body from the jaw to the groin.

Habitat: Prefer habitats with lots of vegetation and are found near bodies of water.

Additional Information: Insectivores, eating small insects and they prefer to choose prey by its activity level, not size. It is the state amphibian of Georgia and Louisiana. From long distance, their call can sound like a cowbell. Up close, it sounds like "quank-quank."



RIPARIAN TRAILS WETLANDS PENINSULA LAKE

RIO GRANDE LEOPARD FROG

Lithobates berlandieri

Description: Up to 2.2-4.5" in length and tan, brown, or pale green in color with distinct black spotting and prominent light stripes down the sides of the body.

Habitat: Permanent water sources, despite being found in a semi-arid range.

Range: Southern US in Texas and New Mexico, and south through Mexico and Central America.

Additional Information: They are insectivorous and will eat almost anything that it can overpower and swallow. The male's mating calls can be heard up to a mile away.



RIPARIAN TRAILS **WETLANDS** PENINSULA LAKE

AMERICAN BULLFROG

Lithobates catesbeianus

Description: Up to 3.6 - 6" in length and olive-green colored.

Habitat: Found in freshwater ponds, lakes, and marshes.

Range: Native to eastern North America, but found to be naturalized in California, Colorado, California, and Hawaii.

Additional Information: They are insectivorous, opportunistic ambush predators and will eat anything they can fit in their mouths, including rodents, small reptiles, amphibians, crayfish, birds, bats, and bugs. They get their name from their call that is reminiscent of the roar of a bull. Bullfrogs are able to jump distances 10 times their body length.



RIPARIAN TRAILS **WETLANDS** PENINSULA LAKE

GULF COAST TOAD

Incilius nebulifer

Description: Up to 4" in length, with a dark lateral stripe on their side down to the center of their back, and a deep groove on their head that goes into a "V" shape.

Habitat: Urban areas near roadside ditches, landscaping, sewers, and meter boxes. Also found around ponds, wetlands, and other bodies of water.

Range: From central to east Texas, down into Mexico.

Additional Information: This toad is an opportunistic carnivore that will eat almost any small insect that it can swallow. Their parotid gland, the triangle wart shaped structure behind the eye, can secrete a toxin that scares off attackers.



RIPARIAN

TRAILS WETLANDS PENINSULA LAKE

DID YOU KNOW?



Amphibians are important to an ecosystem. Not only do they have a significant part in the food chain, they are also important bioindicators. Because of their sensitive nature, they can indicate slight changes in their environment including anthropogenic activities, habitat fragmentation, pesticides, and ecosystem stress.



BIRDS



Birds of Spring Lake

American Coot

Gadwall

Belted Kingfisher

Neotropic Cormorant

*Yellow-Crowned Night
Heron*

Great Blue Heron

Green Heron

Great Egret

Snowy Egret

Cattle Egret

Barn Swallow

Black-Crested Titmouse

Carolina Wren

Bewick's Wren

Eastern Phoebe

Scissor-Tailed Flycatcher

Carolina Chickadee

Yellow-Rumped Warbler

Western Kingbird

Northern Cardinal

Northern Mockingbird

*Black-Chinned
Hummingbird*

*Golden-Fronted
Woodpecker*

Osprey

Red-Shouldered Hawk

Turkey Vulture

Black Vulture

AMERICAN COOT

Fulica americana

Description: 15" in length. Gray, duck-like bird with a white bill, frontal shield and lobed toes.

Habitat: Open ponds and marshes. In the winter, they also live on coastal bays and inlets.

Range: Breeds from British Columbia, western Canada, and New York locally southward. They winter north to British Columbia, Kansas, Illinois, and Massachusetts. Also found in the American tropics.

Additional Information: Coots feed by diving to the bottom of the water, eating off the surface, grazing on land, or by stealing food from other aquatic birds. They are heavy birds that must patter over the water before they can become airborne.

Voice: A variety of clucks, cackles, grunts, and other harsh notes.



RIPARIAN TRAILS **WETLANDS** PENINSULA LAKE

GADWALL

Anas strepera

Description: 18-21" in length. Males have a white patch on hind edge of wing, black rump, and sandy brown head. Females are mottled brown with a white patch on hind edge of wing.

Habitat: Fresh water marshes, ponds, and rivers.

Range: Breeds from southern Alaska, British Columbia, and Minnesota south to California and western Texas.

Additional Information: This species has the widest range of any duck. It is a dabbling duck, meaning that it feeds by tipping forwards, so that the tail sticks up as it reaches for plants along the bottom.

Voice: They utter a duck-like quack with chatters and whistles.



RIPARIAN TRAILS **WETLANDS** PENINSULA LAKE

BELTED KINGFISHER

Megaceryle alcyon

Description: 13" in length. Blue-gray above and white below with a bushy crest on top of head and a dagger-like bill. Males have a blue-gray breasted band. Females have a chestnut belly band.

Habitat: Lives by rivers, lakes, and saltwater estuaries.

Range: Breeds from Alaska eastward across southern Canada and south throughout most of the United States. They winter on the Pacific Coast, north to southeastern Alaska, throughout the south and along the Atlantic Coast.

Additional Information: Perches on limbs over water to watch for prey, usually patrolling a regular path at the same favorite exposed places. Diet is composed of fish, crayfish, crabs, salamanders, lizards, mice, and insects.

Voice: This bird has a loud, penetrating rattle that is given off during flight and when perched.



RIPARIAN **TRAILS** **WETLANDS** **PENINSULA** **LAKE**

NEOTROPIC CORMORANT

Phalacrocorax brasilianus

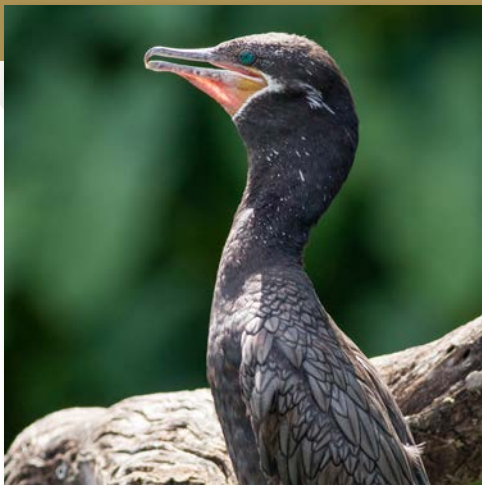
Description: 25" in length. They are a glossy black with olive coloring, with an orange throat pouch that is bordered by white.

Habitat: Brackish to freshwater.

Range: Along the Gulf Coast of Louisiana and Texas, southern New Mexico and south to southern South America.

Additional Information: This bird is a small species of cormorant. They sometimes engage in communal fishing. They are monogamous and engage in communal breeding.

Voice: Their call is a soft grunt.



RIPARIAN **TRAILS** **WETLANDS** **PENINSULA** **LAKE**

YELLOW-CROWNED NIGHT HERON

Nyctanassa violacea

Description: 22-27" in length. Slate-gray with a black head, white cheeks, a yellow crown, black bill, and yellow legs.

Habitat: Found in wooded swamps and coastal thickets.

Range: Found in the southeastern United States and along the coast of Mexico.

Additional Information: They feed primarily on crabs and crayfish, which it crushes with its short and powerful bill.

Voice: They have a loud quawk.



RIPARIAN

TRAILS

WETLANDS

PENINSULA

LAKE

GREAT BLUE HERON

Ardea herodias

Description: Stands 39-52" tall when fully grown. A large, gray heron with a pale bill. Flies with its neck folded into an "S" shape.

Habitat: Found near lakes, ponds, rivers, and marshes.

Range: Breeds from Alaska down south to the West Indies.

Additional Information: Can live in both fresh and saltwater habitats. They are able to hunt at both day and night due to their good night vision.

Voice: They have a harsh "squak."



RIPARIAN

TRAILS

WETLANDS

PENINSULA

LAKE

GREEN HERON

Butorides virescens

Description: 17” in length. Relatively short legs and thick necks that are often drawn up against their bodies. Deep green on the back with a rich chestnut breast and neck.

Habitat: Wooded ponds, marshes, rivers, reservoirs, and estuaries.

Range: Breed over a wide region from Canadian border to Gulf of Mexico, west to the Great Plains, western Texas, and southwestern New Mexico.

Additional Information: One of the world’s few tool-using bird species. It creates fishing lures with bread crusts, insects, earthworms, twigs, feathers, and other objects, dropping them on the surface of the water to attract small fish.

Voice: They have a harsh, explosive “skeow” call. When they are disturbed, they use a series of raspy clucks, “kuk-kuk-kuk-kuk.”



RIPARIAN **TRAILS** **WETLANDS** **PENINSULA** **LAKE**

GREAT EGRET

Ardea alba

Description: 35-41” in length. This is a large, white heron with a yellow bill and black legs.

Habitat: Found in fresh and salt marshes, marshy ponds, and tidal flats.

Range: Breed and winter from Oregon, south to Mexico.

Additional Information: The destruction of wetlands poses a threat to the success of this species. They are similar to the Great Blue Heron by feeding alone in shallow waters.

Voice: They have a deep croak that seems to come from the stomach.



RIPARIAN **TRAILS** **WETLANDS** **PENINSULA** **LAKE**

SNOWY EGRET

Egretta thula

Description: 22-26" in length. White plumage, black legs, yellow feet, and a black bill.

Habitat: Frequently found along coastal wetlands and estuaries.

Range: They are year round residents of southern Florida down into South America. They spend their summer months in the southern United States and winter in Mexico.

Additional Information: In the late 1800s, their plumage was highly valued and suffered major population losses until reforms were passed in the twentieth century.

Voice: They are quiet except at their breeding sites, which then they give a raspy or nasal call.



RIPARIAN TRAILS **WETLANDS** PENINSULA LAKE

CATTLE EGRET

Bubulcus ibis

Description: 35-41" in length. Short, thick-necked egret that is all white with a yellow bill and legs. During the breeding season, they have golden plumes on their heads.

Habitat: Found in pastures and fields.

Range: Year-round residents along the southern portion of the United States down into South America. They also spend their summers east of the Rockies.

Additional Information: This species is native to Africa. They follow large animals and feed on the invertebrates that are stirred up by them.

Voice: They have a raspy "rick-rack" call.



RIPARIAN TRAILS **WETLANDS** PENINSULA LAKE

BARN SWALLOW

Hirundo rustica

Description: 5 $\frac{3}{4}$ -7 $\frac{3}{4}$ " in length. Sparrow-sized bird with a deeply forked tail. Upperparts are dark steel-blue with buff underparts and a rusty throat and forehead.

Habitat: Agricultural land, suburban areas, marshes and lakeshores.

Range: Breeds from Alaska east across Canada to Newfoundland and south throughout all of the United States except southern Texas, the Gulf Coast, and peninsular Florida. They winter in the tropics and Eurasia.

Additional Information: These birds build mud nests, causing the male and female to make up to 1,000 trips collecting mud. When selecting a mate, females prefer the male with the longest, most symmetrical tail and dark red chest color.

Voice: They have a constant liquid twittering and chattering.



RIPARIAN TRAILS WETLANDS PENINSULA LAKE

BLACK-CRESTED TITMOUSE

Baeolophus atricristatus

Description: 6" in length. Gray on its back, pale gray underside and rust-brown flanks. Males have a black crest while females and immatures have a dark gray crest.

Habitat: Common wherever trees grow: deciduous, heavy timber or urban shade trees. They prefer to nest in tree cavities, telephone poles and fence posts.

Range: Found from Oklahoma and Texas, south throughout northeastern Mexico.

Additional Information: When approached by a predator, their alarm call is a loud scold that fades away causing the predator to think they are fleeing, when in reality, they are hiding nearby.

Voice: They have a one-noted song that sounds like "peter-peter-peter."



RIPARIAN TRAILS WETLANDS PENINSULA LAKE

CAROLINA WREN

Thryothorus ludovicianus

Description: 5 ½" in length. Upper body is rich brown color, buffy below, and a notable white eyebrow.

Habitat: Woodland thickets, ravines, and rocky slopes covered with brush.

Range: Resident bird in the southeastern United States, north to Wisconsin and Michigan, southern Ontario, New York, and southern New England.

Additional Information: The Carolina Wren is the state bird of South Carolina. Known for building multiple nests to confuse predators, they construct dome-shaped nests out of snake skins, hair, feathers, and other materials.

Voice: Their call is a "peup-peup-peup" or a "tew-tew-tew."



RIPARIAN TRAILS WETLANDS PENINSULA LAKE

BEWICK'S WREN

Thryomanes bewickii

Description: 5 ½" in length. Gray-brown wren with a white underside, a white eyebrow and a white tip on their fan-shaped tail.

Habitat: Thickets, brush piles, and hedgerows in farming country. Can also be found in open woodlands and scrubby areas near streams.

Range: From south British Columbia, Nebraska, southern Ontario, and southwestern Pennsylvania south to Mexico, Arkansas, and the northern gulf states.

Additional Information: This wren uses its long, narrow, slightly curved bill for scavenging on the ground and in crevices for insects. There has been a severe decline of this species in the eastern part of the United States due to the expansion of House Wrens, which are known to remove eggs from nests.

Voice: Their call is similar to the Song Sparrow. They have a loud, melodious song with a wren-like warble.



RIPARIAN TRAILS WETLANDS PENINSULA LAKE

EASTERN PHOEBE

Sayornis phoebe

Description: 7" in length. This flycatcher is a dull olive green color without wing bars or an eye ring. Their legs, feet, and bill are all black. When perched, it wags its tail.

Habitat: Open woodlands near streams; cliffs, bridges, and buildings with ledges.

Range: They breed from Canada, south to the northern edge of the Gulf states and winter from Virginia, Gulf Coast and Florida southward.

Additional Information: The Eastern Phoebe is a loner, rarely coming in contact with other phoebes. They are flycatchers, meaning they sit on perches as they look for flying insects and catch them in mid-air.

Voice: They have a clear "phoe-be" call that is repeated several times.



RIPARIAN TRAILS WETLANDS PENINSULA LAKE

SCISSOR-TAILED FLYCATCHER

Tyrannus forficatus

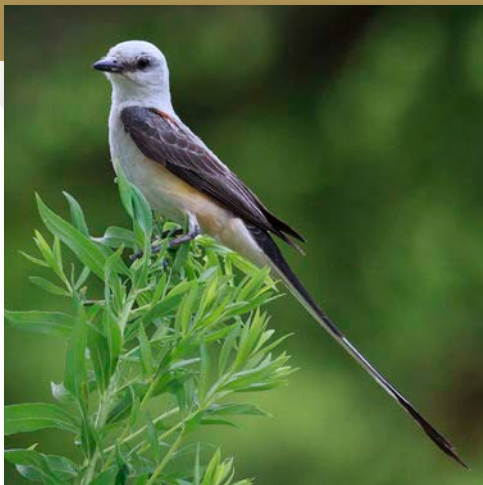
Description: They are a gray and salmon-pink flycatcher with a long, forked tail.

Habitat: They prefer open habitats, especially savannas, around utility lines and fences.

Range: Scissor-tailed flycatchers breed in the south-central US down into northern Mexico, and winter in southern Mexico and Central America.

Additional Information: Right before they migrate, this flycatcher will form roosts of up to 1,000 birds in one flock. Their tail helps them successfully catch insects while flying, allowing them to make sharp turns and twists.

Voice: Their song consists of a series of sharp notes, which usually rises in pitch and speed towards the end of the song



RIPARIAN TRAILS WETLANDS PENINSULA LAKE

CAROLINA CHICKADEE

Poecile carolinensis

Description: 4-5" in length. Gray on its back with a distinct black cap and bib, and white underparts with rust-brown flanks.

Habitat: Deciduous woodlands and residential areas.

Range: They are a resident form southeastern Kansas and central New Jersey south to Texas, Gulf Coast, and central Florida.

Additional Information: The Carolina Chickadee and the Black-capped Chickadee are very similar, causing them to be unable to coexist during the breeding season, which results in them replacing one another geographically.

Voice: This bird has a buzzy "chick-a-dee-dee" call and a 4 note song that is whistled "see-dee-see-dee."



RIPARIAN **TRAILS** **WETLANDS** **PENINSULA** LAKE

YELLOW-RUMPED WARBLER

Setophaga coronata

Description: This is a larger warbler with a large head and stout bill. They are gray with specks of white in their wings and yellow on their faces, sides, and rump.

Habitat: Found on edges and in open forests in the summer. In the fall and winter they move to open woods and shrubby habitats, including residential areas.

Range: They breed in Canada, up into Alaska and in the far west and east northern states. They winter in the lower US down into Mexico and Central America.

Additional Information: They are the only warbler that is able to digest the wax from wax myrtles and bayberries. However, they are primarily insectivorous, eating mostly flying insects, catching them from the air like flycatchers do.

Voice: The males will sing a slow, whistled warble with a mostly even pitch. Each song is 1-3 seconds long.



RIPARIAN **TRAILS** **WETLANDS** **PENINSULA** LAKE

WESTERN KINGBIRD

Tyrannus verticalis

Description: 7.9-9.4" in length. Gray head, yellow belly, with whitish chest and throat. Tail is black with white outer feathers. They have large heads with straight beaks and a square-tipped tail.

Habitat: Open habitats where they can perch on fences and utility lines. They prefer valleys and lowlands.

Range: Breed throughout the West from southern Canada, south to Mexico and east to the Great Plains. They winter in the tropics.

Additional Information: They are known as birds of the West, but they tend to wander during migration. They are mainly insectivores, and use acrobatic maneuvers to catch flying insects out of the air.

Voice: Their song consists of a rising series of "kips." They also have a call of squeaky twitters and will give a buzzing call when attacking predators or other kingbirds.



RIPARIAN TRAILS WETLANDS PENINSULA LAKE

NORTHERN CARDINAL

Cardinalis cardinalis

Description: 8-9" in length. Males are bright red with a pointed head crest, black face, and stout red bill. Females are buffy-brown with a red tinge on their crest, wings, and tail.

Habitat: They are found in woodland edges, thickets, brushy swamps, and gardens.

Range: Resident in the eastern United States, southern Canada, and south to the Gulf Coast.

Additional Information: Cardinals are an aggressive bird that occupies territories year-round. Seeds are a main part of their diet, but sometimes eat insects during the breeding season.

Voice: They have a rich "what-cheer, cheer, cheer," "purty-purty-purty-purty," or a metallic chip.



RIPARIAN TRAILS WETLANDS PENINSULA LAKE

NORTHERN MOCKINGBIRD

Mimus polyglottos

Description: 9-11" in length. A gray robin sized bird with a long tail and white patches on their wings and tails.

Habitat: Found in residential areas, city parks, farmlands, open country with thickets, and desert brush.

Range: Found in the southern two-thirds of the United States and down into Mexico.

Additional Information: The mockingbird is the state bird of Texas! These birds are mimickers, learning up to 200 songs in their lifetime, singing songs of other birds and sounds that they may hear.

Voice: They sing a long series of musical phrases, repeating 3 or more times and often imitating other birds.



RIPARIAN TRAILS WETLANDS PENINSULA LAKE

BLACK-CHINNED HUMMINGBIRD

Archilocus alexandri

Description: 3 ¼-3 ¾" in length. Metallic green on its upperparts, gray underparts and a white breast. Males have an iridescent black chin with a violet throat band. Females differ with a white throat and breast, buffy sides, and white-tipped outer tail feathers.

Habitat: Mountain and alpine meadows, woodlands, canyons with thickets, chaparral, and orchards.

Range: Breed from British Columbia south throughout the west to Mexico and central Texas and winters in Mexico.

Additional Information: In the spring, the male hummingbird maintains a mating and feeding territory. The males court the female with extravagant aerial displays, and once mating is complete the males moves nearby a good food supply.

Voice: A low tup or "teew-teew-twee."



RIPARIAN TRAILS WETLANDS PENINSULA LAKE

GOLDEN-FRONTED WOODPECKER

Melanerpes aurifrons

Description: 9.5" in length. Barred back and buffy on front side, with orange mark on their neck and a yellow mark on their forehead. Males have red on the top of their heads.

Habitat: Found in open woods in dry country and river bottoms with trees.

Range: In the United States, this species is only found in southwestern Oklahoma and in Texas.

Additional Information: They feed by pulling insects from bark when probing the trees. In Texas, it is not uncommon for their faces to be stained purple from eating the fruit of the prickly pear cactus.

Voice: They give off of a loud "churr." Their call is a burry "chuck-chuck-chuck."



RIPARIAN TRAILS WETLANDS PENINSULA LAKE

OSPREY

Pandion haliaetus

Description: 21-24" in length. Brown on its back and white on its belly, with white head and dark line through their eye on the side of its face.

Habitat: Found near lakes, rivers, and seacoasts.

Range: Found from Alaska, through Canada, and down south through Mexico.

Additional Information: Ospreys hunt for fish by flying over water and watching the surface until prey is sighted. Once it catches a fish, it readjusts the fish by positioning the fish's head forward.

Voice: Their call is a loud musical chirping.



RIPARIAN TRAILS WETLANDS PENINSULA LAKE

RED-SHOULDERED HAWK

Buteo lineatus

Description: 16-24" in length. White bars on their dark wings, with a pale underside with rust-colored bars. They get their name from their rusty-brown shoulders.

Habitat: Found in deciduous woodlands, especially near water. Our resident breeding pair have a nest in an American Sycamore tree near the wetlands boardwalk.

Range: Found in the eastern half of the United States and California.

Additional Information: Red-shouldered Hawks hunt by watching quietly from a low perch, dropping down to catch snakes and frogs. During their courtship, a pair can be very noisy flying in the sky around their nesting territory.

Voice: They have a shrill scream "kee-yeeear."



RIPARIAN **TRAILS** **WETLANDS** **PENINSULA** **LAKE**

TURKEY VULTURE

Cathartes aura

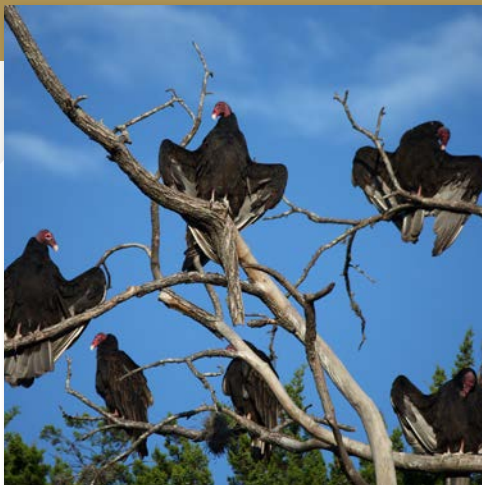
Description: 25-32" (64-81 cm). A large dark bird with long, broad wings, and a featherless red head. Underside feathers are paler than the rest of their color, giving them a two-toned appearance.

Habitat: Found mainly in deciduous forests and woodlands. They are often seen over adjacent farmlands.

Range: Found all throughout the United States and southern Canada.

Additional Information: They are the most common and widespread of the New World vultures. They locate carcasses partially by smell and soar through the air by riding on thermals, rising columns of warm air, to save energy.

Voice: They are usually silent. May hiss or grunt when feeding or at their nest.



RIPARIAN **TRAILS** **WETLANDS** **PENINSULA** **LAKE**

BLACK VULTURE

Coragyps atratus

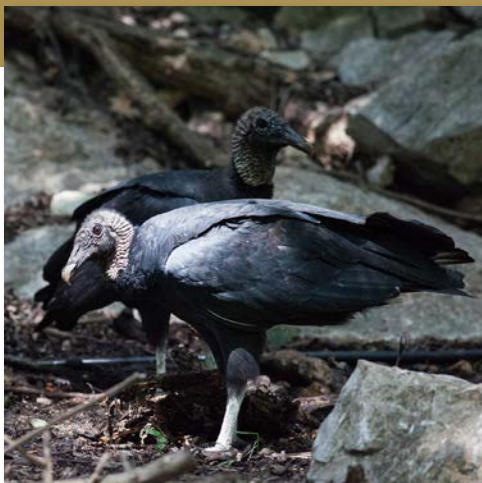
Description: 22-24" in length with wingspan of 4'6". Large black bird with a white patch near wing tips. Head is bare lacking feathers and they have a short tail.

Habitat: Found in open habitats, but breed in light woodlands and thickets.

Range: This bird is a resident from western Texas and Arkansas north and east to New Jersey and south to Florida. They are also found in the American tropics.

Additional Information: Black Vultures are scavengers that feed on carrion and sick, weak, or unprotected young birds and mammals. Black Vultures rely on their vision to find food and thermals, or updrafts, to fly high overhead.

Voice: Hisses or grunts but is seldom heard.



RIPARIAN **TRAILS** **WETLANDS** **PENINSULA** **LAKE**

DID YOU KNOW?



Central Texas is part of the Central Flyway of North America, which ranges from the Canadian Arctic to the southern tip of Argentina. Many species depend on this flyway because of its dependable source of food, water, and cover. A few notable species that depend on this are the Whooping Crane and the Golden Cheek Warbler.



MAMMALS



Mammals of Spring Lake

Brazilian Free-Tailed Bat

Eastern Fox Squirrel

Common Raccoon

Ringtail

Striped Skunk

Gray Fox

Virginia Opossum

White-Tailed Deer

Nutria

Northern American Beaver

BRAZILIAN FREE-TAILED BAT

Tadarida brasiliensis

Description: Medium sized bat with broad ears and the end of its tail free.

Habitat: Use caves, mine tunnels, hollow trees, human habitations, bridges, and other dark places as daytime retreats.

Range: One of the most widely distributed mammalian species in the Western hemisphere, ranging from the northern US down into central America.

Additional Information: Their diet consists of insects. In fact, bats in Texas are estimated to eat 6,000 to 18,000 metric tons of insects annually. The largest colony of bats in the world, estimated to be 20 million, is at Bracken Cave, just 40 minutes south of San Marcos. They consist only of females and are all Brazilian free-tails. It is the largest known concentration of mammals.



RIPARIAN TRAILS WETLANDS PENINSULA LAKE

EASTERN FOX SQUIRREL

Sciurus niger

Description: Up to 21" in length with gray and black fur on its back and orange on its belly.

Habitat: Hardwood forests that have nut producing trees.

Range: Eastern two-thirds of Texas and eastern half of the US.

Additional Information: Their diet includes acorns, nuts, buds, fruits, fungi, insects, amphibians, and the inner bark of trees. They got their name from their gray and red fur coat that resembles the gray fox.



RIPARIAN TRAILS WETLANDS PENINSULA LAKE

COMMON RACCOON

Procyon lotor

Description: Up to 33-45" in length. Gray with black and white markings, dexterous hands and bushy tails.

Habitat: Prefer brushy or wooded areas near bodies of water, but will live in developed areas if there is enough food and water.

Range: Common throughout Texas and North America.

Additional Information: They eat everything from fruits, nuts, insects, fish, small animals, carrion, to human garbage and are almost entirely nocturnal. Their nimble hands allow them to be good swimmers and climbers.



RIPARIAN TRAILS WETLANDS PENINSULA LAKE

RINGTAIL

Bassariscus astutus

Description: Up to 17" in length, without their tail. Characterized by long black and white striped tail, usually longer than their body.

Habitat: Prefer rocky areas and den in hollow trees.

Range: Found throughout Texas but uncommon in the coastal plains of south Texas in the Rio Grande area. They are found in the southwest portion of the US down into Central America.

Additional Information: Ringtails eat fruits and berries, birds, rodents, carrion, reptiles, amphibians, and insects. It is in the same family as a raccoon and is sometimes referred to as a civet cat. Their tail serves as a distraction for predators.



RIPARIAN TRAILS WETLANDS PENINSULA LAKE

STRIPED SKUNK

Mephitis mephitis

Size and Description: Up to 30" in length, with a white stripe down each side of its back and two scent glands below its tail.

Habitat: Wooded or brushy areas. They take cover in rocky areas.

Range: From southern Canada down into northern Mexico.

Additional Information: The striped skunk eats plants and animals, but insects make up most of their diet. When they feel threatened, skunks will either make a purring noise or growl.



RIPARIAN

TRAILS

WETLANDS

PENINSULA

LAKE

VIRGINIA OPOSSUM

Didelphis virginiana

Description: Up to 37" in length, and are one of the world's most variably sized mammals. Dull, grayish-brown color and has a hairless prehensile tail.

Habitat: Found in a variety of habitats including forests, marshes, and rural human inhabited areas.

Range: Throughout Central America, up into the US, east of the Rockies.

Additional Information: Omnivorous, eating a wide variety of plants and animals. When feeling threatened, they play "possum." This is actually an involuntary reaction and is triggered by extreme fear. They enter a near coma with their eyes open, tongue out, emit a putrid odor, and their heart rate drops.



Paul Hurtado

RIPARIAN

TRAILS

WETLANDS

PENINSULA

LAKE

WHITE-TAILED DEER

Odocoileus virginianus

Description: They vary in size. The farther away from the equator, the larger the body size is ranging from 55lbs to 275lbs.

Habitat: Mixed habitat of wooded areas near grasslands in riparian areas.

Range: Native to Canada, US, Mexico, South and Central America.

Additional Information:

Herbivorous, consuming leaves, legumes, shoots, grasses, forbs, cacti, acorns, and fruit. Males regrow their antlers every year and shed them after all females have been bred in December to February. Deer are ruminants, meaning it has a four-chambered stomach.



RIPARIAN **TRAILS** **WETLANDS** **PENINSULA** **LAKE**

NUTRIA

Myocastor coypus

Description: Similar looking to beavers and have orange colored fur, with webbed feet, and a scaly rat-like tail.

Habitat: Aquatic habitats, in both fresh and saltwater.

Range: Native to South America, but were introduced into North America originally for the fur trade.

Additional Information:

They feed on aquatic and semi-aquatic vegetation. Nutria were introduced into Texas as a cure-all for ponds choked with vegetation. The damage that they cause to an ecosystem can vary, but usually the most destructive habit is their burrowing.



RIPARIAN **TRAILS** **WETLANDS** **PENINSULA** **LAKE**

NORTH AMERICAN BEAVER

Castor canadensis

Description: Up to 4' in length, with webbed feet and a large flat nearly hairless tail.

Habitat: Dependent on slow moving brooks, streams and rivers for dam construction, and will also live in small lakes.

Range: Widely distributed throughout North America.

Additional Information: They prefer to eat the bark of deciduous trees like aspen, willow, birch, and maple. They also eat the roots of tuberous aquatic plants.

Beavers are the largest rodent in North America. They use their tail to maintain balance when gnawing on trees and use it to slap the water to warn away predators.



RIPARIAN TRAILS **WETLANDS** PENINSULA LAKE

DID YOU KNOW?



The Texas Hill Country, especially here in San Marcos, is home to the densest population of melanistic deer, one of the rarest forms of the white-tailed deer. Melanism is a condition where the animal produces excess melanin pigment, which causes them to be a dark color; a dark brown, almost black. These are spotted quite frequently here at Spring Lake.



REPTILES



Reptiles of Spring Lake

Green Anole

Mediterranean Gecko

Texas Spiny Lizard

Ground Skink

Eastern Six-Lined Racerunner

Red-Eared Slider

Common Musk Turtle

Texas River Cooter

Common Snapping Turtle

Guadalupe Spiny Softshell Turtle

Florida Red-Bellied Cooter

Blotched Water Snake

Diamondback Water Snake

Texas Rat Snake

Texas Garter Snake

Western Cottonmouth

Texas Coral Snake

GREEN ANOLE

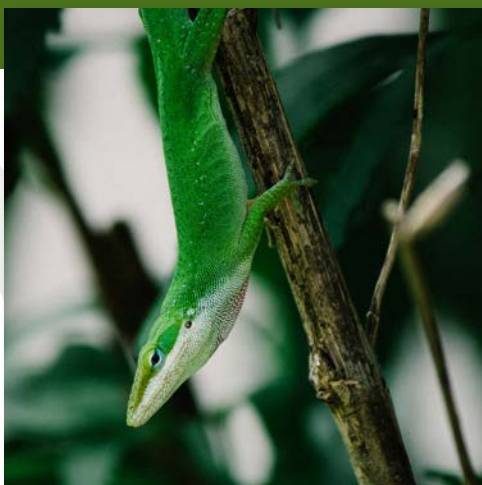
Anolis carolinensis

Description: Slender green lizard that has a max length of 6-8”.

Habitat: Found in plants, where there is occasional shade and moist environment. They prefer to be elevated in trees, walls, or fences.

Range: Eastern third of Texas and are common in the southeastern US.

Additional Information: Feed on small insects like moths, cockroaches, crickets, grubs, and spiders. They are commonly called a “chameleon” because of its ability to change color to blend with its surroundings, but they are not a true chameleon. The male has a large pink fan of skin on its lower neck called a dewlap, which is used for territorial display and courtship.



RIPARIAN TRAILS WETLANDS PENINSULA LAKE

MEDITERRANEAN GECKO

Hemidactylus turcicus

Description: Up to 4-5” in length.

Habitat: Being nocturnal, they can be found mostly in cracks and crevices.

Range: Native to the Mediterranean, it first came to the US in Key West, Florida and now has breeding populations in the Southern states.

Additional Information: Feeds on insects and other invertebrates that come out at night. They have sticky toe pads, vertical pupils, and no eyelids. They are distinguished from our native gecko by its bumpy skin.



RIPARIAN TRAILS WETLANDS PENINSULA LAKE

TEXAS SPINY LIZARD

Sceloporus olivaceus

Description: Up to 7.5 - 11" in length, usually gray with blotching down the back.

Habitat: Trees or on fences and prefer mesquite trees with leaf litter underneath.

Range: Native to Texas and Oklahoma, and northeastern Mexico.

Additional Information:

Insectivorous, eating a variety of beetles and other bugs. Their scales, which is what gives them their name, have a distinct spiny texture to them. You can distinguish males by the blue blotches on each side of the undersides of their bellies



RIPARIAN

TRAILS

WETLANDS

PENINSULA

LAKE

botches on each side of the undersides of their bellies

GROUND SKINK

Scincella lateralis

Description: One of the smallest reptiles in North America, reaching only 3-5.5" in length. Rich coppery brown with dark sides.

Habitat: Require a deep leaf litter, but can live in a variety of habitats including forests, hedgerows, and edges of ponds and streams.

Range: Eastern half of the US and into northern Mexico.

Additional Information: Diet consists of small insects, spiders, and other arthropoda. They have transparent disks in their eyelids, allowing them to see with their eyes closed. It is a fossorial species, meaning it spends most of its life buried. They bury themselves in leaf litter.



RIPARIAN

TRAILS

WETLANDS

PENINSULA

LAKE

EASTERN SIX-LINED RACERUNNER

Cnemidophorus sexlineatus sexlineatus

Description: Up to 6-10.5" in length. Dark green or black with 6 yellow or green-yellow stripes that run the length of the body.

Habitat: Woodlands, floodplains, or grasslands.

Range: Throughout western US and northern Mexico.

Additional Information: This whiptail lizard is fast moving, moving up to 18mph to dart for cover. Their tail is almost twice its body length. They are also insectivores.



RIPARIAN **TRAILS** WETLANDS **PENINSULA** LAKE

RED-EARED SLIDER

Trachemys scripta elegans

Description: Up to 12" in diameter. They are most easily identified by the red marking on the side of their head.

Habitat: Permanent slow-moving water sources with mud bottoms.

Range: From Indiana to New Mexico down through Texas to the Gulf of Mexico. They are widely distributed throughout Texas, except for the far western region.

Diet: They eat aquatic plants, small fish, and decaying material.

Additional Information: Red-eared sliders are Texas's most common aquatic turtles!



RIPARIAN **TRAILS** **WETLANDS** **PENINSULA** **LAKE**

COMMON MUSK TURTLE

Sternotherus odoratus

Description: They are a small turtle, up to 2-5" in length. They have a highly domed shell with distinct yellow lines on the side of their face and neck.

Habitat: Shallow water-bodies with low currents, abundant aquatic vegetation, and soft organic bottoms.

Range: Eastern U.S.

Additional Information: They are carnivorous, eating almost anything that they can fit in their mouth: including crawfish, small fish, insects, tadpoles, and carrion. Musk Turtles are primarily nocturnal and they are often seen foraging in shallow water in the evening. They get this name from the musky odor that they are able to release when they feel threatened.



RIPARIAN TRAILS WETLANDS PENINSULA LAKE

TEXAS RIVER COOTER

Pseudemys texana

Description: It is a relatively large turtle, growing up to 12" in length. They are distinguished from red-eared sliders by the yellow markings on their faces. Shell size is up to 10" in diameter.

Habitat: Slow moving waters such as streams, lakes, and other man-made impoundments of water.

Range: Exclusively in Texas, ranging from central Texas to the Gulf coast.

Additional Information: The Texas River Cooter is one of the most studied species of turtle in Spring Lake. Currently, there are 1,400 marked river cooters in Spring Lake. They feed primarily on submerged aquatic vegetation, occasionally eating aquatic invertebrates.



RIPARIAN TRAILS WETLANDS PENINSULA LAKE

COMMON SNAPPING TURTLE

Chelydra serpentina

Description: Shell size up to 20" in diameter and can get up to 35lbs. They are a large, heavy bodied turtle that is distinguished by their rigid shell, hooked upper jaw, and heavily clawed limbs.

Habitat: Almost entirely aquatic and found in slow moving waters with soft, sandy, or muddy bottoms.

Range: Throughout eastern US, from south Canada to the Gulf of Mexico, and into Central America.

Additional Information: Omnivorous, consuming both plant and animal material, and are important scavengers. This turtle is mostly nocturnal and spends most of its time lying at the bottom of a pool of water. It is not recommended to pick them up as it can hurt their backbone as well as be a danger to you!



RIPARIAN TRAILS **WETLANDS** PENINSULA LAKE

GUADALUPE SPINY SOFTSHELL TURTLE

Apalone spinifera guadalupensis

Description: Shell size up to 18" in diameter. Their carapace is scuteless, covered by tan or olive colored, leathery skin.

Habitat: Found in creeks, ponds, large rivers, and lakes.

Range: Found in the Nueces, Guadalupe, and Colorado drainage systems.

Additional Information: Mostly carnivorous, feeding on crayfish, worms, small fish, and frogs. They get their name from the spiny, cone-like projections at the edge of their carapace. They can live up to 50 years.



RIPARIAN TRAILS **WETLANDS** PENINSULA LAKE

FLORIDA RED-BELLIED COOTER

Pseudemys nelsoni

Description: Shell size up to 14.8” in diameter and are distinguished by their red tinged belly, plastron, and the two cusps on their upper beak.

Habitat: Found in almost any aquatic habitat, from spring runs to brackish water.

Range: Endemic to Florida and southern Georgia. However, there is a breeding population at Spring Lake in San Marcos, Texas.

Additional Information: Mostly herbivorous, with their young sometimes eating insects. These turtles are commonly traded for human consumption and the pet trade. This is probably how there came to be a breeding population in Spring Lake.



RIPARIAN TRAILS **WETLANDS** PENINSULA **LAKE**

BLOTCHED WATER SNAKE

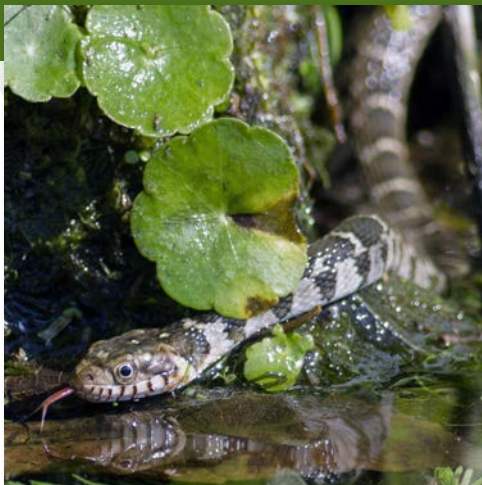
Nerodia erythrogaster transversa

Description: Up to 2-3’ in length. Olive green to brown coloration with a series of dark grayish-brown blotches across the back. As the snake gets older the color will darken.

Habitat: Found near slow moving bodies of water including ponds, lakes, and slow moving streams.

Range: It is found throughout most of the southeastern and south central United States.

Additional Information: They primarily feed on frogs, but will take advantage of small fish trapped in shallow streams. Females give birth to live young in the late summer, which can consist of 8-30 young.



RIPARIAN TRAILS **WETLANDS** PENINSULA **LAKE**

DIAMONDBACK WATER SNAKE

Nerodia rhombifer

Description: Up to 2-3' in length. Brown or olive green with a black net-like pattern along their back, forming a repeating diamond pattern. Underside is usually yellow with dark half-moon spots.

Habitat: Slow moving bodies of water including streams, ponds, rivers, and swamps.

Range: Central US, ranging from Georgia to Texas, and also northern Mexico.

Additional Information: Feeds on fish, frogs, and toads. They are often mistaken for Rattlesnakes and are killed out of fear as a result. They are non-venomous snake but can be aggressive and will bite if provoked.



RIPARIAN TRAILS WETLANDS PENINSULA LAKE

TEXAS RAT SNAKE

Elaphe obsoleta lindheimeri

Description: Up to 5' in length. Usually olive green with irregular blotching.

Habitat: Highly adaptable and can be found in forests, grasslands, and suburban areas.

Range: Mostly in Texas, but can be found in Oklahoma, Arkansas, and Louisiana.

Additional Information: They are good eaters, eating large amounts of rodents, birds, lizards, and amphibians. The first specimen was collected in New Braunfels by Ferdinand Lindheimer. They are very mild tempered for being such a large snake.



RIPARIAN TRAILS WETLANDS PENINSULA LAKE

TEXAS GARTER SNAKE

Thamnophis sirtalis annectens

Description: Up to 15-28" long. Greenish-black with a distinct bright orange or red stripe down the middle of the back and yellow stripes on either side.

Habitat: Usually found near a water source.

Range: Mostly in central Texas, but is a subspecies to the common garter which is found throughout the United States.

Additional Information: It is a subspecies of the common garter snake. Their saliva is slightly toxic, which helps immobilizes their prey. Their bite is usually harmless to humans. They are good hunters and prey includes fish, amphibians, earthworms, aquatic and terrestrial invertebrates, and sometimes small mammals and birds.



RIPARIAN TRAILS WETLANDS PENINSULA LAKE

WESTERN COTTONMOUTH

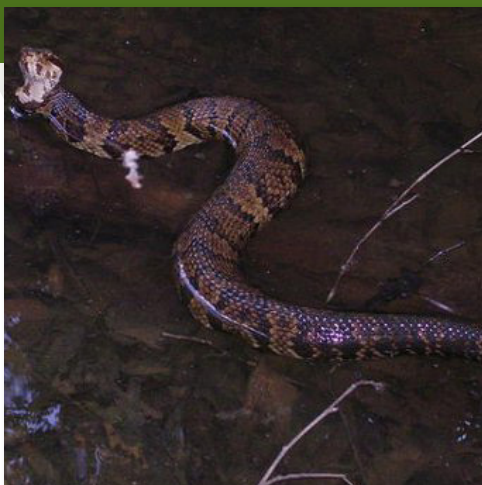
Agkistrodon piscivorus leucostoma

Description: Up to 30-42" in length. Dark-gray with a thick body, a broad, flat head and cat-like pupils.

Habitat: Prefer lowland swamps, rivers, sloughs, and irrigation ditches.

Range: From southern Illinois, south to Alabama, and west to Oklahoma and central Texas.

Additional Information: Feeds on small water birds, mammals, frogs, fish, and smaller snakes. Sometimes they will feed on carrion. They get their nickname "cottonmouth" because when it's frightened, they pop open their mouth exposing the bright white skin of inside their mouth. They are also called "water moccasins" because they are able to bite underwater. This snake is rare at Spring Lake, but it is always a good idea to be aware of your surroundings and the wildlife that may be around.



RIPARIAN TRAILS WETLANDS PENINSULA LAKE

TEXAS CORAL SNAKE

Micrurus tener

Description: Up to 24-40" in length with the traditional coloration of red, yellow, and black banding.

Habitat: Spends most of its time under leaf litter, under logs, or in burrows in the ground.

Range: Widespread in the southern US and northeastern and central Mexico.

Additional information: Primarily eats other snakes and small fossorial species. Their venom is a powerful neurotoxin, but death from a bite is rare. Their fangs are small and hollow, so the venom can only be delivered if the snake bites and holds on and chews. When identifying a coral snake from a milksnake remember this rhyme, "Red on yellow, kill a fellow. Red on black, friend of Jack."



RIPARIAN

TRAILS

WETLANDS

PENINSULA

LAKE

DID YOU KNOW?



Spring Lake contains one of the densest populations of turtles ever studied. Starting in 1995, Texas State University began a comprehensive study on the turtles at Spring Lake. As of May 2012, over 4,000 turtles have been individually marked for identification.



AQUATIC PLANTS



Aquatic Plants of Spring Lake

Fanwort

Hornwort

Arrowhead

East Indian Hygrophilla

Eurasian Watermilfoil

Cattail

Texas Wild-Rice

Two-Leaved milfoil

Red Ludwigia

Marsh Pennywort

Yellow Cow Lilly

Water Lettuce

FANWORT

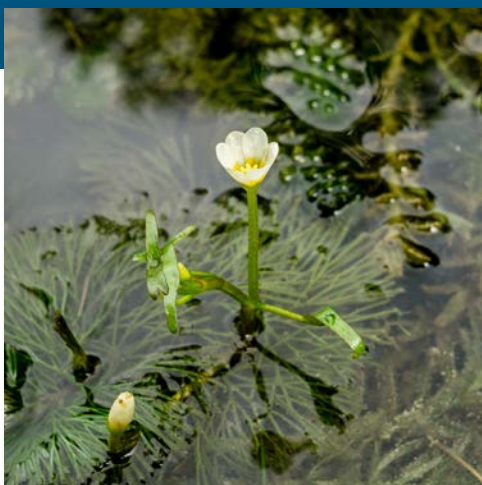
Cabomba caroliniana

Description: It is a fully submerged plant, except for the occasional floating leaves and flower, and ranges from 1-30' long. Leaves have a feathery and fan-like appearance, flowers are small and white.

Habitat: Requires permanent shallow water, usually less than 3 meters and up to 10 meters deep.

Range: Native to South America and the southern, eastern and western coast of the US.

Additional Information: Cabomba is considered a problem weed in most of the US because of how it can reproduce and potential to choke waterways. When the stems become brittle, it can break apart and distribute into new waterways. This results in competition with other established plants.



RIPARIAN TRAILS **WETLANDS** PENINSULA **LAKE**

HORNWORT

Ceratophyllum demersum

Description: It is a submerged, rootless perennial plant, with stiff whorls of dark-green leaves. Because it lacks root, small modified leaves can anchor it into the substrate but usually it is free floating. It reproduces from plant fragments and seed.

Habitat: It is found in inland and coastal ponds, lakes, and slow moving rivers.

Range: Hornwort has a cosmopolitan distribution, meaning it is native to all continents except Antarctica.

Additional Information: It is also known as "coon's tail" because of its similar appearance to a raccoon's tail. Its dense growth habits can create competition among other native vegetation.



RIPARIAN TRAILS **WETLANDS** PENINSULA **LAKE**

ARROWHEAD

Sagittaria platyphylla

Description: It is a submerged plant with the ability to become emergent. In the submerged form, the leaves are flat and strap-like in rosette. The emergent form has a leaf that is in the shape of an arrow.

Habitat: Found in slow moving streams, lakes and ponds.

Range: Native to the eastern US, down into Mexico and Central America.

Additional Information: This plant is sometimes grown as an ornamental plant in garden ponds. In Spring Lake, it is mostly completely submerged.



RIPARIAN TRAILS WETLANDS PENINSULA LAKE

EAST INDIAN HYGROPHILA

Hygrophila polysperma

Description: It is a submerged plant with a square stem. Leaves are 1.5" long and ½" wide.

Habitat: Warmer climates, flowing streams, lakes, and slow moving bodies of water.

Range: Native to India and Malaysia

Additional Information: The name hygrophila means a "wet-loving plant with a fruit that has many seeds." The stems fragment easily and new plants can develop from these small fragments, even a free floating leaf. Its ability to spread easily and grow fast has caused it to be an issue in the US.



RIPARIAN TRAILS WETLANDS PENINSULA LAKE

EURASIAN WATERMILFOIL

Myriophyllum spicatum

Description: Herbaceous, submerged plant that usually grows 3-10' in length. Also known as "parrot's feather", its small leaflets look like feathers and are in whorls of three or four along the stem.

Habitat: Found in brackish water, slow moving streams, reservoirs, and estuaries.

Range: Native to Eurasia and Africa.

Additional Information: This plant was thought to be introduced in the 1940s from the aquarium trade or brought in on a boat. It can be invasive but usually only to disturbed areas.



Robyn Draheim/USFWS

RIPARIAN TRAILS WETLANDS PENINSULA LAKE

CATTAIL

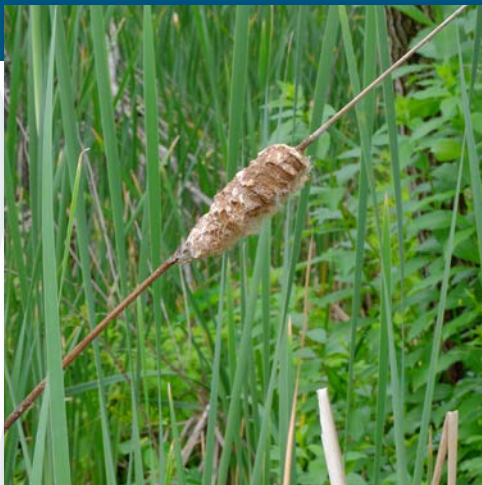
Typha latifolia

Description: It grows up to 4-8' tall. It has a broad linear leaf blades and a dense brown flowering spike.

Habitat: Found in transitional environments where land changes from a wet to dry habitat. It can also be found in constantly wet soil.

Range: Native to almost all of the Americas, Africa, and western Eurasia.

Additional Information: It provides nesting for red-winged blackbirds, ducks, and geese. Nutria eat the roots and shoots and will use the leaves to make a nest. Historically, many parts of the plants were used as either food, medicine, and to help build things.



RIPARIAN TRAILS WETLANDS PENINSULA LAKE

TEXAS WILD-RICE

Zizania texana

Description: It is an emergent aquatic plant that has long, green leaves that can grow up to 45" in length and ¼-1" wide. It has a seed head that emerges above the water.

Habitat: Grows in clear, fast flowing spring-fed waters.

Range: It is found only in the upper two miles of the San Marcos River and nowhere else.

Additional Information: This plant is one of eight endangered species found here in San Marcos. It is endangered because of the threat of population growth in San Marcos, river recreation, and invasive species.



RIPARIAN TRAILS WETLANDS PENINSULA LAKE

TWO-LEAVED MILFOIL

Myriophyllum heterophyllum

Description: It is a submergent plant that is recognized by its red stem and whorls of four or six feathery leaves.

Habitat: Found in ponds, lakes, and ditches.

Range: Native to eastern Canada and to the eastern two-thirds of the US.

Additional Information: This plant is considered native here in Spring Lake. However, it is considered a noxious weed in some places and can have a negative impact in areas where it grows. It can reduce sunlight to other macrophytes and choke out water ways.



RIPARIAN TRAILS WETLANDS PENINSULA LAKE

RED LUDWIGIA

Ludwigia repens

Description: It is a perennial herb with a creeping stem, rooting at the nodes. The stem is usually red with green or red leaves.

Habitat: Grows along the margins of any freshwater body of water.

Range: Native to the southern US, Central America, and the Caribbean Islands.

Additional Information: This plant is a submerged plant that can emerge if the water levels become lower.



RIPARIAN TRAILS **WETLANDS** PENINSULA LAKE

MARSH PENNYWORT

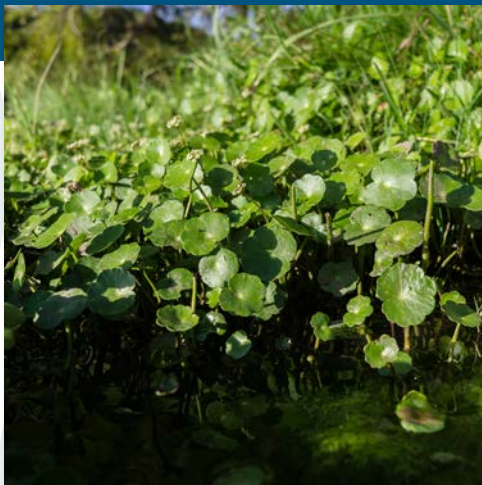
Hydrocotyle umbellata

Description: It is an emergent plant that can have a stem that is several feet long with a circular leaf that is the size of a half dollar, but can be variable. The leaves are shiny and attach in the center, umbrella-like.

Habitat: Found in or near ponds, lakes, rivers and marshes.

Range: It is native to the eastern and southern portion of North America and Nova Scotia.

Additional Information: It can be used as a salad herb, aquarium plant, or ground cover in your lawn. In South America, it is the traditional treatment for anxiety. One benefit of having these in the wetland, is its ability to remove heavy metals from water.



RIPARIAN TRAILS **WETLANDS** PENINSULA LAKE

YELLOW COW LILLY

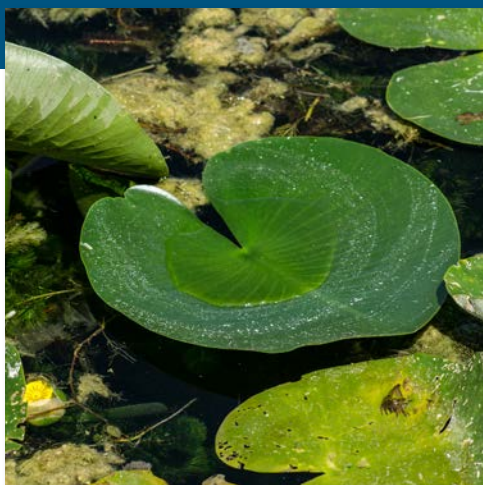
Nuphar luteum

Description: It is an emergent plant, that can grow in water up to 24" deep.

Habitat: Found in ponds, lakes, slow moving streams, marshes, and ditches.

Range: Native to southeastern North America, south to Florida and Texas.

Additional Information: This plant can be very useful. The roots can be eaten raw or cooked or added to things as a thickener. The root has many medicinal uses as well. It can be used as an astringent, stop bleeding, and treatment of dysentery and swelling.



RIPARIAN TRAILS **WETLANDS** PENINSULA LAKE

WATER LETTUCE

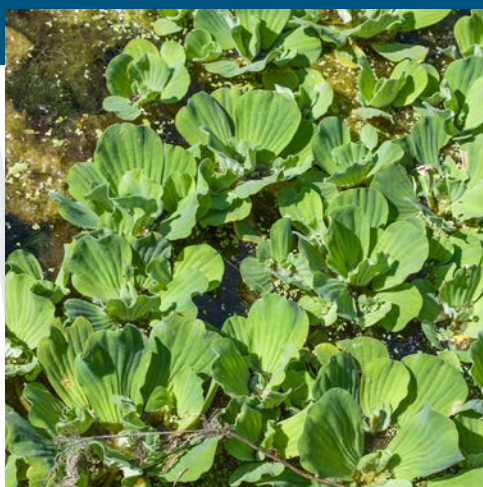
Pistia stratiotes

Description: Floating plant that resembles a floating head of lettuce. The leaves are light green, thick, hairy, and are ridged.

Habitat: Lakes, ponds, and slow moving streams.

Range: Native to South America and Africa. It is unsure if it is native to North America.

Additional Information: It's unknown if it is native or introduced. Even though its origin is unknown, it is thought to have been introduced through boat ballasts. It is a problem plant and has the potential to clog waterways



RIPARIAN TRAILS **WETLANDS** PENINSULA **LAKE**

a



GRASSES



Grasses of Spring Lake

Broadleaf Woodoats

Silver Bluestem

Johnson Grass

Plains Lovegrass

Sideoats Grama

White Tridens

Canada Wildrye

Switch Grass

BROADLEAF WOODOATS

Chasmanthium latifolium

Description: 24-60" tall with broad leaves and drooping panicles. Panicles contain 9-26 florets.

Habitat: Wooded areas and along streams in moist soils.

Range: From Arizona to Florida and north to Michigan and New Jersey.

Additional Information: Best known for its ornamental uses because of its flower color, drought tolerance, and shade tolerance. Also known as inland sea oats, the seeds are a source of food for birds. Cattle will graze this species. Historically, Native Americans occasionally ate the seeds.



SILVER BLUESTEM

Bothriochloa laguroides

Description: 18-42" tall. A native perennial, warm-season bunchgrass. The panicle, or flowering part, is white and fuzzy at the end of the stem. It is often referred to as beard-like.

Habitat: Prairies and rocky slopes. Prefers dry sites and grows best in well-drained sand or clay.

Range: Throughout Texas, but less common in the east and coastal areas.

Additional Information: Grazed most heavily during the fall, but it rates only fair for cattle and poor for wildlife. However, it does provide seed for birds and small mammals, as well as den and nest material. American Indians were noted to use the stems as toothpicks.



JOHNSON GRASS

Sorghum halepense

Description: 36-72" tall. An introduced, perennial warm-season sod forming grass. The leaves often have purple spots, which are caused by bacterial disease or fungi, and have large flowering heads.

Habitat: Prefers moist soils, but it can grow in clay, sands, and loams.

Range: This weed is persistent all over Texas.

Additional Information: It is good grass for cattle to graze on and can be harvested for hay. However, during drought conditions and after the first frost, it will produce hydrocyanic acid, which is poisonous to cattle and sheep. Birds will also eat this grass, including quail and wild turkey.



PLAINS LOVEGRASS

Eragrostis intermedia

Description: 15-36" tall. A native perennial, warm-season grass. It is a bunchgrass with its seed head in a pyramid shape.

Habitat: Prefers rich soils that are on rocky, gravelly, or sandy land.

Range: From California to Florida, and as far north as Missouri and as far south as Central America.

Additional Information: The natural dispersion of the seed occurs when the fruiting stalks detach and tumble across the ground, releasing the seeds. It is a good grass for grazing livestock, but not wildlife.



SIDEOATS GRAMA

Bouteloua curtipendula

Description: 12-42" tall. A native, perennial warm-season bunchgrass. Gets its name from the small oat-like seeds that hang on only one side of the stem.

Habitat: Grows effectively in dryer, mid-grass prairies. It is adapted to sandy and clayey soils.

Range: In Texas, it is found in the cross timbers and prairie, south Texas plains, Edwards Plateau, and the Trans Pecos areas.

Additional Information: In 1971, it was named the state grass of Texas. It produces a high quality and nutritious forage that all livestock use, making it one of the most important range grass species. Wildlife that use this grass include antelope, deer, elk, and turkey.



WHITE TRIDENS

Tridens albescens

Description: 12-36" tall. Native, warm-season perennial bunchgrass. The flowering part is dense, narrow and varies in color from green to purple to white.

Habitat: Grows on prairies, especially along ditches and roadsides.

Range: Lower central portion of the United States.

Additional Information: Cattle and horses graze on the grass, and birds feed on the seed. Its abundance indicates that there is a fair range condition. This plant often has a sour odor.



CANADA WILD RYE

Elymus virginicus

Description: 24-48" tall. A native, cool-season perennial grass with a bristly spike.

Habitat: Shaded banks, fence rows, and open woodlands. Prefers moist soils that are fertile.

Range: Found east of the Rocky Mountains and north into southern Canada.

Additional Information: It is a very palatable and nutritious grass that is eaten by all livestock in the spring and fall. Canada wildrye is a good forage producer, producing as much as 3,300 lbs. of dry weight forage per acre.



SWITCH GRASS

Sporobolus heterolepis

Description:

Habitat:

Range:

Additional Information:





TREES



Trees of Spring Lake

Bald Cypress

Montezuma Cypress

Pecan Tree

Live Oak

Anacua

Cedar Elm

Big Tooth Maple

Texas Mountain Laurel

Bur Oak

Mexican Plum

Black Willow

Box Elder

Flameleaf Sumac

Chinkapin Oak

Green Ash

Cottonwood

BALD CYPRESS

Taxodium distichium

Description: A deciduous conifer that can grow 50-75 feet or taller, with sage-green, bi-pinnately compound leaves.

Habitat: Swamps, stream banks, along streams and riparian areas in moist soils.

Range: Eastern North America from Delaware to Florida, west to Texas, and south into Mexico to Guatemala.

Additional Information: Its wood is often called eternal because of the heartwood's resistance to decay. The name "bald" comes from its deciduous nature, meaning it drops its leaves, which is uncommon in other conifers.



MONTEZUMA CYPRESS

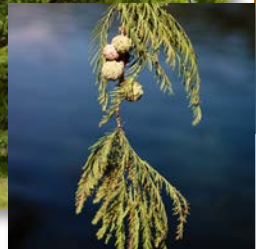
Taxodium mucronatum

Description: An evergreen, fast growing tree that can grow up to 70' tall and up to 6' in diameter. Its leaves are feather-like.

Habitat: A riparian tree, found mostly near stream banks.

Range: Native along the Rio Grande River and other parts of deep south Texas into Mexico.

Additional Information: It is the national tree of Mexico. The largest Montezuma Cypress reported is the "Tule tree" in Oaxaca, Mexico. It is 125' tall and has a circumference of 150'. It is estimated to be between 2,000 and 5,000 years old.



PECAN TREE

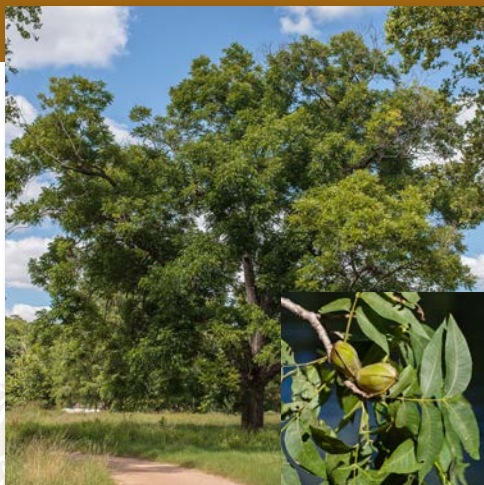
Carya illinoensis

Description: A deciduous tree that grows between 70' to 120' in height. Leaves are lanceolate in shape and finely-toothed along the edge. Flowers develop in early spring; fruit develop through the summer, ripening in autumn. When fruit ripens, the husk splits along three seams, exposing the oval nut.

Habitat: Adapts to a wide range of soils; prefers the deep, moist sandy loam soils. Thrives in humid climates; established trees tolerate much dryer conditions.

Range: Common along the lower Mississippi Valley region, but extends west to eastern Kansas, central Texas to western Mississippi, and western Tennessee and south into northeastern and central Mexico.

Additional Information: The official state tree of Texas. Pecans were used by Native Americans as an important food source; roasted for long journeys, ground pecans were used to thicken stews and create a milky energy drink.



LIVE OAK

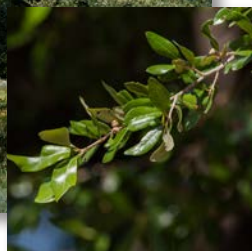
Quercus virginiana

Description: A deciduous tree that reaches heights of 35' to 60'. The thick and leathery leaves are broadly elliptical, often toothed or pointed and are simple and alternately arranged; the upper surface is a glossy dark green with a pale green to silvery lower surface. Produces an acorn about 1" long and 0.5" in diameter.

Habitat: Prefers well-drained soils in full sun; can tolerate drought conditions.

Range: From Virginia through the Atlantic and Gulf states into Texas, west to the Balcones Escarpment and south to Hidalgo county.

Additional Information: Live oaks were once used by shipbuilders in the 18th century to fashion the ribs and planking due to the large bending limbs.



ANACUA

Ehretia anacua

Description: A medium-sized tree that is evergreen. The leaves are dark green and the top surface has the texture of sandpaper. During the spring, it blooms white flowers and in the summer, produces bright orange fruits.

Habitat: Found in woodlands, sunny edges, and in shaded areas. It is more of a bush in low moisture areas.

Range: Found from Central Texas, south to the Gulf coast and the Rio Grande Valley. It is also found in northern Mexico.

Additional Information: It is also known as the sandpaper tree because of its leaf's texture. The berries on the tree are edible. The leaves are the only food source for the Texas tortoise beetle.



CEDAR ELM

Ulmus crassifolia

Description: A large tree that can get up to 75' tall. The leaves are simple, alternate, and are dark green and rough.

Habitat: Found in woodlands, ravines, and open slopes.

Range: Found from Tennessee and Arkansas, south to Mississippi and Texas.

Additional Information: Most widespread elm in Texas. It is the only native elm in Texas that flowers and seeds in the fall. It is a very adaptable tough and tolerant tree where poor or heavy soils exist.



BIG-TOOTH MAPLE

Acer grandidentatum

Description: A small tree that gets up to 50' tall. The leaves are either three to five lobed and are deciduous.

Habitat: Found in the moist soils of canyons in mountains, plateaus and in woodlands.

Range: Native to the canyons of the Edwards Plateau, Lampasas Cut Plains, and the Trans-Pecos.

Additional Information: This species is the maple that gives the name to the state park, Lost Maples State Park. Mature trees have beautiful red and yellow fall color.



TEXAS MOUNTAIN LAUREL

Sophora secundiflora

Description: A slow growing evergreen that can either be a medium to large shrub, or trained as a single or multi-trunk tree. The leaves are glossy, dark green compound leaves composed of 7-9 leaflets.

Habitat: Prefers rocky limestone soil.

Range: Grows in Central and Southwest Texas, as well as up to 5,000' in the Chisos and Davis Mountains.

Additional Information: The flowers of this plant are lavender and smell like grape Kool-Aid.



BUR OAK

Quercus macrocarpa

Description: Grows up to 60-70' tall and is noted for its large leaves, which get up to a foot long, and has large acorns as large as 2" long.

Habitat: Grows best in deep limestone soils of riverbanks and valleys.

Range: From the Appalachian Mountains, west to the Great Plains, as far north as Manitoba, and as far south as central Texas.

Additional Information: Also known as the Mossycup oak and the Mossycup white oak. It has a long taproot which makes it very drought tolerant.



MEXICAN PLUM

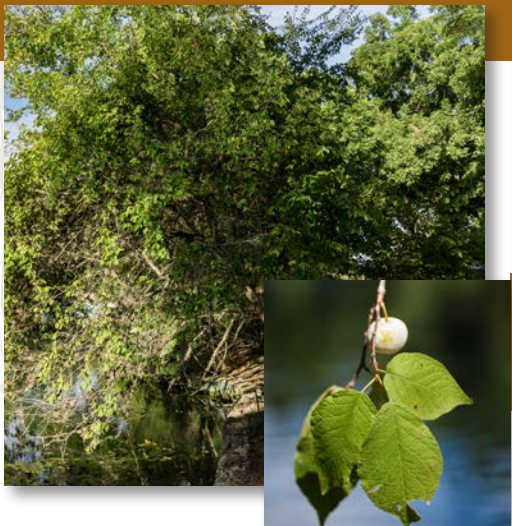
Prunus mexicana

Description: A single-trunked tree with fragrant white flowers that bloom in the spring before the leaves appear. It has small fruits that turn purple when ripened.

Habitat: Found in dry to moist thin woods, river bottoms and prairies.

Range: A common wild plum of the forest-prairie border from Missouri and eastern Kansas to Texas.

Additional Information: Considered to have special value to native bees because it is an attractant for large numbers of native bees. The fruit is commonly used for preserves and cooking.



BLACK WILLOW

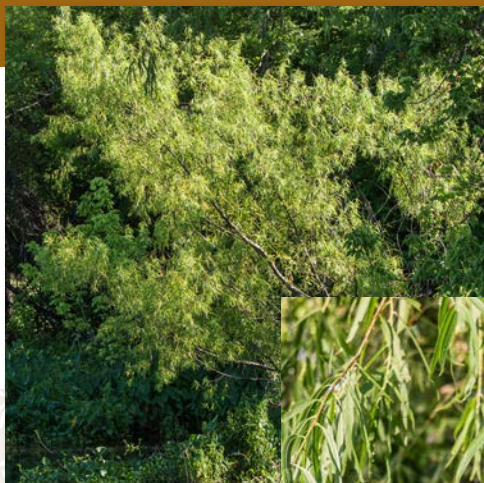
Salix nigra

Description: A small to medium tree, growing from 30-60' tall. The leaves are simple, alternate and in a lance-shape.

Habitat: Usually found in moist or wet soils along banks of streams, lakes, swamps, and pasture sloughs.

Range: From New Brunswick to Manitoba, south down to Florida and Texas.

Additional Information: This tree has many therapeutic values including fever-reducing and pain-killing effects. It is important on stream edges by acting as a binder, keeping soil from washing away.



BOX ELDER

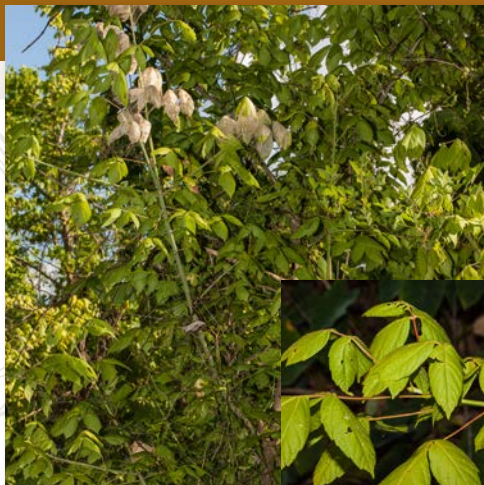
Acer negundo

Description: Leaves are pinnately compound and opposite, usually in 5 leaflets, and resembles poison ivy.

Habitat: Found in all soil types and found in association with bottomland hardwoods.

Range: One of the most widely distributed North American maples, ranging from coast to coast, to southern Canada, down into Guatemala.

Additional Information: Because it is drought and cold resistant, it is often used as a street tree or windbreak.



FLAMELEAF SUMAC

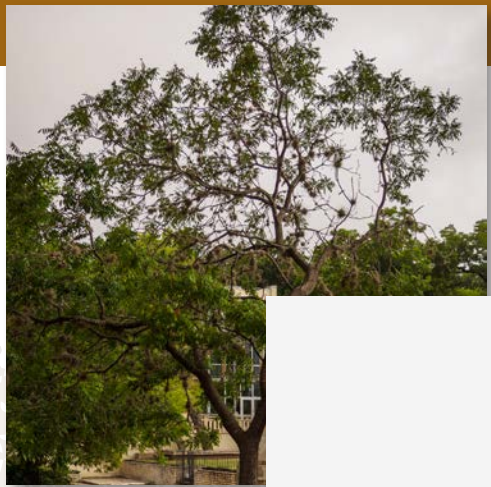
Rhus lanceolata

Description: A small deciduous tree that gets up to 30' in height. The foliage gets bright red and orange in the fall.

Habitat: Found in rocky limestone hillsides and grasslands.

Range: Native from southern Oklahoma through north, central, and west Texas, to New Mexico and northern Mexico.

Additional Information: It produces berries, that when soaked in water, make a tart and tasty high Vitamin C tea with a lemony flavor. It is also known as winged sumac, black sumac, dwarf sumac, prairie sumac, and southern sumac.



CHINKAPIN OAK

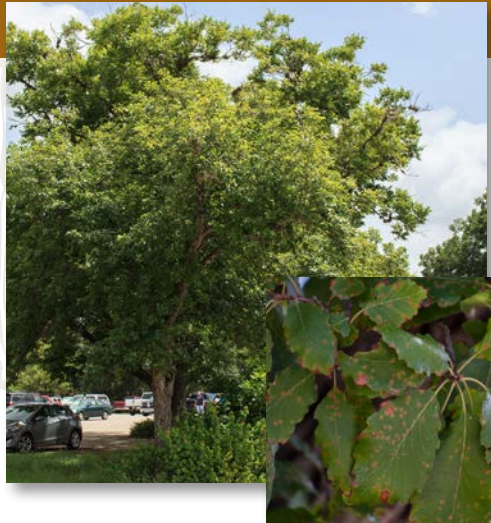
Quercus muehlenbergii

Description: A medium or large tree that can reach a height of 70'. The leaves are unique in that they are sharply toothed, but are smooth without bristle tips.

Habitat: Found in limestone and calcareous soils

Range: Native to eastern and central North America. Found from northeast to central Texas, south to the Guadalupe River and the mountains of west Texas.

Additional Information: They are a member of the white oak group, which is distinguishable by their leaves having sharp teeth, but no bristles. Their acorns are an excellent food for wildlife and humans.



GREEN ASH

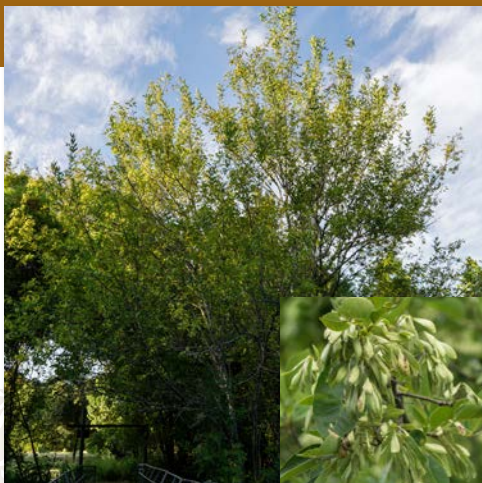
Fraxinus texensis

Description: A smaller drought tolerant tree that is distinguished by its leaflets, which are rounded and in numbers of 5 to 7 leaflets.

Habitat: Found on rocky limestone hillsides, bluffs, and ridges.

Range: Native to east Texas and southern Oklahoma. Grows on limestone from Dallas to north central Texas, and south through central Texas.

Additional Information: It is not as well utilized as it should be for city street and parking lot planting. It requires little water, grows straight up, and is not susceptible to pests or disease.



COTTONWOOD

Populus deltoides

Description: One of the United State's largest hardwood trees, growing up to 130' tall and 5.9' wide. Their leaves are large, deltoid shaped and its seeds are cotton-like strands.

Habitat: Usually grows near rivers with mud banks.

Range: Grows throughout the eastern, central, and southwestern portion of the United States.

Additional Information: They typically live 70-100 years, but in the right conditions, they can live up to 400 years. It is the state tree of Kansas, where they call it "the pioneer of the prairie."





SHRUBS AND VINES



Shrubs and Vines of Spring Lake

Turks Cap

Yaupon Holly

Dwarf Palmetto

Common Buttonbush

American Beautyberry

Elderberry

Ball Moss

Poison Ivy

Cenizo

Trumpet Creeper

Peppervine

Virginia Creeper

TURKS CAP

Malvaviscus arboreus var. drummondii

Description: It is a shrub that usually grows 2-3' in length and width, with bright red flowers that resembles hibiscus flowers that never open.

Habitat: Rocky limestone areas, edges of woods, and along streams.

Range: South from South Carolina over west to Texas.

Additional Information: The plant got its name from its flower, which resembles a Turkish turban. The fruit and flowers are edible raw or cooked, tasting like an apple.



YAUPON HOLLY

Ilex vomitoria

Description: Its growth can vary from a single or multi-trunked trunked shrub or small tree, with a potential of growing up to 45' tall. The leaves are small, evergreen, and dark green and has bright red berries.

Habitat: Wooded areas, limestone uplands, and residential areas.

Range: From Virginia south into Florida and west to central Texas.

Additional Information: Young leaves and twigs contain a caffeine that is similar to yerba mate, and native Americans would use it to make a tea. Many birds and mammals use the fruit for food.



DWARF PALMETTO

Sabal minor

Description: Small palm that gets up to 10' tall but rarely gets to tree size. The trunk is underground where the fan-like leaves come out from, which can get up to 4' wide. The trunk will form above the ground when it is grown in water.

Habitat: Swamps, floodplains, low lying areas.

Range: From North Carolina south into Florida, west to Arkansas to central Texas.

Additional Information: Palmetto State Park got its name from these palm which are numerous in the park.



COMMON BUTTONBUSH

Cephalanthus occidentalis

Description: A multi-stemmed bush that gets up to 12' tall, with the leaves in pairs or in threes. The leaves can get up 8" long and are ovate. White flowers, about an inch wide, cluster in a sphere shape.

Habitat: Around streams, ponds, and swamps.

Range: Native to Canada to the upper Mississippi River valley, south to Florida and Texas.

Additional Information: Buttonbush seeds are eaten by ducks, geese, and shorebirds. Deer enjoy eating the leaves and twigs. Bees use their nectar to make honey.



AMERICAN BEAUTYBERRY

Callicarpa americana

Description: A shrub that gets to be 5' tall, with whorls of toothed leaves that are 3-9" long. Its fruit is the most striking characteristic, having purple or white berries in clusters around the branches at the leaf axis.

Habitat: Native from Virginia south to Florida, west to Arkansas to Texas.

Range: Wooded and moist areas, especially near the edges of water.

Additional Information: Also known as the French mulberry, it was used by native Americans as a tea bath for rheumatism and fevers. It is discouraged to eat the fruits as they can cause nausea and have an unpleasant taste.



ELDERBERRY

Sambucus nigra ssp. canadensis

Description: A deciduous shrub that can get up to 12' tall. It has pinnately-compound leaves, with 4-10 paired leaflets. The flowers are white and form a cluster up to 10" wide, which turn into dark purple berries.

Habitat: Near edges of riparian areas, ditches, boggy areas, and forests.

Range: Native from Nova Scotia down to Florida, west to Manitoba down through Texas.

Additional Information: The berries are used by both animals and humans. Although the berries are inedible raw, they can be used to make jellies, preserves, and wine.



BALL MOSS

Tillandsia recurvata

Description: Forms on the branches of deciduous trees in a gray-ball with stiff, long leaves and small violet colored flowers

Habitat: Growing on tree limbs, power lines, and fences attaching itself with pseudo roots.

Range: Native from Florida and southern Georgia to south Texas and Arizona. Found as far south as Argentina.

Additional Information: It is an epiphyte, meaning it is a non-parasitic plant living on another plant. It does not take nutrients from its host, but absorbs everything it needs to live from the atmosphere. Ball moss is not a true moss but is in the bromeliad family, which is the same family that pineapples are in.



POISON IVY

Toxicodendron radicans

Description: It can have several growth habits including vine, ground cover, or large shrub. The leaves can be variable but have leaflets that are in groups of three on its own stem, sometimes with red stems and red-leaf edges. The leaves turn red in the fall.

Habitat: Both dry and moist woodlands and near streams.

Range: Native from Ontario to Nova Scotia, south to Florida, and west to Texas.

Additional Information: All parts of this plant contain a skin irritant called Urushiol and should be avoided. Remember “leaflets of three, let it be.”



CENIZO

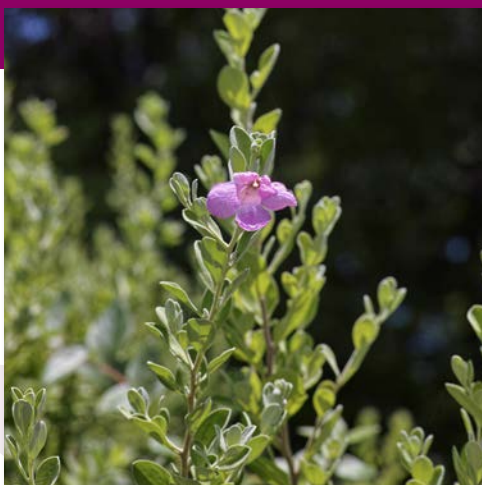
Leucophyllum frutescens

Description: A gray, evergreen shrub that can get up to 8' tall. It has small, silvery, gray soft leaves with purple flowers that are bell shaped.

Habitat: Hillsides, slopes, ditches, and is a common landscape plant.

Range: Native to Texas, from the Edwards Plateau south to the Rio Grande plain to the Trans Pecos, down into northern Mexico.

Additional Information: Known as Texas Sage or the Texas barometer-bush, it has been thought to bloom in relation to rainfall.



TRUMPET CREEPER

Campsis radicans

Description: An aggressive woody vine that can grow up to 3' tall. The reddish orange flowers are a trumpet shape and their leaflets are in 4-6 pairs with a dark green color on the top surface and lighter on their underside.

Habitat: Grows on trees of moist woods and along fence rows.

Range: They are native to eastern North America.

Additional Information: They can be considered a nuisance because of its ability to grow densely. Because this, it is often known as “hellvine” or “devil’s shoestring.” Hummingbirds feed off of the nectar produced by the flowers.



PEPPERVINE

Ampelopsis arborea

Description: It is a semi-evergreen deciduous vine that can grow up to 35' tall. It has leaves that are dark green, coarsely toothed, and are bi- or tri-pinnate. They have small, inedible, pea-sized fruits that are bluish.

Habitat: Moist habitats like swamps, marshes and stream banks.

Range: They are native to the southeastern US.

Additional Information: It can be considered aggressive because of its growth habits. It is useful in attracting wildlife. Songbirds and some animals eat the fruit.



VIRGINIA CREEPER

Parthenocissus quinquefolia

Description: It is a woody, deciduous vine that can grow from 3-40' high, limited only by the structure it is growing on. Its leaf has 5 leaflets, radiating out from the petiole. In the fall the leaves turn red and purple.

Habitat: Wooded areas and along water banks.

Range: Eastern and central North America, from Canada down to Mexico.

Additional Information: Commonly confused with poison ivy, a way to remember is through the rhyme "leaves of three let it be, leaves of five let it thrive." Even though they are not an irritant, their berries are highly toxic to humans.





WILDFLOWERS



Wildflowers of Spring Lake

Tall Goldenrod
Lemon Beebalm
Horse Herb
Mexican Hat

Clasping Coneflower
Texas Thistle
Marsh Fleabane
White Boneset

TALL GOLDENROD

Solidago canadensis

Description: Up to 6' tall and has long, thin leaves that are alternate. They have a characteristic cluster of yellow flowers, called the head, which blooms starting in August.

Habitat: Prairies, meadows, pastures, and stream banks

Range: Native across Canada and throughout the US.

Additional Information: Goldenrods are useful in attracting bees and butterflies. The leaves can be dried and used for tea. They have a licorice flavor.



LEMON BEEBALM

Monarda citriodora

Description: Up to 2' tall, with lavender to pink whorled flower heads and pairs of lance-shaped leaves. It has a distinct lemony or citrus scent.

Habitat: Prairies, plains, and meadows.

Range: Native to the central US, from Kansas to Kentucky, south to Arkansas to New Mexico.

Additional information: Also known as horsemint, this plant can be used as a citrus flavor to teas and candies. It is high in thymol, which can act as a sedative, but it does have a calming effect on stomach aches.



HORSE HERB

Calyptracarpus vialis

Description: This small herb, has a tiny yellow daisy flower with small, simple, deltoid shaped leaves.

Habitat: Fields, meadows, and woodlands.

Range: Native to south-central Texas and down to eastern Mexico.

Additional Information: Also known as the straggler daisy, this a common plant that is found in weedy lawns.



MEXICAN HAT

Ratibida columnifera

Description: It is a sombrero shaped flower with a brown central disk, with 3-7 yellow or yellow and red-brown flowers coming off of it.

Habitat: Prairies, plains, meadows, and roadsides.

Range: Native to southern British Columbia, south into Arizona, Texas, and Mexico, east to Arkansas. It has been naturalized past this to the east.

Additional Information: This plant has many uses. The leaves and stalks can be used for tea to help with stomach aches and the flower tea is used for headaches.



CLASPING CONEFLOWER

Dracopis amplexicaulis

Description: An annual flower with oblong, clasping leaves that stands up to 3' tall. It has a solitary flower head with yellow petals with reddish-purple bases.

Habitat: Along ditches, depressions, and roadsides.

Range: Native from Georgia to Texas, up to Oklahoma.

Additional Information: It can be differentiated from Black-eyed Susans and Mexican Hats from its clasping leaves.



TEXAS THISTLE

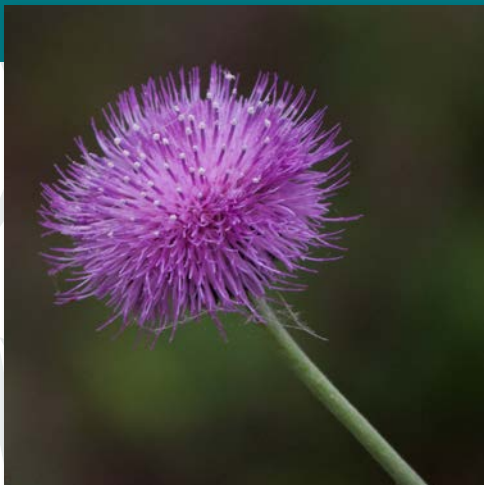
Cirsium texanum

Description: With a rose-lavender colored flower head, this is a thistle that grows up to 5' tall. It has few if any branches near the top of the plant, with leaves that are green on the top and white below.

Habitat: Prairies and along roadsides.

Range: Native from Oklahoma and Missouri south through Texas and northern Mexico.

Additional Information: Even though most thistles get a bad rap, this native thistle attracts many different types of butterflies and pollinators. If the flower is allowed to go to seed, finches will eat the seeds and use them for their nests.



MARSH FLEABANE

Pluchea odorata var. *odorata*

Description: It grows up to 2' tall. It has several leafy branches, with the leaves being long, narrow, with toothed margins. The flowers are rose colored, with small heads, and in a flat-topped cluster on the top of the stems.

Habitat: Found in low lying, moist areas.

Range: Native to the US, Mexico, Central America, and the Caribbean.

Additional Information: The flowers have a strong, camphor odor which causes them to be used frequently in dried flower arrangements.



WHITE BONESET

Eupatorium serotinum

Description: It is a round shrub that ranges from 2-4' tall. It has many branched stems with triangular or ovate leaves that get up to 3" long. It has fragrant whitish-pink flowers that are arranged in clusters at the end of the stems.

Habitat: Rocky hillsides and in well-drained soils.

Range: Native to the Edwards Plateau in Texas, south to Mexico, Cuba, and the Bahaman Islands.

Additional Information: The blooms attract hummingbirds and butterflies. It gets its name from the historic use of it treating a species of influenza called "break-bone fever."



[Copyright information]

Disclaimer: Please note, this is not a comprehensive or static list of species found at Spring Lake.

"ALL GOOD THINGS ARE WILD AND FREE."

Henry David Thoreau



THE MEADOWS CENTER
FOR WATER AND THE ENVIRONMENT

TEXAS STATE UNIVERSITY

EXPLORESRINGLAKE.ORG

