TEXAS PARKS AND WILDLIFE



TABLE OF CONTENTS

Regional Description	
Topography and Characteristics	2
Major Cities / Rainfall / Elevation	3
Common Vegetation	4
Rare Plants and Habitats	4
Common Wildlife	4
Rare Animals	4
Issues and Topics of Concern	5
Project WILD Activities	6
TPWD Resources	6

REGIONAL DESCRIPTION

The Texas Hill Country is located in Central Texas. A drive through the Hill Country will take the visitor across rolling hills, crisscrossed with many streams and rivers.

The Edwards Plateau dominates a large portion of the Texas Hill Country and is honeycombed with thousands of caves.

Several aquifers lie beneath the Texas Hill Country. The Edwards Aquifer is one of nine major state aquifers. It covers 4,350 square miles and eleven counties. It provides drinking and irrigation water as well as recreational opportunities for millions of people. San Antonio obtains its entire municipal water supply from the Edwards Aquifer and is one of the largest cities in the world to rely solely on a single ground-water source.

Springs are created when the water in an aquifer naturally emerges at the surface. Central Texas was once a land of many springs. Statewide, it is estimated that Texas currently has nearly 1,900 known springs. The majority of these springs are located within the Texas Hill Country.



Many of the streams that flow through the rocky, tree-shaded hills of Central Texas are fed by springs. These streams are home to many species of fish, amphibians, plants and insects, which depend on a steady flow of clean water for survival. Some of these species (salamanders in particular) are found only in these spring-

fed environments. Our state fish, the Guadalupe bass, is found in several streams and rivers of Central Texas.

Riparian areas are also a common wetland type in Central Texas and offer food and cover for wildlife. Native vegetation consists of oak-hickory or oak-juniper woodlands, mesquite-mixed brush savannah, and grasslands. Open grassland and savannah were once more common than they are today.

Home to some of the oldest rocks in Texas, this region is characterized by rock outcroppings and large granite domes, such as Enchanted Rock near Fredericksburg.

The Texas Hill Country is home to very diverse wildlife communities, containing at least 407 game and nongame species, including animals like bobcats, rabbits, turtles and migratory songbirds. The Hill Country is also well known for its deer population as it supports the largest white-tailed deer population in the state. The

area where Mason, Gillespie, and Llano counties converge supports the highest deer density in the nation, with one deer for every 2 – 3 acres. Another abundant game species in the Hill Country is the Rio Grande turkey.



In addition to these popular game species, the region, with its unique ecosystem, is also home to a host of rare plants and animals found nowhere else on earth.

Learn more about the <u>Hill Country</u> region, its <u>history</u>, <u>wildlife</u>, and <u>state parks</u>.

Topography and Characteristics

Major River: Colorado, Guadalupe, Nueces Major Aquifer: Edwards, Carrizo-Wilcox

Size: Edwards Plateau: 31,000 sq. mi., Llano Uplift: 5,000 sq. mi.

The land consists of stony hills, steep canyons, cascading whitewater streams and deep blue reservoirs. Elevation ranges from 500 to 2,250 feet above sea level. A layer of thin soil covers the limestone bedrock in most areas. The soils in the Llano Uplift region are predominantly coarse textured sands, produced from weathered granite over thousands of years.

Covering 31,000 square miles, the Edwards Plateau is an uplifted and elevated region originally formed from marine deposits of sandstone, limestone, shales,

and dolomites 100 million years ago during the Cretaceous Period when this region was covered by an ocean.

The Llano Uplift region is known as the Central Mineral region. Surrounded by the Edwards Plateau region, the 5,000 square mile Llano Uplift is distinguished by its unique geology.

Learn more about the <u>rivers</u> and <u>lakes</u> in this region.

Major Cities / Rainfall / Elevation

Average Net Evaporation rate: 16-32 inches

CITY	AVERAGE ANNUAL	
	PRECIPITATION	ELEVATION
Austin	33.65 in.	621 ft.
Big Lake	18.79 in.	2,690ft.
Blanco	34.75 in.	1,370ft.
Boerne	37.36 in.	1,444ft.
Brackettville	22.79 in.	1,118ft.
Brady	27.63 in.	1,720ft.
Camp Wood	27.99 in.	1,470ft.
Del Rio	18.80 in.	999 ft.
Fredericksburg	31.65 in.	1,685 ft.
Junction	23.24 in.	1,747 ft.
Rocksprings	24.76 in.	2,400 ft.
San Saba	27.72 in.	1,195 ft.
Sonora	22.40 in.	2,138 ft.
Source: National Climate Data Center, U.S. Dept of Commerce, www.ncdc.noaa.gov		

Common Vegetation

Switchgrass Shinnery oak Sugarberry Bluestem grass Texas red oak Boxelder Ashe juniper Buttonbush Grama grass Black willow Indiangrass Mesquite Wild rye Bald cypress Marsh purslane Curly mesquite Pecan Water pennywort

Buffalograss Possumhaw Cattail

Plateau live oak Smartweed

Learn more on our Wildscapes page: Plant Guidance for the Edwards Plateau

Rare Plants & Habitats

Texas snowbells Tobusch fishhook cactus

Texas wild-rice Rock quillwort

Learn more about **Endangered and Threatened Plants**.

Common Wildlife

Blue heron Javelina Rio Grande turkey

Cricket frog Kingfisher Raccoon
Grebe Mexican free-tailed bat Ringtail
Green-backed heron Muskrat Tarantula
Guadalupe bass Nine-banded armadillo Salamander
Gulf Coast toad Northern mockingbird White-tailed deer

Learn more about these animals on our Wildlife Fact Sheets.

Rare Animals

Black-capped vireo Texas blind salamander

Golden-cheeked warbler San Marcos gambusia (fish)

San Marcos salamander Fountain darter (fish)

Learn more about **Endangered and Threatened Species**.

ISSUES AND TOPICS OF CONCERNS

To become environmentally literate, we first have to consider these core concepts:

1. Fish and wildlife resources are a public trust.

Did you know that ownership of land does not convey ownership of wildlife? For example, a deer inhabiting Joe's ranch does not belong to Joe—the deer belongs to all of us.

2. <u>Conservation and management of terrestrial and water resources</u> <u>are essential to sustaining fish and wildlife, the outdoor landscape,</u> and the quality of our lives.

Would you agree that we all enjoy looking at a beautiful and healthy scenic landscape?

3. <u>Understanding and active participation in the stewardship and support of our natural resources is key.</u>

Would you agree that when one participates in a service project such as a tree planting, that they take pride and ownership in that habitat now and in the future?

These are the first three of five core concepts endorsed by Association of Fish & Wildlife Agencies (AFWA). Learn more about the <u>AFWA Core Concepts</u>.

With the above concepts in mind, TPWD held a series of focus meetings with leading biologists across the state. They were asked: "What issues in your area are most important for people to know or understand?"

Terrestrial Issues:

- Habitat Fragmentation
- Land Management for Diversity
- Human & Wildlife Conflicts

Aquatic Issues:

- Stewardship in a Watershed
- Water Quality and Quantity
- Water for Wildlife

Explore the Wildlife Management Areas (WMA) of the Hill Country Region.

Learn more about the state of water in the Hill Country region.

Project WILD Activities relative to regional issues

- Cabin Conflict (fragmentation, land use)
- Back from the Brink (land management for diversity)
- Too Close for Comfort (human and wildlife conflicts)
- Water Canaries (water quality)
- Alice in Waterland (water for wildlife)
- Waters going on? (water consumption)

Project WILD Activities with Texas Adaptations

- Changing the Land
- Checks and Balances
- First Impressions

- Here Today, Gone Tomorrow
- Watershed (Aquatic)
- World Travelers

TPWD Resources

People:

Find your local <u>Game Warden</u> Find your local Wildlife <u>Biologist</u>

Student publications and activities:

<u>Coloring pages</u> for the Hill Country <u>Teacher activities</u> for the Hill Country

Maps:

Edwards Plateau ecoregion map

Major Aquifers map
Minor Aquifers map

Additional maps (rainfall, vegetation, river basins, etc)

Media, Videos and Web casts:

Videos about the state parks of the Hill Country region

Webcasts for the Hill Country region

Search the TPW Magazine for articles about the Hill Country

Habitat and Wildlife Publications:

Habitat:

- Land Fragmentation in Texas: Meeting the Challenge
- Introduction to Ecosystem Management

 An Analysis of Texas Waterways: A Report on the Physical Characteristics of Rivers, Streams, and Bayous in Texas

Colorado River

Guadalupe River

Nueces River

Pedernales River

- Texas Wetlands Conservation Plan
- Texas Treasures: Wetlands
- Wetlands Assistance Guide for Landowners

Wildlife:

- Birds of the Edwards Plateau
- Black-capped Vireo Life History
- Cowbirds
- Guadalupe Bass
- Golden-cheeked Warbler
- Javelina
- Learn about Turkey
- Managing Habitat for White-tailed Deer
- Migratory Birds of Texas
- More Deer publications
- Overabundant Deer publications
- Quick Reference Guide to the Hummingbirds of Texas
- The Black-capped Vireo
- Urban Coyotes



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