

TEXAS PARKS AND WILDLIFE



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REGIONAL DESCRIPTION

Big Bend Country is a region of extremes. The Big Bend area, also known as the Trans-Pecos, occupies the extreme western part of the state eastward to the Pecos River. This is a region of diverse habitats and vegetation, varying from desert valleys and plateaus to wooded mountain slopes. Even the mountain ranges vary greatly in the environments they offer for plant and animal life; some are characterized by volcanic rocks, others by limestone.



The Rio Grande River runs along the southern part of the Big Bend Country. It forms the border between Texas and Mexico. The Rio Grande is one of the longest rivers in North America. This region is called “Big Bend” because, here, the Rio Grande River turns in a big bend. Learn more about the [Rio Grande River](#). Ranching is the primary industry in this region.

Learn more about the Big Bend [region](#), its [wildlife](#), [history](#), and [state parks](#).

Topography and Characteristics

Major River: Rio Grande

Major Aquifer: Hueco-Mesilla Bolson

Size: 38,000 sq. mi.

The different soils and elevations in this region support diverse habitats and vegetation, from desert valleys and plateaus to wooded mountain slopes. Mountain outwash materials formed the soils of the Trans-Pecos. Surface textures vary. The soil is generally alkaline.

The various subregions reflect the diversity of the Trans-Pecos. The Sand Hills area consists of shin oak and mesquite on wind-blown dunes. Flat-topped mesas and plateaus are intersected by steep-walled canyons and dry washes that comprise the Stockton Plateau. Soils with high salt content and gypsum dunes

are typical of the Salt Basin area. The Desert Scrub subregion is an area of low rainfall and rapid drainage. Creosote bush flats with yucca, lechuguilla, and various small-leafed plants are common. The Desert Grassland area occurs in the central part of the region and is characterized by deeper soils with high clay content. Finally, the Mountain Ranges have higher rainfall and woody vegetation such as junipers, oaks, pinyon pine, ponderosa pine and Douglas fir.

Although most of Texas is located on flat plains or rolling plains, the only mountains in Texas are located in this region. The highest point in the state is Guadalupe Peak at 8,749 feet above sea level. Elevation naturally rises from the east to the west and from the south to the north.

Learn more about the [rivers](#) and [lakes](#) in this region.

Major Cities / Rainfall / Elevation

Average Net Evaporation rate: 52-68 inches

CITY	AVERAGE ANNUAL PRECIPITATION	ELEVATION
Alpine	17.19 in.	4,530 ft.
Balmorhea	14.19 in.	3,220 ft.
Castolon (Big Bend Nat'l Park)	9.80 in.	2,169 ft.
Chisos Basin (Big Bend Nat'l Park)	19.17 in.	5,300 ft.
El Paso	9.43 in.	3,918 ft.
Fort Davis	15.86 in.	4,880 ft.
Fort Stockton	14.06 in.	3,000 ft.
Marathon	14.51 in.	4,055 ft.
Marfa	15.79 in.	4,760 ft.
Pecos	11.61 in.	2,610 ft.
Presidio	10.76 in.	2,560 ft.
Source: National Climate Data Center, U.S. Dept of Commerce, www.ncdc.noaa.gov		

Common Vegetation

In the Desert

- Creosote bush
- Lechuguilla
- Prickly pear
- Yucca
- Agave
- Sotol
- Ocotillo

In the Mountains

- pinyon pine
- Chisos red oak
- Big-tooth maple
- Texas madrone
- Alligator juniper

In Wetlands

(ciénegas, rivers, washes)

- Cottonwood
- Willow
- Desert willow
- Seep willow
- Alkali sacaton
- Common reed
- Giant reed (not native)
- Salt cedar (not native)

Learn more on our Wildscapes page: [Plant Guidance for Trans-Pecos](#)

Rare Plants & Habitats

Bunched cory cactus

Chisos Mountains hedgehog cactus

Davis' green pitaya

Nellie's cory cactus

Sneed's pincushion cactus

Hinckley's oak

Little Aguja pondweed

Lloyd's mariposa cactus

Pecos sunflower

Terlingua Creek cat's-eye

Learn more about [Endangered and Threatened Plants](#).

Common Wildlife

Pronghorn antelope
Squirrel
Hooded skunk
Coyote
Javelina
Desert bighorn sheep
Mule deer
Mountain lion
Cactus mouse
Collared lizard
Western diamondback rattlesnake
Cactus wren
Roadrunner

Painted redstart
Townsend's big eared bat
Tarantula
Horned lizard
Pyrrhuloxia
Great horned owl
Vermilion flycatcher
Bullock's oriole
Jackrabbits
Blotched watersnakes
Rio Grande tetra
Round-nosed minnow
Catfish
Green sunfish

Learn more about these animals on our [Wildlife Fact Sheets](#).

Rare Animals

Black bear
Peregrine falcon
Montezuma quail
Greater long-nosed bat
Mexican spotted owl

Desert spring fishes:

- Comanche Springs pupfish
- Leon Springs pupfish
- Pecos gambusia
- Big Bend gambusia

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

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

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

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 [AFWA Core Concepts](#).

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:

- Living with wildlife
- Appreciation and Value of Habitat and Biodiversity of the Chihuahuan Desert
- Land Fragmentation

Aquatic Issues:

- Water Quality (including increasing salinity)
- Competing Uses for Water (international and human/wildlife needs)
- Exotic Species (salt cedar and non-native fish)

Learn more about the [wildlife habitats of Big Bend](#). Explore the [Wildlife Management Areas \(WMA\) of Big Bend](#). Learn more about the [state of water in the Big Bend](#) region.

Project WILD Activities relative to regional issues

- First Impressions (Living with wildlife)
- Drawing on Nature (Appreciation of habitat)
- Changing the Land (land fragmentation)
- Somethings fishy here! (water quality)
- What's in the water? (water quality)
- To Dam or Not to Dam (competing water use)
- World Travelers (exotic species)

Project WILD Activities with Texas Adaptations

- Checks and Balances
- Good Buddies-Chihuahuan Desert
- Habitat Rummy-Chihuahuan Desert
- Here Today, Gone Tomorrow
- Watershed (Aquatic)
- World Travelers

TPWD Resources

People:

- Find your local [Game Warden](#)
- Find your local Wildlife [Biologist](#)

Student publications and activities:

- [Coloring and Activity Books](#) for Big Bend
- [Teacher activities](#) for Big Bend

Maps:

- Trans-Pecos 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 Big Bend region
- [Webcasts](#) for the Big Bend region
- Search the [TPW Magazine](#) for articles about the Trans-Pecos

Habitat and Wildlife Publications:

Habitat:

- [An Analysis of Texas Waterways](#): A Report on the Physical Characteristics of Rivers, Streams, and Bayous in Texas
- [Ecologically Significant River and Stream Segments of the Rio Grande \(Region M\) Water Planning Area](#), May 2000
- [El Solitario Newsletter](#), Big Bend Ranch State Park newsletter
- [Land Fragmentation in Texas: Meeting the Challenge](#)

Wildlife:

- [Bear Safety in Mind](#)
- [Birds of the Chihuahuan Desert \(AKA Trans-Pecos\)](#)
- [Birds of the Davis Mountains](#)
- [Birds of the Trans-Pecos](#)
- [Ecology of the Mountain Lion on Big Bend Ranch State Park in Trans Pecos Texas](#)
- [Ecology of the Mountain Lion on Big Bend Ranch State Park in Trans Pecos Texas](#)
- [Exotic Mammals Competing with the Natives](#)
- [Exotics in Texas](#)
- [Learn About Javelina](#)

Mountain Lion Publications:

- [Field Guide to the Mountain Lions of Texas](#)
- [Mountain Lions of Texas](#)
- [Mountain Lions of Texas \(Spanish version\)](#)
- [Proceedings of the Sixth Mountain Lion Workshop \(2000\)](#)
- [Rio Grande Joint Venture: An Invitation to Action](#)
- [Rio Grande Joint Venture: An Invitation to Action \(Spanish\) - Alianza Regional de Conservación del Río Bravo](#)
- [Water for West Texas Wildlife](#)



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