

Interpretive Guide to:

STATE PARKS OF THE BIG BEND



Barton Warnock Environmental Education Center

MORE INFORMATION

Everything in the parks is protected – artifacts, rocks, plants and animals (even insects and snakes). They are all part of the region's rich natural and cultural heritage. Please help us protect these resources by leaving things as you find them.

Barton Warnock Environmental Education Center houses the exhibit, “*Una Tierra – One Land*,” which portrays the natural history of the borderlands region. We hope you will visit this and the other state parks of the Big Bend:

Big Bend Ranch State Park
Presidio, TX
(432) 229-3416

Chinati Mountains State Natural Area
Presidio, TX
(432) 229-3971

Fort Leaton State Historic Site
Presidio, TX
(432) 229-3613

Barton Warnock Environmental Education Center
Lajitas, TX
(432) 424-3327

www.tpwd.state.tx.us/park/



Proud Sponsor of Texas Parks and Wildlife Programs

In accordance with Texas State Depository Law, this publication is available at the Texas State Publications Clearinghouse and/or Texas Depository Libraries.
© 2004 TPWD. PWD BR P4501-152H (5/04) Printed on recycled paper.



EL DESPOBLADO: UNPOPULATED, EMPTY PLACE. WORDS LONG USED TO DESCRIBE THE RUGGED ISOLATION OF THE BIG BEND REGION. YET THESE DESCRIPTORS ARE NOT ENTIRELY TRUE. THE STATE PARKS OF THE BIG BEND OFFER OVER 400 SQUARE MILES OF UNRIVALED GEOLOGY, DIVERSE PLANT AND ANIMAL LIFE, AND EVIDENCE OF OVER 10,000 YEARS OF OCCUPATION BY HEARTY INDIVIDUALS AND DIVERSE CULTURES. EMPTY? HARDLY.

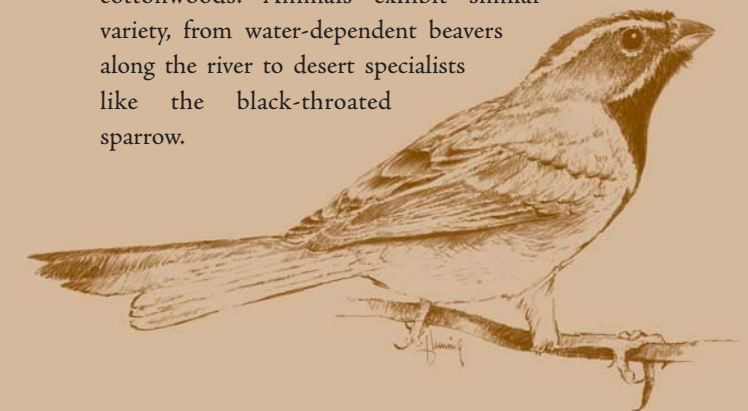


WATER: THE DESERT'S WEALTH

Water, the desert's life-giving wealth, softens and tames *el des poblado* to make it habitable, even welcoming. The Rio Grande carves a lush green ribbon through the harsh, awe-inspiring grandeur of the Chihuahuan Desert as it traces the southern reaches of Big Bend Ranch State Park, Chinati Mountains State Natural Area, Fort Leaton State Historic Site, and Barton Warnock Environmental Education Center along the U.S.-Mexico border.



The availability of water determines the desert's plant and animal life. Depending upon underlying geology and resultant moisture, vegetation exists in a diverse mosaic — sometimes lush, more often sparse. Plants at Big Bend Ranch range from arid-adapted cacti to water-loving cottonwoods. Animals exhibit similar variety, from water-dependent beavers along the river to desert specialists like the black-throated sparrow.



GEOLOGY: WINDOW INTO THE PAST

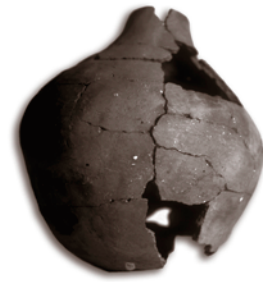
The geology of Big Bend Ranch reminds us of profound changes over the past 600 million years of Earth's history — changes born of water and fire.

A deep ocean, the Ouachita Basin, covered the Big Bend and much of the southeastern United States some 570 million years ago, long before the age of dinosaurs. One may see remnants of the Ouachita Mountains in parts of Arkansas, Oklahoma and west Texas, including The Solitario at Big Bend Ranch. The ancient Ouachitas formed through the tremendous forces of plate tectonics, which folded-up layered sedimentary rock from the ocean floor like a rug being pushed against a wall. Water continued to shape the region as a shallow inland sea spread from the Gulf of Mexico to Alaska. Erosion and uplift worked together to expose the limestone rock of this ancient sea floor in the Contrabando lowlands and the upended "flatirons" that form the rim of The Solitario.

The Solitario — a feature born of fire. Between 36 and 35 million years ago, magma from deep within the Earth pushed upward in three pulses to create a blister-like bulge nearly 10 miles across near the park's eastern boundary. Following a complex series of eruptions, the uplifted older rock and the underlying lava chamber collapsed to form the basin-like caldera we know today as The Solitario, or One Who Stands Alone. Intense volcanism remained at work to form the Bofecillos and Chinati Mountains. Lava from these eruptions eventually hardened into the rhyolite and basalt rock that trap groundwater and account for the region's numerous seeps and springs — life-giving oases in the desert.



HISTORY: LAND OF MANY FACES



Diverse people have lived among the canyons, mountains and valleys of Big Bend Ranch for centuries, typically near water sources. The materials and structures they left behind tell stories of triumph and hardship in this sometimes hospitable, but often relentless land.

Hundreds of prehistoric camps, villages, cooking stations and rock art sites dot Big Bend Ranch. Grinding stones, bedrock mortars, and middens containing numerous animal bones suggest that the hunter-gathers living here used every natural resource available to survive in the demanding environment. On fertile river banks at

La Junta de los Rios, where the Rio Grande and Rio Conchos merge near Fort Leaton, as many as 2,000 American Indian farmers grew beans, corn and squash while living in permanent



Prehistoric rock shelter at Las Cuevas Amarillas.

villages. Spanish explorer Alvar Núñez Cabeza de Vaca, who passed through the region in 1535, referred to these early agriculturalists as "people of the cows" because they wore buffalo robes made from animals hunted 150 miles to the north.

◀ The Alazan Volcano formed La Mota Mountain 27 million years ago.

A handful of horse traders, freighters and probable scalp hunters were the first Anglo-Americans to settle the area in 1848. One, described as "a desperado by name of Ben Leaton," took possession of a fortified adobe structure on the Rio Grande to establish a private fort and trading center along the Chihuahua Trail. Within these



Fort Leaton SHS stands in testimony to the early commercial history of Presidio County.

adobe walls, patrons found safe haven from attacks by Apache bands and border outlaws. Although well known as a scoundrel, Leaton displayed an opposing side — he was famous throughout the west for his unmatched hospitality. In 1849, guest W.H.C. Whiting wrote that he feasted on roast turkey, stewed chicken with chilies, frijoles, tortillas, coffee and whiskey, with Leaton's famous peach brandy as an after-dinner drink.



Load of native chino grass delivered to Crawford Ranch in 1920 for livestock feed.

As the region became safer during the 1870s, families with roots on both sides of the border began to establish small ranches away from the Rio Grande. Those that survived the drought of 1892 were soon thriving. Ruins of the Smith-Crawford house take us back to the 1920s, when the Crawford family grazed the region's largest goat herd and grew its first citrus — oranges and lemons. Early ranchers supplemented their meager incomes in innovative ways. Vats and boilers from wax factories remain in Fresno and Contrabando Canyons. Here, the Crawfords extracted thousands of pounds of wax from abundant candelilla plants and sold it as waterproofing for World War I army tents. Eusebia Madrid made goat cheese that her husband Andres marketed at the Terlingua mercury mines near the southeastern boundary of Big Bend Ranch.

The Bogel brothers soon began consolidating small ranches in the 1910s until they amassed over 38,000 acres of property. The buildings and corrals of their headquarters, La Saucedo, endure today at the heart of the ranch. But subsistence was one thing, and profit another. The ranching boom ended when only two inches of rain fell in 1933. Precious water sources evaporated and desert grasslands withered. Hit hard by drought, the Bogels sold the ranch in 1934. Mannie and Edwin Fowlkes risked limited funds to purchase the Bogel property and additional land. Conditions were so dry once again during the 1950s that the Fowlkes fed their cattle ground sotol, an abundant desert succulent, to keep them alive. Sotol grinders still lie in some pastures as reminders of an enduring people.



Gus Bogel

PHOTO COURTESY OF THE MUSEUM OF THE BIG BEND

PHOTO COURTESY OF MARFA PUBLIC LIBRARY