Ride Big Bend Ránch Page 3



Big Bend Ranch SP pullout map Pages 6 - 7

Zone-tailed Hawks at Big Bend



The River Road Page 12

TEXAS PARKS AND WILDLIFE DEPARTMENT | SPRING/SUMMER 2010 | BIG BEND RANCH STATE PARK

By Linda Hedges

Mere mention of the word "desert" typically conjures up images of dry sand, relentless sun and sweltering heatinfernal wastelands that are brown and dry and crispy. But upon closer inspection, nothing could be further from the truth, particularly when desert plants erupt into flower. The Big Bend in bloom reminds us that desert life can survive—even thrive—under the harshest of harsh conditions. When beauty blooms in the desert, the human heart sings in reply.

In most parts of Texas, spring marks the height of wildflower season. In the Big Bend region, however, the floral show typically reaches its pinnacle significantly later, during the hottest months of the year. On average, the most abundant flowering season is late summer, following the monsoonal rains of July and August. During this time frame, flowering plants are virtually everywhere-shrubs, forbs and grasses alike. Desert marigolds bask in the sun beside mounds of purple feather dalea as trumpet flowers herald the fecundity of the season. Succulents such as Torrey yucca, typically blooming in the spring, may find enough energy to flower once again.

Owing to above-average winter and early spring precipitation this year, the desert is poised to put on its show somewhat earlier that usual—a floral matinee of sorts. Expect a cascade of blooms in May and

Beauty in Bloom



"What a desolate place would be a world without a flower! It would be a face without a smile, a feast without a welcome. Are not flowers the stars of the earth, and are not our stars the flowers of the heaven?" - A. J. Balfour

June, as well. You won't be able to miss the delicate fist-sized prickly-pear flowers, their lemon yellow hues painting a smile to the desert's face. Or the orchid-like flowers of the desert willow, ornamenting its wand-like branches with tiny lavender corsages—a distinct touch of class.

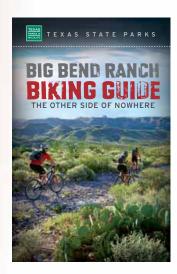
No matter the month you visit Big Bend Ranch, be sure to divert your eyes from the magnificent landscapes long enough for an up-close and personal look at whatever plants are in flower at the time. Stop and smell the roses ... or, in this case, the honey-sweet fragrance of whitebrush, the grape Kool-Aid scent of mountain laurel or the pungent aroma of creosotebush after a rain. Observe the host of other

organisms that are attracted to desert flowers-pollinating bees; nectaring hummingbirds, butterflies and bats; even foraging mammals. Remember: flowering plants do not exist in a vacuum, but are an integral part of the larger ecosystem. And be careful—the Big Bend in bloom may change your image of the desert forever.

TABLE OF

Ride Big Bend Ranch2	Big Bend Ranch State Park Map6
Be Aware	Access and Visitor Services
Featured Campsites3	Limited Time?
Featured Hike 4	Zone-tailed Hawks at Big Bend Ranch SP 10
Featured Mountain Biking4	Histories Intersect at Crawford-Smith Site1
Fees and Visitor Services5	A River Runs By It: The River Road 12

Ride Big Bend Ranch



Hot off the press! Read all about it! The new biking guide to Big Bend Ranch State Park is ready and waiting for you at Sauceda Ranger Station, Barton Warnock Visitor Center or Fort Leaton State Historic Site.

The guide provides directional information for 28 specific rides that you won't want to miss. Included for each are specifics on distance, elevation change, route surface and access. The "Trail Notes" section gives a narrative

account of what to expect along the way, while "The Ride" supplies a point-to-point description of each route, supplemented by a detailed map.

The guide also provides "ride rating" and "ride time" estimates. These ratings are subjective and will vary from person to person.

"Ride Rating" is determined based on how hard the cyclist will physically work on the ride, depending on fitness level, trail roughness and/ or biking skills required. The actual difficulty of each ride will vary depending on weather conditions and other factors. There are no "technical" trail routes in BBRSP. However, beginner-level riders should stick to the routes rated "Easy" or "Easy/Moderate."

"Ride Time" is an estimate that assumes a moderate level of physical fitness. Actual ride times will vary depending on weather conditions and other factors. The estimates do not include time spent changing tires, eating, resting, hiking or exploring.

When cycling at Big Bend Ranch, be aware that trails are a "work in progress" and water sources are scarce. Pay careful attention to signage and remain aware of where you are and where you are going at all times. Signage may be incomplete, so a good sense of direction is helpful, as well as a bike odometer, GPS unit and map. Note that the mileages provided in the biking guide are approximate. Most routes are rugged and rough and are not maintained to "city park" bike trail standards. Trail conditions can change due to weather or seasonal vegetation growth. Cyclists are urged to check with park staff to determine the latest trail information.

Remember that all natural, historical and cultural resources are protected at Big Bend Ranch. Please stay on designated trails and roads, and leave everything as you find it.

Many ride possibilities exist in addition to those described in the booklet. Some rides can be combined or improvised upon, or combined with hikes and other side-trips. Visit the park's Web site for more information: www.tpwd.state. tx.us/bigbendranch.



Welcome to Big Bend Ranch State Park



By Rod Trevizo, General Superintendent

This is our sixth edition of *El Solitario*, a publication that will help you plan your visit to Big Bend Ranch State Park and learn about its rich natural and cultural history.

We have continued to expand access to the park's interior by adding hiking, mountain biking and equestrian trails. Park roads are continually being improved and wayfinding signage added for your comfort and safety. Be sure to review the park map located in the centerfold for the latest updates.

Following the devastating floods of 2008, you will now find new campsites along the River Road (F.M. 170) corridor - 15 at Grassy Banks, six at Lower Madera and five at Upper Madera. These sites remain on a first-come, first-served basis. For all other camping and lodging needs or for information about special events, phone the Sauceda Ranger Station (432) 358-4444 or visit the Big Bend Ranch State Park Web site (www.tpwd.state.tx.us/ bigbendranch).

Happy Trails!

A TREK THROUGH THE BACKCOUNTRY OF BIG BEND RANCH STATE PARK IS GUARANTEED TO TAKE YOU OUT OF THE ORDINARY AND INTO "THE ZONE."

IF YOU GO

Water requirements: 200 - 220 ounces of water per day while riding (the equivalent of two large Camelbacks)

Plan ahead of time: Advance planning is critical. Obtain maps and study them before going. Get your bike and gear together, arrange for guide services and SAG support, and be sure you have containers large enough to carry sufficient water. Hard-soled shoes are

recommended for walking in rocky arroyos and creekbeds. A GPS unit is helpful. ALWAYS CARRY TWO SPARES.

Access: Obtain a park permit from the Barton Warnock Visitor Center in Lajitas (432-424-3327); Fort Leaton State Historic Site in Presidio (432-229-3613); or Sauceda Ranger Station inside the park (432-358-4444). Hours are 8:00 a.m. - 4:30 p.m. every day. Allow time for a mandatory orientation session (about 15 minutes). There are minimal day-use and camping fees.

Maps and trail guides: Visit the TPWD Web site (www.tpwd.state. tx.us) before going. A limited supply may be available at the park. Other online map sources include Google Earth, USGS (www.usgs.gov) and TNRIS maps (www.tnris.state.tx.us).

Commercial outfitters: Terlinguabased Desert Sports (432-371-2489) is the nearest outfitter and guide service. SAG and guide support are highly recommended for multi-day trips through the park. Bikes are available for rent at commercial outfitters and at the park.

Park lodging: Campsites available

by advance reservation. Find campsite descriptions, photos and GPS coordinates at www. tpwd.state.tx.us/bigbendranch. The Big House and bunkhouse at Sauceda are available by advance reservation (432-358-4444).

Lodging outside the park: Lajitas Resort and Spa (www.lajitas.com) offers 103 rooms, a restaurant, spa and pool. Chinati Hot Springs (www.chinatihotsprings.com) offers sustainably designed cabins, a community kitchen, a "cool pool," and hot-spring pools.

Be Aware: For your safety and welfare

Many wonderful animals live here and play a vital role in the balance of nature. You are a guest in their home. By learning about the park's animals and observing the following tips, you can show them the respect they deserve while keeping yourself and your family safe.

Rattlesnakes are especially common at Big Bend Ranch.

Watch where you put your hands and feet. Never harass or attempt to handle a rattlesnake—this is when most bites occur. Rattlesnakes are protected in the park; do them no harm.

Never feed wild animals or allow them to get human or pet food.

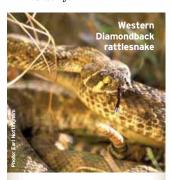
Observe wild animals and longhorn cattle from a safe distance; never approach or try to photograph them at close range.

Keep children and pets under your control at all times.

Clean up and store food and garbage immediately after meals; never keep food in your tent.

Enjoy the outdoors with others, not alone.

In the unlikely event that you encounter a black bear or mountain lion, do not run. Instead, face the animal, make noise and try to look as large as possible. Pick up small children. Back away slowly. If attacked, fight back. Report sightings to park staff immediately.





In the unlikely event that a snake bite occurs:

- Remove jewelry and loosen tight-fitting clothing.
- Wash the bite area with disinfectant.
- Keep the person calm and quiet.
- Limit movement if at all possible.
- Watch for symptoms of shock.
- Seek medical attention immediately.



Yedra 1 looking toward Pico de Cueva

Yedra 1 & 2 campsites are found in the Agua Adentro Backcountry Zone. This area contains over 20,000 acres for exploration and allows a magnificent opportunity for wayfinding and trekking. Yedra is the modified local dialect for the Spanish word *hiedra*, which means ivy in English.

Yedra 1 is perched on the north-facing slope of an impressive ridge of rhyolite lava. In the distance, campers can easily view the L-shaped form of La Mota Mountain. By looking carefully, the narrow top of San Jacinto Mountain comes into view as well.

Yedra 2 is found on a level plain near one of the many beautiful creeks in Big Bend Ranch State Park. The landscape around the campsite is mountainous and filled with canyons. "Remoteness" is the operative word here.

Access:



Yedra 2 4WD High clearance

Getting There

Sauceda Ranger Station to Yedra Road: 6.3 miles, 25 minutes

Portal de Presidio to Yedra Road: 11.7 miles, 46 minutes

What's special about these sites?

- · Beautiful springs
- Near Sauceda Ranger Station
- · Good for children
- Easy access



Yedra 2 campsite

Head 'em up, move 'em out!



GPS Coordinates, Yedra 1

UTM 13 Easting:	594435.5666
UTM Northing:	3263635.9713
Longitude DD:	-104.02574594
Latitude DD:	29.49871120
Longitude DMS:	-104 1 32.6854
Latitude DMS:	29 29 55.3603

GPS Coordinates, Yedra 2

UTM 13 Easting: UTM Northing:	594231.2972 3264502.0655
Longitude DD:	-104.0277783900
Latitude DD:	29.5065422400
Longitude DMS:	-104 1 40.0022



Yedra 1 and La Mota Mtn



Yedra 2 view of Pico de Cueva Larga

FEATURED HIKE

Puerta Chilicote Trailhead to Fresno Canyon/ Flatirons Vista



Los Portales

This hike is a relatively easy way to access some wild and rugged backcountry in Big Bend Ranch State Park, including an exciting 700-foot vertical view of Fresno Canyon and exceptional vistas of the famous Solitario "flatirons" and the mysterious Los Portales. The country around Chilicote Springs is stark desert landscape. There are historical ranch remains, hidden springs, striking volcanic rock formations, and beautiful desert vegetation.

The Puerta Chilicote Trailhead is the closest point that a 2WD lowclearance vehicle can reach.

How to get to the trailhead?

Travel east from the Sauceda Ranger Station on the Main Park Road for about 2.7 miles. Turn right (south) onto the Llano Loop road. Travel south and then southwest for about 1.7 miles. There will be a four-way junction (Chilicote Junction). Turn left (south) through the gate, and follow the road southward. Unless there has been a recent storm, the dirt road should be passable for a 2WD low-clearance vehicle (unless you have a really low-to-the-ground vehicle). At about 0.5 miles you will come to an easily crossable arroyo (dry creek bed). This should be passable, but if you don't feel comfortable crossing the arroyo, you can park off to the side of the road, just before the arroyo. From this arroyo, it is another 0.9 miles to Puerta Chilicote Trailhead on a fairly smooth dirt road.

I'm at the Puerta Chilicote Trailhead ... now what?

Once at the trailhead, pack up your hiking gear (take plenty of water) and continue hiking about 0.7 miles down the old jeep road to the southeast (if you are mountain-biking, you can continue down this road to its end). The old road dead-ends at Chilicote Springs.

Chilicote Springs: This area was used by ancient people and by the earliest Anglo ranch, called Chilicote. If you go down to the arroyo at the end of the jeep trail, staying to the left of the trees, you will see dozens of chiqueras (small rock shelters) above the creek bed that were used by early ranchers to protect baby goats and lambs from the sun.

Trail route to Fresno Canyon/
Flatirons Vista: From the end of the jeep trail at Chilicote Springs, follow the rock cairns eastward for about 2 miles until you come to the rim of Fresno Canyon. There is no prepared trail until you get to the canyon edge, but the route is relatively open. Pay attention to the rock cairn markers. If you are on the correct route, you should be able to see the next and the past cairn from the cairn where you are located. You will be hiking over ancient lava flows from the various Bofecillos volcanic events.

Fresno Canyon/Flatirons Vista: You will know when you have arrived at Fresno Canyon. You can't miss the 700-foot vertical drop into the canyon. If you do, you are in trouble. Look across the canyon and you will see the flatirons of the Solitario. Look down in the canyon and you will see Fresno Creek and the old 1890s-era stage road that connected Marfa and Terlingua/Lajitas. Look across and up canyon and you will see Los Portales on the west side of the Solitario. The low country to the right of the flatirons (ESE) is the valley of the Lower Shutup Arroyo.

This hike description ends here. If this is as far as you want to go, you should retrace your route back to the Puerta Chilicote Trailhead. If you want to continue on a longer and more arduous hike, travel south along the canyon rim for about a mile, where the trail steeply descends for 0.5 miles to the bottom of Fresno Canyon, some 700 vertical feet below. Use caution here, as the trail is rough with some unstable footing.

If you intend on traveling to the bottom of Fresno or on other trails in the immediate area, be sure to review the BBRSP Hiking Trail Guide.

Distance: 6 miles round-trip

Hike Time: About 3 hours

Elevation: High point - 4190'; Low point - 4060'

Hike Rating: Moderate difficulty to rim (tennis shoes not recommended)

Trail Surface: 1.4 miles jeep trail; 4.6 miles cross-country route

Terrain: Mostly gently rolling with some short hills, some rocky sections, and some brush

Access: Puerta Chilicote Trailhead Vehicle Access to Trailhead: 2WD Low-Clearance

MOUNTAIN BIKING

Contrabando multi-use and Horsetrap bike-and-hike

Contrabando Multi-Use Trail

has two trailheads, one located directly across the highway from the Barton Warnock Visitor Center near Lajitas and a second located 7.5 miles to the west along F.M. 170. Regardless of your skill level, this 25-mile trail system offers a segment or side loop that is suitable for you - from novice to advanced. Watch for horses: this trail is open to equestrians too. Enjoy spectacular views as you encircle the red rock of Lajitas Mesa or the uplifted Contrabando Dome. Along the trail, watch for wayside exhibits



that interpret the area's mining

and ranching heritage.

Views of Contrabando Waterhole and ruins from a 1890s ranch await you on the Contrabando Trail.

The word "contrabando" is Spanish for "contraband." For decades, smugglers traversed what is now known as the Contrabando region along the eastern boundary of Big Bend Ranch State Park. In the early 1900s, area ranchers sought Mexican cattle to bolster their herds; some brought animals across the border illegally to avoid custom fees. During the 1930s, huge amounts of candelilla wax slipped across the border as well. Wax smugglers escaped heavy Mexican export taxes and profited from higher prices in the U.S. Then, during prohibition, mule trains brought great quantities of sotol, an alcoholic beverage, out of Mexico to the U.S. border, where it was delivered to bootleggers.

Horsetrap Bikeand-Hike Trail

is easily accessible from Sauceda.
Hikers will find the trail an easy five-mile loop with vistas of the surrounding Chihuahuan Desert. For mountain bikers the degree of difficulty ranges from moderate to downright challenging. A 200-yard portion of the trail is sandy. Enjoy this "off the beaten path" experience as you soak up the solitude and the scenery.



Backcountry Zone Camping



There are no designated campsites in the backcountry zone. Backcountry camping allows overnight visitors to select their own primitive campsite, based upon certain conditions:

- At least 1/4 mile from any other existing campsite
- At least 300 feet from water sources and prehistoric or historic cultural sites
- At least 3/4 mile from trailheads or roads

Backcountry campers may use the "cathole" method to dispose of human waste and must pack out all trash. No open fires are allowed due to resource impact; use of containerized fuel stoves is permitted. The maximum stay is 14 nights (total) and seven consecutive days in any one backcountry zone.

BIG BEND RANCH STATE PARK FEES AND VISITOR SERVICES

Daily entry fee: \$3 per person per day for all 13 years and older

Standard Vehicle Campsite: \$8 per site/day

Backcountry Zone Camping: \$5 per night/site

Horses: \$2 per day/horse

No dump station in park. No hook-ups in park.

Lodging

Lodging is available bunkhouse style or in the "Big House" at Sauceda. Meals are available with advance reservations.

Call (432) 358-4444 between 8:00 a.m. and 4:30 p.m. for information and reservations.

Airstrip

Big Bend Ranch paved airstrip 3TE3

103-56-11.7030 W 29-28-10.6840 N

Elevation: 4250 feet Length: 5500 feet

BBRSP's new Friends Group Compadres del Rancho Grande!

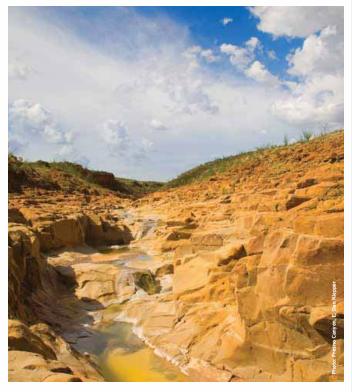


The group's objective is to assist in meeting the needs of the BBRSP complex, including the Barton Warnock Visitor Center,

Big Bend Ranch State Park, Fort Leaton, and Chinati State Natural Area, through your volunteer and financial support.

Please join us today as a member or volunteer! Donations and/or contact information can be sent to:

Comprades del Ranch Grande P.O. Box 314 601 N. State Street Fort Davis, Texas 79734



Park Information and Permits

Park information and permits for day use and camping may be obtained in person from 8:00 a.m. – 4:30 p.m. daily at three locations:

Sauceda Ranger Station Park interior (432) 358-4444 Barton Warnock Visitor Center Lajitas (432) 424-3327

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

Special-use permits are required for use of Primitive Road and all camping. Day Use visitors are required to obtain a free, special-use permit for motorized use of primitive roads.

Campsite and backcountry reservations may be made in advance by calling (432) 358-4444 between 8:00 a.m. and 4:30 p.m. Permits must be picked up in person.

Use Zones

Front Country Zone is defined as those lands within approximately one-quarter mile either side of the designated 2WD roads. All street-legal and licensed vehicles are permitted in this zone. Overnight use may occur only at designated campsites, with the required, special-use permit.

Primitive Road Zone is defined as lands within one-quarter mile either side of designated 4WD or 2WD high-clearance roads. Motorized vehicle access to this zone is restricted to street-legal and licensed vehicles. Overnight use may occur only at designated campsites, with the required, special-use permit.

Backcountry Zones are defined as lands that are more than one-quarter mile from publicly accessible roads. Twenty separate zones have been defined. Only non-motorized travel is permitted. Visitors are encouraged, though not required, to use designated trails and routes until they are knowledgeable and confident enough in their familiarity with the park to travel cross-country.

Important: Orientation

Front Country Zone Day Use Only

Appropriate orientation materials will be provided, depending on the visitor's intended activities and areas of interest at the park.

Primitive Road or Backcountry Zone Day or Overnight Use

The viewing or reviewing of comprehensive orientation materials and information is required. This material will introduce the park, the Chihuahuan Desert, safety, water use, vehicle requirements, land ethics, etc. Orientation is required annually.

No gas, diesel or groceries available in park.

EMERGENCY SERVICES

Cell phone service in the park is unreliable and limited.

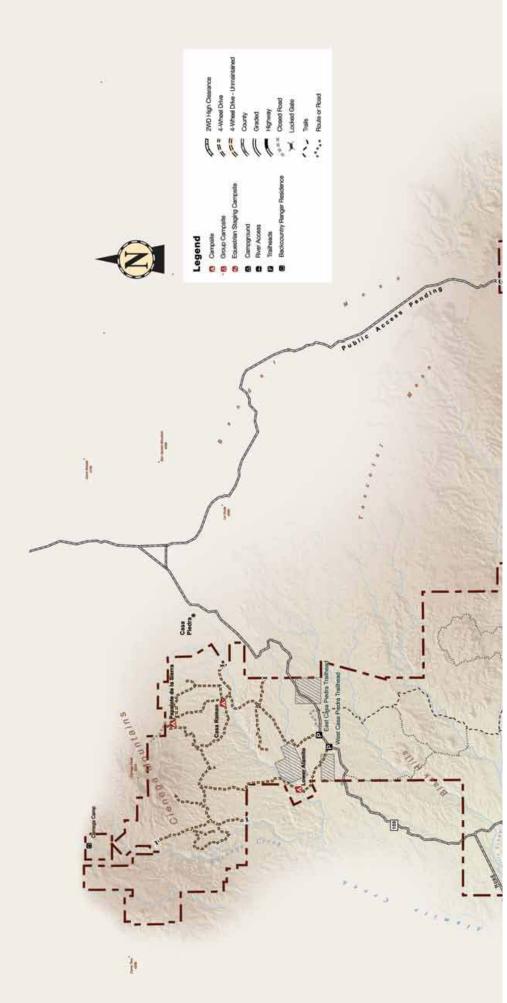
911 service is 2 to 3 hours away.

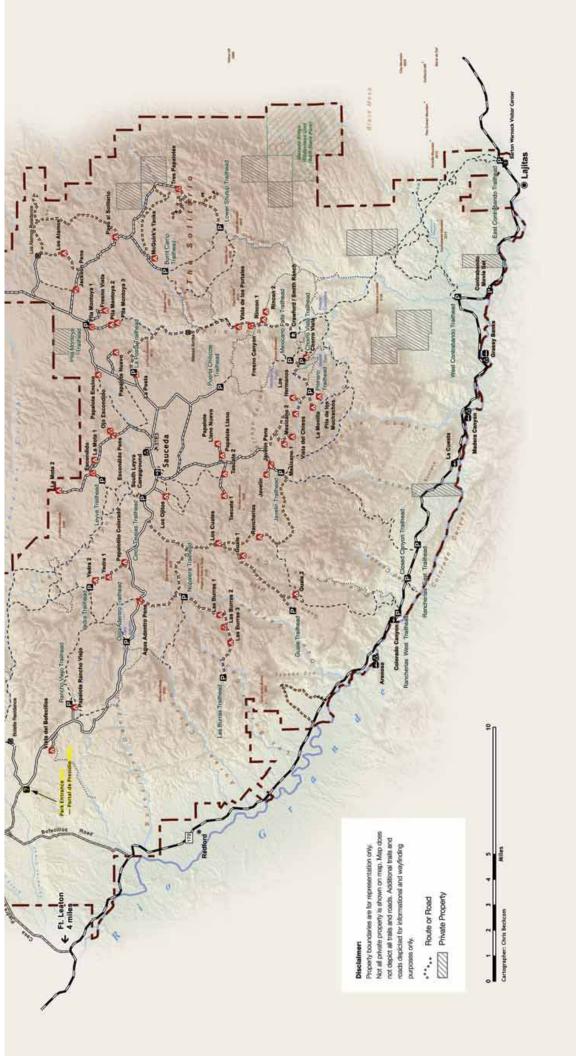
Best course of action is to call Sauceda Ranger Station at (432) 358-4444 or go to Sauceda Ranger Station; ask for help.

After-hours emergency contact: (432) 358-4623









BIG BEND RANCH STATE PARK ACCESS AND VISITOR SERVICES

Vehicle-Accessible Camping

Forty-nine locations have been designated for vehicle-accessible camping. Permits are required. Each site includes a tent area, picnic table and fire ring. Some campsites are still under development and may temporarily lack some amenities.

Campers are required to place tents in designated areas only. Desert resources are fragile. Important: All visitors are required to haul out their human waste and pack out all trash.

Portable privies are available for purchase at all permit-issuing stations.

Downed wood is critical to desert ecology. Gathering firewood is prohibited. Visitors may bring their own firewood or purchase it at Sauceda. Charcoal cooking fires and containerized fuel stoves are allowed. Ashes must be packed out or deposited in the fire ring. The maximum stay per permit is 14 nights.

Individual Campsites

- Up to 8-person occupancy
- 3-vehicle limit

Group Campsites

- Up to 12-person occupancy
- 5-vehicle limit

Equestrian Staging Campsites

- Up to 24-person occupancy
- 12-vehicle limit

Campsites at Campgrounds

• 3-vehicle limit

Pets

Pets are allowed anywhere vehicles are allowed, and within 1/4 mile of publicly accessible roads. Always keep pets on a leash and pick up after them. Never leave pets unattended or allow them to approach wild animals or longhorn cattle.



Road conditions are affected by rain and runoff and will vary widely. Check with a ranger for conditions on arrival.

Know Your Vehicle

Some roads are suitable only for high-clearance or four-wheel-drive vehicles. If you have any questions about the roads or the suitability of your vehicle, consult a park ranger.

- Two-wheel-drive (2WD): main road and some spurs that any highwayworthy vehicle, driven responsibly, can access.
- Two-wheel-drive, high-clearance (2WDHC): roads where extra clearance is required due to road conditions (rocks, steep dips, etc.).
- Four-wheel-drive (4WD): recommended where extra traction is required on steep, loose or soft ground. Includes all-wheel drive (AWD).
- Four-wheel-drive, high-clearance (4WDHC): primitive roads or routes harsher then 4WD, where passage requires vehicles with extra traction, rigid suspension and high clearance.

High clearance is considered a minimum of 8 inches.

Rules for the Road Less Traveled

Park roads are dirt and may be narrow. Speed limit is 25 mph on primary park roads. Drive slowly to keep yourself, your passengers, your vehicle and the park's animals safe.

When should 4WD be engaged? Generally speaking, once you leave the maintained road, shift from 2WD into 4WD and leave it there until returning to the maintained road. Use 4WD low before you need to negotiate any really difficult obstacles.

Take care of your tires. On primitive roads, the number one trouble is tire failure, often sidewall punctures. Drive slowly and watch for sharp rocks, sticks and cactus. Carry fix-a-flat, a lug wrench, hydraulic jack and tow strap. A good spare is essential; two spares are recommended.

Always carry an extra 5 gallons of water.

Beware of brush. The woody bushes of the desert are extremely hard and can produce nasty scratches in your vehicle's paint.

NOTE: A special-use permit is required for travel on all BBRSP roads $\ensuremath{\mathsf{2WDHC}}$ and beyond.



Medical Services

Cell phone service in the park is unreliable and limited. No medical facilities are available in the park. The nearest hospital is located in Alpine, about three hours' drive from Sauceda. In event of emergency, contact or go to Sauceda Ranger Station for help.

Food and Lodging

The lodge at Sauceda is a bunkhouse with a commercial kitchen. Meals are prepared and served in a common dining area. Meal service can be arranged with advance notice. Lodging is available bunkhouse style with men on one side and women on the other. The three-bedroom "Big House" sleeps eight. The Big House has a full kitchen, or meals may be taken at the Bunk House. Pets are not allowed in either. For information, rates and reservations, call (432) 358-4444 between 8:00 a.m. and 4:30 p.m.

Enjoy the Park (and live to tell about it)

The beauty of Big Bend Ranch lies in its rugged remoteness. You are responsible for your own personal safety while at the park. Stay alert, read posted materials and consult a ranger for advice.

Stay cool. Desert heat can kill, and sunburn is no fun. While enjoying the park, be sure to use sunscreen. Wear a long-sleeved shirt, long pants, a broad-brimmed hat and sunglasses. Avoid strenuous outdoor activities during the hottest part of the day. Always drink plenty of water.

Water is life. If you wait until you're thirsty to drink, you've waited too long. Carry and consume at least 1 gallon of water per person per day to avoid dehydration. Drinking water is available at the visitor center.

Weather the weather. In a lightning storm, seek shelter inside a building or a vehicle with a roof. Do not stand under trees or in shallow caves, and avoid high ground. Stay away from water, wire fences and metal railings, which can carry lightning from a distance.

Stay high and dry. Dry creek beds can quickly become raging torrents due to rainfall far upstream. Be cautious when hiking in streambeds. Never cross rain-swollen creeks or washes. Be aware that temperatures can fluctuate by 50 degrees per day at the park, and dress accordingly. Stay dry to prevent hypothermia.

Don't go it alone. Tell someone your plans and estimated return time. Avoid exploring alone. Cell phone service is spotty at best; do not rely upon it. Always have plenty of water and food with you.

Limited Time?

Due to the ruggedness of the Big Bend Ranch State Park (BBRSP) country, the type of vehicle you are driving may dictate where you can drive or what you can do during your visit. The following information should help those visitors driving two-wheel-drive, low-clearance (2WD LC) vehicles plan a day or two in the park.



See exhibits at Barton Warnock Visitor Center in Lajitas.

ONE DAY

From the east side: If you are coming from Big Bend National Park, Study Butte, or Terlingua, be sure to stop in at the Barton Warnock Visitor Center in Lajitas, for orientation/information and to peruse the interpretive exhibits on the natural and cultural history of the area, as well as the desert gardens. The park staff will be happy to help you plan your visit to the park. The park store offers informative books, maps and pamphlets about the area.

From the west: If you are coming from Presidio, be sure to stop in at Fort Leaton to see this impressive state historic site, which was constructed in 1848. The staff will provide you with detailed information about BBRSP and will gladly help you plan your visit to the park.

El Camino del Rio:

The 50 miles of road along the Rio Grande River between Lajitas and Presidio (F.M. 170) is mostly in BBRSP and may well be the most scenic drive in Texas. It is a good all-weather paved road--albeit, hilly and curvy in places (see page 12 for more details).

The main entrance road into the interior of BBRSP takes you through the west entrance, "Portal de Presidio," and on to Sauceda Ranger Station. This is a well-maintained dirt and gravel road which requires slow speeds, and is good for 2WD LC vehicles. It is not recommended for large RVs or trailers. From F.M. 170 it is about 25 miles to Sauceda Ranger Station. Various other side roads within the park require high-clearance and/or four-wheel-drive vehicles. The staff at the ranger station can help you pick a hike or advise you where to travel, depending on the type of vehicle you are driving or your hiking interest.

On your way into or out of the park, if short hikes appeal to you, consider these:

1. The Ojito Adentro trail offers an easy 1-mile round trip that traverses desert scrub into a moist riparian woodland.

the head of canyon. The trail winds through and over huge a boulder field at the upper end of the canyon, to end in a hanging garden just below the pour-off. It is an excellent wildlife and bird viewing area, with great butterflies/ dragonflies. This oasis-like area was an extremely important site that has been used by generations of people who lived in the area for the past 10,000 years. Look toward the northwestern slope to see a great stone fence. Sites such as this one exist throughout BBRSP.

This is a very nice cottonwoodvelvet ash woodland, with running/dripping water at

2. The Cinco Tinajas trail near Sauceda is a 3/4-mile round-trip trail that provides great views into a deep canyon with a series of tinajas, which are naturally formed or scoured rock bowls/pools that hold water when many other sources are dry.

3. Puerta Chilicote to Fresno Canyon Vista – If you arrive at Sauceda Ranger Station before noon, and you are up for an intermediate 5-mile round-trip hike, then this hike would be a great way to spend a few hours. See page 4, "FEATURED HIKE," for details.

CERTIFIED COMMERCIAL GUIDES AND OUTFITTERS

Laijtas, Terlingua

Big Bend River Tours 432-371-3033 or 800-545-4240

Desert Sports 432-371-2727 or 888-989-6900

Far Flung Outdoor Center 432-371-2489 800-839-7238

Lajitas Stables 432-371-2212 800-887-4331

Marfa

Angell Expeditions 432-229-3713



Know before you go

Multi-Use Trails

Some of the park's trails are suitable for hiking only. Other trails are available for mountain bikers and equestrians also. Speak with a park ranger for details and use options. Remember to take plenty of water, regardless of your activity!

Biking

When biking, always wear a helmet and protective clothing. Know your ability and limits. Bike rentals are available at Sauceda Ranger Station.

Horseback Riding

All pack-and-saddle stock users must obtain a backcountry use permit, whether for day use or overnight. Equestrians must bring their own weed-free horse feed. All horses must have documentation of a current Coggins test.

River Access

The Rio Grande provides opportunities for rafting, kayaking, canoeing and free bank fishing. Several river access points are found along F.M. 170. Colorado Canyon includes Class II and Class III rapids — not considered dangerous under normal flow conditions.

Outfitters

Local outfitters can provide guides and assist you with equipment needs. Potential services may include nature/ birding hikes, mountain biking tours, horseback rides, river trips and campouts.



NATURAL HISTORY

Zone-tailed Hawks on Big Bend Ranch State Park

By: Mark W. Lockwood

Texas is home to a number of species of raptors that are primarily tropical in their distribution. These birds typically have a very limited range in the United States but are found through Mexico and most occur southward through northern South America. Not surprisingly these birds are of considerable interest to birders, whether it is a White-tailed Hawk (Buteo albicaudatus) on the South Texas coastal plain or a Gray Hawk (Buteo nitida) in the cottonwood woodlands along the Rio Grande in the Lower Valley or the Big Bend region. One of these special birds is found on Big Bend Ranch State Park. The Zone-tailed Hawk (Buteo albonotatus) is essentially a black bird with white tail bands. In general, they are fairly rare in Texas and thus are listed as Threatened by Texas Parks and Wildlife.

Despite the relative rarity of Zone-tailed Hawk in the United States, this sleek raptor is an uncommon and relatively easy to observe birds at Big Bend Ranch State Park. The body shape and coloration of this hawk allows it to be easily overlooked by the casual observer because it is very similar in appearance to the abundant Turkey Vulture (Cathartes aura). Zone-tailed Hawks spend much of their time gliding in search of prey and their long, narrow wings and a long tail are certainly reminiscent of a vulture. It has been postulated that perhaps these dark-colored hawks lull their prey into a false sense of security that only a benign Turkey Vulture is cruising by before dropping down for the catch. Their body plumage is black and unlike a vulture they have a feathered head. Also unlike vultures their legs and feet are bright yellow, as is the base of the bill. On closer inspection their flight feathers are lighter in color that the wing linings and barred. Most strikingly, they have two or three white bands across the tail that are easily visible on a spread tail but can at other times be difficult to discern. Because of the geology and landform of the State Park there are numerous spring systems that support riparian woodlands



Zone-tailed Hawk

composed of cottonwoods and willows. These specialized habitats provide nesting places for Zone-tailed Hawks. The hawks normally nest in trees, but on rare occasions they will nest on a ledge or in a shallow rock shelter. These riparian areas typically do not cover large areas, but they do form the center of the much larger area that is used by the Zone-tailed Hawk for hunting. These hawks feed primarily on reptiles and small mammals and so are not restricted to the water courses for their hunting grounds.

Although Zone-tailed Hawks are superficially similar to the Turkey Vulture in appearance they do have a different shape and flight style. With some practice they can be very easily picked out as a hawk. Turkey Vultures always hold their wings in a dihedral, meaning that they are not held on a level plane with the body up, but rather in a shallow upward V. Zone-tailed Hawks can also fly with a dihedral, but in general they are more often seen with their wings held closer to level when gliding. The other difference that can be seen even from a distance is that the wings of a Zone-tailed Hawk are narrower when compared to a Turkey Vulture. To recognize this difference does take some experience with both species, but is often the first clue that a soaring raptor might not be a vulture.

Zone-tailed Hawks are summer residents with the first returning birds arriving in mid-March and most birds departing in September. During that time they are unlikely to be confused with other hawks that occur on Big Bend Ranch State Park, although dark morph Red-tailed Hawks (Buteo jamaicensis) can occur in the area into March. The nesting subspecies of Red-tailed Hawk does not have a dark morph and so all of the birds seen here in summer have white underparts. Away from the State Park proper it is possible to see two other similarly plumaged hawks. The Harris's Hawk (Parabuteo unicinctus) is a rare resident along the Rio Grande north of Presidio as well as around Fort Stockton. Harris's Hawks have brown, rather than black, plumage with chestnut shoulders and leggings. They have a broad white band at the base to the tail as well as a thin terminal band. In the Davis Mountains there is a very similar hawk called the Common Black-Hawk (Buteogallus anthracinus). They are very similar in overall appearance to the Zone-tailed including having black plumage and yellow legs and feet. Common Black-Hawks have a shorter tail with one broad white band at its midpoint and a very thin terminal band as well. They also have a very different shape and are more compact.

Because of the specialized habitats of Zone-tailed hawks and the need to protect nests, there may be periods in the spring and summer when certain areas and trails are closed to allow these rare hawks to raise their young without disturbance. They are an integral part of what makes Big Bend Ranch State Park special and protecting nesting sites will help to ensure that they continue to make this their home.



Watch the birdie

species of birds reside in Big Bend Ranch State Park! So dust off your binoculars, pick up a complimentary copy of the park's checklist, Birds of Big Bend Ranch State Park, and see what you can find. Various field guides are available for sale in the

Over 300



Scaled Quail



Black-throated Sparrow

park stores at Sauceda Ranger Station, Barton Warnock Visitor Center and Fort Leaton State Historic Site.

Big Bend Ranch offers the opportunity for you to explore several Chihuahuan Desert habitats including grasslands, desert scrub, canvons. and riparian woodlands and thickets. The greatest diversity and abundance of birds is normally found near the numerous springs and along streams scattered around the park, as well as the Rio Grande. Large springs normally are found in association with riparian woodlands (cottonwoodwillow-hackberry and shrub thickets) which provides important habitat for a number of species. One of the premier birding locations within the park is found at Ojito Adentro (wayside stop #4 along the road to Sauceda Ranger Station).

Good luck and happy birding!

ARCHEOLOGY, HISTORY AND CULTURE

Histories Intersect at Crawford-Smith Site

By Margaret Howard, David Riskind, Cynthia Brandimarte and Doug Porter

Located in Fresno Canyon on the east side of Big Bend Ranch State Park, the Crawford-Smith site is revealing many of its secrets through recent studies by TPWD historians, ecologists, architects, archeologists and surveyors. Their work has confirmed that water, well-known families, mohair, candelilla wax and cinnabar have all played a role in the historic record of the Crawford-Smith homestead.

The proximity of this river terrace to a strong spring played a large part in the popularity of this site over the centuries. Native Americans were the first to camp here in prehistoric times. Recent research indicates that as early as 1904, Seferino Madrid diverted water from Fresno Creek for small-scale irrigation of the terrace. In 1914 or 1915, deed records state that O. M. Connet and/or J. J. Allen built a large wood-frame house, a shearing shed, and stock pens on the property, and had 4 acres under irrigation. The main road from the Terlingua cinnabar mines to Marfa ran up Fresno Canyon and across the site, which probably was a stopping point for many a weary traveler.

J. L. Crawford established a ranch covering 15 square miles in this area by 1916, and settled his family at the site. Historic photographs show the adobe home he built near a complex of pens and irrigated fields; another field and a few small buildings (probably houses for workers) were on a smaller terrace nearby. Crawford made improvements to the water distribution system that brought spring water to the complex, and raised Angora goats to produce mohair.

Crawford also partnered with son-in-law J. J. Allen to establish the Fresno Wax Factory, first located on the ranch near his home and later moved 5 miles down Fresno Creek. From ca. 1914 through 1921, candelilla plants were gathered from the surrounding area and wax was rendered



Crawford-Smith Ranch ca. 1915

from them and sold, to meet the demand for waterproofing tents, ammunition, and maritime equipment for the armed forces in World War I.

Harris Smith bought the ranch from Crawford's descendants in 1930, five years after that patriarch passed away. Smith expanded and modified the adobe house to accommodate his growing family, and built or modified several other buildings. He made substantial improvements to the system of pipes that distributed spring water throughout the complex, irrigating an orchard of fruit trees and gardens outlined by rock walls, and supplying water to the house for indoor plumbing. The Smith family's primary income came from raising Angora goats and selling their abundant mohair.

Smith also was aware of the cinnabar mines in nearby Terlingua, and hoped to discover the valuable ore on his ranch. In 1935, his herdsman Martín Bernal reported that goats grazing in a certain valley had red-stained bellies after a summer shower. Smith prospected there for cinnabar, assisted by business partner Homer Wilson, a local petroleum and mining engineer. Within a few years Smith and Wilson established the Contrabando Dome and Fresno Mines and founded the associated community of Buena Suerte (Good Luck). located just upstream from the old wax factory. To obtain mercury from the cinnabar



Archeologists at work in Fresno Canyon

they initially separated the ore in a flotation mill, operated by piping water from a spring one mile upstream. By 1940, Smith moved his family to Buena Suerte and leased his ranch. The mine closed in 1944, and soon after he sold the ranch and left the area.

The Crawford-Smith site was intermittently occupied through the 1970s by other individuals, the last known being the Palma family. The fruit trees that the Crawford's and Smith's had planted eventually died from lack of water. The pens were modified to contain cattle. Over the years, the original iron pipes that brought water from the spring were repaired with galvanized fittings and spliced with polypropylene pipe. When the site finally was abandoned its buildings began to deteriorate, a process hastened when cottonwood vigas (roof beams) were scavenged from the main structure in the late 1970s or early 1980s.

After the state acquired Big Bend Ranch in 1988, TPWD staff began to inventory the

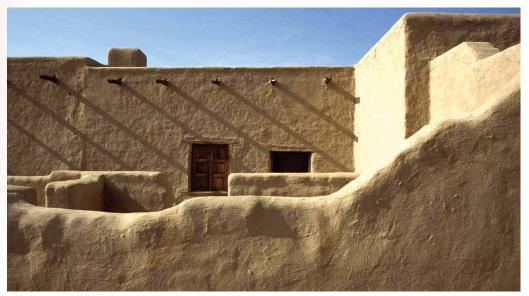
historic sites in the park, and realized that many threads of the histories of the Crawford-Smith complex and other sites were in danger of being lost. The effort to discover and preserve those stories continues to the present. Historians found deed and irrigation records in collections statewide. They sought out descendants, whose recollections and photographs provided a treasure trove of information. Early images of the Crawford occupation (including the one printed here) were discovered in historic photograph collections.

In January and February of 2010, TPWD staff from Big Bend Ranch and other state parks, the Natural Resource Program, and volunteers worked long and hard to clear brush away from structures at the Crawford-Smith site. The pipeline was traced to the source spring, high in a canyon. Near Fresno Creek, an extensive rock-walled platform containing 36 evenly-spaced concrete pads was exposed. A Crawford-era photograph shows that it was already present by that date; it appears have been the foundation for an industrial or military structure, but its precise age and purpose remain a mystery.

While TPWD surveyors compiled a detailed map of the Crawford-Smith site using high-precision GPS equipment, archeologists from the TPWD Cultural Resources Program documented its features and searched for artifacts dating from the earliest occupations through the 1940s. Archeologists also photographed views matching the historic photographs, and located the spots where the original wooden building, orchard, and other features once stood.

Future research on this significant site includes plans for historic architects to make detailed records of the building ruins. The images, accounts, items, and records on the Crawford-Smith site will be used to help visitors appreciate its multifaceted story and the important role it played in the history of the region. Pay a visit; you'll be glad you did.

A River Runs By It: The River Road



(Top) Fort Leaton State Historic Site near Presidio. (Top right) Barton Warnock Visitor Center in Lajitas

Despite flooding of historic proportions on the Rio Grande, the River Road or F.M. 170 between Lajitas and Presidio remains one of the most scenic, albeit changed, drives in all of the United States. Repeat visitors will be amazed at the river's new look. The dense stands of non-native river cane, salt cedar and Bermuda grass that once choked the river have largely been scoured away. In their place, newly-deposited gravel bars outline an unobstructed flow of water through freshly-cut channels. As you drive the River Road and take in the scenery, take a moment to also contemplate the aweinspiring power of nature.

Take A Break; Take a Hike

The River Road continues to boast plenty of hiking opportunities - over 60 miles of trails. The rugged Rancherias Loop, a 19-mile favorite of backpackers,

requires serious trekking through spectacular yet rough country with elevation changes of 1,500 -2,000 feet. The shorter and gentler Rancherias Canyon Trail leads to a waterfall that cascades over rock ledges into a refreshing pool. Day hikers may also choose Closed Canyon, an easy 1/2-mile round-trip trail through a tall and narrow slot canyon near the Rio Grande.

Wet a Paddle; Drop a Hook; Camp Out

Several access points provide opportunities for fishing (no license required in BBRSP) in the Rio Grande or putting in your kayak or canoe. Bring your own, or rely on one of the local outfitters listed on page 9. Designated campgrounds and group areas provide picnic tables, fire rings and shelters for day or overnight use. Be certain to keep vehicles on designated roads and parking areas to avoid becoming stuck in the flood-deposited sand.



Kavaking and canoeing through Colorado Canvon

Live and Learn

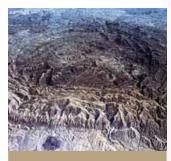
Be sure to watch for interpretive waysides at several pull-offs along the River Road, including La Cuesta (Big Hill), Contrabando Movie Set, Three Dike Hill and the Presidio Basin. Trailside interpretive exhibits also dot the Contrabando Trail, colorful vignettes from the region's past.



Want to Know More?

Before embarking, stop at either the Barton Warnock Visitor Center in Lajitas or Fort Leaton State Historic Site near Presidio. You can view exhibits, pick up maps and area information, and check out the latest road conditions.

Take your time, and enjoy the spectacular scenery. The River Road drive is a great way to spend the day and to get an introduction to Big Bend Ranch State Park.



El Solitario: What's in a name?

Spanish for "hermit" or "loner," El Solitario is the signature landscape feature of the park. Almost 10 miles across, this collapsed and eroded volcanic dome is one of the Earth's more distinctive features as observed from space. Solitario Overlook is a few miles past Sauceda Ranger Station and is accessible by 2WD vehicles. For a closer look you'll need a 2WD high-clearance vehicle. Ask a Ranger for directions and current road conditions.

EL SOLITARIO

Editors W. Phil Hewitt Linda Hedges Regional Director Mike Hill General Superintendent Rod Trevizo



Life's better outside.

EXECUTIVE DIRECTOR Carter P. Smith

Peter M. Holt. Chairman

Mark E. Bivins Amarillo Ralph H. Duggins Fort Worth Antonio Falcon, M.D. Rio Grande City Karen J. Hixon San Antonio Dan Allen Hughes, Jr. Beeville Margaret Martin Boerne S. Reed Morian Houston

Fort Worth

TEXAS PARKS AND WILDLIFE DEPARTMENT MISSION STATEMENT

To manage and conserve the natural and cultural resources of Texas and to provide hunting, fishing and outdoor recreation opportunities for the use and enjoyment of present and future generations.

You may view this and other publications through the TPWD Web site. Please visit http://www.tpwd.state.tx.us/publications/.

In accordance with Texas State Depository Law, this publication is available at the Texas State Publications Clearinghouse and/or Texas Depository Libraries.

© 2010 Texas Parks and Wildlife Department



Mixed Sources

PWD BR P4507-1437 (5/10)

Big Bend Ranch State Park Sauceda Ranger Station Presidio, Texas 79845 Fax (432) 358-4679

General Superintendent Office HCR 70, Box 375 Terlingua, Texas 79852

Fax (432) 424-3404 Phone (432) 424-3341 **Barton Warnock Visitor Center**

Phone (432) 358-4444

HCR 70, Box 375 Terlingua, Texas 79852 Fax (432) 424-3404 Phone (432) 424-3327

Fort Leaton State Historic Site

P.O. Box 2439 Presidio, Texas 79845 Fax (432) 229-4814 Phone (432) 229-3613

Texas Parks and Wildlife Department Headquarters 4200 Smith School Road Austin, Texas 78744 (512) 389-4800 (800) 792-1112

www.tpwd.state.tx.us/bigbendranch