



The Paisano

Big Bend National Park
Rio Grande Wild & Scenic River
Visitor Guide

Volume 34, number 1 2014



C. BALLOU

Central Texas Whipsnake (*Masticophis taeniatus girardi*)

6 What to See & Do

Find out how to make the most of your time in the park. Includes detailed maps of the Chisos Basin and Rio Grande Village.

10 Campgrounds

Interested in camping in the park? Learn more about the three developed campgrounds as well as RV hook-ups.

11 Backcountry

Learn more about opportunities to enjoy Big Bend's wilderness including: primitive camping, backpacking, river trips, and horseback riding.

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Welcome to Big Bend National Park!

Welcome to Big Bend National Park and the Rio Grande Wild and Scenic River! Over 800,000 acres await your exploration and enjoyment.

From an elevation of less than 1,800 feet along the Rio Grande to nearly 8,000 feet in the Chisos Mountains, Big Bend includes massive canyons, vast desert expanses, forested mountains, and an ever-changing river. Here you can explore one of the last remaining wild corners of the United States.

In fact, early explorers found the Big Bend Region to be so remote, so wild, that they called this area El Desplado—the

uninhabited land. At first glance, the desert appears to be desolate and barren. One might feel alone in the wilderness of Big Bend, but even here you are surrounded by life.

From the forests of the Chisos down to the floor of the desert, over 1,200 types of plants thrive in the park and support ecosystems full of pollinators, herbivores, and other wildlife.

Take a drive along one of Big Bend's roads, or hike a scenic trail, and discover just how much diversity and life there is in the desert!



R. WONITE

Superintendent's Message

It is my honor to welcome you to Big Bend, a magnificent corner of this country that we have the privilege to preserve and share. Fulfilling these two missions is an ongoing balance we work to achieve, and we've made some exciting advancements.

In April 2013, we celebrated the opening of the Boquillas Port of Entry. Now visitors can enjoy cross-cultural experiences and build relationships like we previously appreciated in this border region.

Another exciting project is the Fossil Discovery Trail Exhibit. Friends of Big Bend National Park have raised a half million dollars for this project, and continue to partner with us as we create the educational display that will bring our world-class specimens to light. Visit bigbendfriends.org to become a part of this project.

Cindy Ott-Jones

Superintendent Cindy Ott-Jones



Boulders at Balanced Rock

C. BALLOU

To:

EXPERIENCE YOUR AMERICA™

Big Bend National Park
PO Box 129
Big Bend National Park, TX
79834





National Park Service
U.S. Department of the Interior

Big Bend National Park
Rio Grande Wild & Scenic River

The National Park Service was established on August 25, 1916. . . "to conserve the scenery and the natural and historic objects and the wildlife. . . and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations."

Authorized by Congress in 1935, and established in June 1944, Big Bend National Park preserves the most representative example of the Chihuahuan Desert ecosystem in the United States.

Park Mailing Address

Big Bend National Park
PO Box 129
Big Bend National Park, TX 79834

Phone

432-477-2251

Park Websites

www.nps.gov/bibe/
www.nps.gov/rigr/

On matters relating to the Paisano:

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The National Park Service cares for the special places saved by the American people so that all may experience our heritage.

EXPERIENCE YOUR AMERICA™

In the News



Mountain Lion Research in Big Bend

Park Ranger Ali Paul

With every hike in a national park, every family trip to a historical site, we fulfill one half of the National Park Service's dual mission—to provide for the enjoyment of the resource. What we often don't see is the fulfillment of the other half—the conservation and preservation of precious resources. National parks are not just places for recreation; they are living museums, as well as unique scientific laboratories. They are places for discovery because, in order to protect our resources, we must know them. Currently underway is a new study focused on our large predator, the mountain lion.

The purpose of the new study is to gain valuable insight about human and mountain lion interaction in Big Bend National Park. The study will examine the lion population and collect data on its size, density in certain areas, denning locations, and hunting habits. The study will also attempt to learn more about mountain lion interactions with humans by tackling important questions: Do cats use hiking trails? Are they more or less active in human-use areas like the

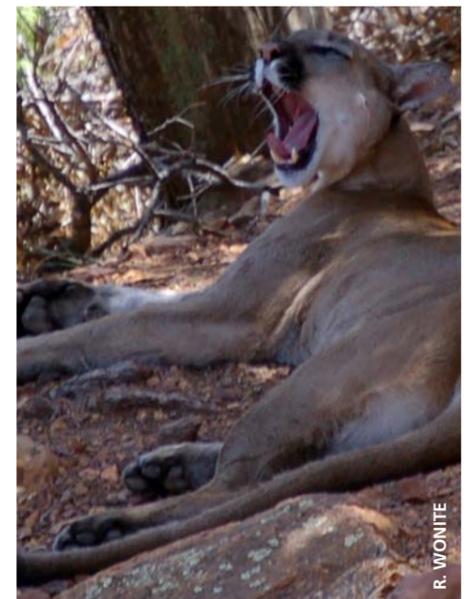
Chisos Basin? Do human behaviors attract mountain lions to an area? A primary goal of the research is to help park managers reduce human/mountain lion conflicts in the park.

The research team consists of experienced scientists from the Borderland Research Institute of Sul Ross State University in cooperation with the National Park Service. The research is being funded by grants, and scientists will work under a special permit. Scientists will use NPS-approved methods, including the use of radio and GPS collars, to collect data. Backcountry wildlife tracking cameras will be installed in the park in areas determined to be good lion habitat. Cameras may also capture black bear images, and scientists hope to collect data on how mountain lion and bear populations affect each other. Raymond Skiles, Big Bend's Wildlife Biologist, will be the liaison for the project and will help guide the research.

One exciting aspect of the study is that visitors can assist scientists with their work. Visitor reports and photos of lions or signs of their scat and tracks could prove beneficial to the study. So, what should you do if you spot a mountain lion? First, enjoy the experience—you've just had a rare sighting! Remember the behavior you witnessed, note

your exact location, time of day, and weather conditions. Then, report your sighting in detail as soon as possible. Wildlife sighting cards are available at park visitor centers.

You have an excellent opportunity to experience the dual mission of the National Park Service in action as we learn more about Big Bend's most famous resident—the mountain lion.



Mountain Lion in the Chisos Mountains

Support Your Park!

Become a member and create a lasting relationship with Big Bend National Park.

Do more with your dues!

Purchase a dual annual membership in both Big Bend Natural History Association (BBNHA) and Friends of Big Bend National Park (FBBNP) for only \$100.

Member Benefits

Membership benefits include a 15% discount in BBNHA bookstores; a 10% discount on most seminars; a subscription to the *Big Bend Paisano*; a current Big Bend calendar; discounts at many other association bookstores in other national park sites; and the opportunity to support scientific, educational, and research programs in Big Bend.

Annual Dues

- Individual \$50
- Associate \$100
- Corporate \$200
- Joint Membership \$100

Life Membership

- Individual/Family \$500
- Corporate \$1000
- Benefactor \$2500

Join online at:

www.bigbendbookstore.org

For more information:

432-477-2236

Park Partners

Big Bend Natural History Association

The Big Bend Natural History Association (BBNHA) was established in 1956 as a private, non-profit organization. The Association's goal is to educate the public and increase understanding and appreciation of the Big Bend area and what it represents in terms of our historical and natural heritage. BBNHA champions the mission of the National Park Service in interpreting the scenic, scientific, and historic values of Big Bend, and encourages research related to those values.

The Association conducts seminars, and publishes, prints, or otherwise provides books, maps, and interpretive materials on the Big Bend region. Proceeds fund exhibits, films, interpretive programs, seminars, museum activities, and research.



www.bigbendbookstore.org

Friends of Big Bend

Founded in 1996, the Friends of Big Bend National Park is a private, non-profit organization with a mission to support, promote, and raise funds for Big Bend National Park in partnership with the National Park Service and other supporters who value the unique qualities of this national resource on the Rio Grande.

The Friends of Big Bend National Park has funded a range of critical projects, including wildlife research programs, the purchase of air and water quality monitoring equipment, and the construction and renovation of the park infrastructure.

Get In On the \$30-Per-Plate Fund-Raiser

Big Bend custom license plates are available for your car, truck, or motorcycle from the state of Texas and most of the proceeds go to preservation and protection of Big Bend National Park.



PO Box 200
Big Bend National Park, Texas 79834
432-477-2242
www.bigbendfriends.org

Volunteers in the Park

Approximately 260 volunteers contribute 50,000 hours of work every year in Big Bend National Park! Whether staffing visitor centers and campgrounds or patrolling backcountry trails, volunteers protect valuable resources and help visitors learn about, and more safely enjoy, Big Bend National Park.

While you might not notice volunteer contributions at first, look around and you'll be surprised how many volunteers you see. It is primarily volunteers who provide visitor information at campgrounds, and at four of the five visitor centers in the park. They keep the campsites, backcountry roads, and trails in pristine condition, assist with maintenance projects, and are considered the eyes and ears of the park. Please thank them for their services if you have the opportunity. For more information, contact the volunteer coordinator at 432-477-1196.



www.nps.gov/volunteer

Big Bend and the Border



J. JURADO

The Fluid Border

In addition to defining the curve that forms the Big Bend, the Rio Grande also serves as the international boundary between the United States and Mexico. Throughout much of its history, the border along the Rio Grande has been fluid, allowing people of both countries to come and go as needed. However, the border is an artificial boundary imposed on the natural environment, and as such is subject to political and social pressures that continue to evolve. Increased border restrictions have led to a number of important changes that affect the international boundary in Big Bend.

Border Safety

- Know where you are at all times, and use common sense. Cell phone service may be limited in areas of the park.
- Keep valuables, including spare change, out of sight and lock your vehicle.
- Avoid travel on well-used but unofficial "social trails."
- Do not pick up hitchhikers.
- People in distress may ask for food, water, or other assistance. Report the location of the individuals to park staff or Border Patrol as soon as possible. Lack of water is a life-threatening emergency in the desert.

- Report suspicious behavior to park staff or the Border Patrol. Do not contact suspicious persons.
- Ask at the visitor center about areas where you may have concerns about traveling.

Border Merchants

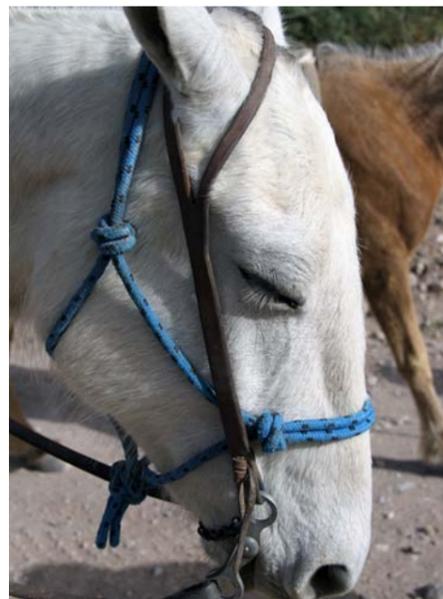
Near the border, you may encounter small "souvenir stands" and Mexican Nationals may attempt to sell you their crafts. Social trails created to place items and refuse left behind contribute to erosion problems and contamination of the watershed. Removal of natural resources from the park or Mexican protected areas causes resource damage. Individuals who place items are subject to arrest for illegal entry and commerce. They will be held until deported through Presidio, 100 miles from Big Bend National Park.

Items purchased illegally will be considered contraband and seized by officers when encountered. Port of Entry staff can answer questions about items that can be *legally* purchased and imported through the Port. By purchasing souvenirs legally you support the citizens of Boquillas, make the river corridor safer for all visitors, and help protect the resources of this ecosystem.

Border Crossing

The Boquillas Crossing Port of Entry is the gateway for visitors who wish to visit Mexico. Proper documentation is required to enter Mexico and re-enter the United States. Information about documentation and Boquillas is available from the staff at the Port of Entry or, visit the U.S. Customs website at:

http://getyouhome.gov/html/eng_map.html



A Member of the Boquillas Taxi Fleet

Visiting Boquillas

- Everyone needs a passport; Mexico requires it for entry, and you must show your passport on return to the U.S.
- Citizens of countries other than the U.S., Mexico, Canada, and Bermuda need additional documentation (Check with Port of Entry staff).
- The Port of Entry is closed two days per week. Hours and days of operation are limited and subject to change. Check at park visitor centers for the current Port of Entry operations schedule.
- There are fees in Mexico for the ferry and transportation into the village.
- There are specific regulations regarding what you may take with you, and what you may bring back.
- All persons are subject to search both in- and outbound from the Port of Entry.
- Pets are not allowed on the Port of Entry road or in its parking lot.

Protecting Yourself and the Park

Big Bend may be wild and unfamiliar country, yet it need not be dangerous. Whether hiking the high country, floating the Rio Grande, observing wildlife, or driving the scenic roads, let safety be your constant companion. By giving forethought to your actions you can have a safe, exciting, and rewarding experience in Big Bend National Park. Spend a moment reviewing these common safety considerations and resource protection guidelines.

Collecting

It is the mission of the National Park Service to preserve all natural and cultural resources unimpaired for future generations. Taking crystals or arrowheads, or collecting plants or animals robs everyone of this heritage—once something is stolen, it cannot be replaced.

Please, do not destroy, deface, injure, dig, collect, or otherwise disturb park resources including plants or animals (dead or alive), fossils, rocks, or artifacts. It is a violation to possess park resources. Please, take only pictures, and leave only footprints.

Driving

Most serious injuries and deaths in the park result from car accidents. Drive within the speed limit (maximum of 45mph in most areas), and watch for wildlife grazing along the roadsides, especially at night. Park roads have limited shoulders and some are steep and winding and require extra caution.

Remember, too, you share the road with bicyclists and pedestrians. Pull off the road to take pictures—do not stop or pause in roadways. Please, slow down...and enjoy!

Heat

The dry desert heat quickly uses up the body's water reserves. Carry and drink water—at least 1 gallon per person per day. As you exercise, you lose salt and water (over a quart and a half per hour during arduous exercise). You need both to survive in this extreme environment. Reduce alcohol and caffeine intake—the diuretic effects can result in accelerated loss of body water.

Protect your body—sensitive skin burns easily. Find shade, wear sunscreen, sunglasses, and a brimmed hat. Wear long-sleeves, trousers, and proper shoes.

Hiking

Trails vary from easy and well maintained to strenuous primitive routes. Plan hikes within your ability. Avoid ridges during thunderstorms, and canyons or creek beds when flash flooding is possible. Carry a flashlight and first aid kit, and let someone know where you are going and when you expect to return. If you get hurt or lost, stay in one place to conserve water and energy.

Please keep your children close; don't let them run ahead on trails.

Water Conservation

Big Bend is a desert, with water being a precious resource. Water in the Chisos Basin is limited to Oak Spring, which is recharged by scant rainfall. Other areas rely on a precious few aquifers.

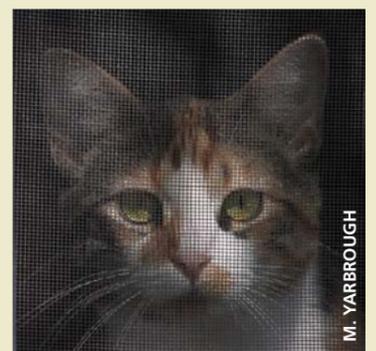
Please voluntarily limit your water consumption within desert areas. Drinking water is necessary, but lengthy showers are an extreme luxury—instead, soak in the Hot Springs if you'd like to relax in some hot water. Wash only what clothing items you need. Consider topping off RV water tanks at your next destination.

Wildlife

Observe Big Bend's wildlife from a distance. Do not follow or approach them. Wildlife is protected in the park; it is illegal to harass or harm wildlife. Never feed wild animals. Feeding wild animals damages their health, alters natural behaviors, and exposes them to predators and other dangers. Protect wildlife and your food by storing food and trash securely.

Venomous snakes, scorpions, spiders, and centipedes are active during warm months. Pay attention: check shoes and bedding before use, and use a flashlight at night.

Pets in the Park



M. YARBROUGH

Having a pet with you may limit some of your activities and explorations in the park. Abiding by these pet regulations will ensure a safer, more enjoyable visit for yourselves, other park visitors, your pet, and the park's wildlife.

- Pets are not allowed on trails, off roads, or on the river. Your pet can only go where your car can go.
- Pets need to be on a leash no longer than six feet in length (or in a cage) at all times.
- You may not leave your pet unattended in vehicles if it creates a danger to the animal, or if the animal becomes a public nuisance.
- If you plan to hike, someone must stay behind with the pet, or you will need to make arrangements with a kennel service. There is no kennel service in the park.
- Pet etiquette and park regulations require that you always clean up after your pet and dispose of waste in trash receptacles.

To Preserve Unimpaired



C. BALLOU

No Wood or Ground Fires: Hidden Costs of Campfires

Park Ranger Bob Hamilton

When entering Big Bend National Park, visitors quickly learn wood fires and ground fires are strictly prohibited everywhere and at all times, except on overnight river trips. Not infrequently a disappointed visitor will ask why this regulation exists.

The most obvious answer is directly related to the lack of annual precipitation in the Chihuahuan Desert ecosystem. Most of every year, moisture in any form is limited; when even a small amount of precipitation occurs, low desert vegetation responds quickly, producing an abundance of lighter fuels that rapidly become bone dry and highly susceptible to wildfire.

The Chisos Mountains receive more precipitation than other areas in the park, and this factor yields an even greater concentration of fuels. The threat of catastrophic wildfire to the resource and to visitors is very real in Big Bend. In March,

1989, action by a careless visitor resulted in a wildfire that burned 334 acres of the western Chisos Mountains and threatened structures in the Basin. No human life was lost, but the environmental change is still evident today; resource recovery from a desert fire is a very long process. But there is another less obvious reason to prohibit fires in Big Bend National Park.

Sparse vegetation throughout the park fails to provide any substantial fuel supply for visitor campfires. Early settlers said one had to "dig for wood" because the only fuels for cooking and heating were contained in the underground root systems of small trees.

The obvious solution is to bring in one's own wood. However, visitors transport firewood from their homes to the national park without realizing the result is potentially devastating to the desert ecosystem. Firewood brought in from other areas can carry non-native organisms into the park. While many exotics have a minimal negative impact, the presence of others can be devastating.

In 2001, a nest of red imported fire ants (*Solenopsis invicta*) was confirmed in the

Chisos Basin Campground. No one is certain the ants were transported into the park on firewood, but the species has expanded its range by hitching a ride on firewood, trains, vehicles, and on potted plants. The presence of these ant colonies in Big Bend National Park represents a grave threat to all insectivorous reptiles and especially to our horned lizards.

Nearly 70% of the diets of the Texas Horned Lizard and the Round-Tailed Horned Lizard are harvester ants. When fire ants arrive, harvester ant colonies disappear. Because fire ants sting and are aggressive, horned lizards do not eat them. Additionally, fire ants can consume and kill horned lizard eggs and young. According to the Chihuahuan Desert Research Institute, "The combination of direct predation and destruction of the lizard's food supply is probably sufficient to ensure the demise of horned lizards."

The National Park Service mission is to "preserve unimpaired the natural and cultural resources" within areas it administers, and most park regulations exist to support the NPS mission. Sometimes the link between regulations and what they are designed to do is complex and poorly

understood. Hopefully, Big Bend's effort to restrict ground fires and wood fires will, in multiple ways, result in the preservation of a healthy Chihuahuan Desert ecosystem for all to enjoy.



Round-Tailed Horned Lizard

J. JURADO

Desert Skies



C. BALLOU

An Enlightening Experience

Park Ranger Jennifer Goucher

Weather in Big Bend can be as volatile as the landscape is diverse. A calm, clear day can quickly turn windy and abrasive in a matter of minutes. Summer offers temperatures greater than 100° Fahrenheit. Ground temperatures have been recorded at 180° Fahrenheit. Winter forecasts often dish out mild, sunny days with temperatures in the seventies, eighties, or nineties, or, you might find yourself building a snowman. Late spring storms can whip themselves into a frenzy when the weather report did not predict a drop of rain. Washes can transport torrents of water from these rains at high rates of speed uprooting plants, animals, and even cars in their wake. And then there is lightning.

Lightning is one of the most deadly weather phenomena in the United States. Lightning can be especially dangerous in the desert as shelter is scarce or nonexistent. Washes, as mentioned above, can flash unexpectedly

and high points, such as peaks and open mesas, become conduits for these terrestrial, plasma strikes. Being swallowed up in a sudden storm happens easier than one would think.

I had the misfortune (or fortune?) of being caught, (and entrapped) in one such storm in December. . .

While cycling through the park one evening from Panther Junction toward the Maverick entrance station, I noticed dark clouds hastily erasing the beginning of a gorgeous sunset. An evening shower was a welcoming thought though, considering the severity of recent drought conditions. I continued pedaling, thinking about the future possibility of a delightful spring bloom. My pleasant thoughts came crashing—literally—to a halt when the first intense bolt of lightning struck the earth. My heart leaped to my throat as I registered what I was riding, and what metal and electronics I had on me! It also occurred to me that my shuttle ride was an hour out, though the storm was rapidly approaching. I had two choices: keep pedaling, or assume the lightning position.

At the fiercest point in the storm I was pelted by sideways rain, enormous gusts of wind blew me across the road, and thunder bellowed with lightning flashes simultaneously. But then, the sun gloriously peaked through the clouds in front of me, and splashed bright-orange color across Santa Elena Canyon. It was beautiful! Checking the clouds above me, I was astonished by a breathtaking, double rainbow. And, lucky for me, my ride arrived, as my friends were also alarmed by the sudden arrival of the storm.

While my adventure ended without incident, (shy of a few rattled nerves), being caught in lightning is not just scary, but dangerous. Few can claim to be as blessed as Roy Cleveland Sullivan, a park ranger at Shenandoah National Park, who was hit seven different times by lightning between 1942 and 1977; he survived every strike.

A short hike, bike ride, backpacking excursion, or other outdoor activity can quickly turn into a precarious situation should there be an abrupt change in the weather. Enjoy the best Big Bend has to offer,

but stay safe by keeping an eye on the sky, and check and recheck the weather report throughout your visit in Big Bend National Park.



Desert Lightning

J. JURADO



In Times Past

M. YARBROUGH

Soaking It All In

Park Ranger Mary Collins

Throughout Big Bend National Park one can catch a glimpse of days gone by. Whether it is the early Native American tribes who called this land home or the settlers and ranchers who dared to scratch out a living, they have all left their mark. The Hot Springs near Rio Grande Village is one such place, easily accessed by car or foot. Following is the story of one man and his family who were determined to call the Hot Springs home:

In 1909, when J.O. Langford purchased the land containing the springs he was searching for a miracle. He suffered frequent bouts of pain and discomfort from malaria—the mosquito-borne infectious disease he contracted as a young boy. Traveling with his pregnant wife Bessie and young daughter Lovie, he set out from Alpine, Texas, for his unknown land by the Rio Grande. They arrived ten days later only to find part of the land already settled and being worked by a Mexican family, the Natividads. Deciding quickly that a land deed was just a piece of paper, the families became close friends.

Langford had tried nearly everything to cure himself of malaria, and now, he put all his faith in his newly acquired spring, and began 21 days of treatment. He both drank and soaked in the water several times throughout those days. By the end of the three-week period, he felt so much better that he decided to build a bathhouse over the spring and charge a small fee for these “healing hot springs.” He wondered why the area hadn’t been developed like Hot Springs, Arkansas. Likely, rugged terrain and lack of easy transportation contributed to the absence of visitors. The land’s nickname, “the Uninhabited Land,” didn’t help either. But now, word-of-mouth of the developed bathhouse began luring people to Langford’s Hot Springs for health treatments and relaxation.

A short three years later though, the Mexican Revolution was threatening to reach their territory, and the possibility of attack by Pancho Villa and his men caused J.O. Langford to abandon his holdings and flee with his family to El Paso.

During their 14 years in El Paso, the Langford’s celebrated the birth of two sons and mourned the loss of their second

daughter, Lucille, the child Bessie was pregnant with and gave birth to at the Hot Springs settlement. After the end of the revolution south of the border, things finally settled down. In 1927 J.O., Bessie, and their sons LeRoy and Joe made the long trip back to their beloved Hot Springs. Lovie remained in El Paso, as a teacher at a local high school.

By the time they made it back, their family wasn’t the only thing that had changed. The once green, grass-covered land had been grazed down to dirt. And the Natividad family had been driven out along with most of their neighbors.

Not to be defeated, Langford built a store and post office near the springs. Better roads and automobiles made it easier to get to the springs, so he also built a motor court.

The Langfords remained until 1942, when J.O. sold the land and springs to the state of Texas. Two years later, Big Bend National Park was established.

Today, you can visit the ruins of the post office, general store, and the motor court. Just a quarter mile down river, you can relax and soak in J.O. Langford’s “healing waters.”

For more information about the Langford family and their hot springs, read *A Homesteader’s Story* by J. O. Langford, available in the Big Bend Natural History Association Bookstore.



Inside the Motor Court

M. YARBROUGH

This Wild Place



C. BALLOU

In the Spirit of Wilderness

Park Ranger Ali Paul

Wilderness is not only a haven for native plants and animals but it is also a refuge from society. It is a place to go to hear the wind and little else, see the stars and the galaxies, smell the pine trees, feel the cold water, touch the sky and the ground at the same time, listen to coyotes, eat the fresh snow, walk across the desert sands, and realize why it is good to go outside.”- John Muir

What is it that lured you to Big Bend National Park? Was it the story of a friend who fell in love with the Chisos Mountains? Was it Big Bend’s intriguing history, or striking photos of the canyons on the Rio Grande that stoked your imagination? Maybe it was the assurance of pristine night skies, the craving for solitude or the allure of endless recreation. This vast place is special for many reasons, and one of the best is its wildness.

In the 1950’s and 60’s the U.S. government developed a response to the outcry that wild places were quickly disappearing. Places where one could escape the confines of civilization were becoming harder to find. By 1964, a solution was enacted into law—the Wilderness Act. This act created a legal definition of wilderness, and determined how it should be managed. The Wilderness Act now protects 109 million acres. It entrusts public lands to the American people, under the management of a few federal agencies, including the National Park Service.

In 1978, the National Park Service and the Carter Administration found 533,000 acres of Big Bend National Park met requirements for inclusion in the National Wilderness Preservation System. Under the Act, the finding established Big Bend National Park lands would be managed as wilderness and protected in such manner by staff and visitors alike. The 1978 administration also recommended that Congress designate

the area as wilderness. While Congress has yet to act on the proposal, wilderness advocates continue to hope for that highest of recognition for the park’s wilderness.

Big Bend is a place where nature is unrestrained, where monsoon waters, rattlesnakes, and javelinas move freely down desolate arroyos. As we soak in its majestic vistas we see an expanse colored by sunsets and native plants, not by human hands. We experience a land that is generally unaffected by the forces of man, where our works are few and do not dominate the landscape. It is a place where true solitude still exists, and primitive recreation can still be enjoyed. Big Bend allows us to experience a world where the earth marches to its own internal rhythm, to the beat of wings not the patterns of human progress.

As we honor the 50th anniversary of the Wilderness Act, take time to listen to a landscape so silent you can hear blood pumping through your veins. At night, celebrate the remoteness of Big Bend by

gazing into the vastness of the Milky Way. Slow down while driving to appreciate and protect our free-roaming wildlife. And, protect this special place by removing all signs of your presence.



Paw Prints in the Snow

J. JURADO

What to See and Do

Chisos Basin

A drive to the Chisos Basin is an excellent way to experience the transition between arid desert and cooler mountain habitats. As this scenic, winding road rises over two thousand feet above the desert floor, it offers vistas of the mountain peaks and the erosion-formed basin area.

Within the Chisos Basin area is a visitor center, campground, lodge, restaurant, gift shop, camp store, and miles of hiking trails.

With limited time, walk the Window View Trail for easy access to mountain vistas, and a classic sunset view. If time permits, consider hiking (or backpacking) into the High Chisos to witness the towering forests of Boot Canyon or the unparalleled vistas of the South Rim.

Note: the road into the Basin is not suitable for RVs longer than 24' or trailers longer than 20'.



Rio Grande Village

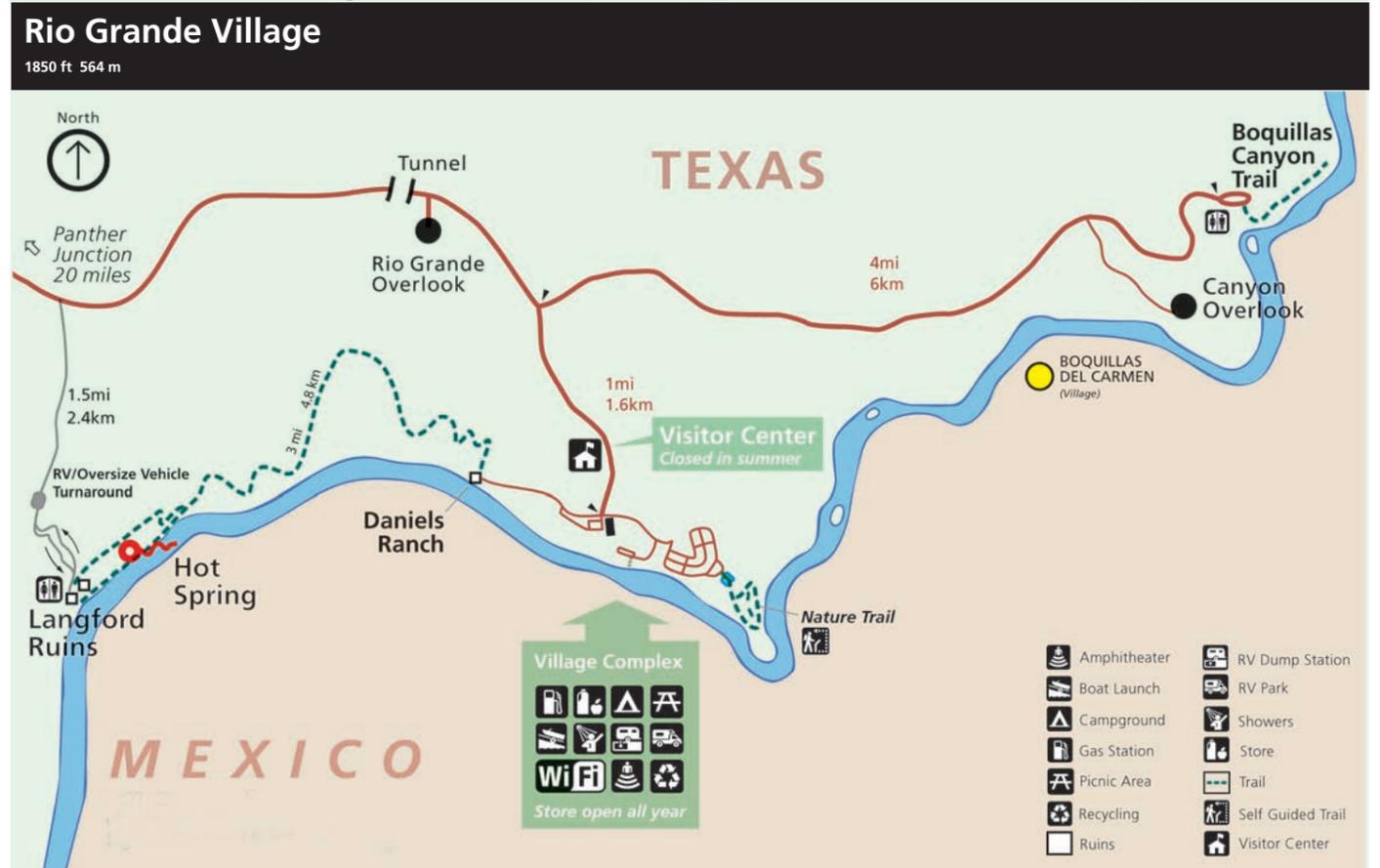
The drive to Rio Grande Village traverses ancient limestone and has marvelous vistas of the magnificent Sierra del Carmens. Along the way is the oasis at Dugout Wells and a spur road leads to the popular Hot Springs.

Continue the drive to Boquillas Canyon, where a short hike offers excellent views of the Rio Grande as it enters the canyon.

Rio Grande Village has a visitor center, campground, RV hook-ups, camp store, gas station, and picnic area.

Take a stroll (or a short drive) from the store to Daniels Ranch; this is a great area for birding. Picnic tables are near the historic ruins.

The Rio Grande Village Nature Trail crosses a wildlife viewing boardwalk, then gradually climbs the hillside, offering panoramic views of the river, Sierra del Carmens, and Crown Mountain. This is an excellent sunset vista.



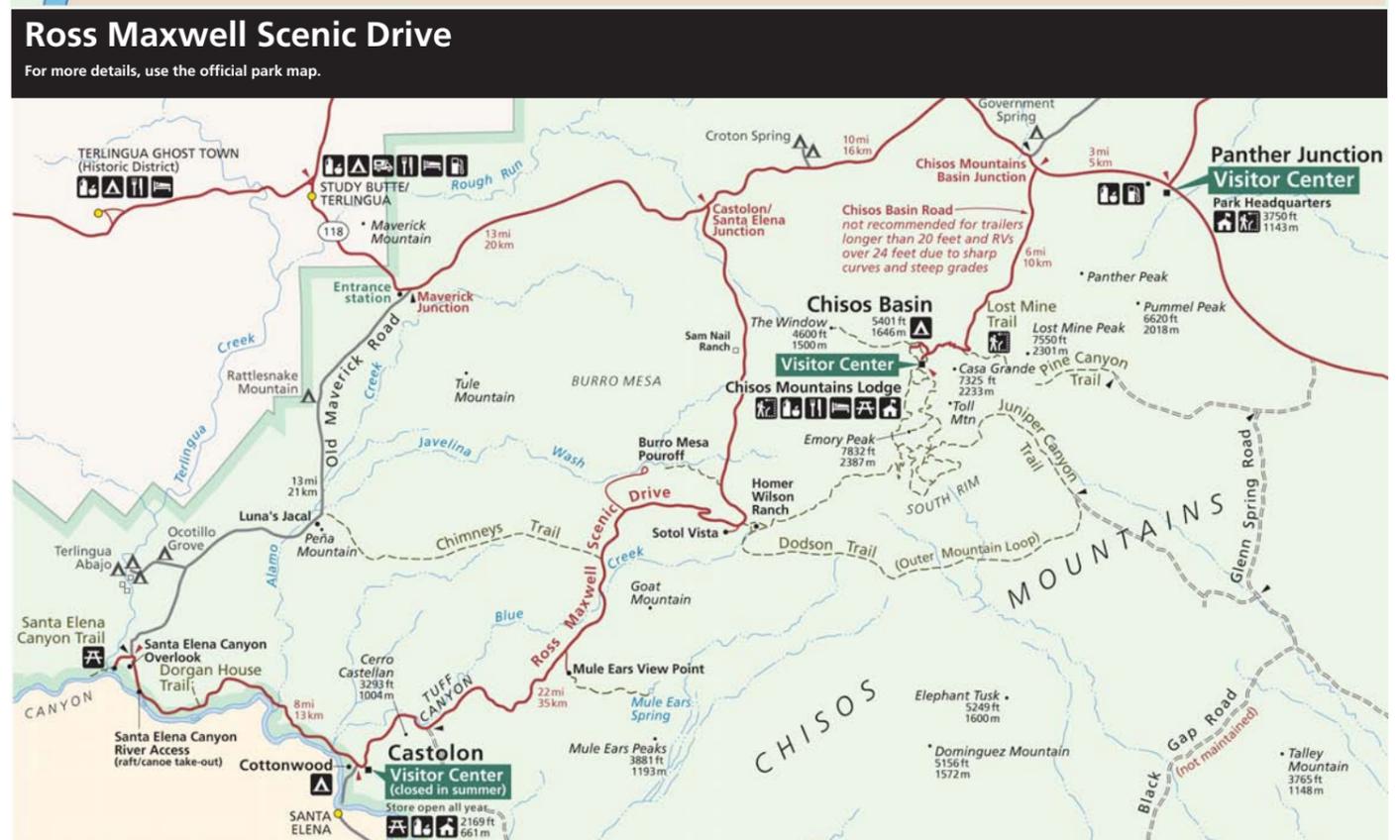
Ross Maxwell Scenic Drive

A trip along the Ross Maxwell Scenic Drive highlights the geologic splendor Big Bend is famous for, and offers many scenic overlooks and exhibits along the way. Sotol Vista, Mule Ears Overlook, and Tuff Canyon are all worthwhile stops.

History is highlighted at Sam Nail Ranch, Homer Wilson (Blue Creek) Ranch, and the Castolon Historic Compound. Castolon has a visitor center, camp store, and nearby is the Cottonwood Campground.

Continue the drive to the magnificent Santa Elena Canyon, where limestone cliffs rise 1,500' above the Rio Grande. A short trail leads into the canyon.

Return by the same route, or take the gravel Old Maverick Road to the western entrance of the park. This road is usually passable for most vehicles, but may be impassable after heavy rains. Check at a visitor center for current conditions.



Popular Day Hikes

The Chisos Mountains *Smoking is prohibited on all trails in the Chisos Mountains.*

Trail	Trailhead Location	Round Trip (mi/km)	Avg Time	Elevation (ft/m)	Description
Basin Loop	Chisos Basin Trailhead (near the Basin Store)	1.8/2.6	1 hour	350/107	Moderate Connects the Laguna Meadow and Pinnacles Trails. Nice views of the Basin area.
Emory Peak	Chisos Basin Trailhead (near the Basin Store)	10.5/17	7 hours	2400/789	Strenuous Trail leads to the highest peak in the park, with excellent views. The end of the trail involves some moderate rock climbing.
Lost Mine 	Basin Road, mile 5 (at the pass)	4.8/7.7	3 hours	1100/335	Moderate Excellent mountain and desert views. For a shorter hike, 1 mile up is a great view to the southeast.
South Rim	Chisos Basin Trailhead (near the Basin Store)	12/19.4 15/24	8 hours 10 hours	2000/656 2000/656	Strenuous Trail leads to the 2000' cliff with incredible views of the desert below. Hike either the southwest rim, or add the northeast and southeast rim trails when open.
Window 	Chisos Basin Trailhead or Basin Campground	5.6/9.0 4.4/7.0	4 hours 3 hours	980/299 500/152	Moderate Descends to the top of the Window pour-off. Great scenery and wildlife viewing. For a shorter hike, start from the Basin Campground (near campsite 51)
Window View 	Chisos Basin Trailhead (near the Basin Store)	0.3/0.5	1/4 hour	0/0	Easy Level, paved, accessible. Great mountain views. Best place in the Basin to catch a sunset through the Window.

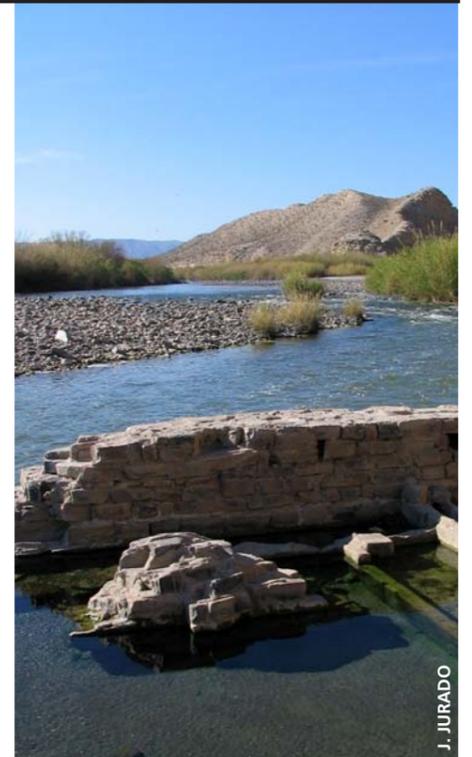


Window View Trail Sunset

C. BALLOU

Eastside — Panther Junction and Rio Grande Village

Trail	Trailhead Location	Round Trip (mi/km)	Avg Time	Elevation (ft/m)	Description
Grapevine Hills Balanced Rock	6.4 miles down the Grapevine Hills Road	2.2/3.5	1 hour	240/73	Easy Follows a sandy wash through a boulder field. A short but steep climb near the end takes you to a large balanced rock. No shade.
Chihuahuan Desert Nature Trail	Dugout Wells	0.5/0.8	1/2 hour	10/3	Easy Loop trail with interpretive signs on desert ecology. Look for javelina tracks and resident birds.
Hot Springs 	End of Hot Springs Road (unpaved narrow road)	0.75/1.2	1/2 hour	0/0	Easy Walk past historic buildings to the riverside hot spring. Enjoy a soak in 105°F water. <i>Hot Spring is subject to flooding during rising river levels.</i>
Boquillas Canyon	End of Boquillas Canyon Road	1.4/2.3	1 hour	40/12	Easy Begins with a short climb, then descends via a sandy path to the river. Ends near a huge sand dune "slide."
Daniels Ranch to Hot Springs Trail	Daniels Ranch parking area, west of Rio Grande Village	6/10	3 hours	100/31	Moderate Trail from Daniels Ranch to the Hot Springs. Cliff drop-offs prevent access to the river along most of the route. No shade.
Rio Grande Village Nature Trail 	Rio Grande Village, across from campsite 18	0.75/1.2	1 hour	130/40	Easy First 300' leads to a wildlife viewing platform on a pond. Trail then climbs the hillside with views of the river and mountains. Great for birding and sunsets.

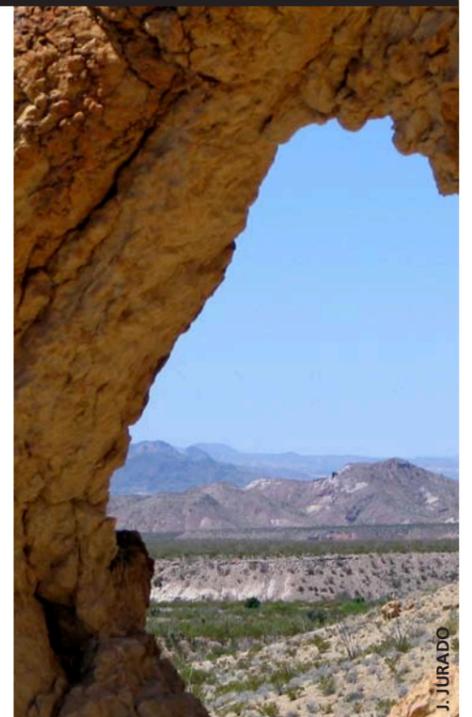


Hot Springs

J. JURADO

Westside — Ross Maxwell Scenic Drive

Trail	Trailhead Location	Round Trip (mi/km)	Avg Time	Elevation (ft/m)	Description
Sam Nail Ranch	Ross Maxwell Scenic Drive, mile 3	0.5/0.8	1/2 hour	10/3	Easy Well-maintained trail leads through the old ranch site. The combination of water and shade makes this an excellent birding location.
Lower Burro Mesa Pour-off	Burro Mesa Spur Road	1.0/1.6	1/2 hour	60/18	Easy Trail enters a dry wash and ends at the bottom of the dramatic Burro Mesa pour-off. A great walk for viewing geological features.
Chimneys	Ross Maxwell Scenic Drive, mile 13	4.8/7.7	2 hours	400/122	Moderate Flat and scenic desert trail to rock formations of an eroded dike. Look for Native American rock art and shelters. No shade.
Mule Ears Spring	Ross Maxwell Scenic Drive, mile 15	3.8/6.1	3 hours	20/6	Moderate Beautiful desert hike to a small spring. Spectacular geology with mountain and desert views.
Tuff Canyon	Ross Maxwell Scenic Drive, mile 17	0.75/1.2	1/2 hour	100/31	Moderate Two trails from the parking lot both provide outstanding balcony overlooks; one of the trails descends to the floor of the canyon.
Santa Elena Canyon	Ross Maxwell Scenic Drive, 8 miles west of Castolon	1.6/2.6	1 hour	80/26	Easy Sandy path crosses Terlingua Creek. Trail switchbacks up to overlook the river before gradually dropping to the river in the canyon.



View from Chimneys Arch

J. JURADO

Birds and Bird Watching



A Note on Big Bend Birds

Park Ranger Matthew Yarbrough

People from all over the world come to see Big Bend's birds. But as many birders know, it can be difficult to find birds, or at least the birds you're looking for, without thinking about bird habits. This is especially important in Big Bend, with distinct climatic zones and migration corridors. From the sky island of the Chisos Mountains to the desert's river corridor, the varied terrain attracts a staggering 450+ species of birds, the largest concentration of bird species of any national park. To find a specific species, however, takes a bit of thought.

Geographically, Big Bend lies in a unique location, making it possible for migrating birds from a variety of habitats to make a stop-over here. You could call Big Bend the middle ground for most species of North American birds. The park's centralized location catches western species as they move north for the summer and again as they fly south for the winter. Big Bend also catches

eastern birds following the same seasonal migration patterns.

The Chisos Mountains provides a secluded woodland paradise along the route many migratory birds take on their way to summering grounds. The desert scrub and grassland are preferable for those who favor wide open space, and the Rio Grande is a haven for bird species that love a lush riparian habitat.

Big Bend's terrain is unique in the West Texas landscape, which means birds taking up residence here can be rare in the region, and even in the nation as a whole. The Colima Warbler is one such species. It nests in the higher elevations of the Chisos Mountains, making Big Bend its only summer home in the United States. Other unique species include the Common Black-Hawk seen perching in the enormous cottonwoods of Daniels Ranch, the Lucifer Hummingbird buzzing among agave stalks along the Blue Creek Trail, and the Black-Capped Vireo calling out on the Window Trail.

Because Big Bend encompasses three unique habitats, spotting the greatest variety of species requires a bit of leg work. A working

knowledge of bird species and their habitats will lead you to every corner of the park. Birds, like all animals, seek out a habitat that makes life easiest for them, one that puts their specific physical and behavioral adaptations to best use. Check out the river corridor to spot a Neotropic Cormorant or a flotilla of Mexican Mallards, or head to the higher mountain elevations for a surprise glimpse of a Red-Faced Warbler or Blue-Throated Hummingbird. The small desert oases—Dugout Wells and Sam Nail Ranch—can be reliable locations to catch the lowland species more inclined to take up residence in the desert, such as the Varied Bunting and the Green-Tailed Towhee.

People that come to Big Bend rarely do so by accident, and the same can be said for the birds that frequent the area for prime nesting habitat or a quick stop-over. However, there are always one or two species that can catch everyone off guard. Weather patterns can be inconsistent, and sometimes they push a bird far off of its normal course. Out-of-range tropical and coastal birds are spotted occasionally, confused, but grateful for the chance to rest in refuge habitats Big Bend offers. Keep your eyes open out there; you never know what you might see.

Birding Hot Spots

Panther Junction to Rio Grande Village

- Dugout Wells—shady cottonwood trees and a windmill at this desert oasis.
- Rio Grande Village Nature Trail—a boardwalk over the pond is an excellent area for water fowl.
- Daniels Ranch Picnic Area—the cottonwood trees provide excellent shade to both resident and migrant species.

Ross Maxwell Scenic Drive

- Sam Nail Ranch—windmills and large trees attract birds to this historic ruin.
- Blue Creek Trail—a half mile from the Homer Wilson Ranch are the Red Rocks, an area known for hummingbirds.
- Cottonwood Campground—large trees here provide a haven for birds.

Chisos Mountains

- Basin area—many mountain birds can be found around the campground and basin developed areas.
- Boot Canyon—the nesting area of the Colima Warbler and other species.
- South Rim—this 2000' cliff is known for falcons and swifts.

Night Skies



Night Navigators

Park Ranger Jennifer Parsons

As technology makes everyday life easier, cleaner, and more efficient, we sometimes lose the incentive to protect certain aspects of our environment, especially if the resulting environmental degradation is not readily apparent.

Unlike ancient travelers and mariners, we no longer rely on the stars for navigation. These days, when we need to convey ourselves from point A to point B we have various means to help us navigate. We can go to an internet mapping website and download the directions. A GPS will tell us exactly where and when to turn as we drive down the road. The technology that once seemed like science fiction is now an everyday fact-of-life. Since the impact of light pollution might not be as noticeable as air or water pollution, our inability to see the full splendor of the night sky might seem like primarily an aesthetic concern. So how much does light pollution really matter?

In January, 2013, scientists from South Africa and Sweden were able to prove that dung beetles navigated using the light from the Milky Way, the only creature in the animal kingdom known to do so. The dung beetle's goal in life is to collect his cache, find his mate, and roll his prize away from the dung pile in a straight line before burying it underground. Otherwise, if he circles back to the dung pile, he risks having his hard work stolen out from under him by a competitor. His ability to orient himself to the Milky Way allows him to follow a straight line.

Dark skies are also important for nocturnal migratory birds, many of which live here in Big Bend National Park. There are several reasons why some birds migrate at night. One reason is to avoid predators. A second reason is energy conservation. As the sun goes down, the wind decreases, making the atmosphere less turbulent and creating cooler temperatures.

Additionally, research discovered that birds orient themselves using star patterns within about 35° of Polaris. Draco, Cepheus,

Cassiopeia, and the Big and Little Dippers are all constellations used by nocturnal migratory birds. Not only does light pollution obscure the constellations and send the birds off course, it can disorient whole flocks and cause them to fly into lighted structures.

Natural darkness is not just critical for the dung beetles and birds; it is important for all life in the biosphere, even humans. Periods of natural darkness are needed for the production of melatonin, the hormone that regulates our natural circadian rhythms. It affects predator and prey relationships and reproductive habits.

Big Bend National Park has been certified by the International Dark-Sky Association as a Gold Tier International Dark Sky Park. We have the darkest skies and lowest levels of light pollution in the lower 48 states, and infrequent cloud cover and low humidity make for excellent nighttime star gazing.

2014 Celestial Events

- March 20—Spring Equinox
- April 22–23—Lyrids Meteor Shower
- May 5–6—Eta Aquarids Meteor Shower
- June 21—Summer Solstice
- July 28–29—Delta Aquarids Meteor Shower
- August 12–13—Persids Meteor Shower
- September 23—Fall Equinox
- October 8—Total Lunar Eclipse
- October 8–9—Draconids Meteor Shower
- October 22–23—Orionids Meteor Shower
- October 23—Partial Solar Eclipse
- November 5–6—Taurids Meteor Shower
- November 17–18—Leonids Meteor Shower
- December 13–14—Geminids Meteor Shower
- December 21—Winter Solstice
- December 22–23—Ursids Meteor Shower

Keeping Wildlife Wild



M. GONZALES

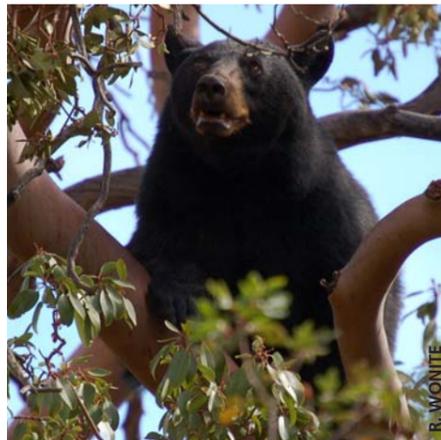
Black Bears

The return of black bears to Big Bend is a success story for both bears and the park. Native to the Chisos Mountains, they disappeared from this area by the 1940s. Nearly fifty years later, they began returning from Mexico. Today, wildlife biologists estimate a black bear population of around 15–20 black bears.

A black bear's normal diet consists largely of nuts, fruits, sotol and yucca hearts, but

also includes small mammals, reptiles, and carrion. Bears normally avoid humans, but can become aggressive if they learn to take food from human sources.

The Chisos Basin Campground, High Chisos backpacking sites, and some primitive roadside campsites have bear proof storage lockers for caching edibles. Hard-sided vehicles are also suitable for storing edible items. Dumpsters throughout the park are bear proof as well. A free brochure about black bears is available at all visitor centers.



R. WONITE

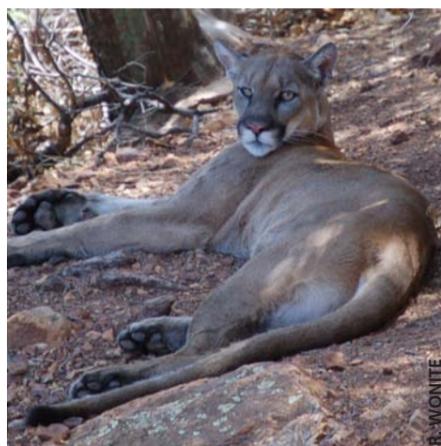
Mountain Lions

Solitary and secretive, the mountain lion is Big Bend's top predator, and is vital in maintaining the park's biological diversity. Mountain lions live throughout the park from mountain to desert, and biologists estimate a stable population of about two dozen lions.

Everywhere in Big Bend, you are in the territory of at least one lion. Within their territories, lions help balance herbivores and vegetation. Research shows these large

predators help keep both deer and javelina within the limits of their food resources.

Each year visitors report around 130 lion sightings in Big Bend National Park. Over half are seen along roadways, but encounters also occur along trails. Your best plan of action is to be aware of your surroundings and avoid hiking alone or at dusk and dawn. Also, watch your children closely; never let them run ahead of you. A free brochure about mountain lions is available on the park website.



R. WONITE

Javelinas

For many visitors, seeing a javelina (pronounced hav-uh-LEE-nuh) is a new experience. Also known as collared peccaries, these animals are only found in the U.S. in Texas, New Mexico, and Arizona.

They are covered with black, bristly hairs and weigh between 40–60 lbs. They usually travel in groups called bands that consist of 10–25 individuals. Peccaries have a highly developed sense of smell, but poor vision.

Physically, they resemble pigs, but are not closely related. A javelina's diet includes prickly pear cactus, grasses, mesquite beans, piñon nuts, fruits, berries, and seeds.

Every year reports document campsites raided by javelinas. Although not normally aggressive, they can be when food is involved. Protect yourselves and the javelina by storing all food inside a vehicle or in the food storage lockers provided in the campgrounds. Do not leave coolers or food boxes unattended at any time.



J. JURADO

Coyotes

Nothing in Big Bend speaks of wilderness more than the song of a coyote. Their various vocalizations from yips to howls let you know you are in the presence of an iconic figure. Their narrow-set, yellow eyes and long snout may seem intimidating, but in general, coyotes do not bother human beings.

Coyotes range over the entire United States. These highly adapted members of the

canine family are omnivores, dining on small mammals, reptiles, and insects. Coyotes will also eat berries and other vegetation when meat is unavailable. Carrion is an important food source in winter.

Coyotes are typically solitary, but will hunt in small groups when individuals converge in areas where food is plentiful. They will work cooperatively, either chasing an animal in relays to tire it, or waiting in ambush. However, unlike wolves, they do not form lasting packs.



M. YARBROUGH

Rattlesnakes

Four species of rattlesnake live in Big Bend National Park—the Western Diamondback, Black-tailed, Mojave, and Rock rattlesnakes.

This often-feared reptile is beneficial to the environment, eating mice, rats, and other small animals—many of which are pests or spread disease.

Perhaps surprising, rattlesnakes are not a top predator, sometimes becoming the meal

of roadrunners, skunks, coyotes, and even other snakes, such as the western coachwhip.

The buzz of a rattlesnake is an unmistakable sound that will stop you in your tracks. And this is a good thing, as rattlesnakes use this sound as a warning when they perceive a threat; continue toward them, and you risk provoking a self-defensive bite. A few bites have occurred in Big Bend. If bitten, contact a ranger promptly, as permanent damage can occur within 12 hours of a bite.



J. JURADO

Wild Animal Encounters

For many people, the chance to see a bear or mountain lion in the natural environment is an amazing opportunity. However, one must always remember that we are entering their home, their territory. As such, we need to respect wildlife, and know what to do if we encounter a wild predator:

- Do not run, but back away to get out of range of the perceived threat.
- If you feel threatened, try to look large, wave your arms, throw rocks or sticks.
- If attacked, fight back.
- Watch children closely and never let them run ahead or lag behind.
- Report bear or mountain lion sightings or encounters to a park ranger as soon as possible.

To help preserve healthy environments for both visitors and predators, please remember:

- Never leave food or trash unattended, as bears and other wildlife readily habituate.
- Never feed wildlife, as no park animal is tame, and feeding leads to aggressive future behavior.
- Keep a healthy distance between you and park animals (at least 50 yards).

Please Help

At the Lodge

- Leave nothing outside your room, on the balcony, or on the porch.

In Developed Campgrounds

- Store food, beverages, toiletries, pet food, and dishes in the bear-proof storage locker provided at your site.
- Keep your campsite clean. Take trash and food scraps to a dumpster.
- Dump liquids in rest room utility sinks, not on the ground.
- Ice chests and coolers are not bear-proof; store them in your vehicle.

In the Backcountry

- Never leave packs or food unattended. Carry everything with you or store in a bear-proof locker.
- Avoid carrying odorous food and toiletries.
- Carry out all trash, including orange peels, cigarette butts, and left-over food and cooking grease.

Cyclists

- Use food storage lockers when provided.

Campgrounds



Chisos Basin

The Chisos Basin Campground is surrounded by tall, rocky cliffs and conveniently located near some of the park's most spectacular and popular trails.

Elevation: 5,401 ft.

Open: Year-round

Details: 60 campsites (no hook-ups). \$14 per night (\$7 per night with applicable pass). Flush toilets, running water, grills, picnic tables, and dump station. Trailers over 20' and RV's over 24' are not recommended due to narrow, winding road to the Basin and small campsites in this campground.

Reservable Campsites: 26 sites are reservable from November 15–April 15. Contact www.recreation.gov, or call 1-877-444-6777.

Group Camping: 7 group campsites are available by advance reservation only. To reserve a group campsite, contact www.recreation.gov or call 1-877-444-6777.

Cottonwood

Cottonwood Campground is a quiet, shady desert oasis located between the Castolon Historic District and the scenic Santa Elena Canyon.

Elevation: 2,169 ft.

Open: Year-round

Details: 24 campsites (no hook-ups). \$14 per night (\$7 per night with applicable pass). Pit toilets, running water, grills, picnic tables, no dump station, no generators allowed. A small picnic area is available across from campsite #23.

Reservable Campsites: There are no reservable campsites in the Cottonwood Campground. All individual campsites are on a first come, first-served basis.

Group Camping: One group campsite is available by advance reservation only. Group campsite is walk-in tent camping only. To reserve the group campsite, contact www.recreation.gov or call 1-877-444-6777.

Rio Grande Village

Set in a large grove of cottonwoods, the campground is adjacent to the Rio Grande. The RGV camp store and showers are within walking distance.

Elevation: 1,850 ft.

Open: Year-round

Details: 100 campsites (no hook-ups). \$14 per night (\$7 per night with applicable pass). Flush toilets, running water, picnic tables, grills, and some overhead shelters. Dump station nearby.

Reservable Campsites: 43 sites are reservable November 15–April 15. Contact www.recreation.gov or call 1-877-444-6777.

Group Camping: 4 group campsites are available by advance reservation only. Group campsites are walk-in tent camping only. Vehicle parking is restricted to an adjacent parking area. To reserve a group campsite, contact www.recreation.gov or call 1-877-444-6777.

Rio Grande Village RV

Open, paved lot with grassy, tree-lined edges. Adjacent to the camp store. This campground, operated by Forever Resorts, LLC, has the only full hook-ups in the park.

Elevation: 1,850 ft.

Open: Year-round

Details: 25 campsites. Concession-operated RV park with full hook-ups—water, electrical, and 3-inch sewer connection. \$33, double occupancy, with a \$3 additional per person charge. Periodically, a few sites may not be available for a 40' or longer RVs due to the size of the parking lot and orientation of the spaces.

Reservable Campsites: 20 sites are available by reservation, 5 are held for first come, first-served campers. Register at the Rio Grande Village store/service station, or call 1-877-386-4383, or 432-477-2293.

Developed Campgrounds at a Glance

	Elevation (ft/meters)	Sites	Nightly Fee	Facilities	Registration	Comments
Chisos Basin	5,401/1,646	60	\$14.00*	Flush toilets, dump station	Self-pay station	Surrounded by rocky cliffs; many hiking trails nearby.
Cottonwood	2,169/661	24	\$14.00*	Pit toilets, no generator use allowed	Self-pay station	In a cottonwood grove along the river. Grassy sites.
Rio Grande Village	1,850/564	100	\$14.00*	Flush toilets, dump station	Self-pay station	Largest campground; shady sites. Laundry and showers nearby.
Rio Grande Village RV	1,850/564	25	\$33.00 and up	Full hook-ups	RGV Camp Store	Concession-operated; register at the RGV store.
			* \$7.00 with an eligible Federal Recreation Pass	Observe posted campground quiet hours.		

Dirt Road Adventures

Dagger Flat Auto Trail

This seven-mile road (14 miles round-trip) winds eastward to a small valley where there is a forest of giant dagger yuccas.

A self-guiding brochure is available, and provides a useful key to the plants and geology along this road.

Typically open to all vehicles, and excellent for bicycling. However, road may require high clearance as sandy areas or muddy conditions may seasonally exist. Check with a ranger for current road conditions.

Allow two hours for the drive. The speed limit on this narrow, winding road is 25 mph.



View Along Dagger Flat Auto Trail

Old Ore Road

This backcountry road follows the historic route used in the early 1900s to transport ore from Mexican mines to the railroad station at Marathon.

This road has excellent vistas of the Chisos Mountains and Tornillo Creek. It passes through the foothills of the Deadhorse Mountains, including the cliffs of Alto Relex.

Ernst Tinaja, five miles from the southern end of the road, is a popular hiking destination.

Allow at least 3 hours to drive this 26 mile-long road. A high clearance vehicle and good tires are necessary.



Limestone Layers at Ernst Tinaja

River Road

The River Road traverses the southern portion of Big Bend, providing a great opportunity to see the remote backcountry of this park.

Midway are the ruins of Mariscal Mine. This former mercury mine is a marvel to explore, as numerous structures are still standing.

Allow a full day (5–7 hours) to explore this 51 mile-long road. Backcountry campsites along the drive (permit required for camping) allow for extended exploration.

This road is for high clearance vehicles only, and may become impassable following rain.



Historic Buildings at Mariscal Mine

Backcountry Roads



Road Name	Description
Dagger Flat	Suggested high clearance past Old Ore Road Junction
Glenn Springs	Narrow road; no RVs, trailers, or wide vehicles
North Rosillos	Deep ruts and sand
Juniper Canyon	High clearance vehicles only; rough, rocky, and slow
Old Maverick	Wash boarded sections; impassable after rains
Old Ore	High clearance vehicles only, 4WD recommended
Pine Canyon	High clearance vehicles only; rough, rocky, and slow
River Road East	High clearance vehicles only
River Road West	High clearance vehicles only, 4WD recommended
Black Gap	4WD required; infrequently maintained

Backcountry



R. WONITE



M. HENCH

Primitive Roadside Campsites

For those who wish to camp in the backcountry without having to backpack, Big Bend offers a number of primitive campsites along roads, both in the desert and along the Rio Grande. A permit is required.

All roadside sites are along unpaved roads. While some centrally-located sites are accessible to most vehicles, a high clearance and/or 4-wheel drive vehicle is necessary to reach those along the primitive dirt roads.

Sites offer excellent views, privacy, an opportunity for solitude, and a cleared gravel

location to park your vehicle and set up a tent.

There are no amenities at any backcountry campsite; please plan to bring everything you need, including water, shade, chairs, and a trowel to bury human waste.

Please remember, campfires (all wood fires or ground fires) are strictly prohibited. Use cook stoves with caution.

Generators are not allowed in backcountry areas, and pets must be kept on a leash within the boundaries of the camp site.

Backpacking

Big Bend National Park has over 200 miles of trails in the Chisos Mountains and desert terrain, with options for backpacking within these beautiful habitats.

Chisos Mountains

There are 41 campsites along Chisos Mountains trails, ranging from one to eight miles from the trailhead. These sites are designated to help reduce impact and damage to this delicate environment.

Sites include a cleared area for a tent as well as a bear-proof storage box, which must be used to store all scented items. A permit

for a specific site must be obtained prior to camping.

Zone Camping

Open zone camping permits are available for backpackers who wish to camp outside of the Chisos Mountains. The park is divided into a number of zones ranging from areas along popular trails to extremely isolated areas.

Camps must be set up at least 0.5 mile from roads, out of sight of roads, and at least 100 yards away from trails, historic structures, archaeological sites, dry creek beds, springs, or cliff edge.



C. BALLOU

River Trips

The Rio Grande follows the southern boundary of Big Bend National Park for 118 miles. In this distance it has carved three major canyons—Santa Elena, Mariscal, and Boquillas.

Seeing the park's canyons from the middle of the Rio Grande is both fascinating and gratifying. There are many possibilities, from half-day floats to extended seven-day excursions.

Canoes, kayaks, and rafts are allowed in river canyons. You may bring your own equipment, or you can hire a guide service.

Local outfitters (see page 12 for phone numbers) provide guide service, equipment rental, and up-to-date river information and conditions.

The deepest channel of the Rio Grande is the international border between the United States and Mexico. Passports are not currently required for river trips, but stepping onto the Mexican bank of the river, then returning to the U.S., constitutes an illegal border crossing. U.S. Border Patrol allows for exceptions to be made under emergency situations only, i.e.; scouting, portaging, or lining.



J. MADDO

Horseback Riding

Visitors are welcome to bring and use horses in the park. A stock-use permit is required (free for day-use), and copies of vaccination documents must be with you.

While horses are not allowed on paved roads or road shoulders, all gravel roads are open to horses. Cross-country travel is permitted in the park, except in the Chisos Mountains, where horse use is limited to the Laguna Meadow, Southwest Rim, and Blue Creek trails. Horses are not permitted in picnic areas or on interpretive trails.

Grazing within the park is not permitted; you must bring your own feed. Stock may be watered in the Rio Grande and at springs not used for domestic water supply. However, be prepared to haul water for you and your stock, as desert springs are unreliable. All horse manure and feed remnants must be removed from the park.

Horses are allowed at several of the park's primitive roadside campsites. Hannold Draw campsite, located 4.8 miles north of Panther Junction, has a corral large enough for 8 horses. If you plan to camp with horses in the park, you may reserve this campsite up to 10 weeks in advance. For reservations, call 432-477-1158.



C. BALLOU

Backcountry Planning

Backcountry Use Permit

A backcountry use permit is required for all backcountry camping, river use, and horse use.

- Permit must be obtained in person at a park visitor center during normal business hours.
- A permit may be obtained up to 24 hours in advance of the trip.
- Permit may be written for up to 14 consecutive nights in the backcountry.
- The permit fee is \$10 (\$5 with applicable pass) for overnight-use, free for day-use.

Backcountry Water

Every gallon removed from backcountry water sources is one less for the wildlife which depends on them.

- Each hiker should carry and drink a minimum of one gallon of water per person per day. Spigots for drinking water are available at all visitor centers.
- Springs and tinajas (rock depressions where water collects) are rare and unreliable—don't risk your life by depending on desert springs. Water should be filtered if used. Caching water is recommended for extended hiking trips in the desert.

Leave No Trace

Following the seven basic leave no trace principles helps protect our fragile desert environment:

- Plan ahead and prepare—a well-planned hike is more likely to be a safe hike, and without the need to rely on precious desert water.
- Travel and camp on durable surfaces—avoid walking on small plants or biological crusts.
- Dispose of waste properly—bury solid human waste at least six inches deep and 0.25 mile from springs. Pack out all waste paper and trash.
- Leave what you find—natural and culture resources are protected within National Parks. Collecting or disturbing features is prohibited.
- Minimize fire impacts—fires are only allowed on overnight river trips. A fire pan is required. Keep all heat sources away from combustible vegetation.
- Respect wildlife—all animals are wild, even if they appear to be tame. Never feed wildlife or leave scented items unattended.
- Be considerate of other visitors—keep noise levels to a minimum, as sounds can carry for long distances across the desert.

Services Inside the Park

Emergency Call 911

National Park Service
General Information 432-477-2251

Big Bend Natural History Association
Booksales & Seminars 432-477-2236

Visitor Centers
Panther Junction (Hdqtrs) 432-477-1158
Chisos Basin 432-477-2264
Castolon 432-477-2666
Persimmon Gap 432-477-2393
Rio Grande Village 432-477-2271

U.S. Post Office
Panther Junction 432-477-2238

Lodging/Restaurant
Chisos Mountains Lodge 432-477-2291
Reservations 877-386-4383

Gas Stations
Panther Junction 432-477-2294
Rio Grande Village 432-477-2293

Camper Stores
Rio Grande Village 432-477-2293
Chisos Basin 432-477-2291
Castolon 432-477-2222

Services Outside the Park

This listing of local services is a courtesy to our visitors and implies no endorsement by the National Park Service or Big Bend National Park.

Lodging
Lajitas
Lajitas Resort 877-525-4827

Marathon
Gage Hotel 432-386-4205
Marathon Motel 432-386-4241
Eve's Garden 432-386-4165

Study Butte/Terlingua area
Big Bend Casitas 800-839-7238
Big Bend Resorts 800-848-2363
Easter Egg Valley Motel 432-371-2254
El Dorado Motel 432-371-2111
Longhorn Ranch Hotel 432-371-2541
Ten Bits Ranch 866-371-3110
Terlingua House 325-473-4400

Camping
Big Bend Resorts 800-848-2363
Big Bend Ranch State Park 432-424-3327
Big Bend Travel Park 432-371-2250
B.J.'s RV Park 432-371-2259
Heath Canyon Ranch 432-376-2235
Longhorn Ranch 432-371-2541
Stillwell's Trailer Camp 432-376-2244
Study Butte RV Park 432-371-2468

Convenience Stores/Gasoline
Big Bend Resorts 800-848-2363
Cottonwood General Store 432-371-3315
Stillwell Store & Station 432-376-2244

Medical Services
Terlingua Fire and EMS 911
Big Bend Medical Center 432-837-3447

Banks
Quicksilver Bank/ATM 432-371-2211

Local Outfitters
Angell Expeditions 432-299-3713
Big Bend Overland Tours 800-848-2363
Big Bend River Tours 800-545-4240
Desert Sports 888-989-6900
Far Flung Outdoor Center 800-839-7238
Rio Aviation 432-557-9477

Horseback Riding
Big Bend Stables 800-887-4331
Lajitas Livery 432-424-3238

Information and Services

Accessibility

All visitor centers are accessible, as are the Chisos Mountain Lodge restaurant and some motel rooms and campsites. The Window View Trail is paved and fairly level.

ATMs

The Chisos Mountains Basin Store, Rio Grande Village Store, and Panther Junction Service Station have ATMs. The nearest banking facility is located in Study Butte, 26 miles west of park headquarters.

Camp Stores

Forever Resorts, LLC, operates stores at Castolon, Chisos Basin, and Rio Grande Village. Each has groceries, camping supplies, and souvenirs.

Camping Limits

Visitors can stay in the park up to 14 consecutive nights, whether in a front or backcountry site, with a limit of 28 total nights in the park in a calendar year. Campers can occupy a specific site up to 14 total nights in a year. Between February 1 and April 15, visitors are limited to 14 total nights in the park.

Entrance Fees

- Single private non-commercial vehicle \$20—valid for 7 days
- Single person entry on foot, bicycle, motorcycle, commercial vehicle, etc. \$10 per person—valid for 7 days
- Big Bend Annual Pass \$40—valid for one year from month of purchase
- Interagency Annual Pass \$80—valid for one year from month of purchase

All other valid passes will be accepted until expired including: Senior Pass, Access Pass, Golden Age Passport, and Golden Access Passport. For commercial rates, please consult our website: www.nps.gov/bibe. Additional permits may be required.

Weather and Climate

The old adage "if you don't like the weather, just wait a minute," often holds true for Big Bend National Park. While Big Bend generally has blue skies and warm days, the weather can change quickly and dramatically.

Throughout the Year

Relative humidity is generally low. Spring and fall are usually warm and pleasant. Summers are hot, although temperatures vary significantly between the desert floor and the Chisos Mountains. May and June are the hottest months. The rainy season extends from mid-June to October with locally heavy thunderstorms and some flash flooding. However, the water recedes rapidly and the rainy season can be a delightful time to visit the desert. Winters are generally mild, although periods of cold weather (including light snow) are possible; winter visitors must prepare for a variety of conditions.

Panther Junction Averages (mountains temps 5-10° lower, low desert temps 5-10° warmer)												
	January	February	March	April	May	June	July	August	September	October	November	December
Max Temp (°F)	60.9	66.2	77.4	80.7	88.0	94.2	92.9	91.1	86.4	78.8	68.5	62.2
Min Temp (°F)	35.0	37.8	45.3	52.3	59.3	65.5	68.3	66.4	61.9	52.7	42.3	36.4
Precip (inches)	.46	.34	.31	.70	1.50	1.93	2.09	2.35	2.12	2.27	.70	.57

Fires

Ground fires and wood fires are strictly prohibited throughout the park. Only gas stoves and charcoal contained in a grill may be used. Use caution with any heat source.

Food Storage

Do not store food or scented items in tents, and never leave coolers, cook stoves, dishes, trash, or food/water unattended.

Gas Stations

Gasoline and diesel are available at Panther Junction and Rio Grande Village Service Stations. Panther Junction has propane exchange. Rio Grande Village offers propane refilling.

Junior Ranger

Through activities, games, and puzzles, kids can have fun learning about the park and earn a badge or patch, bookmark, and certificate. A \$2 booklet is sold at visitor centers.



Kennels

- Alpine Veterinary Clinic 432-837-3888
- Alpine Small Animal Clinic 432-837-5416

Lodging

The Chisos Mountain Lodge, located in the Chisos Basin, includes 72 rooms, gift shop, dining room and camp store. For more information call 432-477-2291 or 877-386-4383.

Phones

Public pay phones are located outside the Chisos Mountains Lodge and Rio Grande Village Store.

Post Office

A full-service post office is located at the Panther Junction Headquarters, open M-F, 8am-11:30am and 1pm-3:00pm. A mail drop is also available at the Chisos Basin Store.

Ranger Programs

Join a ranger for a guided hike or evening presentation. These free programs are offered most days of the year. Schedules are posted at visitor centers and campgrounds.

Recycling

Recycling cans are provided in campgrounds and near stores and visitor centers. Every bit of material recycled means one less piece buried in the park landfill. Please recycle!

Showers and Laundry

Pay showers and laundry facilities are available at the Rio Grande Village Store, and have 24-hour access. Out-of-park facilities are available in Study Butte.

Swimming

Big Bend is a desert park. Wading in the Rio Grande is not recommended. Soaking in the 105° Hot Springs is an option. Do not enter or contaminate backcountry springs.

Other swimming opportunities include Balmorea State Park, the world's largest spring-fed pool (a three-hour drive north).

Visitor Centers

Panther Junction, Chisos Basin, and Persimmon Gap Visitor Centers are open year-round. Rio Grande Village and Castolon Visitor Centers are open November-April.

Wifi/Internet

Free wireless internet is available at the Chisos Mountains Lodge and Rio Grande Village Store/RV hook-ups. There are no public computer terminals.



Frosted Sotols in the Chisos Mountains