



The official newspaper
of Big Bend National Park &
Rio Grande Wild & Scenic River
Volume 24, No. 3 Fall-Winter 2003

The Big Bend *Paisano*

R. Krause

Passport to Adventure

WELCOME TO BIG BEND NATIONAL PARK AND THE RIO GRANDE Wild & Scenic River! Big Bend is one of the largest and least visited of America's national parks. Over 800,000 acres await your exploration and enjoyment. From an elevation of less than 2,000 feet along the Rio Grande to nearly 8,000 feet in the Chisos Mountains, Big Bend includes massive canyons, vast desert expanses, and the entire Chisos Mountain range. Here, you can explore one of the last remaining wild corners of the United States, and experience unmatched sights, sounds, and solitude.

There are as many ways to enjoy Big Bend as there are people who visit. The diversity of recreational options here offers something for almost everyone. While many visitors are content to enjoy Big Bend from the comfort of the paved scenic drives, others with rugged vehicles prefer the challenge and remoteness of the park's many unimproved dirt roads.

Any park ranger will tell you that neither desert nor mountains will truly reveal themselves to a motor vehicle. To experience the best of Big Bend, you should get out on foot, if only for a short time, and become part of the landscape. Listen to the desert silence, smell the creosotebush, and gaze towards a distant mountain range, and you will soon realize how special this place is.



Floating the Rio Grande in one of the park's three canyons will take you into yet another world far removed from the open expanses of desert and mountains. Here, the sky above is merely a sliver of blue framed by vertical walls of towering limestone.

In this issue of the Big Bend Paisano, we explore the many methods of enjoying the wilds of this magnificent park. Whether you enjoy your visit by car, jeep, foot, horse, bike, canoe, or even from a lawnmower, Big Bend National Park is your passport to adventure.

7 Primitive Roads



M. Lawrence

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M. Lawrence

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IN CASE OF EMERGENCY

Park Rangers are available to provide assistance. Dial 911 or (432) 477-2251

Phones are located at:
visitor centers,
campgrounds,
Camper Stores, and the
Chisos Mountains Lodge.

911



The Paisano, Spanish for roadrunner, is published by the National Park Service and the Big Bend Natural History Association for the orientation and education of visitors to Big Bend National Park.

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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." As conservation educators, the Division of Interpretation provides guided walks, talks, evening slide programs, workshops, and other educational activities as well as written materials such as this newspaper.



The Big Bend Natural History Association, established in 1956 as a private, non-profit organization, champions the mission of the National Park Service in facilitating popular interpretation of 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.

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

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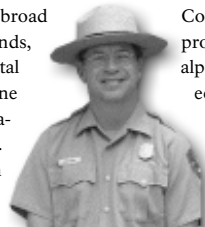
Mail check or money order payable to Big Bend Natural History Assoc. to The Big Bend Paisano, P.O. Box 196, Big Bend National Park, TX 79834. Or call 432-477-2236

Superintendent's Welcome

Welcome to YOUR Park

Welcome to Big Bend National Park and the Rio Grande Wild & Scenic River, two premier units of our nation's National Park System. We trust that you will be awed and inspired as you spend time in this wonderful place.

At over 800,000 acres, Big Bend National Park protects broad expanses of Chihuahuan Desert, high elevation woodlands, strikingly beautiful river canyons, and an ecologically vital river floodplain. The Rio Grande serves as a major lifeline in this desert and for 1,250 miles it also forms the international boundary between the United States and Mexico. One hundred ninety-six miles of this section have been designated as the Rio Grande Wild & Scenic River.



Superintendent John King

We invite you to enjoy the rich diversity of plants, animals, human history, and recreational opportunities that abound here. The park features over 1,200 plant species ranging from tiny cactus to lofty pines. Over 450 species of birds have been observed here, from the ever-popular roadrunner to the majestic golden eagle. The park features a rich human history as different people at different times carved out their lives in this desert region. And while there is much to see and much to learn about while you are here, there is also much to do – hiking, camping, backpacking, bird-watching, nature photography, river rafting, and driving backcountry roads.

So, please enjoy your time in Big Bend National Park, arguably one of the most beautiful and intriguing places on the face of the earth.

Experience Your America!

John H. King
John H. King, Superintendent

Bienvenidos

Bienvenidos al Parque Nacional Big Bend y el Río Silvestre y Escénico - Río Grande, dos áreas asombrosas del sistema de parques nacionales. Esperamos que llenen con admiración y inspiración por su visita en este hermoso lugar.

Con mas de 320.000 hectáreas el Parque Nacional Big Bend protege a vastos áreas del desierto Chihuahuense, bosques alpinos, hermosos cañones y un corredor ribereño ecológicamente vital al bienestar del medio ambiente. El Río Grande es una fuente de vida de este desierto, y sobre 2.000 kilómetros sirve como la frontera internacional entre los Estados Unidos y México. Mas de trescientos kilómetros del río son designados el Río Silvestre Y Escénico - Río Grande.

Les invitamos a gozar de la rica diversidad de plantas, animales, historia cultural, y oportunidades de recreo que se abundan aquí. El parque tiene mas de 1.200 especies de plantas, desde cactus pequeños hasta pinos altos. Hay informes de mas de 450 especies de aves, desde el bien conocido correcamino hasta el majestuoso águila real. El parque también ofrece la historia de las varias culturas que han pasado por esta región desértica. Y mientras que hay mucho ver y aprender también hay mucho que hacer - caminar, acampar, fotografiar, observar pájaros, explorar el río en barco, y explorar los caminos secundarios.

Entonces, por favor, gocen de su visita en el Parque Nacional Big Bend, sin duda uno de los más hermosos y especiales lugares en el mundo.

John H. King
John H. King, Superintendent



Volunteer Honor Roll

Each year, volunteers contribute thousands of hours to the National Park Service. A vital supplement to paid staff, volunteers bring special skills, dedication, and fresh approaches to our work in interpretation, visitor protection, maintenance, administration, and resource management.

Join us in thanking the following individuals and organizations who have recently donated 100 or more hours in volunteer service to Big Bend:

Americorps- NCCC

Mary Kay Arthur

Reta and Richard Averill

Barbara and Bill Baldwin

Norma and Lloyd Burgi

Erv and Sam Drabek

Barbara and Richard Engle

Steve Harper

Fran and Bernie Heyman

Carol Hines

Carol and Bob Huber

Bob Jacyna

Katrina Jensen

Sally and Bob Jones

Gail and John Kamaras

Mark Kirtley

Joan and Jack Lamkin

Maria Lavender

Dan Leavitt

Maryellen McMillin

Dana and Les Over

Casey Parks

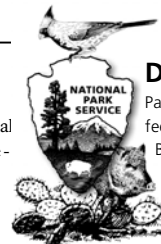
Dori and Tom Ramsay

Adessa Schwartz

Wilderness Volunteers

Clara and George Willis

Scarlett and Bob Wirt



Did You know

Park animals are wild. Do not feed or approach any of Big Bend's wildlife. Enjoy animals at a safe distance and allow them to find their own natural foods.

Do not remove any natural objects from the park, including rocks, cactus, reptiles, and fossils. Collecting specimens of any kind or defacing park features deprives other visitors. Leave everything as you found it for others to enjoy. If you must collect, pick up litter!

All bicycles, including mountain bikes, must remain on paved or unpaved roads. They are not allowed on hiking trails or off-road.

Motor vehicles must be licensed and street-legal. All motor vehicles must stay on established roadways open to public travel.

It's Up to You...

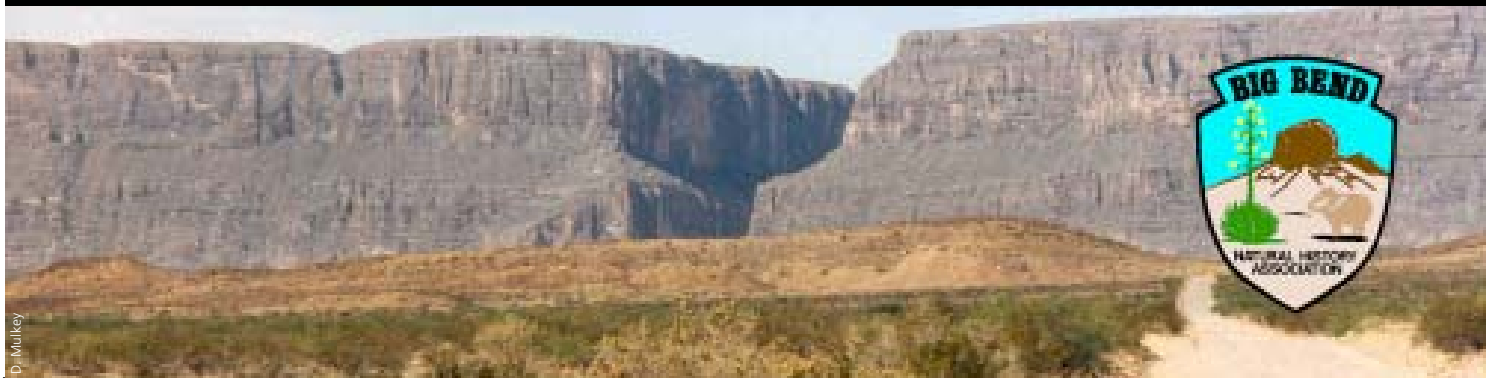
National parks have been described as the crown jewels of the United States. While enjoying the beauty of Big Bend National Park, please remember that few other nations have parks that can compare to those of the United States. They are something to be proud of. They are something to preserve.

The protection of Big Bend National Park is ultimately in the hands of the people who visit it. Your cooperation with park rules is one way to help ensure the park's survival.

Please, treat **your** park with care.



Awesome volunteers during spring training!



The Big Bend Natural History Association is a non-profit organization established to support the park's educational and scientific programs. BBNHA also publishes and distributes books, maps, guides, newspapers and other materials designed to enhance visitors' enjoyment and understanding of Big Bend National Park.

The Big Bend Natural History Association (BBNHA) is up to big things this year. In July, Superintendent King took our housing partnership proposal to Washington, D.C., where it was approved. That means that BBNHA, in partnership with the National Park Service (NPS) and Forever Resorts, the Big Bend concessionaire, will soon be building housing for park employees on land we bought this year in Study Butte. We hope this model of cooperative solutions to pressing problems will prove to be a prototype of one way in which the housing crisis in our western national parks might be addressed.

In yet another agreement, BBNHA with the NPS and the Friends of Big Bend National Park (FBBNP) will be funding the expansion of the visitor center at Panther Junction. The NPS will put up most of the money and oversee the construction, and BBNHA and FBBNP will each put up \$50,000 to finish the project. BBNHA will get a much larger bookstore in the expanded space, and FBBNP has already begun fundraising efforts to raise an additional \$75,000 for new exhibits. Anyone interested in donating to this worthy effort should contact FBBNP at the address listed on the back page.

This year will also see the opening of some larger and/or refurbished bookstores. In October, we will be opening our largest bookstore in the new headquarters of Amistad National Recreation Area in Del Rio, Texas. The NPS has leased a vacated boat dealership and given BBNHA a large space for our bookstore. The Persimmon Gap visitor center in Big Bend was refurbished during the summer, and we will be reopening that bookstore in the fall. Later next year, the NPS has funded the conversion of an employee housing unit next to La Harmonia store in Castolon into a visitor contact station, and BBNHA will be opening a small bookstore there, as well.

As always, we appreciate the public's support in our efforts to assist the NPS in their mission and invite you to become a member of both BBNHA and FBBNP, the two non-profit groups who contribute much needed funding to the park.

Mike Boren, Executive Director

Mike Boren, Executive Director

Seminars

Spend some quality time with an expert on Big Bend birds, tracks, black bears, dinosaurs, geology, and much more with our Natural History Seminars Program. Now in its 15th year, the immensely popular program sponsored by BBNHA continues to grow and improve.

There are still slots available for the Fall session. Sign up today!

Fall 2003 Seminar Schedule

Sept. 27-28 <i>Kelly Bryan</i>	Big Bend Birding
October 19 <i>Sam Richardson</i>	Big Bend 101
November 8 <i>Robert Haynes</i>	Tracking
November 9 <i>Raymond Skiles</i>	Black Bears
November 22 <i>Anthony Fiorillo</i>	Dinosaurs
November 23 <i>Bill Bourbon</i>	Geology Jeep Tour

Average cost for a seminar is \$50 per day with most seminars running 1-2 days. Class size is limited to 15 participants to ensure individualized instruction. Seminar participants may also take advantage of free camping in one of Big Bend's group campgrounds.

To register for a seminar or to receive a complete catalog, contact us at PO Box 196, Big Bend National Park, TX, 79834 or call 432-477-2236. You may also e-mail us at bibe_bbnha@nps.gov



Featured Publications

Have a hunger for the desert? Take a bite out of our great selection of books and publications. Our bookstores offer a wealth of books, maps, checklists, and field guides carefully selected to help you enjoy your visit to Big Bend National Park.

Stop by any visitor center, or order these online at www.bigbendbookstore.org

The Upper Canyons of the Rio Grande

No adventure in Big Bend compares with a trip on the Rio Grande, the majestic, whimsical, and fascinating stream that separates the U.S. from Mexico. Here Louis Aulbach describes in detail Colorado Canyon and associated gorges down through Santa Elena Canyon's 1500-foot deep passage. The spiral-bound book includes mile-by-mile river topo maps and essential trip suggestions and information on the natural and human history that is abundant along the river. \$24.95



Death, Daring, & Disaster

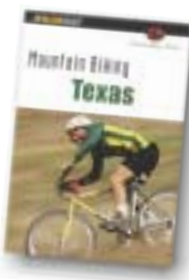
Search & Rescue in the National Parks

Park Rangers are trained at length to handle many types of emergencies, and of course calling on them to use their skills is not the kind of adventure park visitors want. But it's nice to know they are there. In this book Charles R. "Butch" Farabee, Jr., the Park Service's first National Emergency Services Coordinator, tells hair-raising tales of sometimes tragic, sometimes triumphant, always heroic efforts to save human life. \$19.95.



Desert Survival Skills

The deserts of the American West are spectacular and awe inspiring places, but you wouldn't want to be stuck in one for any length of time. If it happens, though, it would be a good thing to have read this work by expert David Alloway. Includes what you should know about the priorities of desert survival, survival kits, water, fire, shelter, and Chihuahuan Desert plant resources. \$22.95



Mountain Biking Texas

Mountain biking is growing in popularity every year and, although there are biking trails described here from all parts of the state, surely some of the most mountainous are in Big Bend. Mountain biker Christopher Hess chronicles more than 50 rides through some of the toughest, prettiest, and wildest spots in the nation with ratings for physical and technical difficulty, tips on riding and trip preparation, and USGS-based maps. \$16.95



Up From the Ashes: New Boardwalk at Rio Grande Village

In February 2003, fire management personnel conducted a prescribed burn within the wetland areas adjacent to the Rio Grande Village Campground. The objective was to help restore native wetland habitats for the endangered Big Bend mosquitofish by reducing overgrown brush and tangles of exotic plants. Wind direction was favorable at ignition time, but quickly shifted. Hot, blowing embers escaped and ignited thick stands of river cane along the nature trail. Firefighters were able to contain the result-

ing blaze to 20 acres, but the wooden boardwalk across the beaver pond was a complete loss. A popular visitor attraction, the boardwalk replacement became a top priority.

Throughout the triple-digit temperatures of spring and summer, a handful of dedicated trail crew members persevered. They began by wading waist-deep in the thick mud to drive over 50 heavy juniper posts five feet deep into the muck with sledge hammers.

Only trail crew can laugh in the face of miserable conditions, sweltering heat, and wallowing in fermented wetland muck. As the heat waves shimmered, and the blue herons, turtles, and vermilion flycatchers watched, the crew bolted on cross members for the 350-foot run across the beaver pond. The recycled "plastic lumber" decking demanded over 12,000 three-inch screws and countless sore muscles and aching backs. The Young Adult Conservation Corps (YACC) assisted in hauling dirt and improv-

ing the entry trail. Final improvements included the kick-rails, wooden benches, and two elegant curved corners.

Hats off to the Big Bend National Park trail crew! The final product is a beautiful, fully handicapped-accessible boardwalk across the wetland. Stop by the Rio Grande Village nature trail and enjoy the sights, sounds, and wildlife of a desert wetland,...and the fruits of trail crew misery.

Burned Over...A Total Loss



Driving Posts



Finished!



Border Crossings Remain Closed

A reminder that entering the U.S. at other than an authorized border crossing point is illegal. There are NO authorized crossings in Big Bend NP. Crossing at Boquillas, Santa Elena, or other locations along the Rio Grande is prohibited. The closest legal ports of entry are at Del Rio and Presidio, Texas.

The U.S. Attorney's Office has indicated that it will prosecute any criminal violations regarding these illegal crossings. If you re-enter the United States at any point within Big Bend National Park, you may be liable for a fine of not more than \$5,000 or imprisonment for up to one year, or both.

Please consult Park Rangers for the latest updates on this situation.

While Visiting A Border Park

Big Bend National Park shares the border with Mexico for 110-miles. This is a remote region, however each year hundreds of people travel north through the area seeking to enter the United States. Please keep the following in mind while visiting Big Bend:



If you see any activity, which seems to be suspicious, illegal, or out of place please do not intervene. Report it to a ranger as quickly as possible.



It is possible you could encounter an individual or small group trying to walk through the park with little or no water. Please do not stop, but instead, immediately report such occurrences to a ranger. Lack of water is a life-threatening emergency in the desert.

A visit to Big Bend is a wonderful experience to learn about the park's history and to experience a wide variety of natural history and recreation options. The park's shared border with Mexico is part of our shared landscape and a chance to experience and learn about our neighbors. A few simple steps can help keep the park safe for everyone who is here.

Big Bend Live!

Magnificent sunsets, fiery sunrises, and the continuously changing play of light on the Deadhorse Mountains are now visible from your home computer! Log onto the official Big Bend National Park Website and you can see what park employees get to see everyday...the view looking southeast from park headquarters, updated every 15 minutes.

View the Sierra del Carmen and the Basin Window...

LIVE!

Although great for bringing Big Bend's scenery into your home, the purpose of this webcam goes beyond providing just pretty pictures. There are great concerns over Big Bend's deteriorating air quality. This webcam is one of many instruments now continuously monitoring visibility in the park. Site visitors can now access real-time readings on visibility, ozone levels, and even archived images of each day.

Click over to www.nps.gov/bibe and check it out!

Surf Big Bend

Official N.P.S.
Website



Live Web-cam
Daily Weather
River Levels
Campgrounds
Research
Backcountry
Park Maps
Press Releases
Road Conditions
Ranger Programs
What's Blooming?
Bird Sightings
Photo Gallery

...and more!

www.nps.gov/bibe

The Rio Grande is in Trouble

Ranger Doug Thompson

FOR MILLIONS OF YEARS, THE RIO GRANDE HAS been one of the greatest rivers of North America. In the Big Bend region, its majestic flow has helped to create a truly fantastic landscape, slowly wearing away thousands of feet of rock to produce three of North America's most spectacular river canyons. (These canyons prompted an early visitor to call the Big Bend a place "where the big river is kept in a stone box.") In an otherwise dry and seemingly barren desert, the Rio Grande has produced a sparkling ribbon of water and lush, green vegetation teeming with fish, birds and other forms of wildlife.

Unfortunately, over the past one hundred years, the Rio Grande has changed dramatically, until today, it is little more than a shadow of its former self. Impoundment, irrigation and other human uses have reduced its flow dramatically, until it no longer floods in a natural cycle (something that is extremely important to both vegetation and wildlife), and its silt often is mingled with various pollutants. A hundred years ago, people drank from the river freely, but today, park visitors should use caution if they wade or swim in it.

Perhaps the greatest threat to the river's overall health is its reduced and/or regulated flow. In recent decades, the construction of dams and the tremendous growth of cities, industry and agriculture along the Rio Grande have diverted huge amounts of water. Sometimes the river below El Paso is nothing more than a dry wash. Where does the water come from that flows through the park? It is mostly the Rio Conchos which originates in the mountains of Chihuahua, Mexico, and enters the channel of the Rio Grande near Presidio, Texas. This river has also been reduced due to growing agricultural and municipal use in Mexico. When this reduction is coupled with recurring, natural droughts, the results can be disastrous. For example, by May 2003 the extreme drought of the past ten years had reduced the river's flow to the point where, for the first time in fifty years, it actually ceased for a few weeks. Park staff noted significant areas in both Santa Elena Canyon

and Mariscal Canyon where the river consisted only of stagnant pools, with no flow between them.

At least seven species of fish have now disappeared from the Rio Grande in the Big Bend area, including the American eel, the sturgeon and the Rio Grande silvery minnow. Also, at least five native mussels may be gone, since only the dead shells of three species have been found in recent years. And the Big Bend slider (a species of turtle) may soon disappear, since it is adapted only to swift water conditions.

Along with its reduced and regulated flow, the river frequently contains high levels of salts and bacteria, as well as agricultural and industrial chemicals. Such contamination affects a wide variety of species. For instance, high levels of both mercury and selenium have been detected in many of the river's fish, in aquatic insects, and in numerous bird species that feed on aquatic organisms.

Because of the Rio Grande's importance to the overall environmental health of the Big Bend region, Big Bend National Park cooperates with the U.S. Geologic Survey (USGS) and other agencies to monitor the river's

condition and the quality of its water. Presently, the park can measure the river's temperature, acidity, oxygen content and salinity as often as every six hours at both Castolon and Rio Grande Village. Recent testing has shown that the river's oxygen content and salinity can change dramatically with rises and falls in the river's level. A

slight rise in May 2002 correlated with a drop in dissolved oxygen that was severe enough to kill fish near Hot Springs.

The park's monitoring activities have contributed to

a program called the *National Stream Quality Accounting Network* (NASQAN). Sponsored by the USGS, this program eventually will provide important clues for determining the impact of upstream reservoirs on the river and the sources of pesticides and agricultural chemicals in its water. This in turn may be the first step in restoring at least some of the river's natural vitality and ecological importance. Without many dramatic changes, it seems unlikely that the "big river in a stone box" will ever fully regain its former, natural role in the story of America's Southwest.



In May the Rio actually stopped flowing.

River Canyons

There are three major river canyons within Big Bend National Park.

Santa Elena

Easy access. Big Bend's most popular river trip.

Length:	20 miles
Depth:	1,500 feet
Put-in:	Lajitas
Take-out:	Near Castolon
Time to float:	1-2 days

Mariscal

The park's most remote river canyon.

Length:	10 miles
Depth:	1,400 feet
Put-in:	Talley campsite
Take-out:	Solis campsite
Time to float:	1 day

Boquillas

Longest canyon float trip in the park.

Length:	30 miles
Depth:	1,200 feet
Put-in:	Rio Grande Vill.
Take-out:	La Linda
Time to float:	3 days

Escape to Big Bend's Canyons

Ranger Angelina Yost

IMAGINE DRIFTING DOWN THE RIO GRANDE THROUGH SHEER WALLS OF limestone, with the occasional sound of your paddle dipping in the water and the song of a canyon wren as your only acoustic accompaniments. A river trip through one of Big Bend National Park's spectacular canyons can offer you this type of wilderness escape. If you are having trouble deciding which of the many canyons to explore, this guide will help you make your decision.

Spectacular Santa Elena

Santa Elena Canyon, downstream, is the most popular overnight or three day trip, not only because the put-in and take-out are easily accessed by car, but because it is often considered the most dramatically beautiful. Santa Elena has the tallest cliffs forming the canyon wall- up to 1,500 feet. The first 13 meandering miles from the put-in at Lajitas give you a good look at the contrast between the riparian and desert ecosystem. The river becomes more technical in the last seven miles when you have entered the actual canyon. Two miles into the canyon, the largest rapid, the Rock Slide is classified as a Class IV rapid at certain water levels.

An enjoyable day trip consists of paddling *upstream*, from the Santa Elena Canyon Trailhead, a few miles into the canyon, and then returning back downstream. If the water level is low, you do not have to fight the current much going upstream, making this trip quite leisurely. It is an ideal trip if you only have one vehicle, or if you do not want to pay for a shuttle back to your starting point. A good destination is Fern Canyon, a beautiful side canyon approximately

two miles upstream, which has ferns growing where water is seeping out of the canyon walls.

Beautiful Boquillas

For visitors with less experience, a relaxing two to four day river trip through Boquillas Canyon is a great choice. The rapids in this 33-mile journey only rate up to Class II. Camping a couple of nights by the soothing sounds of the river, and marveling at the 1,200 foot canyon walls, will allow yourself time to forget about the daily distractions of life. As you travel down the canyon, notice the candellia wax mining camps on the Mexican side.

Magnificent Mariscal

Since you need a high clearance vehicle to reach Mariscal Canyon, it is a wonderfully remote day or overnight river trip. It is the shortest canyon in the park, 10 miles long, with varied scenery and stunning limestone cliffs rising up to 1,400 feet. A few Class II-III rapids give this excursion some excitement. Check with a ranger about road conditions

before embarking on your journey.

Quiet and solitude are rare qualities in today's modern world, but are qualities that exemplify the majesty of Big Bend. Using a canoe or raft to escape into the Park's magical canyons, is one of the best ways to truly experience Big Bend National Park's wilderness. Whether you decide on a day trip or a 10-day journey, each of these canyons will carry you into an ethereal world of water, rock, and sky.



Paddler negotiating the "rock slide" rapid in Santa Elena Canyon.

Hiking & Backpacking

Ranger Mary Kay Manning

Juniper Flat in the Chisos Mountains

THERE IS NO BETTER WAY TO FULLY EXPERIENCE AN AREA THAN ON FOOT, and Big Bend National Park offers over 200 miles of trails for adventurous hikers to explore. Some are well-maintained and easy to follow; others, particularly the more remote routes in the desert, are seldom maintained and are marked only by small rock cairns, if marked at all.

Since the park has so many good trails to experience, hikers are encouraged to refer to *The Hikers Guide to Trails of Big Bend National Park* or *Hiking Big Bend National Park* for detailed information on each one (both available at park visitor centers). For a list of recommended easy and moderate hikes, refer to page 9 in this newspaper, where a chart lists many fabulous trails under five miles round-trip.

While some people express concern about potential hazards such as encountering aggressive or poisonous wildlife while hiking, environmental conditions pose a much greater threat. Mountain lion attacks and rattlesnake bites are rare, but dehydration and heat stress are common problems. Water is scarce throughout the park, so carry all you need. Plan on drinking at least a gallon of water per day.

Permits

Backpackers must get free camping permits prior to beginning their trips. The park has strict rules about food storage, fires, human waste, and other camping issues, and a ranger must go over these regulations with backpackers prior to issuing the permit. There are over 40 backcountry campsites available to backpackers in the Chisos Mountains. You must select a site when getting your backcountry permit, as camping permits for the mountains are site-specific. Each visitor center has a reference book with photos and descriptions of each campsite to aid in site selection.

There are no designated campsites for backpackers in the desert; backpackers must specify only which general area or zone they plan to camp in, and where their vehicle will be parked. Once out in the desert, backpackers must find an appropriate camping site that is at least one-half mile from any road, out of view from roads, and at least 100 yards from trails, water sources, and historic sites.



On the South Rim

Chisos Mountain Trails

When temperatures are high, most hikers head for the shady trails high in the Chisos Mountains. If late summer rains have been sufficient, numerous species of blooming wildflowers will line the mountain trails from August through October. Early November is a good time to see the leaves on the maples and quaking aspen change color. Hikers will probably want to invest a dollar in a *Chisos Mountains Trails* map; this detailed 75 minute map of the Chisos Mountains also has good trail descriptions on the back.



Desert Trails

When the mercury falls, head out into the desert. There are generally fewer hikers on these trails, offering a greater chance for solitude. Correspondingly, many desert trails are not as well-maintained or well-marked as those in the Chisos Mountains, and the chance of getting lost on some desert routes is greater. If you plan to hike in the desert, refer to one of the hikers guidebooks and discuss your plans with a park ranger. Depending on the route, you may also need to purchase a 75 minute topographic map of the area *and know how to use it!* Park rangers have had to conduct extensive (and expensive) searches for hikers and backpackers who either didn't have maps or had maps but didn't know how to read them.



What About Scorpions?

Ranger Dan Leavitt

From drought-resistant exoskeletons, to their secretive lifestyles, scorpions have all the traits of desert specialists. Some visitors however may not be able to look beyond their own "fear factor" to see how interesting scorpions really are.

Creepy features of scorpions include the *pincers* (pronounced pinsers) which are used for feeding purposes only, and of course the stinger or *telson*, which injects the venom used to kill prey. Whether it is the pinching or the stinging, we should not feel threatened at all. Very few park visitors even see a scorpion, and believe it or not, it is likely that during your entire Big Bend visit, you will not be stung or pinched by a single one.

Scorpion Facts

- There are 18 different species of scorpions in Big Bend. Two of these, *Centruroides chisosarioris* & *Diplocentrus bigbendensis* are found nowhere else in the world!
- A scorpion sting (like a bee sting) rarely requires medical attention.
- Only one scorpion in the U.S. is considered dangerous. The bark scorpion is found in Arizona.
- Scorpions have been around for close to 450 million years. This makes them older than dinosaurs.
- A fossilized scorpion has been found that was four feet long!

The truth is, a scorpion would never actually *attack* a human. When a human is stung, it is a defensive warning, the message being "do not cross this line." Backpackers and campers should check bedding, clothing, and shoes if they've been left out overnight. Never walk in the dark here without a flashlight. A sting is painful, much like a honeybee, but may also cause a tingling sensation throughout the body as nerve endings react to the witch's brew of chemicals in the venom. Deadly to insects, the venom causes only discomfort in larger creatures. Many scorpion predators, including coyotes, owls, snakes, bats, and hawks might eat a lot more of them if they didn't have to face a possible sting.



Scorpions are predators as well as prey. They receive most of their moisture from eating tiny insects and even other scorpions. Nocturnal creatures, from a dark perch they wait until prey approaches. Once near, the pincers lash out and grasp the victim like two pairs of strong pliers. If it struggles, the prey is stung and immobilized...dinner is served.

The scorpion is nothing to be feared. Instead, admire this desert specialist's unique features and ability to thrive in the harsh wilds of Big Bend.



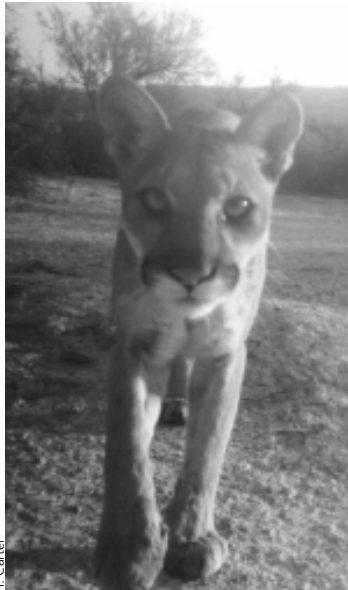
Scorpions are everywhere in Big Bend, but rarely seen

Mountain Lion Country

IF BIG BEND HAD A SYMBOL, IT MIGHT WELL BE THE MOUNTAIN LION—the embodiment of freedom and wildness. Solitary and secretive, this mighty creature is the unquestioned lord of its natural world. As one of Big Bend's top predators, *Felis concolor*—"cat all of one color"—is vital in maintaining the park's biological diversity. Within the delicate habitats of the Chihuahuan Desert, mountain lions help balance herbivores (animals that eat plants) and vegetation. Research shows that cats help keep deer and javelina within the limits of their food resources. Without lions, the complex network of life in Big Bend would certainly be changed.

Encountering a mountain lion, however, can lead to conflicts in maintaining the balance between natural processes and visitor enjoyment and safety. Since the 1950s, there have been more than 800 sightings of mountain lions by visitors. While over 90 percent of these sightings were along park roadways, encounters along trails have also occurred. Since 1984, three lion and human encounters have resulted in attacks on people. In all cases, those attacked recovered from their injuries and the aggressive lions were killed, preventing them from playing out their important natural roles. The more we know about lions, and the less we seek an encounter, the better able we will be to make life easier for them and for us.

How much do you really know about this powerful and wild cat? Mountain lions live throughout the park, including the Chisos Mountains where they prefer to use trails. Your chances of encountering an aggressive lion are remote. What can you do to minimize the consequences of an encounter? Avoid hiking alone or at dusk or dawn. Watch children closely; never let them run ahead of you.



NEVER RUN FROM A LION!

Do not crouch down; the lion has seen you long before you saw it.

Hold your ground, wave your hands, shout! If the lion behaves aggressively, throw stones.

Convince the lion that you are not prey and that you may be dangerous yourself.

If you have small children with you, pick them up and do all you can to appear large.

Report all lion sightings to a park ranger.

The lion's role is a part of the health and welfare of the entire ecosystem. Research and further human understanding of the cat's habits pave the way for conservation efforts in its behalf. As we discover more about the lion, we fear it less and appreciate it more. For many visitors, just seeing a track, or just knowing lions are out there, will be reward enough.

Black Bears

THE RETURN OF BLACK BEARS TO BIG BEND National Park is a success story for both the bears and the park. Native to the Chisos Mountains, bears disappeared from this area during the pre-park settlement era. After an absence of several decades, bears began returning to the park from Mexico in the early 1990s.

Today, wildlife biologists estimate that up to 12 black bears may live in the park. Though they prefer the wooded Chisos Mountains, bears also range along the Rio Grande and through - out the desert, particularly when drought dries up their regular water sources in the mountains.

Black bears are omnivorous. They eat large amounts of nuts, fruits, sotol and yucca hearts, insects, and smaller quantities of eggs, small mammals, reptiles, amphibians, honey, and carrion. Their strong sense of smell also leads them to human foods, and they can quickly open coolers, backpacks, and trash cans when enticed by food odors.

Bears normally avoid humans, but bears that learn to get food from human sources often become aggressive in their attempts to get more "people" food. When humans disobey the rules of both the park and nature by feeding bears, it is the bears that end up paying the ultimate price. Rangers may have to kill bears that lose their fear of people and

endanger humans in their attempts to get our food. Fortunately, Big Bend has not had to kill any bears, but some national parks destroy several bears each season; we hope that through educating visitors about proper

behavior in bear country, we can avoid this tragic outcome.

Big Bend has made it easy to keep edible items away from bears. Campers at the Chisos Basin Campground, at High Chisos backpacking sites, and at some primitive roadside campsites will find bearproof storage lockers for storing all edibles. Hard-sided vehicles are also suitable for storing edible items. All dumpsters in the Chisos Mountains developed areas are bearproof, as well. And remember, a bear's definition of an "edible" is far broader than ours; lock up sunscreen, skin

lotion, toothpaste, soap, and other toiletries whose odors might attract wildlife.

There really are no problem bears - only problem people. Carelessness can kill. Don't be responsible for the death of a bear. Follow the guidelines below. Pay close attention to the food storage rules posted in the Basin campground and on your backpacking permit. Your actions affect both Big Bend's wildlife and future park visitors.

With your help, bears and humans CAN live safely together in Big Bend National Park.



A small population of black bears lives here. Please help us keep them wild by storing all food items properly.

D. Onorato

Don't Call Me Pig!

FOR MANY VISITORS TO BIG BEND NATIONAL PARK, SEEING A JAVELINA (hav-uh-LEE-nuh) is a new experience.

These curious creatures, also known as collared peccaries, are only found in the United States in Texas, New Mexico, and Arizona. They are covered with black, bristly hairs and generally weigh between 40 and 60 pounds. They usually travel in groups called bands that consist of 10-25 individuals. Peccaries have a highly developed sense of smell, but very poor vision.

Physically, javelinas resemble pigs, but in reality, they are not closely related to pigs at all and have been genetically distinct from them for millions of years. A closer look reveals several major differences between the two animals. Javelinas have 38 teeth; domestic pigs and wild boars have 44. The canine teeth of the javelina are short and straight, while those of pigs are longer and curved. Javelinas have a



R. Leasure

Collared peccaries live throughout Big Bend

scent gland that they use to mark their territory that pigs do not have. Pigs sweat to keep themselves cool, but javelinas must instead cool themselves in available water sources or by staying in the shade.

A javelina's diet includes prickly pear cactus, grasses, mesquite beans, pinyon pine nuts, fruits, berries, and seeds. Unfortunately however, many javelinas now include human food as part of their diet. Every year we are seeing more and more campsites in the park raided by javelina. Although normally not aggressive, they can be when food is involved. Protect yourselves and our javelinas by properly storing all your food inside a vehicle or in the food storage lockers provided in the campgrounds. Do not leave coolers or food boxes unattended on picnic tables or in a tent. Flatten tents when you are away from your campsite. It is important that

javelinas and all park animals eat their natural food sources to stay healthy and safe. With your help, these unique animals can continue to thrive and thrill park visitors for years to come.

Keep ALL Wildlife WILD

In the Basin Campground

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

Cyclists

- Use food storage lockers where provided.

At the lodge

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

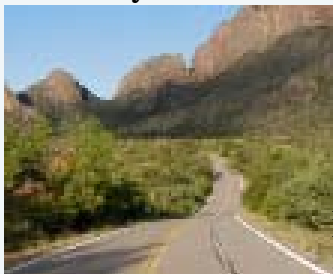
When hiking

- Never leave packs or food unattended.
- Avoid carrying odoriferous food and toiletries.
- Leave excess food and beverages in your trunk or food storage box
- Carry out all trash, including orange peels, cigarette butts, and left-over food.

Now That You're Here, What Can You Do?

You've driven many miles to get here, and have finally arrived at your destination: Big Bend National Park. But now what? Now that you're here, how do you spend your time? Where should you go? What should you explore? The park is big, and often visitors have a limited amount of time to explore.

One Day



If time allows, drive to the **Chisos Mountains** to take in the spectacular mountain views. Walk the 0.3-mile self-guiding Window View Trail to get a feel for the mountain scenery.

A trip along the **Ross Maxwell Scenic Drive** will give you a taste of the Chihuahuan Desert and will lead you to the Rio Grande. There are scenic overlooks and exhibits along the way. Sotol Vista, Mule Ears Overlook and Tuff Canyon are all worthwhile stops. The short walks to the Sam Nail (Old) Ranch and Homer Wilson (Blue Creek) Ranch and a visit to the Castolon Historic District will give you a glimpse into Big Bend's past.

A highlight is the short (*1.6-mile round trip*) walk into **Santa Elena Canyon**—one of Big Bend's most scenic spots. Drive to the end of the Ross Maxwell Scenic Drive to access the trailhead. You may return to the main road by returning on the Ross Maxwell Drive or on the **Maverick Road**, a 13-mile gravel road linking the Ross Maxwell Drive to the Maverick (west) Entrance. Always check on road conditions first.

Three Days



With three days to spend in the park, you can explore the major roads more thoroughly and still have time for hiking. In the Basin area, consider hiking the **Window Trail** (5 miles round trip) or the **Lost Mine Trail** (4.8 miles round trip); consult the *Hiker's Guide to Trails of Big Bend National Park*, for sale in park visitor centers, for trail descriptions.

In addition to the Basin and Ross Maxwell Scenic Drive (see suggestions for "one day") you can drive to **Rio Grande Village**, perhaps stopping at Dugout Wells along the way to walk the short Chihuahuan Desert Nature Trail. The Rio Grande Village Visitor Center offers a brief introductory slide program. Walk the **Rio Grande Village Nature Trail** which begins near site #18 in the campground. The bluff overlooking the Rio Grande at the end of the nature trail is a particularly beautiful spot at sunset.

Boquillas Canyon road will take you to several overlooks of the Rio Grande and the small village of Boquillas, Mexico. At the end of the road is the **Boquillas Canyon Trail**, which takes you to the entrance of this spectacular canyon.

One Week



With a week or more to spend in Big Bend, endless possibilities are open to you. You'll have plenty of time to explore the roads mentioned in the previous sections, and will also have time to hike or to drive some of the **"unimproved" dirt roads**. For these, you'll need a high clearance or four-wheel drive vehicle; don't forget to check at visitor centers for current road conditions. The River Road, Glenn Springs Road and Old Ore Road are some of the more popular backcountry routes. A visit to Ernst Tinaja near the south end of the Old Ore Road is a Big Bend highlight.

If you don't have high clearance or four-wheel drive, gravel roads such as Dagger Flat, Grapevine Hills and Maverick will get you "off the beaten path." Hike the Chimneys Trail, Mule Ears Trail, or Grapevine Hills Trail for a closer look at the desert environment. If you'd like to explore the Chisos Mountains, trails to Boot Canyon, Emory Peak and the South Rim offer good views of the park and take you into another world which seems far removed from the desert. There are plenty of opportunities for overnight backpacking along these trails. A free backcountry use permit is required and can be obtained at park visitor centers.

Float The Rio Grande



If you have the time and a spirit of adventure, you may want to consider a river trip. 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. Park Rangers can recommend a trip that meets your abilities and interests. Rafting and equipment rental companies are listed on page 14.

See "Backcountry Planning" on page 13 for additional information on Big Bend river trips.

Enjoying Your Visit

No matter how limited your time in Big Bend, remember that you will enjoy the park more if you **stop your car and explore on foot**. That doesn't mean that you have to hike miles on steep grades; there are many short, easy walks and roadside exhibits where you can stretch your legs and enjoy the sights, smells and sounds of the Chihuahuan Desert.

Hiker's guides and road guides are available at book sales areas throughout the park, and they

offer more detailed information about Big Bend's trails and roads. Attending **ranger-led activities** and evening programs are also good ways to learn more about Big Bend; check at the visitor centers and park bulletin boards for current activities.

Remember, you will NOT be able to see everything on this trip. You will probably enjoy the park more if you choose a few spots and explore them thoroughly to get a taste of what Big Bend has to offer. Then, come back again sometime to see the rest!



Big Bend Trails



From the 7,825 foot summit of Emory Peak, to the banks of the meandering Rio Grande, visitors will find over 200 miles of hiking trails in Big Bend National Park. Trails range from strenuous primitive routes through rugged desert backcountry to short handicapped- accessible pathways.

Below are descriptions of many of the most popular easy and moderate hiking trails. Most of these trails are perfect for shorter day hikes of up to several hours. For information on longer, more difficult routes, or to plan an extended backpacking trip, stop by any park visitor center. A large selection of maps and trail guides are available and park rangers can assist you in trip preparations and backcountry permits.




Panther Junction - Rio Grande Village Area

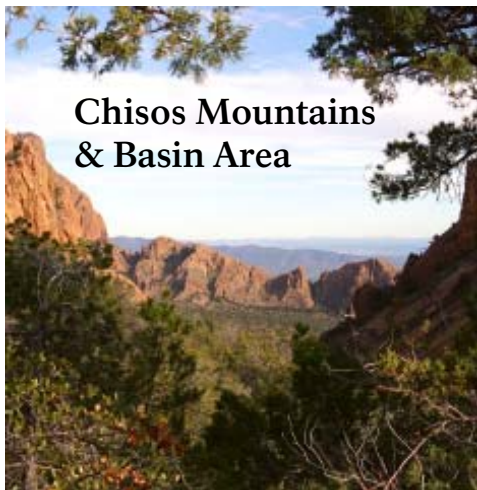
Between Panther Junction and Rio Grande Village lies a vast sweep of scrub desert, rocky ridges, and river floodplain. Sprinkled through this massive area are trails that

highlight the fascinating natural and human history of Big Bend. Discover Indian mortar holes in Boquillas Canyon and the early pioneer settlements of Dugout Wells and Hot Springs. Enjoy the diverse birdlife along the Rio Grande and the rich geology at Grapevine Hills.

One of the more popular areas in Big Bend's east

side, is the Hot Springs Historic District. Drift back in time and imagine what life was like during the early 1900s when J.O. Langford developed this natural hot spring into a tiny health resort. A one-mile loop takes you past the old motel, post office, homestead, and foundation of the hot spring bathhouse.

Trail	Roundtrip Length	Comments	Trailhead Location
Grapevine Hills	2.2 miles	Follows a sandy wash through boulder field. A short climb at the end takes you to a large balanced rock archway	Grapevine Hills Road mile 6
 Chihuahuan Desert Nature Trail	0.5 miles	A flat desert path near a cottonwood oasis. Signs interpret Chihuahuan Desert plant life.	Dugout Wells Picnic Area
 Hot Springs	0.75 miles	Walk past historic buildings to the riverside hot springs. 105°F water. <i>Take a bathing suit and soak a while.</i>	End of Hot Springs Road (<i>unpaved</i>)
 Rio Grande Village Nature Trail	0.75 miles	Cross a boardwalk and climb 125 feet to a great panoramic view of the river floodplain and distant mountains. Good birding and sunrise/sunset views.	Rio Grande Village Campground (<i>site 18</i>)
Boquillas Canyon	1.4 miles	Begins with a short climb, then descends via a sandy path to the river. Ends near a huge sand "slide."	End of Boquillas Canyon Road





Chisos Mountains & Basin Area

The Chisos Mountains form the rugged heart of Big Bend National Park. High ridges and summits coax moisture from passing clouds. The result is a forested mountain "island" surrounded by a desert sea.

When the lower desert trails become uncomfortably hot, enjoy the shady, pine-scented trails of the Chisos Mountains. All Chisos trails begin from the Basin area

which is located in the center of the park.

For a good introduction to the scenery and wildlife of the Chisos, hike the **Window Trail**. From the Basin Campground, this trail winds two miles through colorful Oak Creek Canyon to the top of the Window pouroff. Wildlife is abundant along this trail. Look and listen for javelina, white-tailed deer, and Mexican jays.


Trail	Roundtrip Length	Comments	Trailhead Location
 Window View	0.3 mile	Level, paved, handicapped accessible. Great sunsets and mountain views.	Chisos Basin Trailhead (<i>near the Basin Store</i>)
Basin Loop	1.6 miles	Connects the Laguna Meadow and Pinnacles Trails. Climbs 350 feet through pine/oak woodland. Nice views of the Basin area.	Chisos Basin Trailhead (<i>near the Basin Store</i>)
The Window	5.6 miles	Descends to the top of the Window pouroff. Great scenery and wildlife viewing. Climbs 800 feet on return.	Chisos Basin Trailhead or Basin Campground
 Lost Mine	4.8 miles	This magnificent hike climbs 1,100 feet to excellent mountain and desert views.	Basin Road mile 5 (<i>at Panther Pass</i>)

Ross Maxwell Scenic Drive

The Ross Maxwell Scenic Drive skirts the rocky ramparts of the Chisos Mountains and descends through the spectacular west side of Big Bend National Park. Many of the park's best views and desert hikes are found here.

The Ross Maxwell Drive ends at the trailhead to **Santa Elena Canyon**. There is no better trail to experience the sights and sounds of the Rio Grande. From the parking area, the giant chasm is in full view before you. Hike to the

river's edge and follow it upstream into a world of superlative cliffs and dense thickets of riverside vegetation. Enjoy the sounds of moving water and the descending song of the canyon wren.

Trail	Roundtrip Length	Comments	Trailhead Location
Burro Mesa Pouroff	1.0 mile	A flat, sandy trail up a canyon to the base of a dry pouroff. Interesting geology and desert plants.	Ross Maxwell Dr. mile 11
The Chimneys	4.8 miles	Flat desert trail to prominent rock formations. Look for rock art. No shade.	Ross Maxwell Dr. mile 13
Mule Ears Spring	3.8 miles	A beautiful desert hike to a small spring. Spectacular geology and mountain/desert views.	Ross Maxwell Dr. mile 15
Tuff Canyon	0.75 miles	Balconies overlook this scenic canyon. A short trail leads into and through the narrow gorge carved out of soft volcanic tuff.	Ross Maxwell Dr. mile 20
 Santa Elena Canyon	1.6 miles	Crosses creekbed, climbs stairs, then follows the river upstream into the mouth of a magnificent 1,500 foot deep limestone canyon.	8 miles west of Castolon



Biking Big Bend

Want to experience the Big Bend country more intimately than you can by car, but aren't interested in hiking? Over 100 miles of paved roads and 160 miles of dirt roads lure visitors to explore Big Bend National Park by bicycle. The rugged terrain provides a challenge for most cyclists, but the incredible scenery and the chance to observe the park's flora, fauna, and geology more closely make the effort worthwhile.

Old Ore Road

**26 miles one-way; strenuous.
4-6 hours**

This ride is best done from north to south for an easier ride. Park your vehicle along the wide shoulder at the start of the Dagger Flat Road and ride 2 miles to the junction where the Old Ore Road begins. The Old Ore Road is rough and rocky, and there are places where you must work your way over small ledges and pick your route between large boulders.

For a shorter ride on this road, begin at the south end of the Old Ore Road and ride 5 miles north to the side road leading to Ernst Tinaja campsite #1. Leave your bike in the parking area at the end of this road and hike one-half mile up the creekbed to Ernst Tinaja, one of the most geologically interesting spots in the park. You can continue your ride along the road another few miles north to reach Carlotta Tinaja; leave your bike near the road and explore this short canyon by foot. Look for fossils in the limestone around the tinajas.

Glenn Springs - Pine Canyon Road

**6.4 miles one-way; very strenuous.
About 3 hours round-trip.**

This is one of the most strenuous rides in the park. Park along the road shoulder at the north end of the Glenn Springs Road. After 2.3 miles, turn right onto the Pine Canyon Road. The road ends at the trailhead for the Pine Canyon Trail; leave your bike here and hike 2 miles up the trail into the canyon.

Dagger Flat Road

**7 miles one-way; easy.
2-3 hours round-trip.**

Park along the wide shoulder at the beginning of the Dagger Flat Road. This road has small dips and sandy areas and slowly gains elevation toward the end. Use the guide book available at the start of the road to learn about the plants along the way.

All park roads are open to bicycles. However, they are not allowed on any trails or other off-road areas. Additionally, park roads do not have shoulders and cyclists must share the roads with motorists who may not be aware of them or how to safely pass them. For their own safety, cyclists are discouraged from riding on the Basin Road, as the numerous hills and curves limit motorists' sight distance. While there are many good roads to ride in the park, few of them are loop trips. Having someone shuttle you or your vehicle broadens your opportunities.

Paint Gap Road

**2.5 miles one-way; easy to moderate.
1.5-2 hours round-trip.**

Park at the junction of the paved road and the Paint Gap Road. The first part of this road is easy, but the last part is very rocky and rough.



Panther Junction to Castolon

**35 miles one-way; moderate to strenuous.
3-6 hours.**

This is one of the most scenic rides in the park. As the road skirts the Chisos Mountains, it provides incredible views of the mountains, the desert, and striking geologic features. The overall elevation loss is 1580 feet, but there are several steep hills along the way.

Panther Junction to Rio Grande Village

**20 miles one-way; mostly easy.
1.5 hours one-way.**

Although there are some hills, this ride is mostly downhill, dropping 1900 feet over 20 miles. For a side trip, ride the 2-mile improved dirt road to the Hot Springs Historical Area and explore the buildings and short trail by foot.

What Can Kids Do Here?



Big Bend is a great place for kids!

Become a Junior Ranger!

Learn desert secrets, identify the parts of a cactus, and discover what javelina eat!

The Big Bend Junior Ranger program is designed for kids of all ages. Through activities, games, and puzzles, kids can have fun as they learn about the park. They can also earn stickers, badges, patches, and certificates.



The Junior Ranger Activity Book costs \$2.00 and is available at all park visitor centers.

Hike a Trail!

Many park trails are suitable for families. Consult the "Easy and Moderate Hikes" chart on page 9. For children in strollers, consider the Window View Trail, a paved ¼-mile loop trail that begins at the Chisos Basin trailhead.

Big Bend is a special place! We hope you enjoy Big Bend National Park and that you learn to value its resources. If you have any questions, ask a park ranger for help.

Where's All The Wildlife?

"HEY RANGER, WE'VE BEEN DRIVING ALL DAY AND HAVEN'T SEEN ANY ANIMALS. DOES ANYTHING live here?" These questions may have crossed your mind too. You may be surprised to learn that over 3,000 different kinds of animals inhabit Big Bend National Park. While the vast majority of these are invertebrates, over 600 species of vertebrates are also known here.

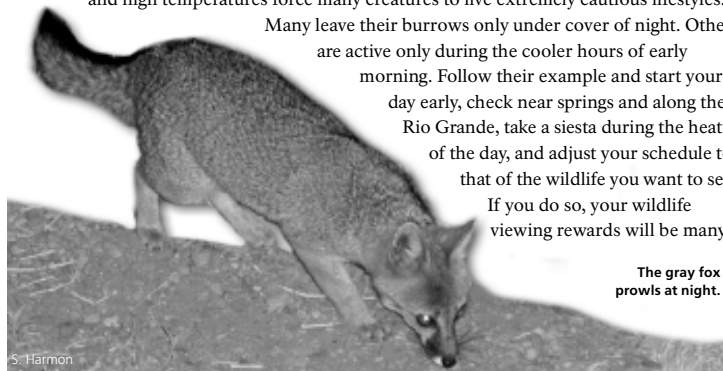
Common invertebrates include tarantulas, wolf spiders, centipedes, millipedes, scorpions, sunspiders, grasshoppers, walking sticks, velvet ants, harvester ants, and mites. Many are active only after summer rains, while others like the grasshoppers and cicadas may be heard singing throughout the heat of the day.

Vertebrates are most popular with park visitors since they include deer, javelina, black bears, and America's favorite watchable wildlife - *the birds*. Checklists of the park's birds, mammals, reptiles, and invertebrates are available at park visitor centers. Researchers have identified over 39 species of fish, 75 species of mammals, 11 amphibians, and 56 reptiles. Big Bend's bird checklist contains 450 species, the largest diversity of birds to be found in any U.S. national park.

The desert landscape may seem completely uninhabited, but the desert is full of surprises. Those who take the time to get out of their car and investigate, will discover abundant evidence of the desert's denizens. Holes, tracks, nests, and droppings are everywhere. Lizards dart by at amazing speed. Listen for the tinkling notes of the black throated sparrow, or the raspy song of the cactus wren. Keep in mind that in desert areas like Big Bend, low rainfall and high temperatures force many creatures to live extremely cautious lifestyles.

Many leave their burrows only under cover of night. Others are active only during the cooler hours of early morning. Follow their example and start your day early, check near springs and along the Rio Grande, take a siesta during the heat of the day, and adjust your schedule to that of the wildlife you want to see.

If you do so, your wildlife viewing rewards will be many.



The gray fox prowls at night.

"Desert Tracks"

Desert dramas are revealed in sand and soft soil. To see an animal, both you and it must be in the same place at the same time; but tracks may last for days. Below are some commonly seen Big Bend tracks.

Roadrunner



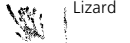
Coyote



Javelina



Lizard



Rugged & Remote

Driving Big Bend's Backcountry Roads

Ranger Tom VandenBerg

ONE OF THE MOST OUTSTANDING ASPECTS OF BIG BEND NATIONAL PARK is the extensive system of unpaved roads. While most visitors will stay on the 120 miles of paved routes, those with a sense of adventure and a high-clearance and/or four-wheel drive vehicle can also enjoy over 150 miles of unpaved roads. These unpaved roads offer beautiful scenery, primitive campsites, access to fascinating natural and historic sites, as well as the opportunity to test the durability and limits of your vehicle and its occupants.

ROAD CONDITIONS

Forty five miles of the unpaved roads are classified as "improved dirt roads." These roads, like the Maverick Road on the park's west side, are passable by most vehicles during much of the year. The fact that a road is "passable" does not mean that it would be ideal for today's low-clearance passenger cars. Almost any amount of rainfall will produce a rough washboard surface on these roads. If you are not willing to submit your vehicle to this kind of punishment, you are better off avoiding all the unpaved roads in the park.

The remaining unpaved roads are classified as "backcountry dirt roads" and are considerably more primitive. Most of the year these roads, like the River Road and Old Ore Road are passable only by high-clearance and/or four-wheel drive vehicles. Some of these roads, like the Black Gap Road, are not maintained and will require determination and considerable skill in order to successfully negotiate them. Even the toughest vehicle will face a number of challenges: boulders and washes, rough washboard, sandy areas that quickly become mud after rainfall, and an abundance of thorns and spines to threaten your tires. Because many of these roads are infrequently used and patrolled, you must be prepared to deal with any challenges or emergencies that arise. Road conditions will deteriorate quickly after heavy use and severe weather. Always inquire at a park visitor center about current road conditions.

DRIVE PREPARED

Before you leave the pavement, ensure that your vehicle and tires are in good condition. A disabled vehicle on one of these roads can become a life-threatening situation. Check all vehicle fluid levels and tire pressure. Make sure that you have emergency equipment: a good spare tire and the tools to change it, and extra coolant or water for the vehicle's radiator. You must also provide for yourself and your passengers. Carry plenty of water, food, a first aid kit, and some sleeping gear in case you have to spend an unplanned night in your vehicle. Dress as if you were going hiking, so that you are prepared to walk if the need arises. Always check road conditions with a park ranger before you go.



G. Hamilton

Big Bend's primitive road system is unique among national parks, most of which do not allow any off-pavement driving.

B. Lawrence

DRIVE SMART

While driving Big Bend's backcountry, you are on your own - it is always best to play it safe. Drive slowly and carefully. This is a poor place to break down. If you encounter a road obstacle or conditions beyond the limits of your vehicle, turn around. If your vehicle becomes disabled, it is almost always best to stay with your vehicle. If walking becomes necessary, it is imperative that you carry water and stay on the road. Make sure to leave a note on the dashboard that describes the problem and indicates where you are going.

DRIVE LEGAL

In addition to protecting yourself, please help us protect your park. Always stay on established roadways. Off-road driving is prohibited. All vehicles must be street legal and licensed. No ATV's or "four wheelers." Everything here is protected...collecting rocks, plants, animals, artifacts, or any other park resources is illegal. If you plan to camp out in the backcountry, obtain a free backcountry permit from any park visitor center.

Big Bend's primitive road system is unique among our national parks, most of which do not allow any off-pavement driving. For those park visitors who come well prepared, Big Bend's backcountry roads provide another aspect of the allure of this remote and primitive national park. Drive slowly, carefully, and have fun!

Backcountry Campsites



Along with the chance to explore remote corners of the park, Big Bend's primitive road system also provides access to some of the park's best roadside camping spots. Sprinkled along the park's dirt roads lie 62 primitive roadside campsites. These campsites offer privacy, solitude, desert silence, and spectacular scenery as their only amenities. Not designed for trailers or large RV's, most of these sites require a high-clearance vehicle and a lengthy drive (*some up to two hours*) on rocky dirt roads. Many will require 4-wheel drive for access. If you plan on camping in such a site, it is important that you are properly equipped with everything you will need in the backcountry, including water. We also suggest folding chairs and a table.

A backcountry permit for your *specific site* is required from any park visitor center *before* you set out to camp. These free permits may be obtained in person, up to a day in advance of your first night. A park ranger will help you select a vacant site, get your vehicle description, and discuss the park's backcountry regulations and safety information. To assist you in site selection, visitor centers have a "campsite catalog" containing full-color photos, maps, and a detailed description of each primitive campsite (*also on the park website*).



The campsite catalog details each campsite.

Primitive Roadside Campsites



Regulations

- A backcountry permit is required
- No wood or ground fires
- Only camp in designated sites
- Bury human waste
- Pack out all trash, including toilet paper
- Generator use is not permitted

You will find:

- Scenic Splendor
- Solitude
- Quiet
- Adventure

You will not find:

- Water
- Restrooms
- Picnic Tables
- Shade
- Stores
- Generators
- Visitor Centers
- Showers

Come Prepared!



D. Catalani

Ranger Programs



Join a park ranger for a guided hike, evening slide show, talk, or workshop on Big Bend's natural and cultural history. These free programs are offered daily. Consult the Interpretive Activities Schedule posted on visitor center and campground bulletin boards for more information.

Camping



Tent Camping

Camping in Big Bend National Park is on a first-come, first-served basis with **no advance reservations taken**. The National Park Service operates campgrounds at Rio Grande Village, the Chisos Basin, and Castolon. The cost is \$10.00 per night for a site.

Camping is also available at **primitive backcountry campsites** in the Chisos Mountains and along backcountry roads. High-clearance or 4-wheel drive vehicles are necessary to reach most road sites. Backcountry permits are required and can be obtained in person at park visitor centers up to 24 hours in advance.

Groups of 10 or more are eligible to reserve a spot in one of the park's **group campsites**. Reservations may be arranged up to 90 days in advance by calling (432) 477-2251.

Camping areas are often full during the Thanksgiving and Christmas holidays, as well as during spring break in March or April.



The only showers and laundry facilities in the park are located at the Rio Grande Village store.



Rio Grande Village campsite

Lodging



The Chisos Mountains Lodge, operated by Forever Resorts Inc., is located in the Chisos Basin at 5,400 feet elevation. The lodge offers a variety of rooms and cottages, plus a gift shop and dining room. For reservations, please call (432) 477-2291 or 2292.

Banking



There are NO banking facilities in Big Bend National Park. The nearest banking/ATM services are located in Study Butte, 26 miles west of park headquarters. Most stores accept major credit cards; however, camping fees must be paid in cash. It is advisable to have small bills (\$1, \$5, \$10, \$20) since larger bills are often difficult to change.

Birdwatching



Birding is one of the main attractions of Big Bend National Park. More bird species (450) have been observed here than any other national park. Although the peak diversity of birds occurs during the spring migration, the fall and winter seasons still have much to offer to the birder.

The fall migration can be the season of the second chance, including warblers missed in the spring that sometimes show up again in the fall. For example, the 2002 fall season rewarded alert birders with Grace's and pine warblers, as well as one Louisiana waterthrush. Perhaps the biggest challenge of this season is identifying birds in faded adult or confusing juvenile plumage. Again from last fall season, a pair of rare dusky-capped flycatchers with young tested the skills of several observers.

Although Big Bend specialties like Colima warbler and Lucifer hummingbird will leave the park in late fall for warmer southern climates, the winter season is no time to put away your binoculars. Winter birding can be very rewarding here, with the added bonus of generally mild, dry, and sunny weather in which to be afield. Present throughout the winter are those species considered permanent residents of the park, many of them unique to the desert southwest, like greater roadrunner, cactus wren, and black-throated sparrow. Residents are joined by other species that spend only the winter in Big Bend, including Anna's hummingbird, ruby-crowned kinglet, sage thrasher, and sage sparrow. Mild weather may even encourage some migrants to linger here, as did a hooded warbler at Rio Grande Village two years ago. To tempt the avid birder, there is always the possibility of discovering a rare, out of range species. In December of 2000, two observant birders found a rufous-backed robin, providing a first winter record for the park.

Patience, a good field guide, and knowledge of where to look are the keys to locating the birds of Big Bend. A checklist of birds and local and regional bird-finding guides are available for purchase at any park visitor center. These are great aids for determining which species are likely to be present and the habitats they frequent.

Keep in mind that many of the species you enjoy are in decline. Habitat destruction on both wintering and breeding grounds, as well as in critical stopover areas along migration routes, are bringing many of these birds to the brink. You can help: tread softly in fragile habitat areas. Don't disturb birds with excessive noise or intrusive attempts at photography. Please share your observations with us, particularly of rare and accidental species. Your detailed report becomes part of the record and can be an aid to researchers. Enjoy the birds of Big Bend National Park, and do all that you can to ensure their return.

Trailers & RV's



All park campgrounds can accommodate trailers and RVs, but vehicle lengths have a great deal to do with safely reaching the campground and finding a suitable space.

The only hookups available in Big Bend National Park are at Rio Grande Village in the 25-site, **Rio Grande Village RV Park** operated by Big Bend Resorts, Inc. Although there is no size restriction, your vehicle must be equipped with water and electrical hookups as well as a three-inch sewer connection. Register at the store. No advance reservations.



Chisos Basin Campground

Near the RV park is the 100-site **Rio Grande Village Campground** operated by the National Park Service. Although there are no hookups, water, flush toilets, and a dump station are available. Set in a large grove of cottonwoods, the campground is adjacent to the Rio Grande. Many of the sites are pull-throughs. **Generator use is limited: from 8:00 am to 8:00 pm daily.** A no-generator use area is also designated.

The 65-site **Chisos Basin Campground** is rugged and hilly. The sites are small and most are not suited to recreational vehicles or trailers. The road to the Basin is steep and curvy, especially at Panther Pass—the road's highest point. The road into the campground is a 15 percent grade. Trailers longer than 20 feet and RVs longer than 24 feet are not recommended.

Cottonwood Campground, near Castolon, offers pit toilets and potable water, but no hookups or dump station. **Cottonwood is a NO-generator campground.**

Big Bend's unpaved roads are generally unsuitable for RV's and trailers. Overnight camping in any primitive site requires a backcountry permit, obtained in person at park visitor centers up to 24 hours in advance.

Park Campgrounds

	Elevation	Sites	Nightly Fees:	Facilities	Registration	Comments
Chisos Basin	5,401 ft	65	\$10.00*	Flush Toilets, Dump Station	Self-pay station	Surrounded by rocky cliffs. Many hiking trails nearby.
Cottonwood	2,169 ft	35	\$10.00*	Pit Toilets, No Generators	Self-pay station	In a cottonwood grove along the river. Grassy sites. Good birding.
Rio Grande Village	1,850 ft	100	\$10.00*	Flush Toilets, Dump Station	Self-pay station	Largest campground. Shady sites. Laundromat and showers nearby.
Rio Grande Village RV	1,850 ft	25	\$18.00	Full Hookups	Inquire at RGV Camper's Store	Concession-operated. Adjacent to RGV store.

* \$5.00 with Golden Age or Golden Access Passport

Horses

Visitors are welcome to bring and use their horses in the park. A free stock-use permit is required and may be obtained in person at any of the park's visitor centers up to 24 hours in advance of the trip.



While horses are not permitted 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 on nature trails, the Santa Elena and Boquillas Canyon Trails, or the Pine Canyon Trail, nor are they permitted in picnic areas.

Grazing within the park is not permitted, so you must bring your own feed. Stock may be watered in the Rio Grande and at springs that are not used for domestic water supply. Be prepared to haul water for your stock as springs are unreliable, especially during winter months. Check current spring conditions at a visitor center when you arrive. All horse manure must be removed from the park, or deposited at a designated location near the NPS horse corral at Panther Junction (ask a ranger for directions).

You may camp with your horses at many of the park's primitive road campsites. These are available on a first-come, first-served basis through a free backcountry use permit available at park visitor centers. These campsites are especially difficult to obtain during holiday periods, especially spring break.

Camping with horses is not permitted in any of the park's developed campgrounds. Government Springs campsite, located 3½ miles from Panther Junction, is a primitive campsite with a corral large enough for 4-8 horses. If you plan to bring horses to the park, you may reserve this campsite up to 10 weeks in advance by calling (432) 477-1158.

Hiking & Backpacking

Big Bend National Park offers over 100 miles of hiking trails. A free permit is required for all overnight trips, and can be obtained in person only up to 24 hours in advance of the trip. Because of the unreliability of desert springs, it is difficult to plan an extended backpacking trip prior to your arrival in the park. Decide how much distance you want to cover and how much time you have. Park staff can assist you with trip planning based on your needs and current trail conditions. The Panther Junction Visitor Center is open daily from 8:00 a.m. to 6:00 p.m.

Backpacking sites in the Chisos Mountains are difficult to obtain during the Thanksgiving and Christmas holidays, and during spring break in March and early April.

Maps and hiker's guides are available for purchase at park visitor centers. If you would like to order them in advance of your trip, call the Big Bend Natural History Association at (432) 477-2236 or visit their online internet bookstore at www.bigbendbookstore.org



Pets are not allowed on trails or in backcountry areas. Please leave pets at home if you plan to hike.

The Southeast Rim of the Chisos Mountains, Mariscal Rim, and Casa Grande are closed during the peregrine falcon nesting season (February 1 - July 15).

Weather

Elevational differences in Big Bend mean that temperatures can be vastly different in different areas of the park. The lower areas along the Rio Grande are very hot during the summer months, while the Chisos Mountains are considerably cooler. Winter weather generally occurs between November and February, with temperatures dropping dramatically as cold fronts move through the area. Between June and October thunderstorms and flash floods may occur. Bring clothing for both warm and cool weather, as well as rain gear, when visiting Big Bend any time of the year. See "how hot?" on page 15.

Floating the Rio Grande

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, which have rapids varying in difficulty from Class I to Class IV. Between the canyons, the river is generally slower-paced. The Rio Grande Wild and Scenic River extends downstream beyond the park boundary for an additional 127 miles.

If you plan to take a river trip in Big Bend National Park, you may bring your own equipment, or you can hire a guide service. Four local companies (see page 14 for telephone listings) provide guide service in the park—you may reserve a trip by contacting them directly.



If you plan to use your own equipment, you must obtain a free permit at a park visitor center. Permits are issued up to 24 hours in advance of your trip, in person only. Stop by the Panther Junction Visitor Center for your permit and for current river condition information prior to your trip.

Permits for the Lower Canyons of the Rio Grande Wild and Scenic River may be obtained at the Persimmon Gap Visitor Center, when open; a self-permitting station is also located at Stillwell Store, 5 miles south on FM2627 on the way to La Linda, Mexico. Permits for floating Santa Elena Canyon may be obtained at the Barton Warnock Center in Lajitas. Only permits for Santa Elena Canyon may be written there. However, we encourage all parties to get their permits at a park visitor center when possible, to obtain the most up-to-date river information and conditions.

River guide booklets are available for purchase at park visitor centers. If you would like to order them in advance of your trip, call the Big Bend Natural History Association at (432) 477-2236 or visit their online internet bookstore at www.bigbendbookstore.org

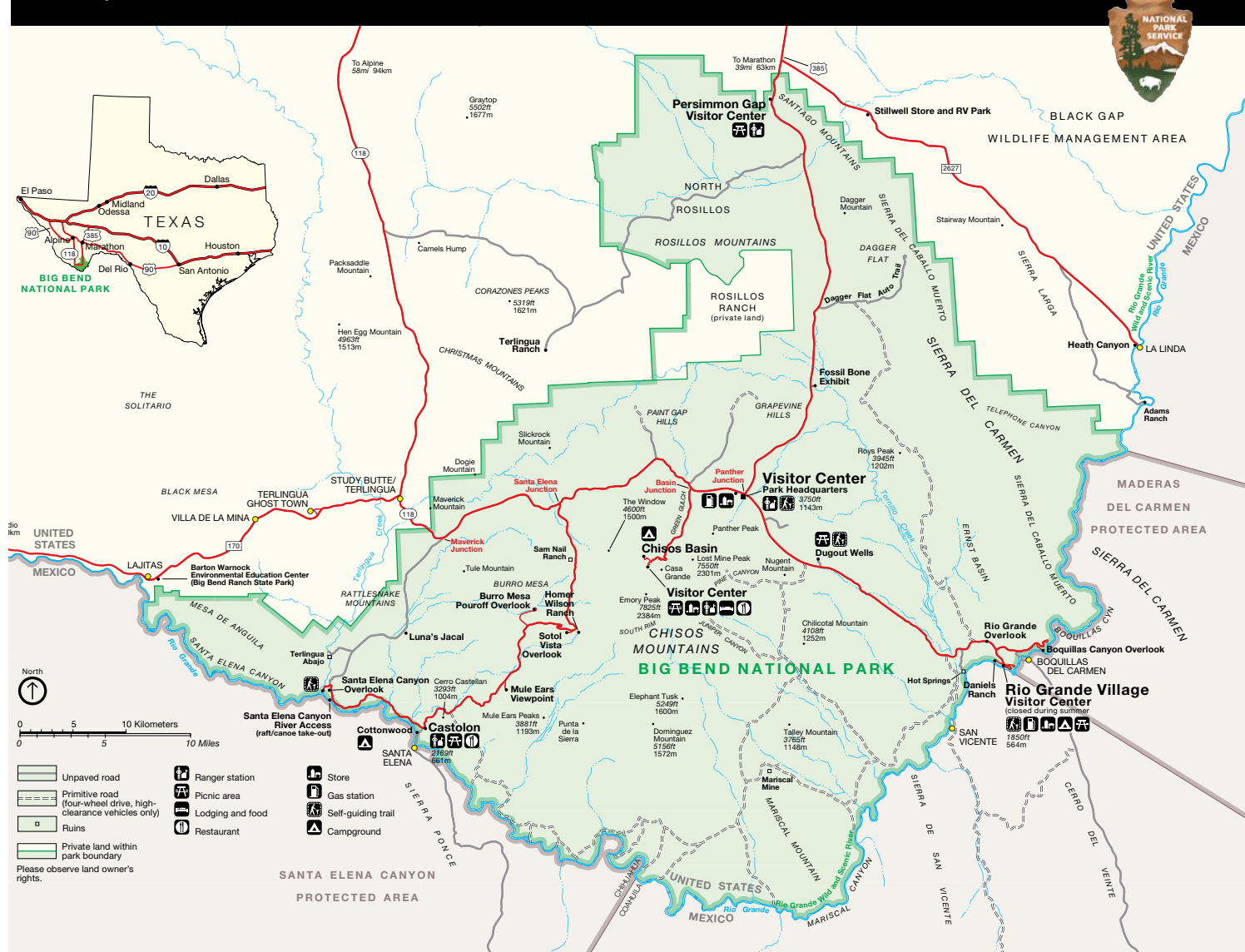


Keep Big Bend Beautiful

For your convenience, barrels for recycling cans, glass, and plastic bottles are located at the entrances of park campgrounds.



Park Map



Local Services

No Cell Phone Service
in Big Bend

Inside The Park (432)

EMERGENCY

911

National Park Service

General Information 477-2251

Big Bend Natural History Association

Booksales & Seminars 477-2236

Visitor Centers & Ranger Stations

Castolon Ranger Station 477-2225
Chisos Basin Visitor Center 477-2264
Panther Junction Visitor Center 477-1158
Persimmon Gap Visitor Center 477-2393
Rio Grande Village Visitor Center 477-2271

Lodging

Chisos Mountains Lodge 477-2291
477-2292

Restaurants

Chisos Mountains Lodge 477-2291

Park Gasoline Service

Panther Junction (also diesel) 477-2294
Rio Grande Village 477-2293

Campground Stores

Rio Grande Village 477-2293
Chisos Basin 477-2291
Castolon 477-2222

Outside The Park (432)

Lodging

Badlands Motel, Lajitas 424-3471
Big Bend Motor Inn, Study Butte 800-848-BEND
Easter Egg Valley Motel, Study Butte 371-2254
El Dorado Motel, Terlingua 371-2111
Gage Hotel, Marathon 386-4205
Heath Canyon Ranch Inn, FM 2627 376-2235
Longhorn Ranch Hotel, Hwy. 118 371-2541
Marathon Motel, Marathon 386-4241
Terlingua Ranch Resort 371-2416

Camping

Big Bend Motor Inn, Study Butte 800-848-BEND
Big Bend Ranch State Park, Lajitas 424-3327
Big Bend Travel Park, Study Butte 371-2250
Lajitas on the Rio Grande 424-3471
Longhorn Ranch, Study Butte 371-2541
Ocotillo Mesa RV Park, Study Butte 800-729-1406
Stillwell's Trailer Camp, FM 2627 376-2244
Study Butte RV Park 371-2468
Terlingua Ranch Resort 371-2416

Gas Stations & Grocery Stores

Big Bend Motor Inn (gas, diesel) 800-848-BEND
Lajitas Trading Post (gas, supplies) 424-3234
Study Butte Store (gas/diesel/groceries) 371-2231
Stillwell Store & Station (gas) 376-2244

Medical Services

Terlingua Medics 371-2222
Lajitas Infirmary 424-3536
Big Bend Regional Medical Center, Alpine 837-3447

Banks

Quicksilver Bank & ATM, Study Butte 371-2211

Kennels

Terlingua Creek Kennels, (Oct-Apr) 371-2348

Guide Services

Big Bend Touring Society, Terlingua 371-2548
Texas Jeep Expeditions 877-839-JEEP

Rio Grande Float Trip Outfitters/Rentals

Big Bend River Tours, Study Butte 800-545-4240
Desert Sports, Terlingua 888-989-6900
Far Flung Adventures, Study Butte 800-359-4138
Rio Grande Adventures, Study Butte 800-343-1640
TX River Expeditions, Study Butte 800-839-7238

Horseback Riding

Big Bend Stables, Study Butte 800-887-4331
Lajitas Stables, Lajitas 424-3238
Spring Creek Remuda, 23 mi. south of Marathon 376-2260
Ben's Hole Creek Ranch, Terlingua 371-2954

Let Safety Be Your Constant Companion

Big Bend is unfamiliar country to most visitors yet it need not be dangerous. Whether hiking the highcountry, rafting the Rio Grande, observing wildlife, or simply driving the scenic roads of this wilderness park, let safety be your constant companion. Spend a moment reviewing these common safety concerns so that you may have an enjoyable visit.

Driving

Many accidental deaths in Big Bend result from car accidents. While driving is a great way to see the park, it can also be dangerous, particularly if you are tired or are going too fast. Drive within the speed limit, 45 mph maximum in the park, and watch for javelina, deer, and rabbits grazing along road shoulders, especially at night. Seat belts are required at all times. Remember, too, that you share the road with bicyclists and pedestrians. Some park roads, such as the road into the Chisos Mountains Basin, are steep and winding and require extra caution. The Basin Road is not recommended for RVs over 24 feet or trailers over 20 feet. Finally, always select a designated driver before drinking alcoholic beverages.

Heat

Desert heat can kill you. Carry plenty of water (at least one gallon per person, per day) and wear a hat, long pants, long-sleeved shirt, and sun screen when hiking. Springs are unreliable and often dry up for a portion of the year, despite what maps indicate. Avoid hiking during mid-day in summer; travel as wild animals do, in the early morning or late evening hours rather than during the heat of the day.

Mountain Lions

Big Bend is mountain lion country, especially the Chisos Mountains. While lion attacks are rare, three have occurred in the last 10 years. Should you encounter an aggressive mountain lion, hold your ground, wave your arms, throw stones, and shout. Never run. Keep groups together and consider hiking elsewhere with young children if you come across a special mountain lion warning sign posted at a trailhead.

Desert Wildlife

Black bears, javelinas, skunks, coyotes, and raccoons frequent Big Bend's campgrounds. Although they sometimes appear tame, all of the animals in the park are wild, and could pose a threat to your health and safety if you attempt to approach or feed them. Never feed any of Big Bend's wildlife. To prevent these creatures from becoming habituated to people, store all food, coolers, cooking utensils, and toiletries in a hard-sided vehicle, preferably in the trunk of your car. Food storage lockers are available for hikers and campers in the Chisos Mountains. Dispose of garbage properly. At the Chisos Basin Campground, throw away garbage in the special bear-proof dumpsters and trash cans provided. Remember to report all bear or lion sightings to a ranger.

Hiking

Exploring this desert and mountain country on foot requires both mental and physical preparation. Trails vary from well maintained in the Chisos to primitive and barely visible in the desert. Plan hikes within your ability. Take along a map and compass and know how to use them. Flash floods may occur following thunderstorms so avoid narrow canyons or dry washes. Stay low and avoid ridges during thunderstorms. Carry a flashlight and a first aid kit. Let someone know where you're going and when you expect to return. If you get hurt or lost, stay in one place to conserve water and energy. Signal for help; three blasts on a whistle is a well-recognized distress call. In remote areas, a large "X" marked on the ground by any means visible from the air will signify that help is needed. Carry a signal mirror. Remember to obtain a free backcountry use permit before heading out overnight.

Fire

Fire danger is always an important safety consideration in Big Bend. Wood or ground fires are not permitted in the park, and you must exercise caution in the use of gas stoves, charcoal grills, and cigarettes. Big Bend has experienced drought conditions in the past several years and some restrictions may apply to the use of these heat sources. Check with a ranger for the latest information about fire safety in the park.

Swimming

Hot weather makes the muddy Rio Grande look very inviting, but swimming is not recommended.

Water borne micro-organisms and other waste materials can occur in the river and cause serious illness. The river can be hazardous, even in calm-looking water. Strong undercurrents, deep holes, and shallow areas with sharp rocks and large tree limbs are common and make the Rio Grande unsafe for swimming. If you do choose to swim, wear a life jacket and avoid alcohol.

Poisonous Animals

Venomous snakes, scorpions, spiders, and centipedes are all active during the warmer months. Inspect shoes and sleeping bags or bedding before use and always carry a flashlight at night. While snake bites are rare, they usually occur below the knee or elbow. Pay attention to where you walk and place your hands.

Big Bend truly is wild country. In fact, many people visit precisely because it is so remote and rugged. But remember, as you enjoy the splendor of this great wilderness area, to make safety a priority. By giving forethought to your actions you can have a safe, exciting, and rewarding vacation in Big Bend National Park.

Keep The Wild in Wildlife!

Javelina are wild and can be dangerous...



How Hot?

PANTHER JUNCTION
elevation 3,750 feet

	Avg.High/Low	Avg.Rainfall"
January	61/35	.46
February	66/34	.34
March	77/45	.31
April	81/52	.70
May	88/59	1.50
June	94/66	1.93
July	93/68	2.09
August	91/66	2.35
September	86/62	2.12
October	79/53	2.27
November	66/42	.70
December	62/36	.57
yearly average:	79/47	15.34"

Temperatures in the Chisos Basin vary 5-10 degrees below these readings, while daytime temperatures along the Rio Grande average 5-10 degrees warmer.

Pet Owners

Keep your pet on a leash (or in a cage) at all times. Pets are not allowed on park trails, or anywhere off established roadways. Pets may not be left unattended in the park.

A National Park is a refuge for the animals and plants living within it. Even if your pet doesn't chase animals, dogs present the image and scent of a historical predator. The result is stress on native wildlife.

Predators such as owls, coyotes, javelina, and lions CAN and DO kill pets here. Even large dogs cannot defend themselves against such predators.

Remember, desert heat is **deadly**. Do NOT leave your pet alone in a vehicle. Pets are not allowed on trails, off roads, or on the river. The nearest kennel service is in Terlingua, 30 miles away.





National Park Service
U.S. Department of the Interior

Big Bend National Park
PO Box 129
Big Bend, TX 79834
www.nps.gov/bibe



Big Bend Natural History Association
PO Box 196
Big Bend National Park, TX 79834
www.bigbendbookstore.org

Non-Profit Org.
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Big Bend NP, TX
Permit # 0001

Get In On The \$50 - Per-Plate Fund Raiser



Buy this custom plate from the state of Texas and 90% of the cost will be used to help preserve and protect Big Bend National Park, one of the world's last great wildernesses. It may be the most fulfilling contribution you'll ever make.



PO Box 200
Big Bend National Park, TX 79834
www.bigbendfriends.org

EXPERIENCE YOUR AMERICA

Join Our Family



Please accept our invitation to join the Big Bend Natural History Association

The Association's goal is to educate the public and increase their understanding and appreciation of the Big Bend Area and what it represents in terms of our historical and natural heritage. You can be an important part of this effort when you become a member.

BBNHA was founded in 1956 to aid educational, historical, and scientific programs for the benefit of Big Bend and its visitors.

Your Benefits as a Member

- A 15% discount on items sold by BBNHA
- A 10% discount on most seminars
- A subscription to *The Big Bend Paisano*
- Current Big Bend calendar
- Discounts at many other association bookstores in visitor centers at other national park sites
- Opportunity to support scientific, educational, and historical programs in Big Bend

Past and present projects include:

- Operate book sales outlets in Big Bend National Park and Amistad National Recreation Area
- Publish trail guides and brochures and assist with the publication of *The Big Bend Paisano*
- Sponsor an on-going Seminar program
- Provide annual grants for research projects and administer grants and gifts received for the park
- Support the park's volunteer, Junior Ranger, and educational outreach.

Yes!

Please enroll me as a member of BBNHA

ANNUAL DUES

___ Individual (\$25) ___ Associate (\$50)
___ Corporate (\$100)

LIFE MEMBERSHIP

___ Individual or Family (\$250)
___ Corporate (\$500)
___ Benefactor (\$1,000)

___ New Member ___ Renewal

Mr./Ms./Mrs. _____
Address _____
City _____ State/ZIP _____

Make check payable to BBNHA or charge to:

___ Visa ___ Mastercard ___ Discover
Card No. _____ Exp. Date _____

Signature _____

DETACH AND MAIL TO:

BBNHA, P.O. Box 196
Big Bend National Park, Texas 79834
Telephone: (432) 477-2236
e-mail: bibe_bbnha@nps.gov



S. Little