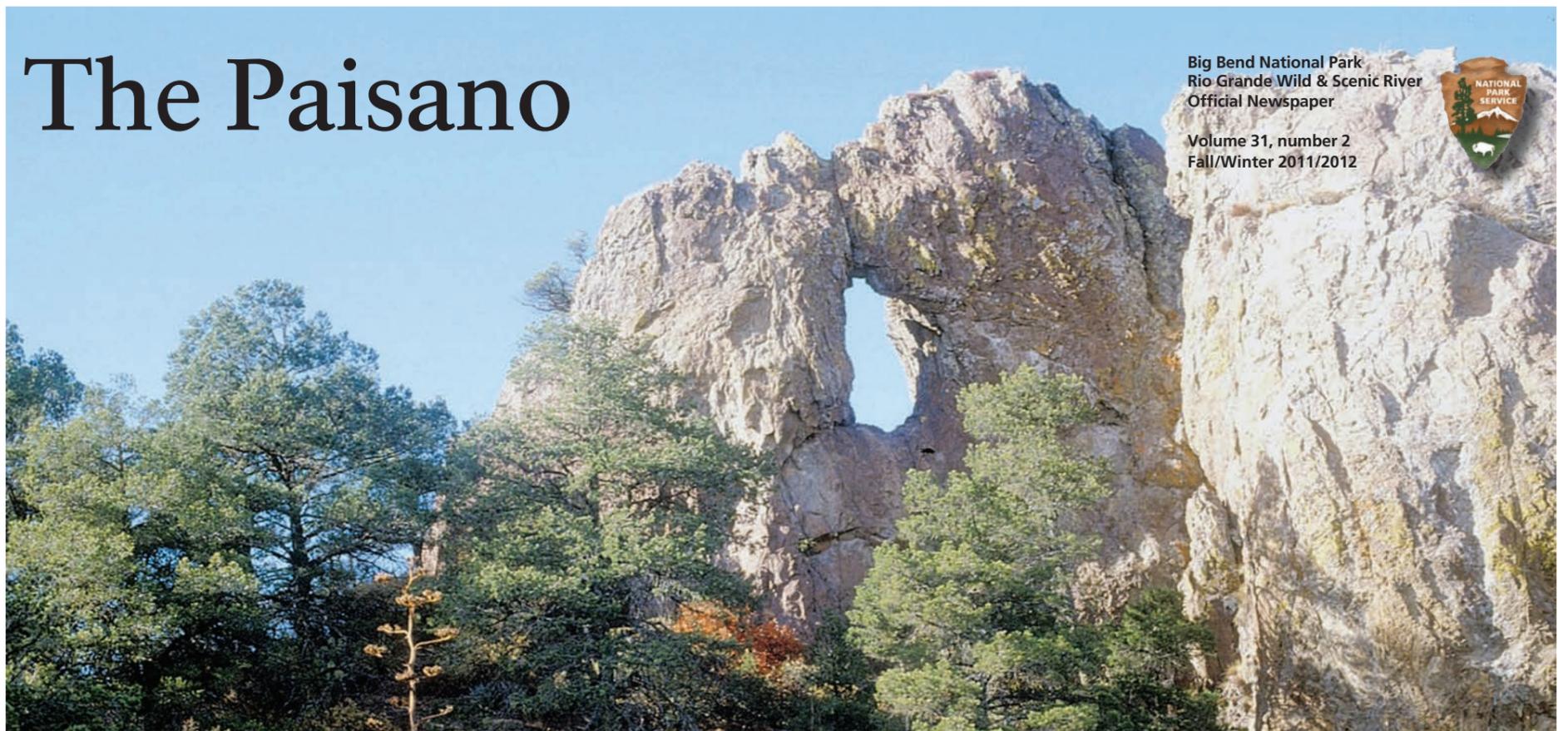


The Paisano

Big Bend National Park
Rio Grande Wild & Scenic River
Official Newspaper

Volume 31, number 2
Fall/Winter 2011/2012



8 What to See & Do

Find out how to make the most of your time in the park. Includes recommendations and suggested trip itineraries for one day, three day or week long visits.

9 Day Hikes

Find descriptions of many of the popular easy and moderate hiking trails. Includes trail length, average time required, difficulty, and location.

16 Park Maps

Don't know where you are? The park map can help. Find detailed maps of the Chisos Basin and Rio Grande Village and phone numbers for services in and outside the park.

Emergencies

Call 911
Or 432-477-2251
24-hours a day
Or contact a Park Ranger

Insider's Inspiration

Welcome to Big Bend National Park and the Rio Grande Wild and Scenic River! Over 800,000 acres await your exploration and enjoyment. From an elevation of less than 2,000 feet along the Rio Grande to nearly 8,000 feet in the Chisos Mountains, Big Bend includes massive canyons, vast desert expanses, forested mountains, and an ever-changing river. Here you can explore one of the last remaining wild corners of the United States.

families return year after year to celebrate an anniversary, holiday, or simply enjoy a vacation.

Big Bend isn't an easy park to get to, so what brings people back? For some, it's peace and solitude. For others, spectacular scenery and mountain vistas inspire them to return. Diversity draws in others, as every trip provides an opportunity to see a new plant, animal, or bit of history.

Big Bend experiences have inspired visitors for decades. While most parks note that roughly ten percent of their visitors return, nearly two thirds of Big Bend's visitors are people who have been here before, and couldn't wait to come back. In fact, many

This issue is dedicated to identifying that special spark, that bit of inspiration, which draws us as visitors and park rangers to come to, return to, and stay in Big Bend National Park.



Superintendent's Message

Many superintendents align the end of their career in a park where they have a strong desire to serve, and for me that was Big Bend. I have served in a number of spectacular national parks, such as Black Canyon in Colorado, and Organ Pipe in Arizona, but I was inspired to serve at Big Bend before retirement because of the park's remarkable diversity, stunning scenery, and limitless opportunities for the future.

One of these opportunities, which has persuaded me to postpone my retirement, is opening an international crossing at Boquillas. Strengthening international conservation, reestablishing positive relationships, and providing a legal source of income for our neighbors across the river is an incredibly positive step along the border, and can help make Big Bend a safer place. And, of course, it will return the unique cross-cultural experiences our visitors enjoyed in the past, and wish to have again. I look forward to seeing this dream become a reality.

William E. Wellman

Superintendent William E. Wellman

EXPERIENCE YOUR AMERICA™

What is a Paisano?

Paisano is a Spanish word meaning countryman or peasant that is used throughout the American Southwest as a nickname for the greater roadrunner.

Big Bend on the Internet

Plan your next trip, or learn more about the fantastic resources of the Big Bend by visiting the official National Park websites. These are your best sources of information for weather, river levels, research, park news, trip planning, and more.

Big Bend National Park:

<http://www.nps.gov/bibe/>

Rio Grande Wild & Scenic River:

<http://www.nps.gov/rigr/>



Got Water? Got Salt?

Carry and drink water—at least 1 gallon per person per day. Eat salty snacks and regular meals. As you exercise, you lose salt and water (over a quart and a half per hour during arduous exercise). You need both to survive in this extreme environment.

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To:

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





National Park Service
U.S. Department of the Interior

Big Bend National Park
Rio Grande Wild & Scenic River

The *Big Bend Paisano* is published by the National Park Service for the orientation and education of visitors to Big Bend National Park and the Rio Grande Wild & Scenic River.

National Park Service

Superintendent, William E. Wellman
Chief Naturalist, David Elkowitz
Park Ranger/Editor, Cookie Ballou

The National Park Service was established on August 25, 1916. . . “to conserve the scenery and the natural and historic objects and the wildlife. . . and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.” Authorized by congress in 1935, and established in June 1944, Big Bend National Park preserves the most representative example of the Chihuahuan Desert ecosystem in the United States. As conservation educators, the park’s Division of Interpretation and Visitor Services provides guided walks, talks, evening slide programs, workshops, and other educational activities as well as written materials such as this newspaper.



Big Bend Natural History Association

Executive Director, Mike Boren

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.

Photograph Credits

When possible, the *Paisano* uses photographs of the park taken by visitors. These photographs bear the photographer’s name; all uncredited images are NPS photographs.

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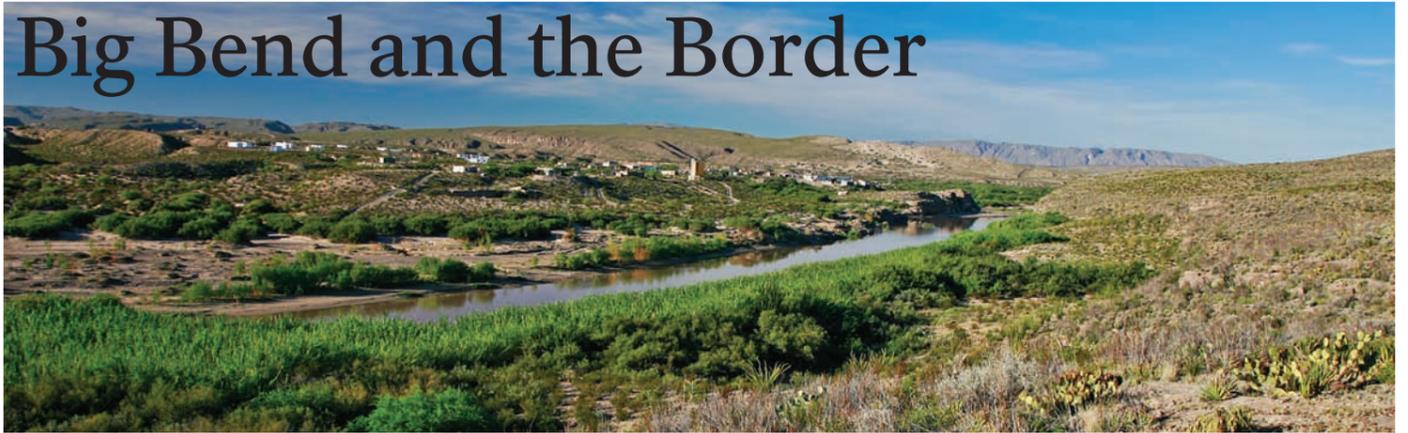
432-477-2251

Official Park Websites

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

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

EXPERIENCE YOUR AMERICA™



View of Boquillas, Mexico

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

Crossings Remain Closed

As a result of a 2002 U.S. Customs and Border Protection decision, there are still no authorized crossings in Big Bend National Park. *Crossing at Boquillas, Santa Elena, or other locations along the Rio Grande is prohibited.* The closest legal ports of entry are Del Rio and Presidio, Texas. A legal port of entry may be established in the park in the near future. Meanwhile, the U.S. Attorney’s Office will prosecute any criminal violations regarding 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.

Border Safety

A few simple steps can help keep the park safe for everyone here. Please keep the following in mind:

- Know where you are at all times, follow good safety procedures, and use common sense when making decisions.
- Cell phone service is frequently out of range in many areas of the park.
- Keep valuables, including spare change, out of sight and lock your vehicle.
- Avoid travel on well-used but unofficial “trails”.
- Do not pick up hitchhikers.
- People in distress may ask for food, water or other assistance. It is recommended that you not make contact. Instead, report the

location of the individuals to the visitor center or other park staff or the Border Patrol as soon as possible. Lack of water is a life-threatening emergency in the desert.

- Report any suspicious behavior to park staff or the Border Patrol. Please do not contact suspicious persons.
- Ask at the visitor center or contact a ranger or a Border patrol agent about any areas where you may have concerns about traveling.

Border Merchants

Mexican Nationals may approach you from across the river to sell souvenir items such as walking sticks, bracelets, and crafts. If you agree to look at/purchase their items and the Mexicans cross the river, they may be arrested for being in the U.S. illegally. They will be held until deported back to Mexico through Presidio (100 miles away). Mexican merchants will be arrested for illegal commercial operations which may result in a fine and/or additional incarceration while awaiting adjudication prior to deportation.

Items purchased will be considered contraband and seized by officers when encountered. Rocks, minerals, and archeological items cannot be purchased, imported, or possessed in a national park.

In addition, illegal trade impacts the resources of the park in a number of negative ways, including the creation of social trails

that crush plants along the river and cause erosion of riverbanks, and an increase in garbage and contaminants along the Rio Grande watershed. Supporting this illegal activity contributes to the continued damage of the natural resources along the Rio Grande, and jeopardizes the possibility of reopening the crossings in the future.

Sotol walking sticks and other handcrafted items made in Boquillas, Mexico can only be purchased legally at sales outlets inside and outside of the park.



Mexican crafts

Fees: Your Dollars at Work

Why Do Parks Charge A Fee?

Much of the funding for Big Bend and other national parks comes from American taxpayers. However, protecting this land and ensuring that you have a safe, enjoyable and educational experience costs more than this tax base provides. Therefore, the U.S. Congress determined that people who use federal lands should pay fees to help offset the difference.

Where Does Your Money Go?

Twenty percent of the money collected from entrance and campground fees is redistributed to units of the national park system that do not charge fees to assist in their upkeep and to upgrade those areas. Eighty percent of the money collected here stays in Big Bend National Park.

How Is Your Money Used?

Your entrance and campground fees help Big Bend National Park complete important projects that directly benefit you and other park visitors.

Recent Projects:

- Rio Grande Village Nature Trail—addition of boardwalk and viewing platform
- Rehabilitation of Maverick Entrance Station

Current Projects:

- Santa Elena River Access
- Boquillas Crossing Facility

Entrance Fees

Single Private Non-commercial Vehicle

\$20—valid for 7 days

Single person entry on foot, bicycle, motorcycle, commercial vehicle, etc.

\$10 per person—valid for 7 days

Big Bend Annual Pass

\$40—valid for one year from month of purchase

Interagency Annual Pass

\$80—valid for one year from month of purchase

All other valid passes will be accepted until expired including: Golden Age Passport, and Golden Access Passport.



International Park Commission - Early 1930s

Park Partners

Big Bend Natural History Association

The Big Bend Natural History Association (BBNHA) was established in 1956 as a private, non-profit organization. The Association's goal is to educate the public and increase their understanding and appreciation of the Big Bend area and what it represents in terms of our historical and natural heritage. BBNHA champions the mission of the National Park Service in interpreting the scenic, scientific, and historic values of Big Bend, and encourages research related to those values. The Association conducts seminars, and publishes, prints, or otherwise provides books, maps, and interpretive materials on the Big Bend region. Proceeds fund exhibits, films, interpretive programs, seminars, museum activities, and research.

For those who prefer to shop in person, or during your visit, BBNHA operates sales outlets at Amistad National Recreation Area in Del Rio, Texas, and in Big Bend National Park visitor centers in the Chisos Basin, at Panther Junction, Persimmon Gap, Castolon, and Rio Grande Village.

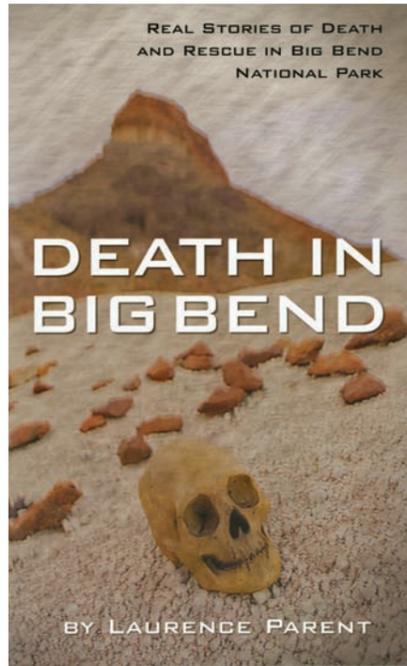
When preparing for a future visit, or remembering a previous trip, BBNHA offers both phone and internet sales. Phone orders can be placed during business hours seven days a week by calling 432-477-2236. Please browse through our online store at <http://www.bigbendbookstore.org/> You can enjoy safe, secure shopping in the comfort of your home. We offer many categories, authors, subjects, and titles.

Ongoing BBNHA projects include:

- Publishing trail guides and brochures
- Providing annual grants for research projects, and administering grants and gifts received for the park
- Supporting the park's volunteer, Junior Ranger, and educational outreach programs



www.bigbendbookstore.org



New item available from BBNHA

Friends of Big Bend

Founded in 1996, the Friends of Big Bend National Park is a private, non-profit organization with a mission to support, promote, and raise funds for Big Bend National Park in partnership with the National Park Service and other supporters who value the unique qualities of this national resource on the Rio Grande. The Friends of Big Bend National Park has funded a range of critical projects, including wildlife research programs, the purchase of equipment to monitor air and water quality, and the construction and renovation of the park infrastructure.

The Friends of Big Bend National Park host a yearly membership event and in-park tour, which is an excellent opportunity to get to know the board of directors governing the organization, and become more involved with the group. Also, several fund-raising events occur in the major Texas cities throughout the year and are another opportunity to get involved and help with the mission of the Friends Group. The group's website is a great place to look for upcoming events and current happenings.



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

Big Bend custom license plates are available for your car, truck or motorcycle from the state of Texas and most of the proceeds go toward preservation and protection of Big Bend National Park—one of the world's last, great wildernesses. It may be the most fulfilling contribution you'll ever make.



Volunteers in the Park

Volunteers are a valuable part of our operation and our community. Last year over 240 volunteers contributed approximately 46,400 hours of service.



Honor Roll

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

- Jim Bishop
- Angie Dean
- Steve Harper
- Cynta deNarvaez
- Steve Wick
- Reine Wonite
- Georganne Bradbury
- Jon Gosch
- Elaine & John Jonker
- Rachel Kilian
- Sarah King
- Bob Wirt
- Beth Bishop
- Bud Frankenberger
- Don & Carol O'Brien
- John Pfistner
- Rick Bradbury
- John Rech
- Hennessy, Bob & Ruthine
- Jim & Jan Allen
- Ed Davis
- Doug & Kay Combs
- Austin Danicic
- Joan & Ray Kane
- Tom & Kendall Ermann
- Bob Douat
- Steve & Toka Smith
- Steve & Tina Ehrman
- Chris Dunn
- Royann & Royce Brockett
- John & Linda Lightbourn
- Marshall & Pat McCall
- Gary & Diane Frable
- Robert & Glenda Overfelt
- Terry Brackeen
- Jim Scanlon
- Joe Cain
- Dana Crites
- Jennifer Goucher
- Elton & Esther Homan
- Mark Schuler
- Bill & Patti Marvin
- Barney Ghim & Paula Jamps
- Jim & Mary Lynn Murrell
- Jerry Turner
- Linda Richardson
- Phillip & Margaret Hodgins
- Danny & Diana Edwards
- Jane & Ron Payne
- Roy & Aletha Ellis
- Bill & Jane Berry
- Michael & Nancy Coe
- Kenn & Linda Sutton
- Allen & Linda Comstock
- Jim & Marlene Hufford
- Mark Kirtley
- Lillian Nichols & Robert Martin
- Earl Shumaker
- Richard Edwards
- Marty & Donna Niles
- Paul Bloom
- Ed Navarro
- David Conway
- Gary Lamar
- Ron Buckner
- Mr. & Mrs. J Watson

Join us and support your park!

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

Do more with your dues!

Purchase a dual annual membership in both BBNHA and the Friends of Big Bend National Park for only \$100.

Member Benefits

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

Annual Dues

- Individual \$50
- Associate \$100
- Corporate \$200
- Joint (W/ FBBNP) \$100

Join online at www.bigbendbookstore.org

Telephone: 432-477-2236

Or, make checks payable to BBNHA and detach and mail to:
Big Bend Natural History Association,
PO Box 196, Big Bend National Park, Texas 79834

Life Membership

- Individual/Family \$500
- Corporate \$1000
- Benefactor \$2500
- Renewal
- New Member

Name _____
Address _____
City _____ State _____ Zip _____

In The News

Partners in Protection— A Natural Area of International Significance



Sierra del Carmen Mountains

Along the U.S.-Mexico border in the Big Bend region of Texas and the Mexican states of Chihuahua and Coahuila, an impressive complex of parks and protected areas helps preserve the largest desert ecosystem in North America—the Chihuahuan desert. The region is one of the most biodiverse in the world with more than 268 river miles and 2.6 million acres of land protected in the U.S. and Mexico.

Over the years, park rangers, scientists, volunteers, and local communities have diligently preserved the spectacular landscapes and habitat on both sides of the border, beginning with the establishment of Big Bend National Park in 1944. In 1994, Mexico established two flora and fauna protected areas: Cañon de Santa Elena in Chihuahua and Maderas del Carmen in Coahuila. In June 2009, Mexico designated Ocampo Natural Protected Area, between the other two areas, forming a contiguous set of protected areas in the largest desert ecosystem of North America. In October 2009, Mexico established the Rio Bravo del Norte Natural Monument to protect the Mexican side of the river corridor.

On May 19, 2010, Presidents Barack Obama and Felipe Calderón expressed their support for the U.S. and Mexico to work together to recognize and designate Big Bend-Rio Bravo as a natural area of binational interest. In support of this important precedent, goals and an action plan have been formulated.

The plan addresses critical conservation issues along the river corridor such as restoration of riparian and aquatic ecosystems, control of exotic and invasive species, monitoring of threatened species and species of interest, and the reestablishment of silvery minnow populations. The plan also calls for binational cooperation for the response to and control of wild fauna diseases including monitoring and management of diseases in domestic and wild animal populations. In addition, the plan calls for a formal data exchange mechanism between agencies and partners in both countries to facilitate joint conservation efforts. Coordinated efforts will also mitigate and/or adapt to the effects of climate change in the protected areas of Big Bend-Rio Bravo.

Another important aspect of the plan, and perhaps the issue stirring the most inquiries, is the coordinated effort between the Department of Homeland Security and the Secretariat of International Affairs of Mexico to establish an official border crossing near the town of Boquillas, Mexico. With coordinated eco-tourism activities, the reestablishment of positive relationships, and a legal source of income for park neighbors across the border, visitors will once again be able to experience a safe, pleasant, and meaningful cross-cultural visit.

West Texas Drought— The 5¢ Postcard

Park Ranger Rob Dean

An old nickel postcard of West Texas offers the amusing depiction of a lost prospector crawling through the desert in search of a water hole. Its over-used caption reads, “Wish you were here!” Even today the old card is relevant as arid conditions in West Texas and Big Bend National Park are more the norm than the exception. The current drought however, has surpassed the norm. Exacerbated by record-setting winter freezes, the drought adds a level of stress that affects entire ecosystems, and makes that old postcard image a reality.

The harsh reality of drought is evident and this year all of Texas is reportedly enduring its third worst in history. The Palmer Drought Severity Index of dry and wet years in Texas (1895 to present), documents 1916–1918 and the early 1950s as the most severe drought years on record. It appears that 2011 may be record-setting as well.

Both plants and animals respond to harsh environmental factors in a variety of noticeable ways. Vegetation suffers with little or no growth, turning brown and looking dead and desiccated. Desert-adapted creosote shrivels, and prickly pear pads resemble crisp potato chips. As a vital linkage in a burdened food chain weakens, so do the animals—invertebrates, vertebrates, predators, and prey—that depend on it. All respond to hard times in any manner that will ensure their survival.

Dry conditions also mean wildfires and this year has been a big fire year. Local area fires have burned thousands of acres, destroyed

homes, and killed livestock. Big Bend’s renowned Mexican fire crew, Los Diablos, as well as National Forest Service crews, and local area fire departments have been busy fighting fires and working in fire prevention and management.

Fortunately, fires in Big Bend National Park have been small and easily contained. Conditions remain dire, however, and park management has taken steps to minimize fire danger by limiting use of charcoal, prohibiting campfires, issuing smoking bans, and closing trails in areas where fire danger is most severe.

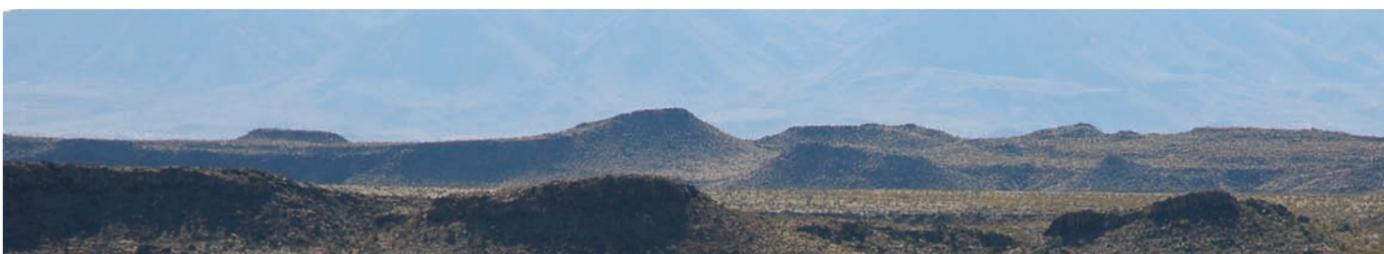
The postcard image of West Texas, with its parched desert, dried up cactus, and bleached skull is a caricature in reality as the drought continues. And just as the lost prospector searches for a waterhole, we watch for thunderheads and hope they bring the desert ecosystem some much-needed relief.



"Wish you were here!"

Much More Than Wilderness

Seasonal Park Ranger Bob Hamilton



I am drawn to wilderness. Having lived most of my life in places with all the mechanizations and trappings of modern society, I often sought wilderness to rest and restore my soul. My home wilderness areas bear names like Bob Marshall, Selway-Bitterroot, Great Bear, and Absaroka-Beartooth, all found in the northwest. I now add the Big Bend of West Texas to the list... maybe the top of the list.

From the moment I entered Big Bend National Park I was struck by its wilderness qualities. The openness and grandeur simply overwhelmed me. In every direction I saw rugged hills and mountains rising from the desert floor into endless blue sky. Distant canyons, peaks, mesas, and desert plains beckoned exploration. I found stunning sunrises, sunsets, the darkest of night skies, and deafening silence. But I quickly learned that there was much more.

Before Big Bend National Park, ranches, mines, and riverside agriculture dominated the landscape. Big Bend’s second superintendent, Lemuel Garrison, observed that Big Bend was created from “recycled land;” among our national parks, considered nature parks, this makes Big Bend unique. Most others were pristine natural areas prior to designation. Though Big Bend has not been legally classified as wilderness, it is primarily managed as wilderness.

But woven into this recovering landscape are many traces left by those who lived on the land in the past, traces that provide a depth of meaning and experience found in few other places.

Any chosen path may cross an old or barely visible trail littered with rusted sardine, tobacco, or evaporated milk cans cast aside by the driver of an ore wagon. The ground near an old ranch site may yield the sparkle

of broken ceramics from a homesteader’s table. I have walked through an ancient campsite littered with stone flakes, fire hearths, and metates left by people whose identity is still a mystery. Such discoveries challenge me to stop and contemplate. Often I find myself transfixed by the spirits that reside in the relics of their lives. Like the catclaw that tugs at my clothing, those spirits hold me here, infuse important meaning into my desert experience, provide perspective in my life, and compel me to return.

I have always agreed with Ed Abbey, who said “Wilderness is not a luxury, but a necessity of the human spirit.” By my reckoning, Big Bend’s uniqueness arises from the union of history, culture, and the wilderness idea, making it one of our greatest national treasures.



Relic from bygone days



Windmill at Sam Nail Ranch

Canyon's Echo

Seasonal Park Ranger Christina Rinas

My first trip to Santa Elena Canyon is forever etched in my mind, though not necessarily because of the spectacular scenery. It is, without a doubt, one of the most beautiful places in the park. Massive limestone cliffs soar above the slow moving Rio Grande, and hanging gardens of cactus and other desert plants dangle precipitously from vertical surfaces.

What I remember most though, was the sudden musical trilling of a bird that broke the mid-day silence. Over and over again these flute-like notes echoed off the canyon walls, accentuating the tranquility. This was the first time I had ever heard the singing of the canyon wren. From that day on, no matter where I hear this bird, Santa Elena

Canyon and my first trip to Big Bend come to mind.

The canyon wren prefers the arid rocky canyons and cliffs of the Western United States. This tiny bird, less than six inches in length, has large claws in comparison to its body, important for clinging to the sheer cliff-faces of its home. Its small, decurved bill allows it to probe deep into crevices and extract the insects and spiders that make up the bulk of its diet. These items provide the wren with most of the water it needs, for it seldom drinks water. Inconspicuous, this wren might go unnoticed if it weren't for its song: a series of cascading whistles that echo off of the walls of its rocky home. To me, it's one of the most beautiful bird songs.

The canyon wren is one of over 450 species of birds found here, the most of any national park. Most of these are migrants, birds that pass through Big Bend in the spring and fall, or end their journey here for the summer season to nest and raise their young before returning south. The canyon wren, however, is a year-round resident, gracing the high cliffs and rocky places with its song year long. Though they can be found in the Chisos Mountains, it is along the Rio Grande where their charismatic song is emblematic of the river, complementing the murmur of water flowing past towering canyon walls.

It has been eight years now since my first visit to Santa Elena Canyon. The park's scenery has become a familiar sight and I've

lost count of how many times I've heard the canyon wren's song. It still remains my favorite bird in the park. Each time I hear its notes, I am reminded of the awe that Big Bend inspired in me. It keeps this place special and reminds me why I continue to come back year after year.



Canoeing into Santa Elena Canyon

J. JURADO

A Wealth of Diversity

Seasonal Park Ranger Travis Smith



Chisos hedgehog cactus

The life of a seasonal park ranger has benefits, chief being the opportunity to work in some of the most beautiful places in the world. The downside: sometimes a job occurs in a place that doesn't stun you with its grandeur from the get-go. That was my experience when I first arrived in Big Bend National Park in the fall of 2008. Not only wasn't I stunned by grandeur, I didn't get it at all.

In order to be a national park, an area must have national significance. As I looked around, I didn't see anything significant—nationally or otherwise. I recalled the account of a 1916 military expedition: "The country isn't bad. It's just worse. Worse the moment you set foot from the train, and then, after that, just worse and worse." I couldn't have agreed more... Some national parks, though, are slow to reveal their secrets. It takes time to appreciate the stories hidden by a bleak exterior. My awakening came later, and most unexpectedly.

Less menacingly named strawberry pitaya, forming conspicuous mounds of low stems, held more appeal. A single pitaya can present over a hundred magenta flowers, each producing a sweet fruit of fire-engine red: a valuable food source for wildlife. A personal favorite is the Texas rainbow. Their showy stems have alternating rings of white, pink, and red and their large yellow flowers can be streaked, tie-dye like, with pink and orange.



Golf ball cactus

It happened months after my arrival. By then I had learned that Big Bend supports a surprising wealth of biological diversity, including sixty types of cacti—more than any other national park. Unimpressed, I regarded cacti as nemeses, accidents waiting to happen. Their spines tore my jeans, stabbed my legs, and drew my blood. But then spring came, and the desert transformed with the bloom of cactus flowers, their bursts of colors dappling the landscape in the most unexpected places. It was...unforgettable. Now inspired, my search began.

Others hid concealed. Cryptic and tiny Boke's button cactus and golf ball cacti were a challenge to find, squeezed between rocks that shelter them from wind and sun. Even harder to locate was living rock cactus. Growing on eroded limestone and lacking spines, they look just like rocks. It was only in the fall, when bright pink flowers appeared from the apparent stone, that a curious finger poke revealed their organic nature.

Some were easy to find, like Big Bend prickly pear. With its bright purple-red stems becoming more vivid in winter and during drought, it stood out in the crowd.

Edward Abbey wrote, "Half the pleasure of a visit to Big Bend National Park, as in certain other affairs, lies in the advance upon the object of our desire." My exploration of the cacti continues. They have convinced me: Big Bend indeed has national significance. For others who venture here, it offers unlimited opportunity to find, and advance upon the object, of their desire.

A Doctor Seuss Landscape

Student Conservation Association Intern Dana Crites



In the Big Bend
Where buffelgrass grows
The cacti do thrive
Between creosote rows

The land seems so parched
Beyond dry, dusty ranches
With mean thorny shrubs
And far-reaching branches

But I chose to come here
And live for a season
What drew me in?
I'll tell you the reason!

This desolate land
Holds many a surprise:
Like Dr. Seuss trees
Ocotillo branches rise

Their grey thorny stalks
Grow up to the air
Wet or dry seasons
Make them leafy or bare

And at their stalks end
Bloom brilliant red flowers
Regardless of leaves
Or soaking spring showers



As the park greens
I venture about
For I've heard a rumor
Ocotillo have leafed out!

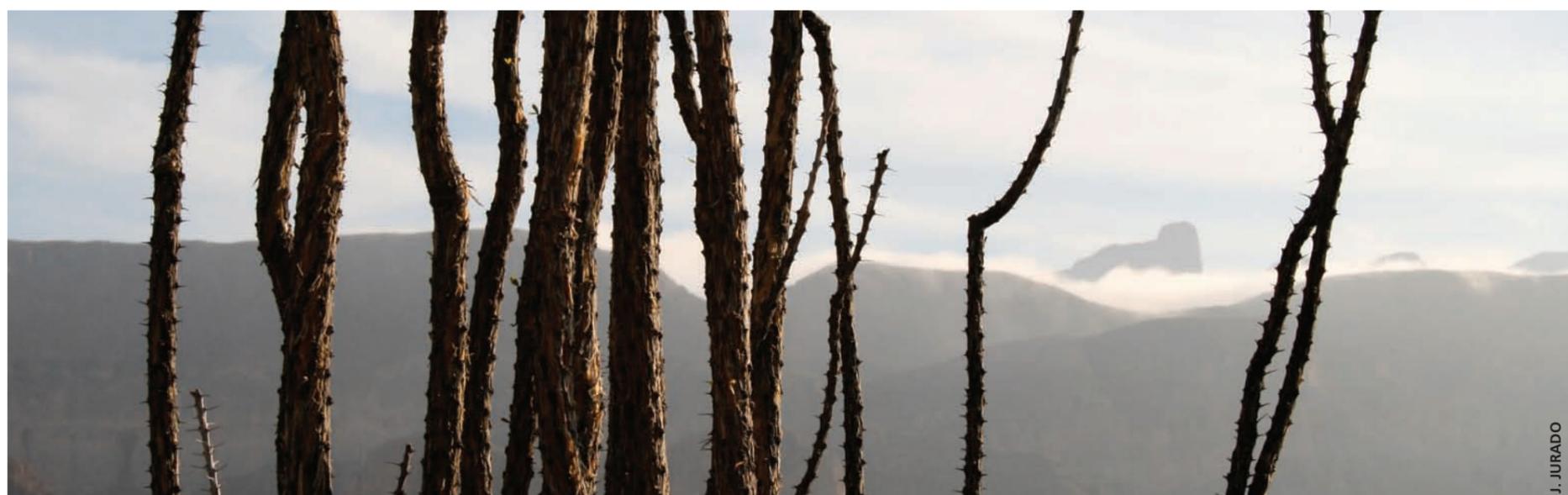
But how can this be?
Their stalks look quite dead
Their only life sign
Are their flowers of red

Their thorny stalks change
Within days of a shower
Their small green leaves grow
And sunlight devour

But without these leaves
Ocotillo do fine
With photosynthetic stems
For use in dry times

My season's now ending
With much left to see
But I know I'll return
To see this place green

Next spring may be wet
With a strong-flowing Rio,
A sea of cactus blooms,
And green-covered ocotillo!



Siren's Song

Seasonal Park Ranger Amanda Evans

The siren's song of the desert tempts some with its promise of hidden wonders in treacherous country. Some hear notes from this elusive muse the first time they set foot in the Big Bend, and are tempted to linger. Others hear only the howls of a dusty wind whipping across an empty landscape, and move on.

Big Bend has always been like this. It is a land at once uninviting and appealing, a place in contradiction with itself. Many consider it undesirable land, unfit for human habitation. Yet for thousands of years people have roamed the Big Bend and chose to make it their home, myself included.

I heard Big Bend's siren song when I first arrived in the park four years ago, making this place forever a part of my life. The desert enchanted me, like it has so many others across the centuries. A big part of this enchantment was finding clues across the desert of those who had come before me: a single rusted horseshoe, a lonely grave marked with a wooden cross, flakes of stone around ancient fire rings; all are reminders that this is not a land untouched by humans. This desert is so challenging, so devoid of current settlement, but still whispers their stories.

One of my favorite chapters in the story of Big Bend can be read in an unexpected place. From Panther Junction, a small spot of green can be found. It is a lone tree in the expanse of desert scrub that signals the presence of water; a beacon of life in an otherwise harsh

land. The tree became a destination for me, a challenge to meet, reachable only on foot across rough terrain. After a long hike, arrival at the tree brings relief, satisfaction, and . . . something totally unexpected.

At this lone tree is the crumbling ruin of a rock building: all that remains of Camp Neville Spring. From 1885 to 1891 it was a military outpost for the Seminole Negro Indian Scouts, descendants of escaped slaves who fled Florida to the safety of Mexico. They returned to the United States following the end of the Civil War and slavery, welcomed by a U.S. Army in need of desert tracking and fighting skills to counter Apache and Comanche warriors. From this isolated post the Scouts covered hundreds of miles with each patrol, their reports now buried in military annals, their story largely forgotten. But for me, learning their story and seeing the remnants of their history is one more verse in the siren song that draws me to Big Bend.

Indeed, this is the beauty and power of Big Bend for me: a chance discovery in the wilderness—an encounter with the lingering memories of those who once lived in this harsh terrain. It is an experience nearly indescribable. The desert tempts us with the whispered possibility of discovering its secrets and, perhaps, our own. Those of us entranced by this siren's spell know that, while we can leave Big Bend, it will remain part of our lives forever. There will always be more of this desert, past histories, and ourselves to explore and discover.



Outland Places

Student Conservation Association Intern Jenny Goucher



It was January, and I was driving from Illinois to Big Bend for the first time. I was not entirely sure what to expect. Having done some research, I had prepared myself for what many had described as a remote land with few visitors. Being in a part of the country where few venture was an exciting prospect.

Just past the Persimmon Gap Visitor Center, I rolled down the window and felt a warm breeze hit my cheeks. Is this January? As the beauty of this enigmatic landscape unfolded before me, I was overwhelmed with emotion. I soon learned that not many people come to Big Bend and have a neutral reaction.

It is not just the vastness of the landscape, nor the unexpected diversity of life that draws one in. With its star-filled night skies,

vibrant sunrises and sunsets, intensely hot days, freezing cold nights, extreme times of drought, its very own mountain range and a river that doubles as a political border—in a word, Big Bend is complex. This complexity is not contemporary but, like a fine wine, something that has been cultivated and cured through time.

Part of Big Bend's appeal is the thing that some people fear most: isolation. Often we are attracted to that which we fear. The adventure of facing it, we find, can be the cure. There are few places left in the world where you can be alone with your thoughts and, by choice, not see another person for days. One does not come to Big Bend by accident. People choose this for themselves.

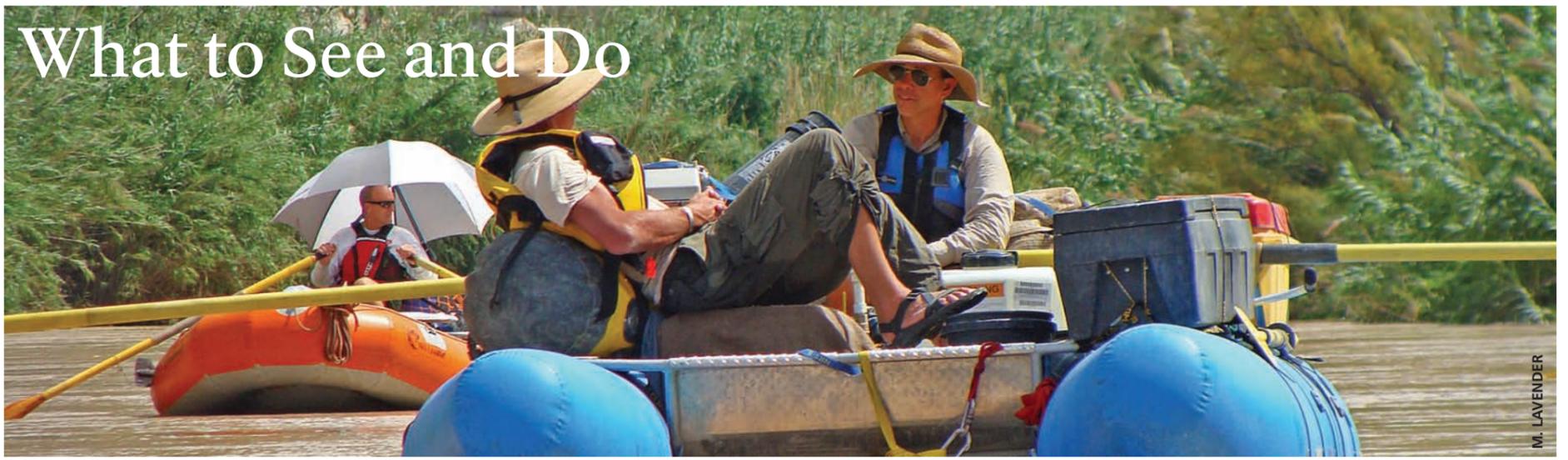
John Steinbeck put it best:

“. . . it is rather more difficult to be killed or maimed in the outland places of the globe than it is in the streets of our great cities, but the atavistic urge toward danger persists and its satisfaction is called adventure. However, your adventurer feels no gratification in crossing Market Street in San Francisco against the traffic. Instead he will go to a good deal of trouble and expense to get himself killed in the South Seas. In reputedly rough water, he will go in a canoe; he will invade deserts without adequate food and he will expose his tolerant and uninoculated blood to strange viruses. This is adventure.”

John Steinbeck, The Log from *The Sea of Cortez*. 1951.

Whether it is a trail you had not hiked before or a plant that you had previously never seen, each time you visit Big Bend the discovery of new things is addicting. With its complexity, its remote beauty, Big Bend is a unique place where adventure meets you at the entrance station and keeps you coming back for more.

What to See and Do



M. LAVENDER

One of the many ways to enjoy Big Bend National Park and the Rio Grande Wild and Scenic River.

One Day

With one day to spend in the park, there are several ways to explore Big Bend's three remarkable ecosystems: the desert, river, and mountains.

A trip along the **Ross Maxwell Scenic Drive** highlights the geologic splendor Big Bend is famous for, and offers many scenic overlooks and exhibits along the way. Sotol Vista, Mule Ears Overlook, and Tuff Canyon are all worthwhile stops. The short walks to the Sam Nail Ranch, Homer Wilson (Blue Creek) Ranch, and a visit to the Castolon Historic District showcase some of Big Bend's past. The magnificent Santa Elena Canyon is at the end of the road.

The drive to Rio Grande Village traverses ancient limestone and has marvelous vistas

across the river to the magnificent Sierra del Carmen escarpment. A highlight along the way, is the short hike into **Boquillas Canyon**—one of Big Bend's most scenic spots. Travel to the end of the Boquillas road near Rio Grande Village to access the trailhead. Another highlight, the **Rio Grande Village Nature Trail** crosses a wildlife viewing platform then gradually climbs to a promontory with excellent panoramic views.

A drive to the **Chisos Basin** is a pleasant way to experience the transition between arid desert and cooler mountain habitats. Walk the 0.3 mile self-guiding **Window View Trail** for excellent vistas of the surrounding peaks. This trail also offers one of the best sunset views in Big Bend National Park.



Window View Trail Sunset

Floating the Rio Grande

If you have 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. Outfitters and equipment rental companies are listed on page 16. See "Backcountry Planning" on page 14 for additional information.

Backcountry roads

There are over 200 miles of dirt roads in the park. Improved dirt roads, such as the Dagger Flat, Grapevine Hills, and Old Maverick Road, are usually in good condition and accessible to normal passenger vehicles, except following rainstorms. Primitive dirt roads, such as the Old Ore Road or the River Road, generally require high-clearance vehicles and/or 4-wheel drive. Always check current road conditions at a visitor center before traveling any of the park's dirt roads. Standard backcountry road conditions are listed on page 14.

Three Days

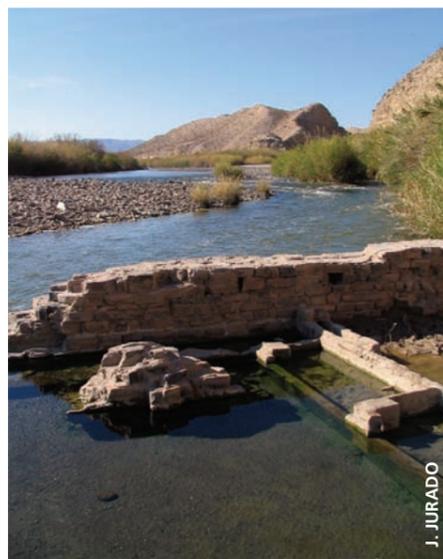
With three days to spend, you can explore the major roads more thoroughly and still have time to hike.

In the Basin area, consider taking the **Window Trail** which descends through Oak Creek to the top of the Window pour-off (5 miles round trip), or the **Lost Mine Trail** which is an excellent introduction to the High Chisos (4.8 miles round trip).

The Grapevine Hills Trail follows a sandy wash through granite-like boulders, then climbs to its featured highpoint—the **Balanced Rock**. The trailhead is 6 miles down the Grapevine Hills improved dirt road. The **Chimneys Trail** is a great hike for

wildflowers in the spring with a closer look at an eroded volcanic dike. It is located on the Ross Maxwell Scenic Drive. Both of these trails are good morning or evening hikes, but can be very hot mid-day.

In addition, consider exploring stops on the drive to Rio Grande Village. At **Dugout Wells**, there is a desert nature trail and a shady oasis with tables, nice for picnicking and birding. A soak in the **Historic Hot Springs** is also a popular activity. It is accessible via an improved dirt road (not recommended for dual-wheeled vehicles or RVs). There is also a six-mile round trip trail between the Hot Springs and Daniel's Ranch at Rio Grande Village.



Hot Springs

Enjoying Your Visit

The visitor centers at Persimmon Gap, Panther Junction or the Chisos Basin are excellent places to begin your visit. Park staff there can answer your questions or assist in planning your itinerary, and exhibits provide additional orientation. Also, hiker's guides and road guides, available at visitor center bookstores, offer more detailed information about Big Bend's trails and drives.

Attending ranger-led walks and evening programs are another fun way to learn more about the park. Check at the visitor centers and park bulletin boards for current activities.

One Week

With a week or more to spend in Big Bend, there is ample time to explore the roads and trails mentioned in the previous sections and time to drive some of the **primitive dirt roads**. For these, a high clearance or 4-wheel drive vehicle is necessary. *Always check at visitor centers for current road conditions, and carry appropriate gear.*

The River Road, Glenn Springs Road, and Old Ore Road are popular primitive dirt roads. **Ernst Tinaja**, near the southern end of the Old Ore Road is a Big Bend highlight. The **Pine Canyon Trail**, at the end of the Pine Canyon primitive dirt road, winds through sotol/grassland and a dense wooded canyon before reaching a towering 200-foot cliff.

If you don't have high clearance or 4-wheel drive, **improved dirt roads** such as the Old Maverick Road, Dagger Flat, and Grapevine Hills travel through classic desert habitat.

If you'd like to explore the High Chisos mountains, the trails to **Boot Canyon** and the **South Rim** offer great panoramic vistas, while the hike to **Emory Peak** leads to the highest point in the park. There are plenty of opportunities for overnight backpacking along these trails. A backcountry use permit is required and can be obtained at park visitor centers.



Ernst Tinaja



Popular Day Hikes

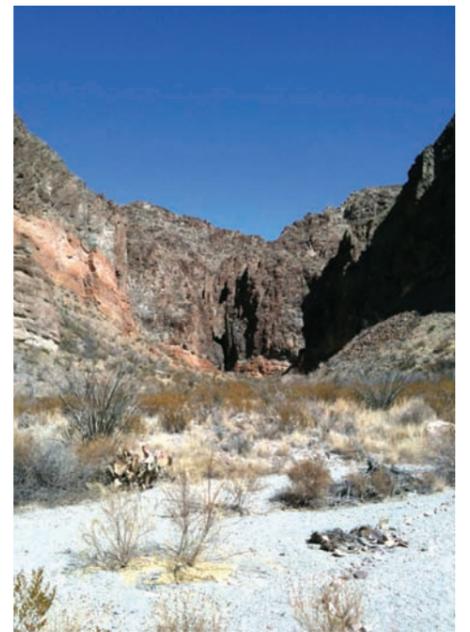
From the 7,832 foot (2,387 m) towering summit of Emory Peak, to the banks of the meandering Rio Grande, visitors have access to over 200 miles of hiking trails in Big Bend National Park. Trails range from strenuous primitive routes through rugged desert backcountry to short accessible pathways. Whatever your hiking preference, Big Bend has much to offer.

This page has descriptions of some of the most popular easy, moderate, and strenuous hiking trails, divided by geographic areas of the park. Many of these trails are perfect for shorter day hikes of up to several hours.

| Trail | Trailhead Location | Round Trip (mi/km) (avg. time) | Elevation (ft/m) | Description |
|---|---|------------------------------------|----------------------|--|
| Eastside — Panther Junction and Rio Grande Village | | | | |
| Grapevine Hills Balanced Rock | Grapevine Hills Road—3.5 miles west of Panther Junction Usually passable for all vehicles. | 2.2/3.5 1 hour | 240/73 | Easy Follows a sandy wash through boulder field. A short but steep climb at the end over beautiful eroded granite takes you to a large balanced rock. No shade. |
| Hot Springs  | End of Hot Springs Road Unpaved narrow road. | 0.75/1.2 1/2 hour | 0/0 | Easy Walk past historic buildings to the riverside hot spring. Take a bathing suit and soak in 105°F water. <i>Spring is subject to flooding during rising river levels.</i> |
| Daniel's Ranch to Hot Springs Trail | Daniel's Ranch parking area, west of Rio Grande Village | 6/10 3 hours | 100/31 | Moderate Trail leads from Daniel's Ranch to the Hot Springs. Cliff drop-offs prevent access to the river along most of the route. No shade—oppressive on hot days. |
| Boquillas Canyon | End of Boquillas Canyon Road | 1.4/2.3 1 hour | 40/12 | Easy Begins with a short climb, then descends via a sandy path to the river. Ends near a huge sand dune "slide." |
| Rio Grande Village Nature Trail  | RGV Campsite 18 | 0.75/1.2 1 hour | 130/40 | Easy First 300 feet leads to a wildlife viewing platform on a pond. Trail then climbs the hillside to views of the river and mountains. Great for birding and sunsets. |
| Chihuahuan Desert Nature Trail | Dugout Wells | 0.5/0.8 1/2 hour | 10/3 | Easy Loop trail with signs that interpret desert ecology. |
| The Chisos Mountains <i>Smoking is prohibited on all trails in the Chisos Mountains.</i> | | | | |
| Basin Loop | Chisos Basin Trailhead (near the Basin Store) | 1.6/2.6 1 hour | 350/107 | Moderate Connects the Laguna Meadow and Pinnacles Trails. Nice views of the Basin area. |
| Window View   | Chisos Basin Trailhead (near the Basin Store) | 0.3/0.5 1/4 hour | 0/0 | Easy Level, paved, accessible. Great mountain views. Best place in the Basin to catch sunset through the Window. |
| Lost Mine  | Basin Road mile 5 at the pass | 4.8/7.7 3 hours | 1100/335 | Moderate Excellent mountain and desert views. For a shorter hike, 1 mile up is a great view to the southeast. |
| The Window | Chisos Basin Trailhead or Basin Campground | 5.6/9.0 4 hours 4.4/7.0 3 hours | 980/299 500/152 | Moderate Descends to the top of the Window pour-off. Great scenery and wildlife viewing. For a shorter hike, start at the Basin campground. |
| Emory Peak | Chisos Basin Trailhead | 10.5/17 7 hours | 2400/789 | Strenuous Trail leads to the highest peak in the park, with excellent views. The end of the trail involves some moderate rock climbing. |
| South Rim | Chisos Basin Trailhead | 12/19.4 8 hours 15/24 10 hours | 2000/656 2000/656 | Strenuous Trail leads to the 2000' cliff—the south rim—with incredible views of the desert below. Hike either the southwest rim, or add the northeast and southeast rim trail when open. |
| Westside — Ross Maxwell Scenic Drive | | | | |
| Santa Elena Canyon | Ross Maxwell Drive 8 miles west of Castolon | 1.6/2.6 1 hour | 80/26 | Easy Crosses river sand and rocks, including wading Terlingua Creek. Switchbacks ascend and then the trail gradually drops back to the river in the canyon. |
| The Chimneys | Ross Maxwell Drive mile 13 | 4.8/7.7 2 hours | 400/122 | Moderate Flat and scenic desert trail to rock formations. Look for rock art. No shade. |
| Mule Ears Spring | Ross Maxwell Drive mile 15 | 3.8/6.1 3 hours | 20/6 | Moderate Beautiful desert hike to a small spring. Spectacular geology and mountain/desert views. |
| Upper Burro Mesa Pour-off | Ross Maxwell Drive mile 6 | 3.6/5.75 2 hours | 300/91 | Moderate Walk the wash downstream through two canyons to reach the upper lip of a pour-off that is wet only after rain. Do not take this trail when storms are likely due to a lack of escape routes. |
| Lower Burro Mesa Pour-off | Burro Mesa Spur Road | 1.0/1.6 1/2 hours | 60/18 | Easy Trail enters a dry wash and ends at the bottom of the dramatic Burro Mesa pour-off. A great walk for viewing geological features. |
| Northside — Persimmon Gap | | | | |
| Dog Canyon | Pullout 3.5 miles south of Persimmon Gap | 3.5/5 3 hours | 50/16 | Moderate Cairned trail leads through the open desert and into Dog Canyon. Very exposed in summer heat. |
| Devil's Den | Pullout, 3.5 miles south of Persimmon Gap | 6.5/10.4 4 hours | 600/196 | Moderate Route follows dry washes and leads to a narrow canyon. Technical climbing required inside the canyon. |

 = Self-guiding trail

 = Accessible trail



Lower Burro Mesa Pour-off Trail

Featured Hike—Lower Burro Mesa Pour-off

This short hike to the bottom of the Burro Mesa Pour-off showcases the geology of Big Bend. Initially, you see dark Burro Mesa rhyolite, the yellow band of the Wasp Spring flow breccia, the white compressed ash (tuff) of the Chisos Formation, and conglomerates. Then, while hiking through the dry wash, you pass the same type of volcanic rock that formed Emory Peak, displaced over 3,000 feet lower in this down-faulted block. The trail ends at the base of a 100' dry waterfall, polished smooth by decades of rains and flash floods.

More Information

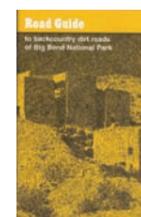
For information on longer, more challenging routes, or to plan an extended backpacking trip, stop by any park visitor center. Park rangers can assist you with trip preparations and backcountry permits. Visitor center bookstores carry a large selection of maps and guides including those listed below.



Hiker's Guide to trails of Big Bend National Park
Covers all major trails in the park, from short self-guided nature trails to strenuous backpacking routes. \$1.95



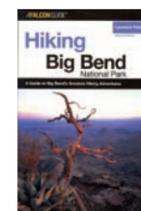
Road Guide to paved and improved dirt roads of Big Bend National Park
Describes points of interest visible from all paved and improved dirt roads in the park. \$1.95



Road Guide to backcountry dirt roads of Big Bend National Park
Detailed mileage logs of Old Ore Road, Glenn Spring Road, and River Road. Good descriptions of historic sites and scenery. \$1.95



Chisos Mountains Trails Map
A topographic map that includes all trails in the Chisos Mountains. Includes trail lengths and descriptions. \$0.99



Hiking Big Bend
In collaboration with national park rangers, Laurence Parent has compiled a comprehensive guide to 44 of the most popular hikes. Photos show terrain and views. Describes difficulty, elevation changes, and maps needed. Also includes three hikes in Big Bend Ranch State Park. \$14.95

Birds and Birdwatching

Park Ranger Mark Flippo

November 21, 2010. Arizona birder Matt VanWallene scans for birds in Rio Grande Village. Movement in a tree draws his attention; a small cinnamon-colored bird, flycatcher behavior. In the long lens of the camera, a prominent crest becomes evident. Unsure of the bird's identity, he manages several photographs for later study. Several days later, after posting the images on-line, he gets his answer: a tufted flycatcher, only the second record in Big Bend, the third in Texas, the fifth in the entire U.S. Within days of the report, people from all over the country rush to Big Bend to see this rarity. Over the next month and a half, the little flycatcher obliges hundreds of birders with excellent looks and a notation on the coveted life list. It is a classic Big Bend birding story.

For many birders, it is this chance of discovering the unexpected that brings them back to Big Bend year after year. The tufted flycatcher is just one of many surprises: violet-crowned hummingbird—1996, sulphur-bellied flycatcher—1997, piratic flycatcher—1998, rufous-backed robin—2000, Aztec thrush—2003, black-vented oriole—2006, fan-tailed warbler—2007... the list goes on.

The attraction lies not only in the rarities. For many visitors, Big Bend's "every day" birds are equally as thrilling. Whether you are looking for one for the record book,

or enjoying the birds at hand, Big Bend National Park has much to offer. All you need is patience, a good field guide, and knowledge of where to look. A checklist of birds is available for purchase at any visitor center and is a great aid in determining which species are likely to be present in a given season and the habitats in which they can be found. Searching in these key areas will provide the best opportunities to see birds and to build your "Big Bend List."

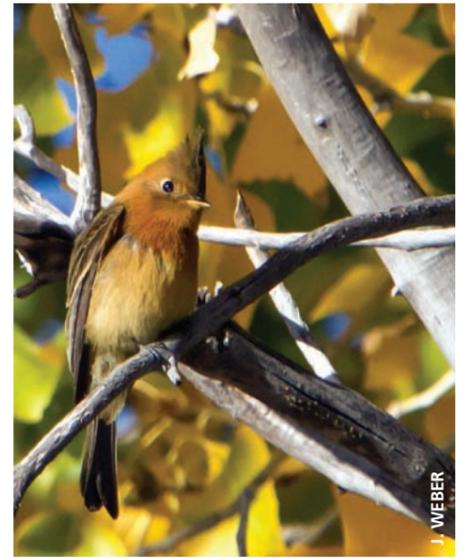
First are the riparian areas, including the corridor of the Rio Grande (Rio Grande Village and Cottonwood campgrounds), and the many desert springs (Dugout Wells and Sam Nail Ranch). Other productive areas include the pinyon-juniper-oak belt (Green Gulch and lower Lost Mine trail), the moist wooded canyons of the high Chisos (Boot and Pine Canyon), the grassland/shrub community along the lower slopes of the Chisos (Blue Creek Canyon), and the remaining lower desert areas.

The timing of your visit will dictate the birds you are likely to see. The fall season with its annual migration is a great time to be here. Moving at a more leisurely pace and lasting longer, generally from mid-August to early December, the fall migration is not as spectacular as that of the spring. However, the potential still exists for surprises, the aforementioned tufted flycatcher being a

prime example. Fall can also be the season of the second chance. Warblers missed in the spring sometimes show up again in the fall, including hermit, black-throated green, and rare, red-faced warblers.

Winter season (December–mid February) in Big Bend can also be very productive, albeit challenging. Of the 452 species reported in the park, almost a third of them occur here during the winter months. Many of these are waterfowl and sparrows; the former along the Rio Grande, the latter haunting grassy areas in the lower and mid-elevation desert. The challenge of identifying winter plumage ducks and sparrows is huge, but not to worry. There are other birds to lend diversity to your list. Easily found permanent residents of the park, many of them unique to the desert southwest, include greater roadrunner, verdin, cactus wren, and black-throated sparrow. These are joined by species that spend only the winter in Big Bend, including the Anna's hummingbird, orange-crowned warbler, and green-tailed towhee.

While "listing" is a legitimate and fun activity, keep in mind that many of the species that are the source of your enjoyment are members of populations in decline. Habitat impacts are bringing many of these birds to the brink. You can help with bird conservation in several ways. Don't disturb



Tufted flycatcher

birds with excessive noise or intrusive attempts at photography. Tread softly in fragile habitat areas, taking care not to damage water sources. And join in the annual Christmas Bird Counts held December 28 and 29 (ask at a visitor center for details).

Please share your observations with us, particularly of rare and accidental species. Your detailed reports become part of the record and can be an aid to researchers.

Enjoy the birds of Big Bend, and remember: You could be the next to discover the unexpected!

Star Stuff

Seasonal Park Ranger Gail Abend



Emory Peak, April 15, 2007, near local midnight. This 360-degree photo shows the Milky Way skirting the entire horizon. The Zodiacal band and gegenschein glows are visible, which are reflections of sunlight from interstellar dust. The small bright spots on the horizon line are far-off cities such as El Paso, Texas and Chihuahua City, Mexico, whose lights are only visible due to this time exposure photo. The park radio tower is on the right.

Did you know we are made of star stuff? Exploding supernovas create all known elements in the universe—everything that our earth and bodies are made from. Astronomer Carl Sagan made this point when he popularized the field of astronomy through his award winning series, *Cosmos*. He left us a legacy, and a vision to not only study the cosmos, but to share it with the public.

Like Carl Sagan, spreading a love and a passion for nature is an opportunity that motivates and inspires park rangers. Here in Big Bend, we have one of the best opportunities to share his legacy. With some of the darkest night skies in the lower 48 of the United States, and a remote location far from the light pollution of cities, vast numbers of stars otherwise imperceptible can be seen here. Perhaps most impressive is witnessing the starry band of the Milky Way, our home galaxy, stretching from horizon to horizon. These nighttime vistas provide food for the spirit as well as the mind.

Those twinkling points of light, the stars that are millions of miles away, shine at us through space and time. The light from the red supergiant star Betelgeuse in the constellation Orion, for example, took over 600 years to reach us.

Imagine the people roaming through Big Bend 600 years ago. What were their thoughts and feelings as they gazed at that far away star? When the light from Betelgeuse left that star, most people would never have conceived of exploring space. I feel fortunate to have grown up in the years when a space launch occupied an entire day of television coverage. It was exciting to witness people going where no humans had gone before, and looking into space took on new meaning.

Gazing into a clear, dark night sky brings a sense of wonder and solace. The stars can be spirit guides, inspiring one to go on an inner quest, to reflect on one's life and perhaps look for meaning. Big Bend National Park

offers such places for reflection. On those incredible starry nights in Big Bend, whether you're sitting outside your lodge room, or on the ground of your campsite looking up into space, you have the opportunity to ponder your place in this vast universe. It may be too big to comprehend, we may feel puny in its immenseness but, if you take the time to look up at those stars, understand how they form, how old they are, and their destiny, you may come to appreciate your place in it all.

There are many places to visit or live in this world—some with towering mountains or erupting geysers. I am drawn to the beauty of Big Bend National Park night skies. Here, the universe beckons us to realize that we are at the right place at the right moment to learn, to be renewed, and to remember that everything in this world, including ourselves, is star stuff.

CELESTIAL EVENTS AT BIG BEND

- **Draconid Meteor Shower**
October 7–9, 2011
- **Orionid Meteor Shower**
October 20–22, 2011
- **Taurid Meteor Shower**
November 4–6, 2011
- **Leonid Meteor Shower**
November 16–18, 2011
- **Lunar Eclipse (before dawn)**
December 10, 2011
- **Geminid Meteor Shower**
December 11–14, 2011
- **Ursid Meteor Shower**
December 19–22, 2011
- **Winter Solstice**
December 21, 2011
- **Quadrantid Meteor Shower**
January 3–4, 2012
- **Spring Equinox**
March 20, 2012

Keeping Wildlife Wild



M. GONZALES

Snacks for bears are not on the menu at the Lodge for a good reason—our food is bad for them.

There really are no problem animals—only problem people. Carelessness can kill. Don't be responsible for the death of a wild animal. Your actions affect both Big Bend's wildlife and future park visitors. With your help, wildlife and humans can live safely together in Big Bend National Park.

Mountain Lions

Solitary and secretive, the mountain lion is Big Bend's top predator, and is vital in maintaining the park's biological diversity. Everywhere you go in Big Bend, you are in the territory of at least one lion. From mountain to desert, biologists estimate that the park has a stable population of approximately two dozen lions. Within the delicate habitats of the Chihuahuan Desert, mountain lions help balance herbivores and vegetation. Research shows that these large predators 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.

Each year, an average of 130 sightings of mountain lions are reported by the visiting public within Big Bend National Park. While over 60 percent of these sightings were along park roadways, encounters along trails have also occurred. Mountain lions live throughout the park, including the Chisos Mountains, where they sometimes use man-made trails. The best plan of action is for you to be aware of your surroundings. Watch children closely; never let them run ahead of you. Avoid hiking alone or at dusk and dawn.

A free brochure with more information about mountain lions is available at all visitor centers.



D. SWEETMAN

Please Help

In Developed Campgrounds

- Store food, beverages, 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 when provided.

At the Lodge

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

In the Backcountry

- Never leave packs or food unattended.
- Avoid carrying odorous 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.
- Ice chests and coolers are not bear-proof; store them in your vehicle.



Javelinas

For many visitors in Big Bend National Park, seeing a javelina (pronounced *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 javelina's diet includes prickly pear cactus, grasses, mesquite beans, piñon pine nuts,

fruits, berries, and seeds. Unfortunately however, many javelinas now include human food as part of their diet.

Every year reports document more and more campsites raided by javelinas. Although not normally aggressive, they can be when food is involved. Protect yourself and the javelina 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 rely on their natural food sources to stay healthy and safe. With your help, these unique animals will continue to thrive and park visitors will continue to be thrilled to see them.



J. JURADO

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 by the 1940s. After an absence of nearly fifty years, bears began returning to the park from Mexico in the late 1980s. Today, wildlife biologists estimate that between 15–20 black bears may live in the park.

Black bears are omnivorous; their normal diet is comprised of large amounts of nuts, fruits, sotol and yucca hearts, and smaller quantities of small mammals, reptiles, and carrion. 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. Rangers may have to kill bears that lose their fear of people and endanger humans in their attempts to get our food.

Big Bend has made it easy to keep edible items away from bears. The Chisos Basin Campground, at High Chisos backpacking sites, and at some primitive roadside campsites have bearproof storage lockers for caching all edibles. Hard-sided vehicles are also suitable for storing edible items. All dumpsters throughout the park are bearproof, as well.

A free brochure with more information about black bears is available at all visitor centers.



If you encounter a bear or mountain lion:

- Do not run (you may resemble prey).
- Watch children closely and never let them run ahead or lag behind.
- Try to look large. Wave your arms.
- Throw rocks or sticks if threatened.
- If attacked, fight back.
- Report any bear or mountain lion sightings or encounters to a park ranger as soon as possible.

Information and Services

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 most days. Check the interpretive activities schedule posted on visitor center and campground bulletin boards for more information.

Camper Stores

Forever Resorts LLC operates camper stores year-round at three locations in the park: Castolon, Chisos Basin, and Rio Grande Village. Groceries, camping supplies and souvenirs are available in all locations. The gas station at Panther Junction also has a limited selection of groceries.

Banking

There are no banking facilities in Big Bend National Park. ATMs are located in the park at the Chisos Mountains Lodge and the Rio Grande Village Store. The nearest bank is located in Study Butte, 26 miles west of park headquarters. Most stores accept major credit cards; however, some local services accept only cash. It is advisable to have small bills (\$1, \$5, \$10, \$20) as larger bills may be difficult to change.

Lodging

The Chisos Mountains Lodge, operated by Forever Resorts LLC, is located in the Chisos Basin at 5,400 feet elevation. The lodge offers 72 rooms, a gift shop and restaurant. For reservations or more information, please call 1-877-386-4383 or visit their website at chisismountainslodge.com

Gas Stations

Gasoline is available in the park at two locations operated by Forever Resorts LLC. The Panther Junction station has gasoline and diesel. The station at Rio Grande Village has unleaded fuel and propane.

Post Office

A full-service Post Office is located at the Panther Junction headquarters, near the visitor center entrance. Open Monday–Friday, 8am–1pm, and 3pm–4:30pm except federal holidays. A mail drop is also available in front of the Chisos Basin store.

Wifi/Public Phones

Wireless internet is available at the Chisos Mountains Lodge and the Rio Grande Village Store. Public phones are located at visitor centers, campgrounds, camper stores, and the Chisos Mountains Lodge.

No Fires

Ground fires and wood fires are prohibited throughout the park. Use only gas stoves or charcoal within a BBQ grill. Pack out all evidence of use, including ash. In the backcountry, charcoal fires are only allowed at roadside campsites and are prohibited in the High Chisos or zone camping areas.

Showers and Laundry

Public showers and laundry facilities are located at the Rio Grande Village store.

Cell Phones

Limited cell phone coverage is available in the Big Bend area. *Do not* depend on your phone to work in the Chisos Basin or remote portions of the park.

Recycling

Please use the recycling bins provided in campgrounds, around stores, and near visitor centers. On average, the park recycles around 100,000 pounds of material each year. Every pound of material that can be recycled means one less pound buried in the park landfill. Please recycle!

Accessibility

All visitor centers are accessible. Wheelchair-accessible campsites and restrooms are located in Chisos Basin and Rio Grande Village Campgrounds. The Chisos Mountains Lodge restaurant is accessible, as are some motel rooms. A device for hearing impaired is available at park headquarters. Employees with sign language abilities may be available. Some ranger-led programs are also accessible. The Window View Trail is paved and fairly level. A brochure on accessibility is available at all visitor centers.



J. JURADO

Camping

Tent Camping

The National Park Service operates campgrounds at Rio Grande Village, the Chisos Basin, and Castolon. The cost is \$14.00 per night per site. Campsite fees can be paid in U.S. currency, personal checks, or credit card. 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 (see page 14).

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

Trailers & RVs

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 Forever Resorts LLC. 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 or call 1-877-386-4383 in advance.

Near the RV park is the 100-site Rio Grande Village Campground operated by the National Park Service. Water, flush toilets, and 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 8:00am to 8:00pm daily. A no-generator use area is also designated.

The 60-site Chisos Basin Campground is rugged and hilly. 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, has 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 RVs and trailers. Overnight camping in any primitive site requires a backcountry permit, which can be obtained in person at park visitor centers up to 24 hours in advance (see page 14 for more information).

Group Camping

Groups of 9 or more are eligible to reserve a spot in one of the park's group campsites at the Rio Grande Village, Chisos Basin, and Cottonwood Campgrounds. Group sites are reservable year round and reservations may be made 360 days in advance through www.recreation.gov.

Camping Limits

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

Campsite Reservations

Forty-three (43) sites at Rio Grande Village campground and twenty-six (26) sites at the Chisos Basin campground are reservable from November 15 to April 15 each year, and visitors may make reservations for that period up to 180 days in advance. All remaining campsites in these two campgrounds and the entire Cottonwood campground remain on the first-come, first-served basis.

Campsite reservations may be made by phone at 1-877-444-6777, or on-line at www.recreation.gov.



Chisos Basin campsite

Developed Campgrounds at a Glance

| | Elevation (ft/meters) | Sites | Nightly Fee | Facilities | Registration | Comments |
|------------------------------|-----------------------|-------|----------------|--|------------------|--|
| Chisos Basin | 5,401 / 1,646 | 60 | \$14.00* | Flush toilets, dump station | Self-pay station | Surrounded by rocky cliffs; many hiking trails nearby |
| Cottonwood | 2,169 / 661 | 31 | \$14.00* | Pit toilets, <i>no generator use allowed</i> | Self-pay station | In a cottonwood grove along the river. Grassy sites. |
| Rio Grande Village | 1,850 / 564 | 100 | \$14.00* | Flush toilets, dump station | Self-pay station | Largest campground; shady sites. Laundry and showers nearby. |
| Rio Grande Village RV | 1,850 / 564 | 25 | \$27.00 and up | Full hookups | RGV Camper Store | Concession-operated; register at the RGV store. |

* \$7.00 with an eligible Federal Recreation Pass



Pets in the Park

A national park is a refuge for its resident animals and plants. 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. In addition, desert heat is deadly and predators are a serious threat to your pet's well being.

Having a pet with you may limit your activities and explorations in the park. Please keep in mind the following points when bringing a pet to the park:

- Keep your pet on a leash, no longer than six feet in length, or in a cage at all times.
- Pets are not allowed on park trails, anywhere off established roadways, or on the river.
- Pets may not be left unattended in the park.
- Do not leave your pet alone in a vehicle.
- Pet etiquette and park regulations require that you always clean up after your pet and dispose of waste in trash receptacles.
- Predators such as owls, coyotes, javelinas, and mountain lions can and do kill pets. Even large dogs cannot defend themselves against such predators.



Pets must be on a leash at all times.



Pets are not allowed on trails or in backcountry areas.



Kennels

The following kennel and veterinary services operate in the greater Big Bend area:

Alpine Veterinary Clinic

Alpine, Texas
432-837-3888

Alpine Small Animal Clinic

Alpine, Texas
432-837-5416

Bio Bend...



...is for Kids!

Explore!

Big Bend's habitats range across the Chihuahuan Desert, down to the Rio Grande, and up into the Chisos Mountains. All are rich with plants, animals, and stories of human history, giving children plenty of room and opportunity to explore.

Kids visiting the park will enjoy the exhibits and relief map of the park at the Panther Junction Visitor Center, the Fossil Bone Exhibit area, the Hot Springs, the sand dune in Boquillas Canyon, the mountain lion exhibit at the Chisos Basin Visitor Center, and the hands-on exhibits at the Castolon Visitor Center.

Get kids involved in ranger-led programs. These include guided hikes, slide programs, bird walks, and explorations of various park features. Check the schedule at any visitor center to take advantage of all the available programs. Stop by any visitor center for further suggestions.

Hike a Trail!

Many park trails are suitable for families. Consult the listing of easy and moderate hikes on page 9. For children in strollers, consider the Window View Trail, a paved 0.25 mile loop trail that begins at the Chisos Basin trailhead. Remember to watch children closely; never let them run ahead or lag behind.

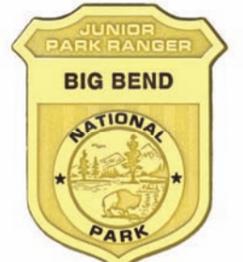
Be Safe

Be sure to talk to your children about safe behavior before you begin hiking or exploring the park. Require children to walk with adults, rather than by themselves. Keep all your children with you and stand as a group. Desert vegetation can be sharp; have a first aid kit and tweezers handy. Please see pages 11 and 15 for additional safety information.

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 a badge or patch, a bookmark, and a certificate.

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



Is there any place to swim in the park?

Big Bend is a desert park; water is a precious commodity here and often difficult to find. *Swimming in the Rio Grande is not recommended.* See page 15 for important water safety information. The end of the Boquillas Canyon Trail and the Santa Elena Canyon trailhead area may be suitable for wading at certain times of the year (always check river conditions first). You can soak in the 105°F Hot Springs (near Rio Grande Village). When the Rio Grande rises due to rain, the hot spring becomes submerged.

If you really want to swim, Balmorhea State Park (about a three-hour drive north of Big Bend) boasts the "world's largest spring-fed swimming pool." Contact Balmorhea State Park at 432-375-2370 for more information.

Leave No Trace in Big Bend

Plan ahead and prepare

Big Bend is a land of extremes. Plan on high desert temperatures in the summer with little to no shade; in the winter freezing temperatures are possible in the Chisos Mountains. Schedule your visit to avoid peak season. Visit in small groups. Split larger parties into groups of 4-6. Use a map and compass to eliminate the use of marking paint, rock cairns or flagging.

Travel and Camp on Durable Surfaces

Durable surfaces include established trails and campsites, rock, and gravel. While on the trail, walk in single file in the middle of the trail, even when wet or muddy. Protect riparian areas by camping at least 100 yards from springs, creek beds, and tinajas. Keep campsites small. Focus on areas where vegetation is absent.

Dispose of Waste Properly

Pack it in, pack it out. Inspect your campsite and rest areas for trash or spilled foods. Pack out all trash, leftover food, and litter. Deposit solid human waste in cat-holes dug 6 to 8 inches deep at least 0.25 mile from water, camp, and trails. Cover and disguise the cat-hole when finished. *Pack out toilet paper and hygiene products.*

Leave What You Find

Preserve the past. Examine, but do not touch, cultural or historic structures and artifacts.

Leave rocks, wildflowers and other natural objects as you find them. Avoid introducing or transporting non-native species. Do not build structures, furniture, or dig trenches.

Minimize Campfire Impacts

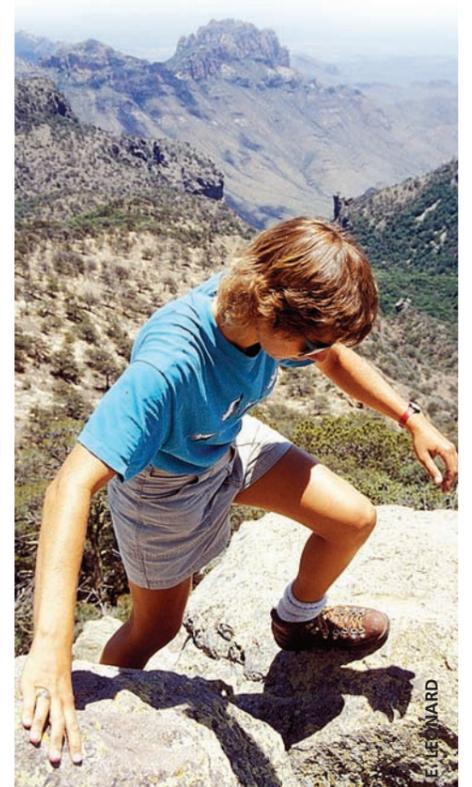
Campfires are not allowed in Big Bend National Park. In order to cook foods you may use a backpacking stove, portable fuel stove, or the barbecue grills in your campsite.

Respect Wildlife

Observe Big Bend's wildlife from a distance. Do not follow or approach them. Never feed wild animals. Feeding wild animals damages their health, alters natural behaviors, and exposes them to predators and other dangers. Protect wildlife and your food by storing rations and trash securely. Pets are not allowed in the backcountry or on trails. Pets should be on leash and under supervision at all times.

Be Considerate of Other Visitors

Respect other visitors and protect the quality of their experience. Be courteous. Yield to other users on the trail. Step to the downhill side of the trail when encountering pack stock. Take breaks and camp away from trails and other visitors. Let nature's sound prevail. Avoid loud voices and noises.



It's not just about today—do your part to maintain the resources of Big Bend exactly as you see them so future visitors can do the same.

Backcountry Planning



Getting a Permit

A permit is required for all river use, horse use, and overnight backcountry camping, and can be obtained in person only, up to 24 hours in advance of the trip. Permits can be written for as many as 14 consecutive nights in the backcountry. Park staff can assist you with trip planning based on your needs and current trail conditions. Permits can be obtained at all visitor centers during normal operating hours.

Overnight Use Fee

A \$10-per permit fee is required for all overnight backcountry use permits, including multi-day river trips, and overnight backcountry camping. This fee is payable when the permit is issued, and all funds collected go to projects to improve or protect the backcountry experience, including hardening/improving river access points, backcountry campsite maintenance, and trail maintenance.

Plan Ahead

Detailed information on backcountry campsites in the Chisos Mountains and along the backcountry roads is available on the park's website at www.nps.gov/bibe. A wide variety of maps, books, hiking guides and river guides is 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 bookstore at www.bigbendbookstore.org.

Hiking & Backpacking

Big Bend National Park offers over 200 miles of hiking trails in the Chisos Mountains and desert terrain. A permit is required for all overnight trips in the backcountry. Decide how much distance you want to cover and how much time you have. Desert hiking can be unpleasant or deadly in hotter months.

In the Chisos Mountains, the Southeast Rim Trail and a portion of the Northeast Rim Trail from the Boot Canyon/Southeast Rim junction are closed during the peregrine falcon nesting season (February 1–May 31).

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

Backcountry Roads

For those who wish to camp in the backcountry without having to backpack, Big Bend offers over seventy primitive campsites along backcountry roads. While some sites are accessible to most vehicles, a high clearance and/or 4-wheel drive vehicle is necessary to reach others. Sites have nice views, isolation, and a flat gravel space, but offer no amenities or shade. A backcountry permit is required to use these sites.

Backcountry Water

The dry desert air quickly uses up the body's water reserves. Each hiker should carry and drink a minimum of one gallon of water for each day they are in the backcountry. Spigots for drinking water are available at all visitor centers. Big Bend is a desert environment. Springs and tinajas (depressions in rock where water collects) are rare and often unreliable. Water should be filtered. Every gallon removed from backcountry water sources is one less for the wildlife which depend on them. Please carry enough water to supply your own needs—don't risk your life by depending on desert springs. Caching water is recommended for extended hiking trips in the desert.

Horses

Visitors are welcome to bring and use their horses in the park. A 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. Every horse user should obtain a copy of the regulations regarding use of horses in the park.

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. The Chisos Mountain and Burro Mesa trails are day-use only.

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. Three local companies (see page 16 for telephone numbers) 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 permit at a park visitor center. 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. Permits for floating Santa Elena Canyon may be obtained at the Barton Warnock Center in Lajitas. 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.



Black Gap Road

Standard Backcountry Road Conditions

| | Road open to: | Notes |
|-----------------|----------------|--|
| Croton Spring | All Vehicles | Slippery mud after any rain |
| Dagger Flat | All Vehicles | Bumpy but ok for cars; very sandy near end of rd. |
| Glenn Springs | High Clearance | Narrow road; no RVs, Trailers or wide vehicles |
| Grapevine Hills | All Vehicles | Usually passable for all vehicles to trailhead |
| Hot Springs | All Vehicles | Narrow road; no RVs, Trailers or wide vehicles |
| North Rosillos | High Clearance | Deep ruts and sand; little-traveled |
| Juniper Canyon | High Clearance | High-clearance vehicles only; rough, rocky, & slow |
| Old Maverick | High Clearance | Rough; often impassable after heavy rains |
| Old Ore | High Clearance | High-clearance vehicles only, 4X4 recommended |
| Paint Gap | All Vehicles | High-clearance past PG 3 campsite |
| Pine Canyon | High Clearance | High-clearance vehicles only; rough, rocky, & slow |
| River Road East | High Clearance | High-clearance vehicles only |
| River Road West | High Clearance | High-clearance vehicles only, 4X4 recommended |
| Black Gap | 4X4/HC only | 4x4 required! never maintained |

Ask at a visitor center for updated road conditions, and be prepared for any contingency. Weather may cause road conditions to deteriorate. All vehicles must be street legal and stay on established roadways.

Backcountry Regulations

You are responsible for protecting the resources of your park; these regulations are enforced.

Use or discharge of firearms is prohibited. All wildlife is protected by federal law.

Possession of other weapons, traps, or explosives is prohibited.

Groundfires and woodfires are prohibited.

Use only gas stoves or charcoal within a BBQ grill. Pack out all evidence of use. Smoking is prohibited on all Chisos Mountains trails.

Pack out all trash.

Help preserve the park's natural beauty by packing out all trash including cigarette butts and toilet paper.

No pets on trails or in the backcountry.

Pets may harm or be harmed by wildlife, and can attract predators.

Do not cut switchbacks on trails.

Although cross-country hiking is allowed, help prevent trail erosion by staying on marked trails.

Collecting any natural or historical feature or object is prohibited.

Leave park features intact for others to enjoy.

Contaminating natural water sources and their surroundings is prohibited. Camp at least 100 yards from any water source.

Desert water sources and springs are fragile and vital for the plants and animals that depend on them for survival. Soaps, oils, skin lotions, and food residues from bathing and washing can seriously impact water quality. Minimize your impact to areas surrounding springs, seeps, and other temporal water sources.

Camp within designated sites.

When camping in a designated site prevent resource damage by camping within the area outlined by rocks, logs, or brush.

Generator use is not permitted in backcountry campsites.

Natural quiet is a protected resource; help preserve a quiet wilderness experience.

In open zones, camp at least 0.5 mile and out of sight from any road and at least 100 yards from any trail, historical structure, archeological site, dry wash, or cliff edge.

Minimize your impact to the natural landscape.

Bury human waste at least 6 inches deep. Pack out toilet paper.

Human waste is unsightly and unsanitary. Carry a digging trowel. Locate latrines 0.25 mile from any water source and well away from camp.

Motorized vehicles and bicycles are permitted only on designated public roads.

Off-road vehicle travel causes visual and environmental damage.

Do not feed wildlife.

Feeding wildlife is illegal; it often results in having to destroy the animal. Keep food, ice chests, and cook gear in a hard-sided vehicle or food storage locker, where provided. Do not leave open food containers unattended. Keep trash contained in vehicles or bear boxes.

Safety is *Your* Responsibility

Big Bend is wild and unfamiliar country to most visitors yet it need not be dangerous. In fact, many people visit precisely because it is so remote and rugged. As you enjoy the splendor of this great wilderness area, whether hiking the highcountry, rafting the Rio Grande, observing

wildlife, or simply driving the scenic roads, let safety be your constant companion. Spend a moment reviewing these common safety concerns. By giving forethought to your actions you can have a safe, exciting, and rewarding experience in Big Bend National Park.

Driving

Of the few accidental deaths in Big Bend that occur some years, most result from car accidents. 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. Federal regulations require that all occupants of a vehicle wear seats belts while in a national park. Remember, too, that you share the road with bicyclists and pedestrians. Some park roads, such as the road into the Chisos 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. Always select a designated driver before drinking alcoholic beverages.

Heat

Desert heat can kill you. Carry and drink at least one gallon of water per person, per day. Wear a hat, long pants, long-sleeved shirt, and sun screen when hiking. Springs are unreliable and often dry during much of the year. Hike 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, two have occurred in the last twenty 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.

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.

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 when using gas stoves, charcoal grills, and cigarettes. During drought conditions 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. *Smoking is prohibited on all trails in the Chisos Mountains.*

Poisonous Animals

Venomous snakes, scorpions, spiders, and centipedes are all active during the warmer months. Wear shoes or boots at night instead of sandals. 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 where you place your hands.

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 in the special animal-proof dumpsters and trash cans provided.

Remember to report all bear or mountain lion sightings to a ranger.

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.

If you really want to swim, Balmorhea State Park (three hours north of Big Bend) boasts the "world's largest spring-fed swimming pool." Contact Balmorhea State Park at 432-375-2370 for more information.

Motorcycles



Share the Road

Every year park rangers investigate an increasing number of motorcycle accidents. Unfortunately, a significant number involve serious injuries.

Be alert

Animals may dart out from road edges. Other drivers may pay too much attention to the scenery and cross over the center line into your travel lane or may suddenly stop their vehicles in the middle of the road to observe wildlife. These and other unforeseen conditions can lead to motorcycle accidents.

Suggestions for Motorcycle Riding

- Watch for vehicles straying over the center line.
- Stay alert for sudden stops or traffic slow-downs, especially around scenic pullouts or other congested areas.
- Wear brightly colored clothing or jackets to increase visibility to other motorists.
- Be aware of road surfaces as you ride. Never over-ride the road conditions.
- Watch for wildlife at the road edge.
- Secure your motorcycle and valuables when you are away from your bike.
- Ride with headlights on.

Survive the Sun

In all seasons, whether walking, backpacking, or day hiking, follow these tips to conserve your internal water reserves:

REDUCE YOUR ACTIVITY

During the warmest days, generally from May through August, avoid hiking in the lower elevations during the heat of the day—generally from 10:00am to 6:00pm.

FIND SHADE

Shade in the desert means the difference between excessive heat gain from the radiant sun and sheer comfort. In an emergency, a person resting in the shade will survive longer than someone exposed to the sun.

DRINK YOUR WATER

Don't try to conserve the drinking water you have. Whether strolling in the Basin, or hiking the South Rim Trail, you must DRINK your available water. Carry plenty of drinking water—at least 1 gallon per person per day. Balance your food and water intake. Eat a salty snack every time you take a drink of water.

REDUCE ALCOHOL & CAFFEINE INTAKE

Water is the best remedy for dehydration and listlessness. The diuretic effects of caffeine and alcohol can result in an accelerated loss of body water.

PROTECT YOUR BODY

Our sensitive skin burns easily; it needs shade, sunscreen, sunglasses, a wide brimmed hat, and proper footwear. Dehydration is accelerated by exposed skin, so keep your clothing on. Wear long-sleeved, loose-fitting, light-colored clothes.

ALL SPRING WATER MUST BE TREATED: BOIL IT OR USE PURIFICATION TABLETS

Weather and Climate

Weather

Elevational differences in Big Bend mean temperatures can vary dramatically between mountain, desert and river. The lower areas along the Rio Grande are very hot during summer months, while the Chisos Mountains are considerably cooler. Winter weather generally occurs between November and February, with temperatures dropping significantly 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.

Summer and Fall

Temperatures along the river tend to be the warmest in the park. Plan your activities with the weather in mind; visit the river in the morning, and always carry plenty of water. Higher elevations in the Chisos Mountains lead to lower temperatures. July brings thunderstorms; precipitation can liven up the landscape, but rains can reap havoc on the primitive roads throughout the park.

How Hot Is It?

Average temperatures and rainfall at 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 Avg. | 79/47 | 15.34" |

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

Area Phone Numbers

Park Overview Map

For more details, use the official park map.

Services inside the Park

EMERGENCY Call 911

National Park Service
General Information 432-477-2251

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

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

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

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

Park Gasoline Service
Panther Junction (diesel) 432-477-2294
Rio Grande Village 432-477-2293

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

Services outside the Park

Lodging
Lajitas
Lajitas Resort 877-525-4827

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

Study Butte/Terlingua area
Big Bend Motor Inn 800-848-2363
Easter Egg Valley Motel 432-371-2254
El Dorado Motel 432-371-2111
Longhorn Ranch Hotel 432-371-2541
Ten Bits Ranch 866-371-3110

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

Convenience Stores/Gasoline
Big Bend Motor Inn 800-848-2363
Cottonwood General Store 432-371-3315
Study Butte Store 432-371-2231
Stillwell Store & Station 432-376-2244
Terlingua Store 432-371-2487

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

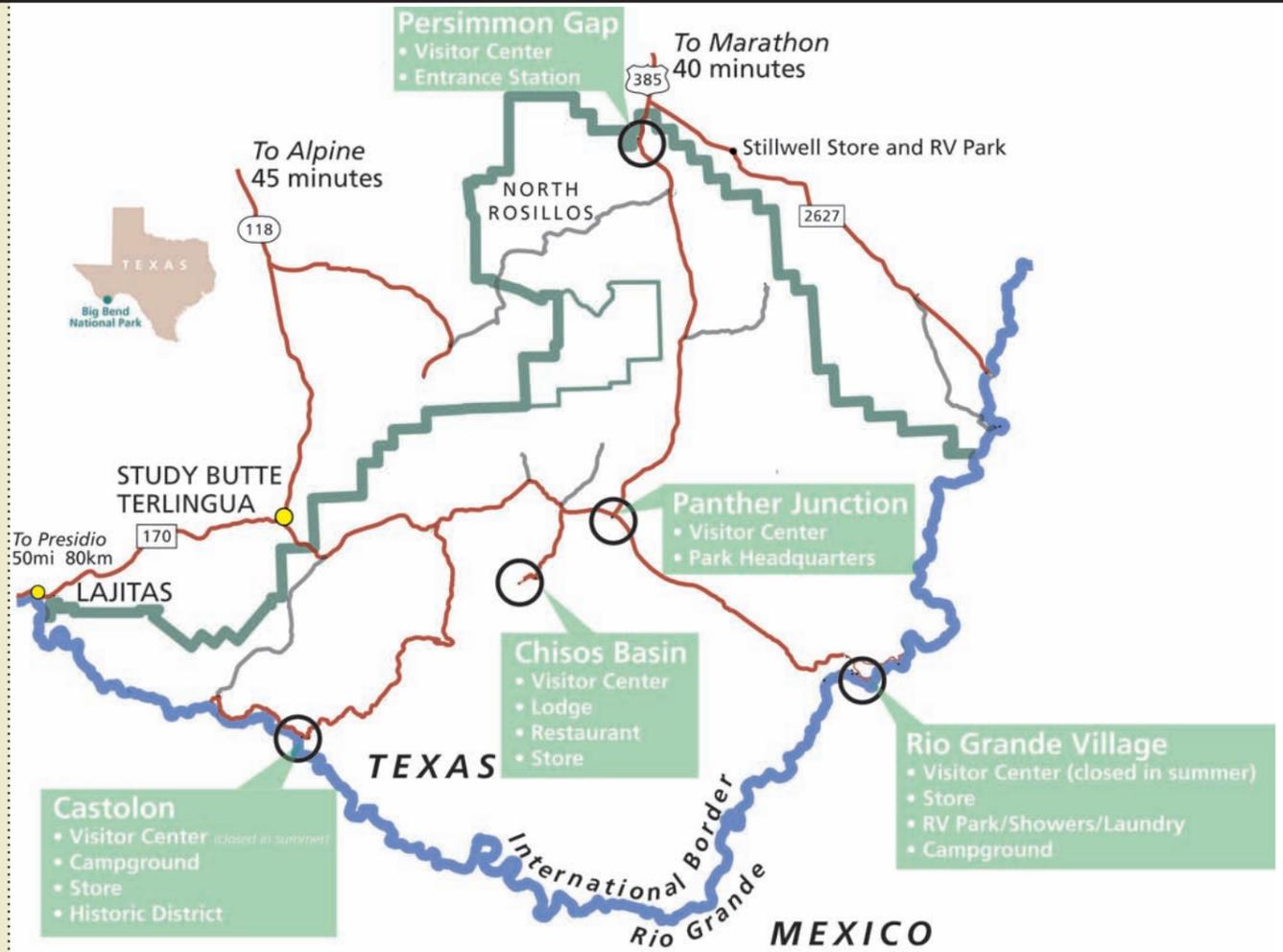
Banks
Quicksilver Bank/ATM 432-371-2211

Float Trip Outfitters/Rentals/Guide Services
Big Bend River Tours 800-545-4240
Desert Sports 888-989-6900
Far Flung Outdoor Center 800-839-7238

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

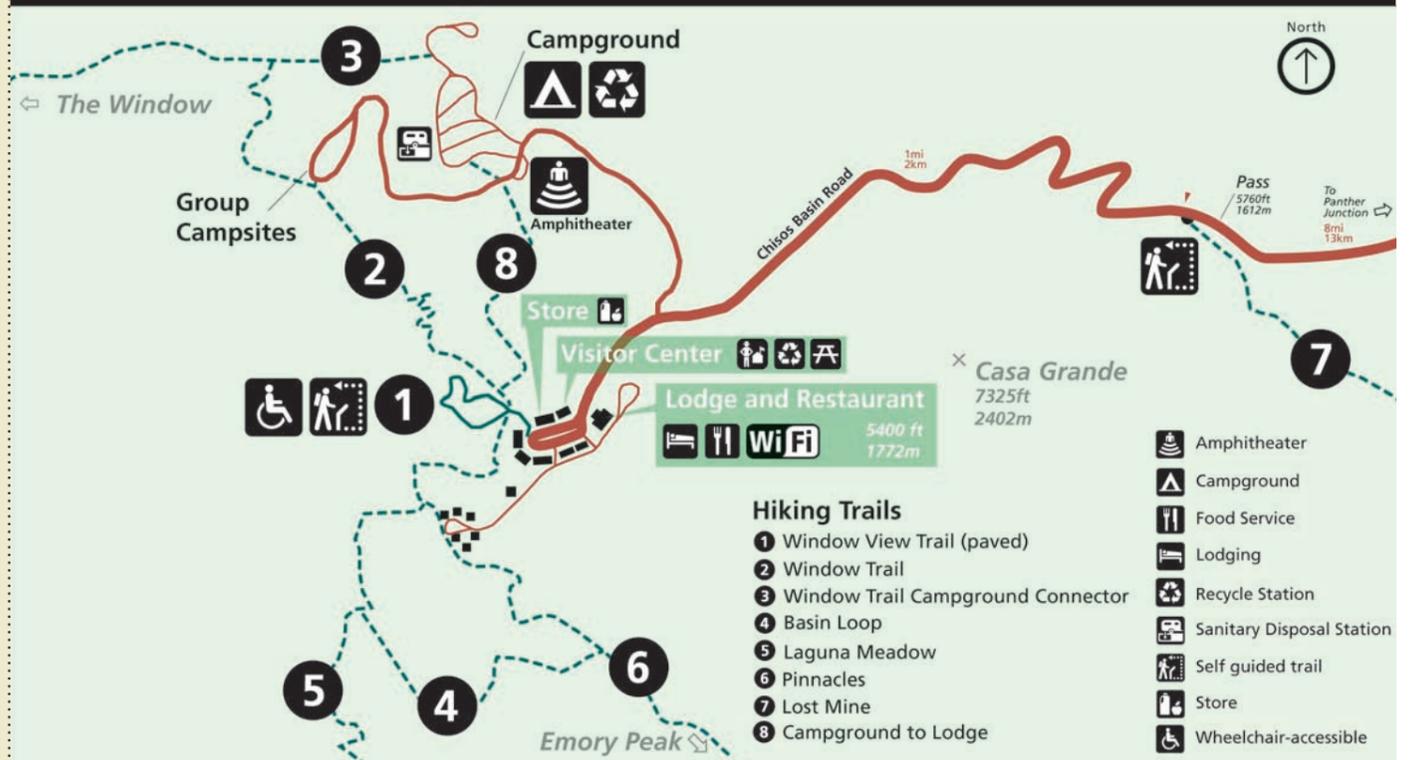
The facilities and services listed here are located within the greater Big Bend area, and vary from 30 to 100 miles from Big Bend National Park. The communities of Terlingua/Study Butte (30 miles west) and Marathon (70 miles north) offer basic services, including gas stations, restaurants, lodging, and campgrounds. Alpine, 100 miles to the northwest of the park, offers the greatest number of services.

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



Chisos Basin

5401ft 1646m



Rio Grande Village

1850ft 564m

