NATIONAL PARK SERVICE • U.S. DEPARTMENT OF THE INTERIOR

Foundation Document Overview

Big Bend National Park

Texas

Contact Information

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Purpose

Big Bend National Park preserves a large area of the Chihuahuan Desert, encompassing spectacular wilderness character, scenic values, natural dark skies, and the biological and geological diversity of the Big Bend area, including the Chisos Mountains and the Rio Grande and its canyons. The park provides for the benefit and recreational enjoyment of the public, with opportunities to experience remoteness and the international flavor of the US-Mexican border, and works cooperatively toward binational management of resources.

Significance

Significance statements express why Big Bend National Park resources and values are important enough to merit national park unit designation. Statements of significance describe why an area is important within a global, national, regional, and systemwide context. These statements are linked to the purpose of the park unit, and are supported by data, research, and consensus. Significance statements describe the distinctive nature of the park and inform management decisions, focusing efforts on preserving and protecting the most important resources and values of the park unit.

1. Big Bend National Park protects the largest and most representative example of the Chihuahuan Desert ecosystem in the United States, which includes the Chisos Mountains—the only mountain range fully contained within a US national park. The river, along with the springs, desert, mountain, and grassland environments, supports extraordinary biological diversity, including endemic and rare plants and animals. Big Bend National Park contains more species of birds, bats, butterflies, scorpions, ants, reptiles, and cacti than any other unit in the National Park Service.

2. Dramatic, diverse, and well-exposed geologic features provide opportunities to study a wide range of sedimentary, igneous, and metamorphic geologic processes in Big Bend National Park. The three great North American mountain-building episodes, which formed the Appalachians, Rockies, and Basin and Range, intersect in the Big Bend region.

3. The numerous scientifically important Cretaceous and Tertiary fossils found in Big Bend National Park record the evolution and history of ancient life from the Age of Reptiles through the Age of Mammals. The park preserves a largely intact 130-million-year slice of geologic time, including the dinosaur extinction event.

4. Big Bend National Park is the core of a greater region in which diverse cultures interacted over a span of more than 13,500 years. The park contains physical remains of human manipulation of the landscape and adaptation to post-Pleistocene climate change. The cultural history includes the long span of American Indian habitation and later contact with European settlers. More recent history includes the military, farmers, ranchers, miners, NPS development, and modern uses.

5. Big Bend National Park, along with Rio Grande Wild and Scenic River, two Texas state parks, and four Mexican protected areas, comprise one of the largest transboundary protected areas in North America, covering 3 million acres and more than 300 miles of the Rio Grande. The binational character of this remote and diverse landscape figures high in visitor experience, as well as management opportunities and challenges.

6. With over 800,000 acres of protected land, Big Bend National Park provides exceptional opportunities to experience primitive desert wilderness, undisturbed natural soundscapes, solitude, world-class dark night skies, clean clear air, and unparalleled scenic vistas extending into Mexico. Recreational and educational experiences include rare bird and wildlife viewing, river floating, international border crossing, hiking, sightseeing, and camping.

Fundamental Resources and Values

Fundamental resources and values are those features, systems, processes, experiences, stories, scenes, sounds, smells, or other attributes determined to merit primary consideration during planning and management processes because they are essential to achieving the purpose of the park and maintaining its significance.

- **Acoustic Environment, Scenic Views, and Air Quality**
- **Border Culture**
- **Cultural Resources and History**
- **Ecosystem and Biological Diversity**
- **International Cooperation and Regional Collaboration**
- **Physical Resources**
- **Recreation and Education**

Big Bend National Park contains other resources and values that may not be fundamental to the purpose and significance of the park, but are important to consider in management and planning decisions. These are referred to as other important resources and values.

- **Research and Partnerships**

Interpretive Themes

Interpretive themes are often described as the key stories or concepts that visitors should understand after visiting a park—they define the most important ideas or concepts communicated to visitors about a park unit. Themes are derived from—and should reflect—park purpose, significance, resources, and values. The set of interpretive themes is complete when it provides the structure necessary for park staff to develop opportunities for visitors to explore and relate to all of the park significances and fundamental resources and values.

- The convergence of desert, mountain, and river ecosystems in Big Bend National Park supports a remarkable diversity of life and provides abundant opportunities to experience and learn about the natural world.
- Big Bend's rugged and remote wilderness, spectacular river canyons, vast expanses, panoramic vistas, clean clear air, dark night skies, and proximity to Mexico provide outstanding recreational opportunities and inspire wonder, reflection, and rejuvenation.
- For thousands of years, the Big Bend region has been a focus of human activity—bringing people together from all directions, sometimes in harmony and sometimes in conflict.
- Survival strategies and adaptations of living things in the Chihuahuan Desert are as wondrous as the environment is extreme—often defying our expectations about the ability of life to thrive in such conditions.
- Abundant fossils in Big Bend National Park, including some found nowhere else in the world, record the existence and demise of dinosaurs and the flourishing of mammals, enabling us to ponder evolution and our own impermanence in the world.
- Diverse, well-exposed, and accessible geologic features enable us to learn about the processes that shaped, and continue to shape the Earth and influence its inhabitants.
- Although the life-giving Rio Grande has attracted peoples for centuries, it also provides cooperative transboundary management opportunities for the United States and Mexico to ensure mutual benefit.

Description

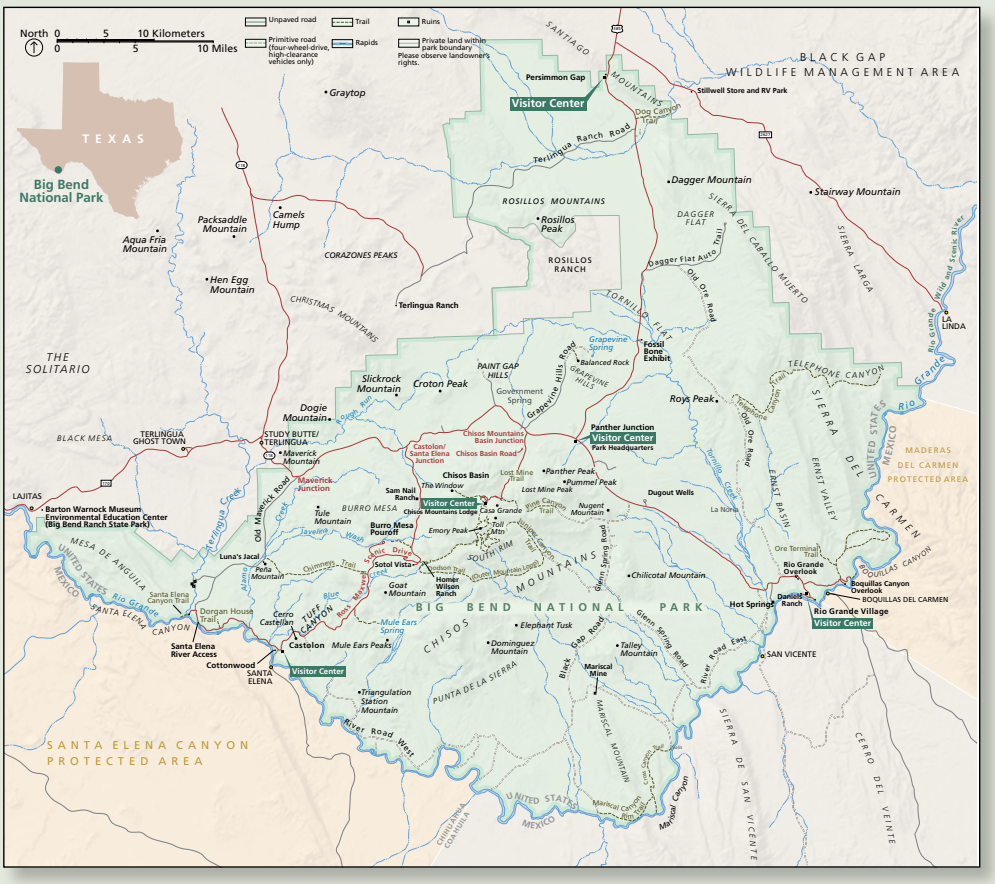
Big Bend National Park, the first national park in Texas, is in south Brewster County and encompasses more than 801,000 acres, including 533,900 acres of recommended wilderness in the Big Bend of the Rio Grande. The Rio Grande flows for 118 miles on the park's southern boundary, through Santa Elena, Mariscal, and Boquillas Canyons, the deepest gorges on the river. The river forms the international boundary between Mexico and the United States, with the name Big Bend originating from the abrupt change of the Rio Grande's channel from southeasterly to a northeast direction. The park boundary is within the northern portion of the Chihuahuan Desert, which has the most precipitation of all four deserts in North America and one of the most biologically diverse.

The Chisos Mountains, the southernmost range in the continental United States, are completely enclosed in the park and rise over 7,800 feet above sea level. The popular Chisos Basin, a topographic depression in the Chisos mountain range, offers spectacular panoramic vistas and a cool respite from the desert heat for visitors. The park preserves tremendous geological diversity, including marine sedimentary rocks, continental sedimentary rocks, volcanic rocks, and evidence of the three great North American mountain-building episodes. Evidence of geological processes readily visible at the park includes sedimentation, tectonics, erosion, volcanism, and fossilization. With over 1,200 known species of fossils, the park is in the top tier of national park system units for fossil resources.

The park exhibits extreme climate contrast due to the range in elevation, which causes wide variation in moisture and temperature. Altitude ranges from about 1,800 feet along the river to 7,800 feet in the Chisos Mountains. Annual precipitation in the arid to semi-arid climate ranges from 6 inches in the desert to 17 inches in the mountains. Summer days often exceed 100 degrees Fahrenheit (°F) in the lower elevations, and although winters are normally mild throughout the park, subfreezing temperatures occasionally occur. This variation in climate contributes to the extraordinary diversity in plant and animal habitats present in the park.

Thousands of archeological sites record the presence of humans in the Big Bend area for the past 13,500 years, demonstrating their survival strategies and their adaptations to changing climatic conditions. The park contains examples (architecture, farming, mining, ranching, etc.) of 19th- and 20th-century developments that highlight the cultural interactions among the people of the United States, Mexico, and American Indian groups, who combined to form a distinctive borderlands culture, and a landscape exhibiting cultural change and the effects of human activities on the land.

In 1976, the United Nations Educational, Scientific, and Cultural Organization (UNESCO) designated Big Bend a "Man and the Biosphere" international reserve, one of only 28 in the United States. Binational collaboration with the government of Mexico in the management of shared natural and cultural resources was strengthened in the 1990s with the establishment of the Maderas del Carmen and Cañon de Santa Elena protected areas. In 2006, these two areas were recognized officially as sister parks, creating one of the largest transboundary protected areas in North America. In 2013, the Boquillas Port of Entry was opened, allowing improved cooperative resource management and research, educational programs, and increased tourism opportunities between the two countries.



Some of the many opportunities for visitors in the park include scenic drives and mountain biking through miles of paved, improved, and dirt roads, a large network of hiking trails, and horseback riding; engaging in river-related activities such as floating the canyons or open water by raft, canoe, or kayak; birding and other wildlife viewing; and camping in one of the four campgrounds in the park or numerous backcountry sites. The remoteness of the park and its distance from major roads, airline routes, and developed areas contributes to its lack of artificial light and noise as well as its wilderness character and ecological diversity.