

Guadalupe Mountains

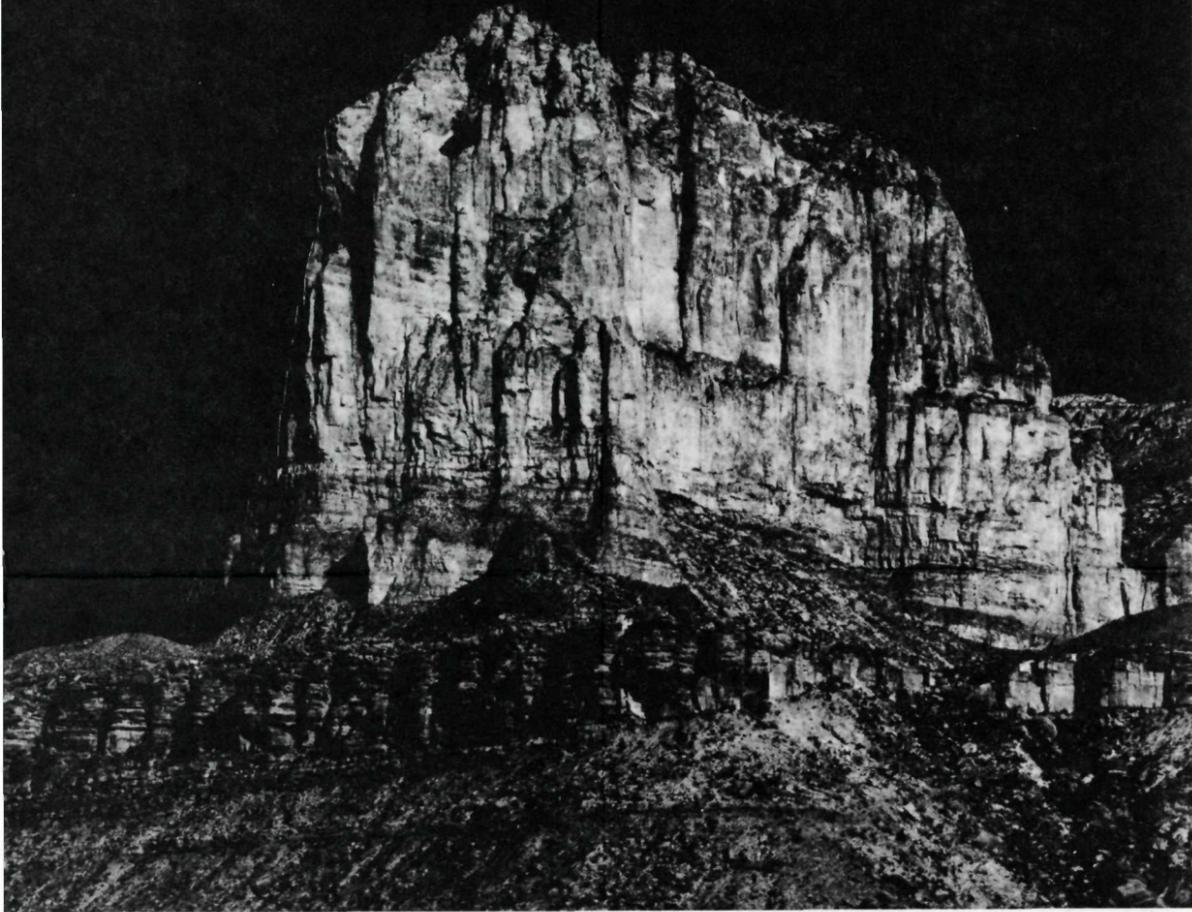
NATIONAL PARK • TEXAS

The Guadalupe Mountains stand like an island in the desert, silent sentinels watching over the most extensive fossil reef complex known to man. Trace the trails of human history here or gaze upon vast dimensions of geologic time in the spectacular exposure of Capitan Reef.

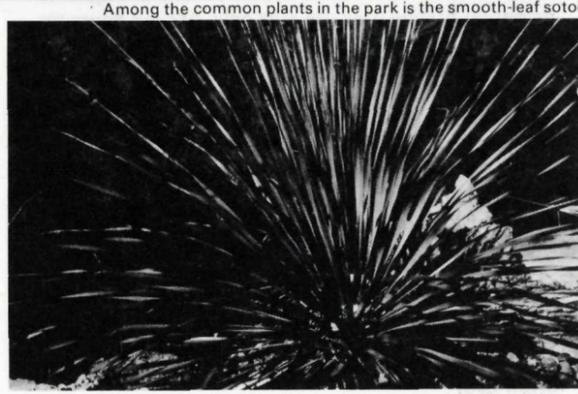
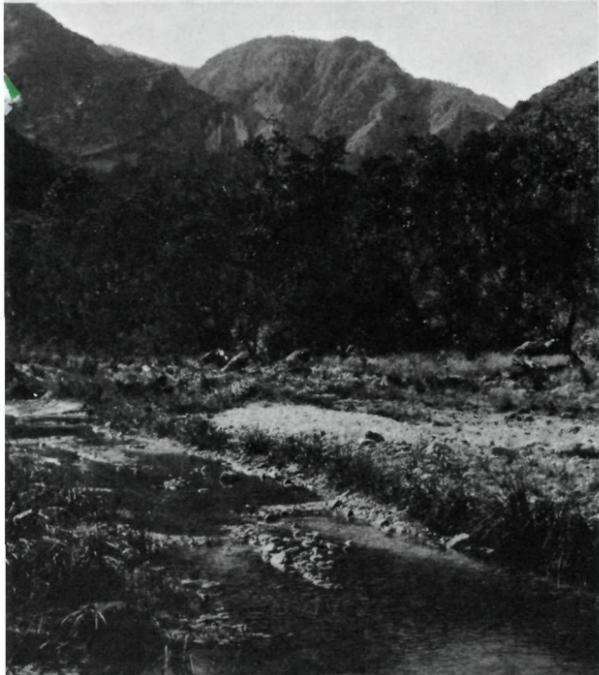
The mountain range resembles a massive wedge—rising in Texas, its arms reach northward into New Mexico. At its "V" stands El Capitan, a 610-meter (2,000-foot) sheer cliff. The mountains and canyons shelter a unique remnant of forest plants and animals which have struggled for survival since the end of the ice ages, about 10,000 years ago. The 30,867-hectare (76,293-acre) park lies astride these

mountains' most scenic, rugged portions. Here, the highest point in Texas, 2,667-meter (8,751-foot) Guadalupe Peak, stands in sharp contrast with the park's lowest elevation, 1,112 meters (3,650 feet) at the base of the western escarpment.

In the park you can explore desert lowlands, superb canyons, and forested mountains. You can study geology, visit historic sites, and see plants and animals uncommon to the surrounding semi-arid lowlands. Those who climb into the high country can enjoy outstanding views across the Salt Basin to the west, the Delaware Basin to the south and east, and into the deeply cut canyons to the north.



Barren El Capitan is a sharp contrast to McKittrick Canyon (below).



Among the common plants in the park is the smooth-leaf sotol.



A long tail helps balance the ringtail as it leaps.

COVERED BY A SEA

The rocks which make up the Guadalupe Mountains were formed during the Permian period, 225 to 280 million years ago. An inland sea which covered more than 16,100 square kilometers (10,000 square miles) of Texas and New Mexico controlled their formation. It was in the shallow water near the shore of this sea that the Capitan barrier reef was built by lime-secreting algae and other organisms. As the reef grew upward and seaward upon talus broken loose by storms, sediments also were deposited in a lagoon between reef and land. In time, the arm of the sea filling the Delaware Basin was cut off from the rest of the ocean, and the basin became excessively salty. Deposits of mineral salts gradually filled the basin to the height of the reef and then layered deposits buried the long-dead reef.

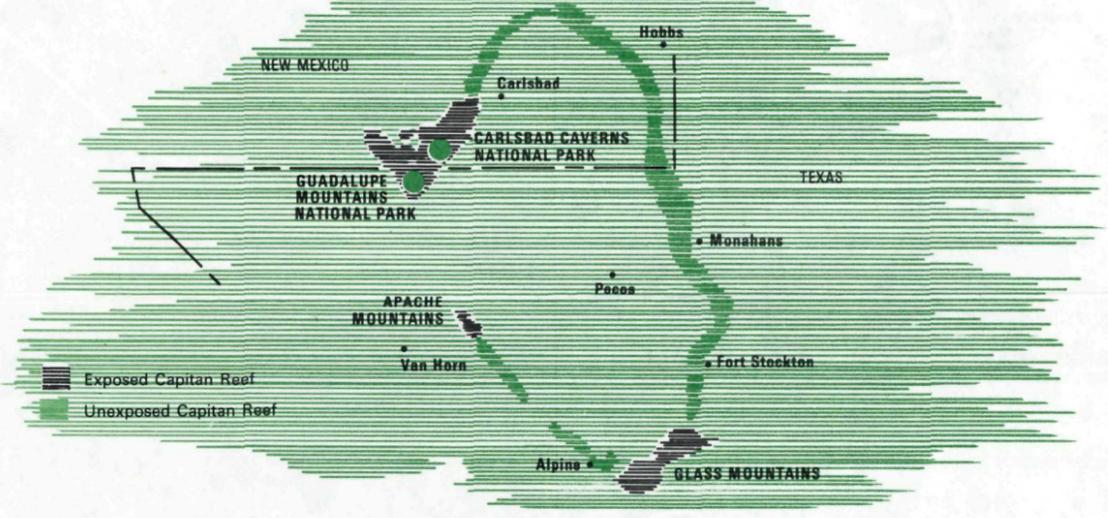
A series of earth movements eventually raised the region dramatically, tilting its southwestern edge upward. Erosion cut away the softer sediments, and additional movements helped shape the mountain range.

eastern and central plains also reach into the Guadalupe.

Vegetation typical of the southwestern deserts, such as creosotebush, lechuguilla, Parry agave, yucca, and sotol, is found at the lower elevations. The high country contains a forest of ponderosa pine, Douglas-fir, limber pine, and a few aspens, a relic of a forest that covered this area thousands of years ago when the climate was cooler and the rainfall was greater than they are today.

In the sheltered canyons, where moisture is more abundant, ferns, big-tooth maple, chokecherry, walnut, hophornbeam, Texas madrone, and other species occur with vegetation from higher and lower elevations. Protection of these rare associations of plants is of paramount importance.

Animals commonly seen include elk, mule deer, wild turkey, ringtail, raccoon, porcupine, kit and gray foxes, coyote, and bobcat. Black bear and cougar pay occasional visits. More than 200 species of birds and 52 species of reptiles and amphibians have been identified.



The south face of the Guadalupe marks the location of the seaward face of Capitan Reef. The portion of the range extending northward from the reef slope is composed of sediments deposited in the lagoon. The reef extends across 563 kilometers (350 miles) of western Texas and southeastern New Mexico, mostly far beneath the arid plain (see diagram). The most extensive exposure is the 64-kilometer-long (40-mile) eastern Guadalupe escarpment, stretching northward through Carlsbad Caverns National Park. It is also exposed in the Glass and Apache Mountains.

A striking cross section of the Capitan Reef complex, which includes the massive reef-core, fore-reef, and back-reef deposits, is in the 579-meter-high (1,900-foot) north wall of McKittrick Canyon.

A MIX OF PLANTS AND ANIMALS

A rare mixture of biotic communities occurs in the Guadalupe Mountains. Here, species from the Rocky Mountains reach their southern and eastern limit and meet species from Mexico at the northern extent of their range. Plants and animals of the

A HOME TO MAN

For the past 12,000 years, the mountain caves, springs, plants, and wildlife provided shelter and sustenance to various groups of people. Spanish conquistadors passed near the Guadalupe on journeys north from Mexico in the late 1500s and found Mescalero Apaches inhabiting this area.

Military surveyors mapping a transcontinental route to the California goldfields in 1849 passed along the base of the Guadalupe just south of El Capitan. A route was opened through Guadalupe Pass in 1858, and it was used for 11 months by the Butterfield Overland Mail Line to carry mail and passengers from St. Louis, Mo., to San Francisco, Calif. The first eastbound and westbound stagecoaches to travel the new route met just west of Guadalupe Pass on September 28, 1858. Pine Springs ("The Pinery") Station was a regular stop for changing teams on the four-horse, Celerity stagecoaches.

Homesteaders moving west reported seeing the Guadalupe Mountains for weeks before they reached them.

Shortly after the Civil War, ranching activities began and the area was soon settled. At times the settlers had to contend with outlaws, cattle rustlers, and Apache raiders.

In 1878 and 1879, soldiers from nearby military posts occasionally camped at Pine Springs while trying to subdue the remaining Apaches and move them onto a reservation.

ANTICIPATE STORMS

In this semi-arid climate, the summers are generally warm and the winters mild. But severe and sudden changes in the weather often occur. You can expect strong winds in winter and spring and electrical storms, sometimes accompanied by heavy downpours and flash flooding, in summer. Considerable variation, especially in temperature, between higher and lower elevations and between the eastern and western side of the range is common.

PRECAUTIONS

The following suggestions are offered to help make your visit safe and pleasant:

Check with a park ranger before leaving the main roads. Know where you want to go, how long it will take, and what type of equipment is needed. If an emergency or if an accident occurs, notify a park ranger or the information center.

Do not climb the cliffs. The reef limestone is unstable and considered unsafe even for most "technical" climbers.

Beware of cactus and other desert shrubs. Their spines can inflict painful injury.

Watch for and respect rattlesnakes, especially in brush areas, in rock piles, around cliffs and ledges, in damp places, and during the evening or the morning. If you see one, detour; do not kill it.

Be prepared when you enter the back country. There is no water in the back country. Be sure to carry plenty of water; in warm weather, 4 liters (1 gallon) per person per day is recommended. Wear stout shoes and tough clothing. Gloves, a flashlight, and first-aid supplies are also advisable.

HELP PROTECT THE PARK

Natural and historic features. Disturbing, harming, or removing any rocks, plants, wildlife, or historic objects is prohibited. The use of metal detectors, prospecting, and mining are prohibited by law.

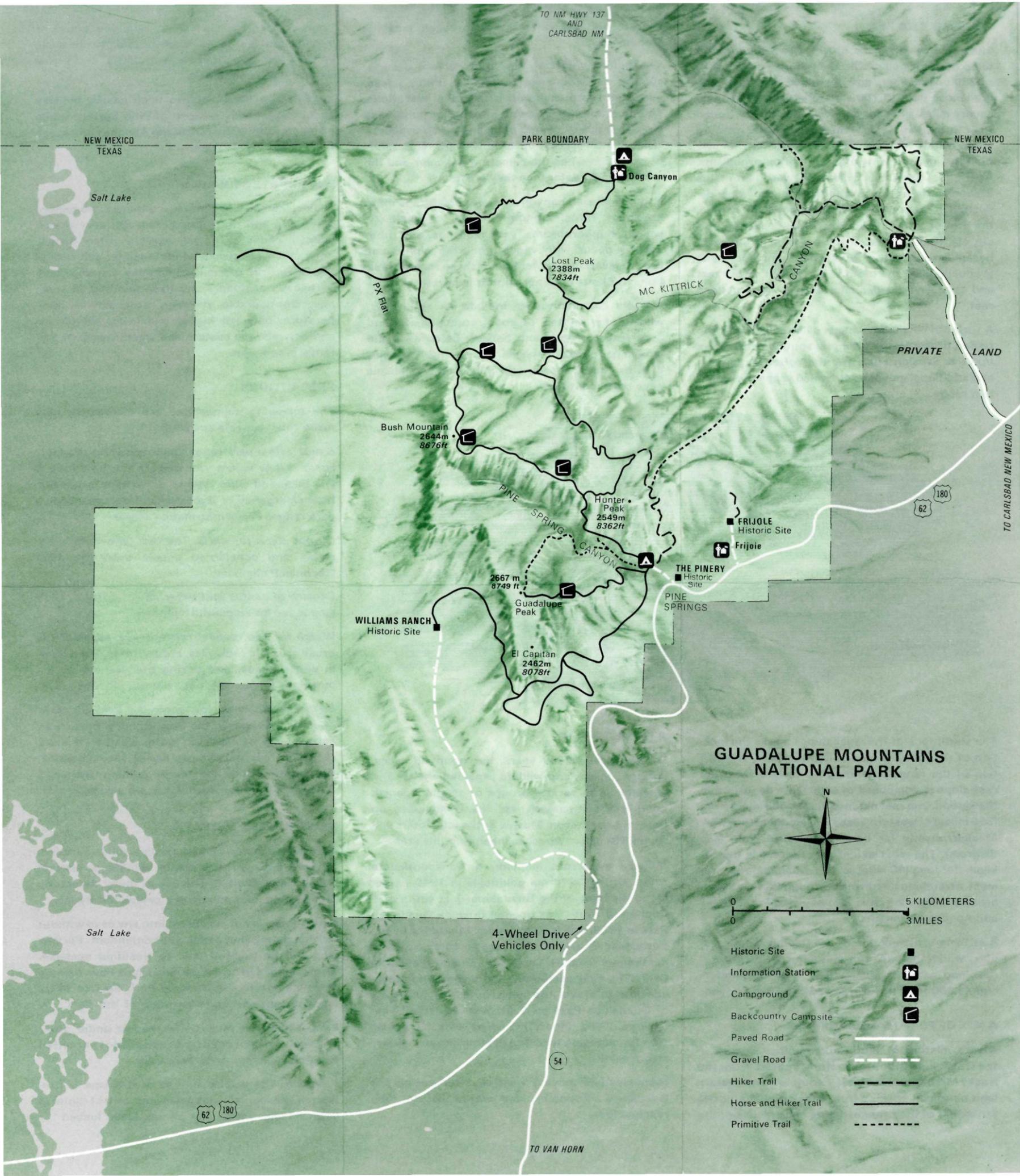
Caves. Entry is not permitted into any cave without written permission of the superintendent. Permission will be granted only to qualified speleologists engaged in investigations which have demonstrable value to the National Park Service in its management and understanding of the park.

Pets. All animals must be leashed or under other physical restraint at all times and are not permitted in public buildings or on park trails.

Firearms. The display or use of firearms is prohibited. Keep them unloaded and out of sight in your vehicle, which you should leave locked.

Guadalupe Mountains

NATIONAL PARK • TEXAS



WHAT TO SEE AND DO

Frijole Information Station is open daily 8:00 a.m. to 4:30 p.m. mountain time (later in summer). Phone: (915) 828-3385. Located on Highway U.S. 62-180, 89 kilometers (55 miles) southwest of Carlsbad, N.M., and 177 kilometers (110 miles) east of El Paso, Tex. Information, maps, literature and exhibits available.

Backpacking and Hiking: 101 kilometers (63 miles) of rocky and rugged trails, often steep. High woodlands, canyon and desert country. Plan to carry all your own water, to stay on designated trails, and to camp in designated backcountry sites. No fires or pets in backcountry. Obtain overnight permits and information at Frijole Information Station.

Guadalupe Peak Hike: 13-kilometer (8-mile) round trip, very strenuous. Trail climbs over 914 meters (3,000 feet) to the highest point in Texas, elevation 2,667 meters (8,749 feet). Spectacular views of desert below.

Devils Hall Hike: 8-kilometer (5 mile) round trip along the wash floor of Pine Canyon. Rocky, but relatively level hike to the narrows of the canyon.

The Bowl Hike: 11-kilometer (7-mile) loop trip up the trail to Pine Top and down Bear Canyon trail. Trail leads to a relict forest of dense pine and Douglas-fir in the high-country.

McKittrick Canyon Hiking: Open daily for day use. Check at information station for current visiting hours. Drive to the mouth of the canyon and hike the full 14.5-kilometer (9-mile) round trip into the canyon, or just go in as far as you want. A stream surfaces and disappears at various places along the canyon bottom. Rare and interesting plant communities are on the floor and lower slopes of the canyon. The canyon walls reveal segments of Capitan Reef and fore-reef and back-reef marine deposits. In autumn, the colors of the foliage are outstanding. Self-guiding pamphlet available.

Manzanita and Smith Springs Hike: Begin this relatively level 3-kilometer (2-mile) round trip hike at Frijole Historic Site. Interpretive signs introduce the geology, ecology, and history of the area, including tales of Apache, cavalry, farming, and ranch life.

Frijole Historic Site: Most complete and substantial buildings of early ranching enterprises in the area. Site is a residence/ranger station at present, but can be viewed from the outside. It is 0.8 kilometer (0.5 mile) north of Frijole Information Station.

Butterfield Stage Station Historic Site, "The Pinery": Ruins of a stage coach station built in 1858 located 1.6 kilometers (1 mile) west of Frijole Information Station. Pamphlet available.

Williams Ranch Historic Site: Eleven-kilometer (7-mile) primitive road for 4-wheel drive vehicles only. Open from 8:00 a.m. to 2:00 p.m. mountain time. Check out gate key and obtain information and directions at Frijole Information Station. Day-use area only. Allow 3 hours for round trip. Interpretive sign introduces ranch history at this site.

Horseback riding: The low-desert areas of the park lend themselves to horse travel, but the mountain trails are steep and rough. Horses are permitted only on designated horse trails. They are not permitted in McKittrick Canyon.

Sightseeing by car: U.S. 62-180 passes through the park, offering spectacular views of El Capitan, Guadalupe Peak, and the eastern and western escarpment. Scenic, historic Guadalupe Pass has picnic areas provided by the State of Texas. The National Park Service Frijole Information Station 1.6 kilometers (1 mile) east of Pine Springs is open daily.

CAMPING

Pine Springs campground is located 2 kilometers (1.5 miles) west of Frijole Information Station. Dog Canyon campground is located in the Dog Canyon area on the north side of the park and is accessible via N.M. Highway 137 north of Carlsbad, N.M. Both campgrounds are primitive and have chemical toilets, picnic tables, charcoal grills, and space for tent campers as well as recreational vehicles. No dumping area or hookups are available. Only Dog Canyon campground has drinking water; for Pine Springs campers, water is available at the Frijole Information Station. No fee to camp.

ACCOMMODATIONS

Overnight accommodations and food service facilities are available at cities some distance from the park: Carlsbad, N.M. (89 kilometers/55 miles); El Paso, Tex. (177 kilometers/110 miles); White's City, N.M. (55 kilometers/34 miles); Dell City, Tex. (71 kilometers/44 miles); and Van Horn, Tex. (105 kilometers/65 miles).

ADMINISTRATION

Guadalupe Mountains National Park is administered by the National Park Service, U.S. Department of the Interior. A superintendent, whose address is 3225 National Parks Highway, Carlsbad, NM 88220, is in immediate charge.

As the Nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering the wisest use of our land and water resources, protecting our fish and wildlife, preserving the environmental and cultural values of our national parks and historical places, and providing for the enjoyment of life through outdoor recreation. The Department assesses our energy and mineral resources and works to assure that their development is in the best interests of all our people. The Department also has a major responsibility for American Indian reservation communities and for people who live in Island Territories under U.S. administration.

National Park Service
U.S. DEPARTMENT OF THE INTERIOR

GPO: 1980-311-342/44
Reprint 1980