Discover the Wonders of the Chihuahuan Desert Above...

By Sharon Collyer

Separated only by the distance covered in a long day’s hike, two of our nation’s national parks perch side by side on the edge of a steep desert ridge overlooking the vast plains of West Texas and southeastern New Mexico. One of these parks is trademarked by Texas’s highest summit, the 8,751-foot Guadalupe Peak, a craggy sentinel towering above rolling mountain landscapes of ponderosa pine forest, deep canyons, and spring-fed crystalline streams. Further north on the tapering ridgeline, the other park extends over a sweeping panorama of sun-draped Chihuahuan Desert flora that overlays many miles of winding underground passageways, cool wet caverns, and surreal formations concealed from the above-ground eye. Two parks so logistically close, yet so characteristically dissimilar, that either offers experiences not found in the other. And yet, Guadalupe Mountains National Park and Carlsbad Caverns National Park are intricately linked by the resources they are commissioned to preserve and protect. Without one, we would find it difficult not to have the other.

Underlaid with limestone layers several thousand feet thick, both parks share the same geologic start. In the shallow, warm waters of an ancient Permian-era horseshoe-shaped sea, the exoskeletons of marine animals, and the silts carried by freshwater streams fused together and bonded by the layering of bodies, the pressure of decomposition, and slow passage of millions of years. After the shallow sea drained, continents drifted and uplifts thrusted sections of the reef skyward. Meanwhile, hydrogen sulfide from gas and oil deposits far below the surface combined with oxygen from the water table to create sulfuric acid, which very rapidly ate away at fissures and cracks within the extremely porous limestone reef. Cracks turned into caves as uplifts continued and the water table dropped further. Climates changed. Species evolved, went extinct, and then, about 200,000 years ago, humans appeared on Earth.

Today, even if the surface realm of the two parks appears distinctly dissimilar due to differences in elevation, rainfall, and vegetation, their innards are riddled and pockmarked by many caves formed by the same processes and at the same time. While Carlsbad Caverns National Park is internationally renowned for spectacular and easily-accessed subterranean features, Guadalupe Mountains National Park quietly protects its own share of the cave system and, although the cool pine forests and maple-shaded hiking trails atop the high peaks of the Guadalupe Mountains Carlsbad seem to have little in common with the exposed, weathered, and prickly environment of arid Carlsbad, both parks are prime stewards of the Northern Chihuahuan Desert ecosystem. Together, they extend protection to an enormous variety of Chihuahuan Desert plants and animals whose habitat falls between Carlsbad’s lowest above-ground point of 3,600 feet, and the very top of Guadalupe Peak.

However, federal protection of one of the most intact and diverse tracts of Chihuahuan Desert is only part of the Guadalupe-Carlsbad story. By preserving above ground resources from permanently damaging human impacts, the parks also protect the fragile underground cave system. Even within a hypothetically isolated subterranean environment where discernable change is measured in geologic time, environmentally damaging consequences stemming from surface-based human activities are a very real threat. Formations in the caves grow drop… by drop… by drop… from water... continues on p. 3.

...and Below
Greetings

WELCOME TO CARLSBAD Caverns and Guadalupe Moun-
tains National Parks. Carlsbad Caverns National Park, a World
Heritage Site since 1995, features a spectacular cave system of
decorated chambers. Guadalupe Mountains National Park protects
one of the world’s best examples of a fossil reef. Both parks are
located within the Chihuahuan Desert, a fascinating place to explore
desert life.

Our park staff are here to help make your visit a truly memorable
event and will be happy to help you plan your visit to areas within
and without the designated wilderness. Guided tours at Carlsbad
Caverns can enrich your park experience. These tours offer a variety
of caving experiences, from easy lantern tours to challenging trips
involving crawling and squeezing through tight passages.

Guadalupe Mountains National Park has over 80 miles of hiking
trails to explore, ranging from wheelchair accessible paths to strenu-
ous mountain hikes, including an 8.4 mile roundtrip hike to Texas’
highest mountain, Guadalupe Peak (8,751’).

Volunteerism Makes a Difference

WE WOULD LIKE TO EXTEND OUR SINCERE GRATITUDE TO
the dedicated effort and talent that volunteers have brought to Carls-
bad Caverns and Guadalupe Mountains National Parks. Volunteers
play a vital role in fulfilling our mission of preserving our natural
and cultural heritage and sharing that heritage with the visiting public.
Volunteers do everything from staffing the information desk, roving
interpretation, patrolling surface and cave trails, to trail mainte-
nance, research, cave restoration, and more.

Junior and Senior Ranger Programs

MANY NATIONAL PARKS ACROSS AMERICA OFFER A JUNIOR
Ranger program for children to encourage their interest in national
parks and to promote a sense of stewardship and ownership for
these special places that they come to visit. This self-paced educa-
tional program allows children to earn a badge and/or certificate
upon completion of required activities that teach them
about park resources. Age appropriate activities are included in the
Junior Ranger booklet, typically for pre-kindergarten through upper
elementary-aged children.

At Carlsbad Caverns, the Junior Ranger program offers activities that
 teach children about the resources both above ground and below
the surface (including plant and animal life of the desert, cave fea-
tures, and history of the park). Younger children have opportunities
to color and draw, find objects on a visual scavenger hunt, use their
senses to experience their surroundings, and complete games. Older
children will sequence events, complete word searches, and write
stories and poems. Each activity in the booklet is an optional activ-
ity depending on interest and age-level. The Junior Ranger booklet
is available at the visitor center information desk. Children of all ages may
participate and earn a badge or patch—it’s their choice. The program is
free.

At Guadalupe Mountains, children work through a separate activity
booklet and visit points of interest within the park. The booklet accommodates families of varying travel plans.

Traveling with a Pet?

On a warm day the temperature inside a car can kill a pet. Do not leave your pets unattended.

At Carlsbad Caverns National Park, pets are allowed on all paved roads, pullouts, and parking areas, along Walnut Canyon Desert Drive (Loop Road), on the paved Nature trail, and at Rattlesnake Springs picnic area. Pets must be kept on a leash at all times. Pets are not permitted in the cave or at the bat flight programs. However, service animals are allowed. During the day, your pet may be cared for at the concessions kennel for a $10.00 fee. Call 575-785-2232 for details. A citation will be issued if animals are left in vehicles when ambient air temperatures will reach 70° Fahrenheit (21°Celsius) or higher.

At Guadalupe Mountains National Park, pets are allowed only on the Frinsey trail, while on leash, but are not allowed on other trails, in the backcountry, in buildings, or at evening programs. Service ani-
mals are allowed. Both pets and service animals are permitted in the Pine Springs and Dog Canyon campgrounds. In any national park, your pet must be physically restrained at all times.

To become a Volunteer-In-Park (VIP) visit www.volunteer.gov or contact:
Carlsbad Caverns National Park
Maggi Duly, Volunteer-In-Park Coordinator
575-785-5312
Guadalupe Mountains National Park
Fermin Salas, Volunteer-In-Park Coordinator
915-828-3251 ext. 2311

Senior Ranger programs are a new development, currently available at limited locations, aimed at an audience that enjoys a challenge and wants to use an activity book to learn about the park and help plan their visit. Senior Ranger books are available at the Pine Springs Visitor Center, Dog Canyon Contact Station, and the Carlsbad Caverns Visitor Center for anyone 13 years and older. Activities include visiting sites, learning about the park’s history, geology, flora, and fauna. Upon completion, partici-
pants earn a patch and certificate.

The National Park Service also offers an online WebRanger program for those who are unable to visit a national park, featuring activities about sites found across the nation. The activities illustrate principles in natural science and American history in new ways. To learn more, visit www.nps.gov/webrangers.

www.meetup.com/Guadalupe-Mountains
@GuadalupeMtnsNP
www.facebook.com/Guadalupe.Mountains
www.nps.gov/gumo

As you travel and spend time in the area please remember to keep
safety in mind. Deer and other wildlife are plentiful—enjoy watching
wildlife, but remember they often move across roads, especially in
the evenings, be vigilant while driving during twilight hours. Hikers
should be prepared for rapidly changing weather conditions. Hikers
can become dehydrated in our dry climate, so carry plenty of water
(one gallon per person per day is recommended). Always check with
a ranger before venturing into the backcountry.

We are wholeheartedly committed to our mission of preserving and
providing for the enjoyment of our nation’s most outstanding trea-
sures. We wish you a rewarding experience in every way.

Douglas S. Neighbor
Superintendent
Carlsbad Caverns NP
Eric Brunnenmann
Superintendent
Guadalupe Mountains NP
Creepy Crawlies of the Chihuahuan Desert

By Kristin Nicole Johnson

A familiar sign at the entrance to all national parks and monuments reads, “No collecting or disturbing of any plants, animals, or minerals.” But wait a minute—any animals? Leave the bears, the bats, and the mountain lions alone, yes, but surely the centipedes, beetles, and spiders are fair game for the stomping?

Well, technically even the smallest and most annoying gnat is protected within the bounds of National Park Service (NPS) areas. The founding mandate of the NPS is to “conserve the scenery and the natural and historic objects and the wildlife therein” in an unimpaired state for the enjoyment of future generations. Thus, Carlsbad Caverns and Guadalupe Mountains National Parks provide protected habitat for all native wildlife, not just those of the cute and cuddly variety. This means the creepy crawlies interbreed with their desert sisters to protect, too—all 600+ of them.

And with good reason—as well as playing an important role in the ecosystem, some of the bugs here are just too cool to overlook! Take the desert centipede. It purportedly has 15 bodies, 15 pairs of legs, 15 eyes, and 15 tails! The tarantula hawk, for instance. It purports to lure out tarantulas they can use as a host for the wasp larvae before the tarantula hawk lays its eggs in the deluded tarantula. She will usually the victor due to the paralyzing sting. Although the tarantula hawk is just ⅔ to ¾ of an inch long, it is the most toxic insect in North America. But don’t worry; it’s not likely to sting you unless you dress up like a tarantula! The yellow jacket, for instance, can be quite long, but the tarantula hawk is a much more fearsome critter. It purports to be “a hardy, poisonous claw capable of lacerating and inflaming human flesh, and has venomous fangs strong enough to pierce through leather gloves. And if that weren’t enough, the centipede is scary fast. Its thick yellow legs can propel the centipede at speeds as high as two feet per second. They are long-lived creatures, as well. Some centipedes may live for several years.

If you are lucky, maybe you will come across a giant centipede on your visit today, perhaps it will be feasting on a dead bat or lizard. And while centipedes typically seek shelter during the daytime, it is not uncommon to see that occasional fast flash of black and red as they make a mad dash across the visitor center lobby. Just remember to give the centipede, the tarantula hawk, and all their buggy brethren wide berth. For not only are some invertebrates dangerous, they are also federally protected within park boundaries. The Guadalupe Tiger Beetle of the Guadalupe Mountains is even considered a species of concern by the US Fish and Wildlife Service. And because the threatened and endangered species listings are just now starting to include invertebrates around the world, it is only a matter of time before the overlooked critters crawling beneath the prickly pear are given more of the attention and respect they deserve.

By Dale Pate

Deadly Disease Continues to Kill Bats

BATS ARE IMPORTANT FOR ECO SYSTEMS ACROSS the country and the world. They are excellent pollinators and eat millions of tons of insects nightly. Some of these insects are pests of food crops. A study completed in the 1990’s on the Brazilian (Mexican) Free-tailed bats from Carlsbad Cavern shows that 40 percent of the insects devoured by these bats are crop pests taken along the farmlands of the nearby Pecos River. Bats are important.

Unfortunately, beginning in the winter of 2006-2007 in caves near Albany, New York, a new and very deadly disease began to decimate bats that hibernate. Bat deaths were immediately associated with a white fungus growing around noses, ears, and on wing membranes. This condition was later named “White-nose Syndrome” (WNS).

Since 2006, over five million bats have been killed by this disease and as of this summer, WNS has been detected in nine species of bats that hibernate. Death rates of various colonies have been from 90 percent to 100 percent of all bats in that particular colony. An additional concern is that WNS is spreading rapidly. It is now found in caves and mines in 14 states. The most recent occurrence of WNS was found in a cave in western Oklahoma.

There are lots of unknowns concerning WNS. At this time, it does not appear to be affecting summer bat colonies such as Brazilian Free-tailed bats for which Carlsbad Cavern is famous. We must all be vigilant. While it is known that transmission of the fungus is mostly from bat-to-bat, it may also be possible for humans to transport fungus spores on clothing, gear, shoes, or skin.

In an effort to slow down the spread of fungus and give bat scientists more time to look for a solution to this serious problem, Carlsbad Caverns National Park is asking visitors to follow a few simple steps when visiting the cave. It is not necessary to cover the den back up again. When the eggs hatch into larvae, the defeated tarantula will be their first meal.

Another icon of the Southwest is the giant desert centipede. It is an arthropod you don’t want to mess with around. It can reach lengths of eight to ten inches, has sharp, poisonous claws capable of lacerating and inflaming human flesh, and has venomous fangs strong enough to pierce through leather gloves. And if that weren’t enough, the centipede is scary fast. Its thick yellow legs can propel the centipede at speeds as high as two feet per second. They are long-lived creatures, as well. Some centipedes may live for several years.

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There is no entrance fee for those who own any of the following passes (up to three individuals plus the cardholder): The Annual Pass, Annual Pass (Military), Senior Pass, Access Pass (all three are part of the America the Beautiful—National Parks & Federal Recreation Land’s Pass), Golden Age Passport and Golden Access Passport all cover the basic entrance fee. Pass holders must still obtain entry tickets. Entrance fee applies to self-guided tours. Guided tours require an additional fee. All fees and tours are subject to change.

Reservations
We recommend that you make reservations for guided tours at least six weeks in advance. Some tours fill quickly. Reservations are not necessary for self-guided tours. To make reservations call the National Park Reservation System at 877-444-6777 or visit www.recreation.gov

Reserved tickets must be picked up no later than 10 minutes prior to the posted tour starting time. Tickets will not be issued if within 10 minutes of the start of any tour. No refunds for late arrivals.

Have a Safe Tour
Cave temperature is 56°F (13°C) year-round. A light jacket or sweater and good walking shoes are recommended. Do not wear sandals. For your safety:

• Stay on the paved trail.
• Supervise children closely; children under 16 must remain with an adult at all times.
• Ask park rangers for help.
• Take prescribed medications with you.
• High humidity in the cave can affect your respiratory system; bring your inhaler just in case.
• If you are diabetic, be sure you have eaten enough calories.
• If you have an infant with you, child-carrying backpacks are recommended. Strollers are not allowed.
• Leave your pet at the kennel, not in the cave.

Protect the Cave
• Never touch, tap or handle the cave formations; the oils on your skin damage the formations.
• Never take gum, tobacco, food, or drinks into the cave.
• Never throw coins or other objects into the pools.

Photography
Photography is permitted on most tours; however, please use proper etiquettes. Wear those around you before you flash, and do not use the rocks as your personal tripod. Photography is permitted on most tours; however, please use proper etiquette. Warn those around you before you flash, and do not use the rocks as your personal tripod.

NATURAL ENTRANCE SELF-GUIDED ROUTE
Length: 1.25 miles, 1 hour Fee: Entrance Fee
This hike is similar to walking into a steep canyon (a descent of about 800 feet in one mile). It is recommended only for those physically fit and healthy; sturdy footwear required. Highlights include the Natural Entrance, Devil’s Spring, Whale’s Mouth, and Iceberg Rock.

LEFT-HAND TUNNEL
Fee: Entrance Fee and $7.00 Tour Ticket
A self-guided tour through the cave’s Left Hand Tunnel is midway to the underground entrance. This hike is moderately strenuous; this is a historic candle-lit lantern tour through an undeveloped section of the cave on unpaved trail. The dirt trail winds over uneven surfaces with some steep, slippery slopes. Careful footing is required to navigate on steep, slippery slopes, around cave pools and fragile formations. Not recommended for anyone who has difficulty seeing in dim light or candle-light conditions. Lanterns are provided. Sturdy closed-toed shoes or hiking boots required. No backpacks. Tour departs from the visitor center.

LOWEER CAVE
Fee: Entrance Fee and $20.00 Tour Ticket
This tour was postponed until Spring 2015. Strenuous. Highlights include the Devil’s Bookshelf. The tour is suitable for anyone with a fear of enclosed spaces, heights, or darkness. Tours depart from the upper entrance.

HALL OF THE WHITE GIANT
Fee: Entrance Fee and $20.00 Tour Ticket
This tour was postponed until Spring 2015. Extremely strenuous. Participants navigate ladders, ropes, and slippery surfaces. Sturdy, closed-toed shoes or hiking boots required. Helmets and headlamps provided. Backbacks not allowed. Tours depart from the visitor center.

Slaughter Canyon Cave
Fee: $15.00 Tour Ticket
This tour was postponed until Spring 2015. Strenuous. Tours meet at the visitor center. Participants will then travel to the cave site. Participants must hike a steep, rocky, and uneven 1/4 mile trail with 300’ elevation gain to the cave entrance. Bring water and sunscreen for the hike. The tour is strenuous, muddy, and requires an ascent of a 15° slope using a knotted rope. Must wear sturdy, closed-toed hiking boots or shoes. Participants must bring three AA batteries. Helmets and headlamps are provided. Carry water—weather may be very hot in summer and very cold in winter. Stay on the trail and wear sturdy hiking shoes.

BIG ROOM SELF-GUIDED ROUTE
Length: 1.25 miles, 1 1/2 hours Fee: Entrance Fee
Descend by elevator to start the tour in the Underground Rest Area. The non-skid trail is paved and mostly level, although there are a couple of short, steep hills. All visitors to Carlsbad Cavern should experience this tour. Highlights include the Lion’s Tail, Hall of Giants, Bottorneless Pit, and Rock of Ages. One or more trails can be navigated by wheelchair, with assistance. The park does not provide wheelchairs. This trail can also be accessed after hiking the 1.25-mile Natural Entrance Self-Guided Route.

SPIDER CAVE
Fee: $20.00 Tour Ticket
Extremely strenuous. Participants navigate slippery surfaces, bellycrawl for extended periods of time, and free climb rock chimneys. Not recommended for anyone with a fear of enclosed spaces or heights. Tours depart from the visitor center.

KING’S PALACE GUIDED TOUR
Length: 1 mile, 1 hour Fee: Entrance Fee and $8.00 Tour Ticket
(Minimum of 1 adult with a Senior Pass or Access Pass cardholder required) Moderately strenuous. There is a steep 80° hill you must go down initially and then back up at the end of the tour. Walk through four naturally-decorated chambers with a variety of cave formations by descending to the deepest portion of the cavern open to the public. Rangers briefly turn off all lights to reveal the natural darkness of the cave. The trail is paved. Sturdy walking shoes required. Light jacket recommended. Tours depart from the Underground Rest Area.

Photography
Photography is permitted on most tours; however, please use proper etiquettes. Wear those around you before you flash, and do not use the rocks as your personal tripod. For safety reasons, tripods are not allowed on any guided tours. Tripods are allowed in the Big Room, Main Corridor, or Natural Entrance. Video cameras are permitted on the Big Room, Natural Entrance, and King’s Palace tours. Please use caution and do not use the ultra-bright lights available on some cameras. Photography is not allowed at the Bat Flight Program offered from mid-May to mid-October.
For Reservations call 877-444-6777 or TDD 1-877-833-6777

<table>
<thead>
<tr>
<th>Tour</th>
<th>Trail Surface</th>
<th>Tour Dates and Times</th>
<th>Adult Fee</th>
<th>Age Limit</th>
<th>Tour Length</th>
<th>Group Size</th>
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<tbody>
<tr>
<td>Kings Palace</td>
<td>Fenced Trail, Hill must be climbed on return trip</td>
<td>March 1 - July 2 Daily: 10:30 a.m. - 3 p.m. Additional 1:30 p.m. tour on Sur/Thu/Fri/Sat. July 4 - August 9 Daily: 9 a.m. - 10:30 a.m., noon, 1-3 p.m., 3-9 p.m.</td>
<td>$8</td>
<td>4</td>
<td>1.5 hours</td>
<td>55</td>
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<tr>
<td>Left Hand Tunnel</td>
<td>Unleven dirt trail and slippery slopes</td>
<td>May 22 - August 9 MWTh: 1:30 p.m.</td>
<td>$7.00 and General Admission Ticket ($3.50 ages 6-15, Senior Pass and Access Pass holders)</td>
<td>6</td>
<td>2 hours</td>
<td>15</td>
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<tr>
<td>Lower Cave</td>
<td>Must negotiate fifty feet of ladders, low light, and slippery dirt trails. Might get dirty.</td>
<td>May 22 - August 9 Sur/Thu/Sat: 8:30 a.m.</td>
<td>$20.00 and General Admission Ticket ($10.00 ages 12-15, Senior Pass and Access Pass holders)</td>
<td>12</td>
<td>3 hours</td>
<td>12</td>
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<tr>
<td>Slaughter Canyon Cave</td>
<td>Stereuous climb required to reach cave entrance. Trail in cave is slippery, uneven and rocky.</td>
<td>May 22 - August 9 Friday, 8:30 a.m.</td>
<td>$15.00 ($7.50 ages 8-15, Senior Pass, and Access Pass holders)</td>
<td>8</td>
<td>5.5 hours</td>
<td>20</td>
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<td>Wild Cavins—caving gear provided</td>
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**Surface Activities**

**SERVICES**

Facilities include a visitor center, exhibits, bookstore, restaurant, gift shop and kennel service. Ranger programs are offered daily. Other activities include:

**NATURE TRAIL**

This one-mile paved, partially wheelchair accessible trail begins near the visitor center and highlights desert plants.

**SCENIC DRIVE**

A one-hour drive through the Chihuahuan Desert, this 4.5-mile gravel road is suitable for high clearance vehicles. Brochures are available for 50 cents. The scenic drive is open 8:00 a.m. to 6:30 p.m. mid-May to mid-October. It is open 8:00 a.m. to 4:30 p.m. mid-October to mid-May. These hours are subject to change.

**RATTLESNAKE SPRINGS**

This historic oasis includes a picnic area, shade trees, restrooms and excellent bird watching. Located 3.4 miles south of White’s City on Highway 62/180, then 2.5 miles west on County Road 48. Day use only.

**HIKING & CAMPING**

The park’s wilderness offers day hikes and backcountry camping (permit required). Rangers at the visitor center can provide free permits, trail and weather information, and backcountry camping tips. The bookstore sells topographic maps, which are considered essential for desert hiking.

**NIGHT PROGRAMS**

This summer Carlsbad Caverns National Park will be hosting several night sky events. Weather permitting, telescopes will be available for viewing the celestial night sky and will provide an opportunity for visitors to see for themselves what spectacular views are available in the universe above. Rangers will be available to discuss a variety of topics from nocturnal creatures, cultural folklore and astronomy.

These events will be held immediately after Bat Flight, so please join us in the East parking lot in front of the visitor center (parking limited to the West lot). The visitor center and cave will not be open during these events. No fee or advance reservations are necessary for star parties.

**FULL MOON AND DARK SKY WALKS**

Full moon and Dark Sky Wilderness Walks will be limited to 50 vehicles (first-come, first-served). Tickets will be available at that evening’s Bat Flight program. Junior Ranger hikes will lead up to 15 kids, ages 8-12. Please register at the information desk in the visitor center on the day of the program. Bring a red- or blue-filtered flashlight, wear closed-toed shoes, and dress for the weather. Bring a snack and water. For the Dark Sky walks bring a blanket or lightweight chair. Programs may be cancelled due to inclement weather.

**BAT FLIGHT PROGRAMS (MAY-OCTOBER)**

A few hundred thousand bats fly from Carlsbad Cavern each evening from mid-May until the bats migrate to Mexico some time in mid-October. The ranger program generally begins each evening 30 to 60 minutes before sunset at the park amphitheater, though weather and lightning can cause cancellation of the program. Check at the visitor center for the exact time the program starts or call 575-785-3012. Cameras are not allowed. The lights and high frequency sounds made by the cam- eras disturb the bats. This rule is strictly enforced.

**2015 STAR PARTY DATES**

JUNE 13, JUNE 19, JULY 18, AUGUST 15, SEPTEMBER 12, OCTOBER 1

**DARK SKY WILDERNESS WALKS**

JULY 15, AUGUST 14

**FULL MOON WILDERNESS WALKS**

JULY 2, JULY 31, AUGUST 29

**JR. RANGER NIGHT EXPLORER HIKES**

JUNE 5, JULY 3, JULY 5

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**America the Beautiful—The National Parks & Federal Recreational Lands Pass**

**ANNUAL PASS**

The annual pass sells for $80.00 and is good for one year from date of purchase. The pass covers entrance fees at National Park Service and U.S. Fish & Wildlife sites and standard amenity fees at Bureau of Land Management, Bureau of Reclamation and U.S. Forest Service sites. The pass can be purchased at federal recreation sites that charge entrance or standard amenity fees.

**ANNUAL PASS—MILITARY**

The Military annual pass is free to U.S. Military members with a current CAC card, and their dependents with ID card Form 1173. The card is good for the calendar year from the date it is obtained. The pass can be obtained at federal recreation sites that charge entrance or standard amenity fees.

**SENIOR PASS**

The Senior Pass sells for $10.00 and is good for life. Any U.S. citizen or permanent resident of the United States 62 years or older may purchase the Senior Pass. It covers the entrance fees to National Park Service and U.S. Fish & Wildlife sites and standard amenity fees at Bureau of Land Management, Bureau of Reclamation, and U.S. Forest Service sites. The pass can be obtained at federal recreation sites that charge entrance or standard amenity fees.

**ACCESS PASS**

The Access Pass is available for free to any U.S. citizen or permanent resident of any age that has been medically determined to have a permanent disability. The Access Pass covers the entrance fees to National Park Service and U.S. Fish & Wildlife sites and standard amenity fees at Bureau of Land Management, Bureau of Reclamation, and U.S. Forest Service Sites. Some camping and guided tour fees are discounted 50% for cardholders. The pass can be purchased at federal recreation sites that charge entrance or standard amenity fees.

**GUADALUPE MOUNTAINS NP ANNUAL PASS**

Guadalupe Mountains National Park offers an annual pass for $20.00 for visitors who plan on visiting the park more than once a year, but may not visit other federal park areas.

The pass covers entrance fees and is good for 3 individuals plus the cardholder (persons 15 years and younger are free if without the Guadalupe Mountains NP Annual Pass). The pass is available for purchase at the park at the Pine Springs Visitor Center.
Guadalupe Mountains National Park

SERVICES
Facilities and services within and near Guadalupe Mountains National Park are extremely limited. The nearest gas stations are 43 miles west (Dell City, TX), 35 miles east (White’s City, NM), or 65 miles south (Van Horn, TX). There is no campground; bring everything you need with you.

INFORMATION & EXHIBITS
Pine Springs Visitor Center
Elevation 5,730'. On Highway 62/180, 35 miles southwest of Carlsbad, 10 miles east of El Paso, and 65 miles north of Van Horn on Highway 54 and Highway 62/180. Open every day except December 25. Open daily 8 a.m. to 4:30 p.m. (Mountain Time Zone). Information, natural history exhibits, introductory slide program.

Frijole Ranch History Museum
The ranch house features exhibits describing historic and current use of the Guadalupe. Grounds include a picnic area near a spring shaded by large oak trees. Open intermittently.

McKittrick Canyon
Highway entrance gate is open 8:00 a.m. to 4:30 p.m. Mountain Standard Time. During Daylight Savings Time, hours are expanded to 8:00 a.m. to 6:00 p.m. Restrooms, outdoor exhibits, slide program, picnic tables.

HIKING

Pinery Trail
Distance: 6.7 miles
Difficulty: Easy. Wheelchair accessible, slight incline on return trip.
Discover the desert as you walk to the ruin of the Pinery, a stagecoach station on the Butterfield Overland Mail Route in 1858. Trailside exhibits. This is the only trail pets on leases are allowed.

McKittrick Canyon Trail
Distance: to Pratt Cabin 4.8 miles roundtrip
Difficulty: Moderate. Level but rocky trail, 200' elevation gain to Grotto.

Follow an intermittent stream through the desert and canyon woodlands to the historic Pratt Cabin. A guidebook is available at the trailhead. The Grotto Picnic Area and Hunter Line Cabin are one mile beyond the Pratt Cabin. Please do not drink the water or wade in the creek. To protect this fragile environment, you are required to stay on the trail.

Guadalupe Peak Trail
Distance: 8.4 miles
Difficulty: Strenuous. Approximately 3,000' elevation gain, steep, rocky path.
Hike to the “Top of Texas” at 8,758' for spectacular views. Avoid the peak during high winds and thunderstorms. During warm temperatures, carry a gallon of water per person.

CAMPING

Water and restrooms are available, but there are no showers, RV hookups, or dump stations. The fee is $8.00 per night, per site, $4.00 with a Senior Pass (exhibiting Golden Age Passport) or Access Pass (or exhibiting Golden Access Passport). No wood or charcoal fires are permitted; camp stoves are allowed.

Pine Springs Campground
Located near the Pine Springs Visitor Center, there are twenty tent and nineteen RV campsites (including a wheelchair accessible tent site) available on a first-come, first-served basis. Two group campsites are available for groups of 10-20 people. Reservations (for group sites only) can be made by phoning 950-832-1224 up to two months in advance. Campers planning on day hiking in McKittrick Canyon, to Guadalupe Peak or the Bowl will want to stay here.

Dog Canyon Campground
Located at the end of New Mexico Highway 137, 70 miles from Carlsbad and 10 miles from Park Headquarters, at an elevation of 6,290' in a secluded, forested canyon on the north side of the park. The campground has nine tent and four RV campsites (including a wheelchair accessible tent site). There is one group site for groups of 10-20 people. Reservations for the group site only can be made up to two months in advance by calling 950-838-3529 x2242.

BACKPACKING

Eighty-five miles of trails lead through forests, canyons, and desert to ten backcountry campsgrounds. A free permit is required if you plan to spend a night in the backcountry. Permits are issued at the Pine Springs Visitor Center and the Dog Canyon Ranger Station. For those coming through Carlsbad, Dog Canyon is a great place to begin a backpacking trip because it requires less elevation gain to get into the backcountry.

Wood and charcoal fires are prohibited. Camp stoves are allowed. Pack out all your trash. Pets are not allowed on park trails.

Preparation is the key to an enjoyable backpacking trip. Be prepared for changing weather conditions. Carry plenty of water—there are no water sources in the backcountry. Topographic maps, hikers’ guides, and information can be found at the Pine Springs Visitor Center and the Dog Canyon Ranger Station.

HORSEBACK RIDING

Sixty percent of the park’s trails are open to pack use. A backcountry permit is required for all stock use. These free permits are issued at the Pine Springs Visitor Center and Dog Canyon Ranger Station. Stock riding is limited to day trips only.

Stock corrals are available at Dog Canyon and near Frijole-Rio. Each has four pens and will accommodate a maximum of 10 animals. Reservations may be made two months in advance by calling 950-838-3523 ext. 2242.

Other popular hikes...

<table>
<thead>
<tr>
<th>Trailhead Trail</th>
<th>Distance</th>
<th>Description</th>
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<tbody>
<tr>
<td>Pine Springs Devil's Hall Trail 4.2 miles Moderate. Hike in Pine Spring Canyon to the Hills’ Staircase and Devil’s Hall. After the first mile, the trail drops into the wash and becomes very rocky and uneven. Turn left and follow the canyon bottom to the Hills’ Staircase and a beyond to the Devil’s Hall. Area beyond Devil’s Hall closed March – August due to sensitive species.</td>
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<td>The Bowl 8.5 miles Strenuous. The bowl shelters a highcountry conifer forest. Recommended route: Tejas Trail to Pine Top, Bowl Trail to Hunter Peak, Bear Canyon Trail, Frijole Trail back to campground. Trail climbs 2,500’. Bear Canyon Trail is very rocky and extremely steep.</td>
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<tr>
<td>El Capitan Trail 11.3 miles Moderate. Desert lovers will appreciate the rocky arroyos and open vistas while skirting along the base of El Capitan. Recommended route: El Capitan Trail, Salt Basin Overlook, and return to Pine Springs on the El Capitan Trail.</td>
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<td>Frijole Ranch Manzanita Spring 4 miles Easy. Path is paved and wheelchair accessible. A small pond to see that serves a desert oasis. Dragonflies, butterflies, and birds are active here in the warmer months. During winter, bluebirds frequent the area. Opportunities for chasing other wildlife are high here as well.</td>
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<tr>
<td>Smith Spring Trail (entire loop) 2.3 miles Moderate. Lace for birds, deer and elk as you pass Manzanita Spring on the way to the shady oasis of Smith Spring. Trees around Smith Spring include madrones, maples, oaks, chokecherry, ponderosa pines and others.</td>
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<td>McKittrick Canyon McKittrick Nature Loop 0.9 miles Moderate. Climb the foothills and learn about the natural history of the Chihuahuan Desert. Trailside exhibits.</td>
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<td>Permian Reef Trail 8.4 miles Strenuous. For serious geology buffs, this trail has stop markers that can be used with a geology guidebook sold at the Visitor Center. There are excellent views into McKittrick Canyon from the ridgeline. Trail climbs 2,000’.</td>
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<tr>
<td>Dog Canyon Indian Meadow Nature Loop 0.6 miles Easy. Enjoy a stroll around a meadow frequented by a variety of birds and other wildlife. Along the way you will see evidence of recent fires and regrowth.</td>
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<tr>
<td>Marcus Overlook 4.6 miles Moderate. Follow the Bush Mountain Trail to the ridgeline for a view into West Dog Canyon. Trail climbs 800’.</td>
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<tr>
<td>Lost Peak 6.4 miles Strenuous. Climb out of Dog Canyon on the Tejas Trail to visit the conifer forest above. Outstanding views from Lost Peak. The bowl is a short distance off trail to the right, before the wash near the summit. Trail climbs 1,500’.</td>
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<tr>
<td>Salt Basin Dunes (Day Use Only) 3.4 miles Moderate. Follow the old roadbed from the parking area, for a little over a mile, to the north end of the dunes field. There is one high dune to ascend that some may find difficult. Enjoy the contrast of the pure white dunes with the sheer cliffs of the the Guadalupe as a backdrop. Great for sunrise or sunset hikes all year, and daytime hikes during the winter.</td>
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Artificial Light Imperils the Night Sky

By Michael Haynie

One of the rewards of camping in wilderness is the view of the night sky. Away from city lights and with clear skies more common than not, Carlsbad Caverns and Guadalupe Mountains National Parks offer some of the best star-viewing in the country. Many seek out the natural dark found in national parks to rekindle their sense of wonder over the natural world. A canopy of stars stretching from horizon to horizon will often be the natural phenomenon that impresses even the most jaded among us. Looking heavenward, who cannot wonder how it all got here or be awed by the vastness of the night sky.

Our ancestors looked at the stars and planets above and were filled with wonder too. Amidst the chaos and confusion in the struggle for survival, they were able to detect a recurring order to mark time and anticipate seasonal changes. The timing of planting and harvest by agriculturalists as well as the timing of movements by nomadic hunters were encoded with the apparent movement patterns of stars. Across the globe, many cultures recognize the same constellations by different names. Often, they were a visible reminder of the stories of their culture’s heroes and monsters and the dwelling place of their gods and goddesses.

The ancient Greeks included the seven stars (one star is actually several) that make up the Big Dipper within the constellation, Ursa Major, the Great Bear. American Indians in eastern North America also saw the representation of a bear. The Mescalero Apache referred to the grouping as nahakus, a word with no easy English equivalent. It does not describe a bear or a dipper as in other cultures, but refers to something that spins around itself. Two of the stars of the dipper point to the North Star, or Polaris, and appear to rotate around it as the night progresses. The apparent movement of what resembles the handle of the Big Dipper moves 15 degrees (about the width of your fist held at arm’s length) every hour. Humans can detect 5 degrees of movement, so tracking position changes can also reveal half hour increments of time. Not only does this grouping point north, it also acts as a celestial time piece.

The stars that can be found in the Big Dipper can also reveal both how acute your vision is and the quality of the night sky itself. The second star of the handle on clear nights in areas with excellent night skies resolves into two separate lights. Associated with the Big Dipper is another grouping called the Little Dipper, part of the constellation Ursa Minor, the Little Bear. Much fainter, these stars can only be seen in pristine night skies.

Visitors to Carlsbad Caverns and Guadalupe Mountains National Parks can see over 3,000 stars and the Milky Way on most nights, but that may change if current trends continue. Light pollution is steadily increasing. Light pollution began when it was realized that it is beginning to impact their normally pristine views of the heavens’ nocturnal splendor. Light pollution is unwanted light that both impacts pristine night skies by the light domes it adds to the horizon and the diffused light overhead that removes the detectability of faint stars and galaxies. In recognition of the value of the night sky as a scenic, cultural, and natural resource, the National Park Service (NPS) is acting now to prevent this from happening to the spectacular array of stars and galaxies that adorn the night sky. Part of the overall effort to protect the night sky is to examine the parks’ operations to ensure that light is used only when needed and to minimize the amount of artificial light used by installing or retrofitting fixtures that aim light down only and not to the side which creates glare, or up, which causes light pollution. Because these lights use less energy, there ultimately will be cost savings, although initial installation may be more expensive than lights commonly available.

A key part of the NPS’s efforts to protect this resource is played by a team of scientists, called the Night Sky Team, which began an inventory and monitoring project in 1999. Sites range across the West from Yellow- stone to Yosemite and now include Carlsbad Caverns and Guadalupe Mountains National Parks. In an effort to determine night sky quality, the Night Sky Team uses calibrated equipment and computer programs to gather and analyze data that can be compared across sites. The equipment used is similar to a research-grade digital camera connected to a laptop computer. Scanning the horizon over a period of 1-6 hours and examining the sky overhead allows researchers to diagram the sources and extent of light pollution. Several nights of monitoring are required to generate enough data and account for variables that can affect night sky quality such as humidity, cloudiness, zodiacal glow, wind-blasted dust, air pollution and lights being turned on and off at different times of night. As funding allows, some sites will become monitoring sites, where conditions are regularly observed to detect any changes in night sky quality and allow the park’s managers to make science-based decisions.

Light from as far as Las Vegas and even Los Angeles can be seen in Death Valley National Park. Locally, light from towns in New Mexico, (Carlsbad, Artesia, and Roswell) and in Texas (El Paso, Dell City, Van Horn) was detectable at Carlsbad Caverns and Guadalupe Mountains National Parks’ horizons. Fortunately, overhead night sky quality was still nearly pristine. This summer at Guadalupe Mountains National Park, an intern hired specifically to monitor the night sky will create a report on the current conditions of the night sky and the concerns about future impacts.

As populated areas grow and we search for the answers on how to manage the effects of that growth on the natural world, we will find that when it comes to the night sky, the solution may be as simple as the flip of a switch. It is not a choice between light and dark, but one of choosing to protect both. We can have security with nighttime light- ing and protect the night sky at the same time. We will save money and energy in the meanwhile.

As we move forward into the 21st century, the world’s problems can seem intractable at times, but there is hope with protecting at least one aspect of the Earth’s beauty, the night sky. In areas where the night sky has been impacted, it can be reclaimed, and in areas where it still remains pristine, it can be protected with newer technology available today. All generations hope the following ones will have it better than they did. When we make a promise to the children of today and tomorrow, let’s promise them the moon and the stars.

HIKING IN MOUNTAIN LION COUNTRY

With their large size and very long tails, mountain lions are unmistakable. Adult males may be more than eight feet in length and weigh an average of 250 pounds. Adult females may be up to seven feet long and weigh an average of 90 pounds. Their tracks show four toes with three distinct lobes present at the base of the pad, which is generally greater than 1.5 inches wide. Claw marks are usually not visible, since their claws are retractable.

When you hike in Mountain Lion Country:

Travel in groups. Lions may key in on easy prey, like small children. Make sure children are close to you, and within your sight, at all times—do not let children run ahead of adults. Talk with children about lions and teach them what to do if they meet one.

If a Lion is sighted, there are three things to remember: Do not approach a lion, especially one that is feeding or with kittens. Most mountain lions will try to avoid confrontation. Give them a way to escape. Stay calm, speak calmly, yet firmly. Move slowly. Avoid prolonged eye contact.

Face the lion and stay upright. Do all you can to appear larger. Raise your arms, or open your jacket. Protect small children by picking them up so they won’t panic and run. Back away slowly, if you can do it safely. Do not run! Running may stimulate a lion’s instinct to chase and attack.

If the lion behaves aggressively, throw stones, branches, or whatever you can get your hands on without crouching down or turning your back. Wave your arms slowly and speak firmly.

Light from a lion attacks you. People have fought back successfully with rocks, sticks, jackets, and their bare hands. Protect your head and neck with your arms. Remain standing or try to get back up.
Come face to face with a mountain lion at this unique zoo and botanical garden offering an opportunity to experience the Chihuahuan Desert first-hand. See a large collection of live animals, including the rare Mexican gray wolf, and the roadrunner, the state bird of New Mexico. There is also an unusual collection of cacti and other succulents from around the world.

The park is located high atop the Ocotillo Hills overlooking the northwest edge of Carlsbad, just off U.S. Highway 845, and features exhibits, an art gallery, gift shop, and refreshments.

Open all year—24 hours/day. Wheelchair accessible.

Fees
Day Use Only—$5.00 per vehicle
Camping—$14.00 per night ($10.00 for each additional vehicle driven into the same site)
Primitive Camping Area—$8.00 per vehicle per night.

La Cueva Non-Motorized Trail System
The trail system covers approximately 2,200 acres and contains more than 15 miles of maintained trails. The non-motorized trails are used by mountain bikers, hikers, and equestrians. The trails wind through the rolling limestone foothills of the Guadalupe Mountains and the rugged Chihuahuan Desert environment.

The area is located partially within the city limits of Carlsbad, NM. From Lea Street, go west to Standpipe Rd. Turn south and travel 3 miles to the gravel access road. Turn right and travel approximately 0.3 miles to the trailhead and parking area. There are no facilities other than the parking area and trail signs.

Open daily except December 25. Wheelchair accessible.

Summer Hours
(Memorial Day to Labor Day)
8:00 a.m. to 5:00 p.m.
Last tour entry—3:30 p.m.

Winter Hours (after Labor Day)
9:00 a.m. to 5:00 p.m.
Last tour entry—3:30 p.m.

Fees
Ages 13 and up $5.00
Children 7 - 12 $3.00
Children 6 and under free
Group (20+) discount available.