

The Bristlecone

National Park Service
U.S. Department of the Interior



The official newspaper of Great Basin National Park
Summer 2009 - Spring 2010

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Great Basin National Park
National Park Service
U.S. Department of the Interior

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Lehman Caves Advance Ticket Sales
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For Employment with the NPS or
other federal agencies, go to
www.usajobs.opm.gov.

Note:
Cell phone reception is
not reliable in the park and
surrounding areas.

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

Welcome to Great Basin National Park!

If this is your first visit to the area, you are in for a wonderful experience filled with discoveries and memories that could last a lifetime. And if you are returning, you already know why this is such a special place. Maybe it is the cool mountain streams hiding cutthroat trout, the starry nights with a moon so bright it hurts your eyes, the absolute darkness and quiet of a cave, the chance to imagine how earlier residents made a living from this seemingly unforgiving landscape or just some other aspect that only Great Basin National Park offers.

As the Superintendent of the park, I am proud to share all of this with our visitors. There is something for everybody here. Our two visitor centers may educate and inspire, the campgrounds might provide the surroundings for needed relaxation, while the trails present a challenge for every level of hiking experience. The park staff is top notch and you will see their pride and workmanship, often in the small details. Don't be afraid to ask questions. If you need help, they are also ready to assist you. BUT, please be safe in everything you do here. The opportunities to get out into nature's playground may involve unfamiliar and unknown situations. Enjoy the experience, but plan ahead and use good judgment. It can be a long way and take a long time to bring help.

You will want to plan a visit to Lehman Caves and see what has attracted visitors to these underground wonders since the 1880's. Maybe a

campfire program is something you would enjoy as you consider the next day's hike among 5,000 year old bristlecone pine trees. Do not miss seeing the Great Basin stained glass panorama or the newest exhibits at the Great Basin Visitor Center in Baker. Leave the wildflowers where you find them, but if you are lucky, taste how good a fresh-caught trout can be! Maybe you will happen upon some deer in our historic orchard or view desert bighorn sheep in the distance during your stay. Visit a limestone formation as tall as a six story building, known as Lexington Arch, or the rock glacier below Wheeler Peak. There is so much to see and experience.

Finally, let me thank you for coming. Thank you for traveling so far off the beaten path. We hope that through your park experience that you have come to better understand this part of our heritage as Americans. Great Basin National Park is charged with protecting this spectacular mountain range and with telling the natural and cultural stories of this whole region. We have succeeded if our visitors take away a new appreciation and a greater sense of ownership for the resources under all of our care. And we have really succeeded when you tell your friends, "Great Basin is my favorite park!"

Sincerely,

Andy Ferguson

Superintendent



The Great Basin is a spectacular example of America's vastness and spirit. Great Basin National Park preserves an outstanding piece of this region and is a place you can experience the fascinating resources of this area. The park provides an abundance of natural features and history for all to enjoy. From the depths of Lehman Caves to 13,063 foot Wheeler Peak, from the natural landscape that includes ancient bristlecone pines, streams and lakes to the abundant wildlife including cougars, badgers, mule deer, coyotes, and eagles, Great Basin National Park is yours to discover.

Park Facilities

Lehman Caves Visitor Center

The Lehman Caves Visitor Center is located at the end of the main park entrance road (Hwy 488). The visitor center and Lehman Caves are open every day of the year except Thanksgiving Day, Christmas Day, and New Year's Day. The self-guided Mountain View Nature Trail begins at the visitor center. Restrooms, drinking water, and a pay phone are also available. Adjacent to the visitor center, Lehman Caves Gift and Cafe is open in the summer 8:00 a.m. to 5:00 p.m. (Pacific Time).

Great Basin Visitor Center

The Great Basin Visitor Center, located just north of the town of Baker opened in May 2005 and provides information on the Park and the Great Basin region. Exhibits funded through donations raised by the Great Basin National Park Foundation tell the geological, biological, and cultural stories of the Great Basin. A panoramic stained glass window graces the lobby, courtesy of the 2008 Artist in Residence, Kay Malouff. Open in summer 8:00 a.m. - 5:30 p.m. (Pacific Time); call for winter hours.

Western National Parks Association Bookstores

Western National Parks Association operates two bookstores in the park, one at each visitor center. Both stores offer a wide range of titles on the natural and cultural resources of the region.

Picnic Areas

The park has several developed picnic areas. The first is located near the Lehman Caves Visitor Center parking lot. It has several accessible tables and fire grills. Restrooms and water are available in the summer. Upper Lehman Creek Campground has several picnicking possibilities, including an area near the host site and tables near the amphitheater that are available for groups through a special use permit (775-234-7331, ext. 213). The newest park picnic area and restroom facilities are located at the Pole Canyon trailhead.

RV Dump Station

The RV dump station, potable water, and trash receptacles are located approximately one half mile inside the park on the entrance road (Hwy 488). Summer only; \$5.00 fee applies, no discounts.

Campgrounds

Great Basin National Park has four developed campgrounds with vault toilets, picnic tables, tent pads, and campfire grills. There are no hookups or leveled parking sites. Lower Lehman Creek Campground is open year-round. Water is available in the summer at the campgrounds, or year-round at the visitor centers.

Campsites are first-come, first-served. No reservations can be made. Campsites may not be "saved" for members of a party arriving later. Campground regulations are posted on the campground bulletin boards. Visitors are responsible for following all regulations including the following:

Up to 2 vehicles, 3 tents, and 8 people are permitted per site.

Tents must be placed within 30 feet of the picnic table or fire ring.

Quiet hours are from 10 p.m. to 6 a.m. Generators can be used from 8 a.m. to 6 p.m. only.

Check-out is 12:00 noon. Maximum stay is 14 days.

Camps must be kept clean. Collect all waste water and dispose in campground toilets or at the RV dump station. Pick up all trash.

Bathing and washing dishes, utensils, or clothing at water spigots is prohibited.

Pets must be kept on a leash (no longer than 6 feet) and under physical control at all times. Pets are not allowed on trails. Leaving a pet unattended and tied to an object is prohibited.

Build fires only in park provided metal rings and extinguish completely when not attended.

Only dead wood on the ground can be used as fuel for campfires. Chainsaws are prohibited.

The Grey Cliffs Group Campground is available by reservation for groups from Memorial Day to Labor Day. It has pit toilets and picnic tables but no potable water. Fees apply. Reservations required: (775) 234-7331, ext. 213.

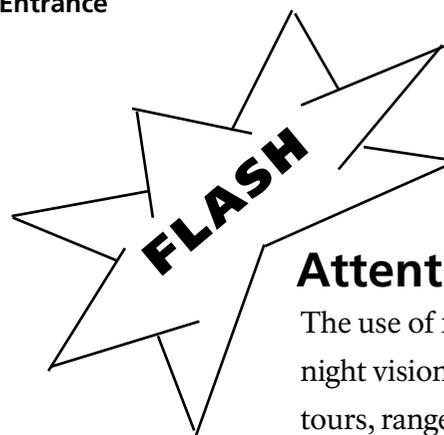
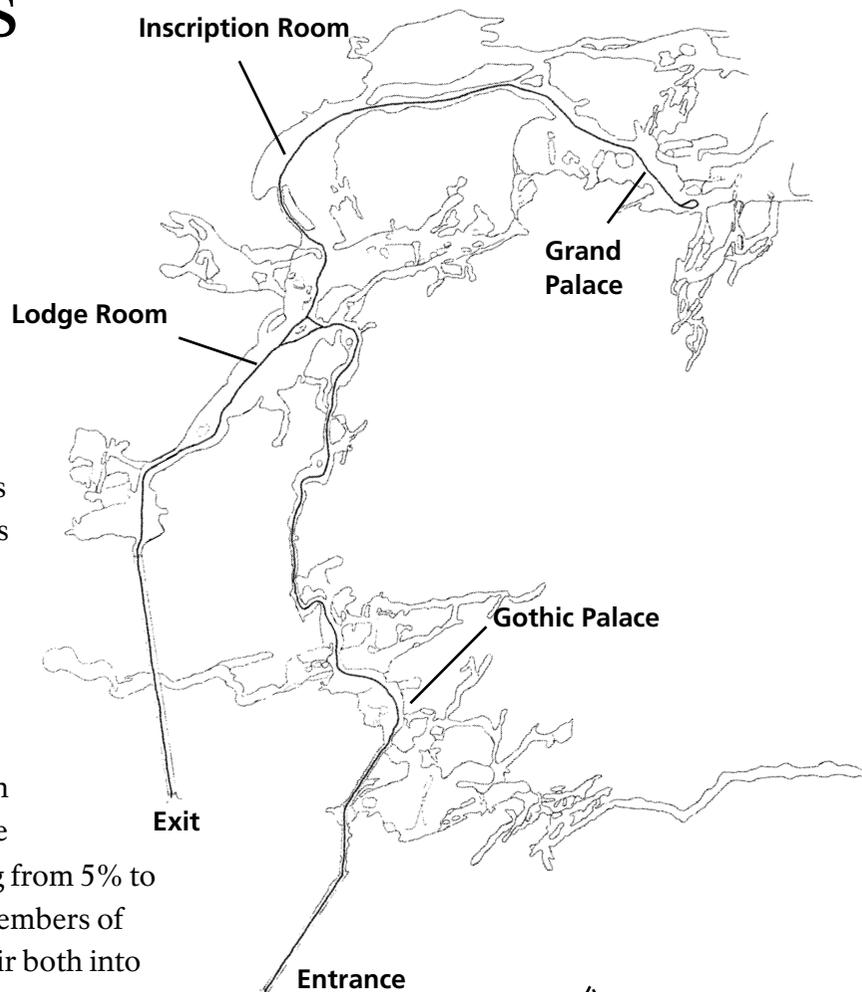
Free primitive camping facilities are available along Snake Creek and Strawberry Creek roads. All sites have fire grates. Snake Creek sites have picnic tables; some also have pit toilets. Group size is limited to 15 people, 6 pack animals, and 6 vehicles per site. Maximum stay is 14 days per site.

Campgrounds					Nightly Fees: Per Site (regular fee): \$12.00 Golden Age or Golden Access: \$6.00		
	Elevation	Sites	Accessible Sites	Pull-through Sites	Usually Open	Distance from Visitor Center	Comments
Lower Lehman Creek	7,300 feet (2,200 m)	11	Site 1	6	year-round	2.5 miles (4.0 km)	Nearest campground host is at Upper Lehman Creek campground, Site 1.
Upper Lehman Creek	7,752 feet (2,362 m)	22	Site 2	0	May - October	3.5 miles (5.6 km)	Group picnic area available by reservation. Campground host, Site 1
Baker Creek	7,530 feet (2,295 m)	34	Sites 11 & 27	6	May - October	3.5 miles (5.6 km)	Access is via a graded gravel road. Campground host, Site 8
Wheeler Peak	9,886 feet (3,013 m)	37	Site 5	0	June - September	12.0 miles (19.0 km)	Access is via Wheeler Peak Scenic Drive. Vehicles and trailers longer than 24 feet are not permitted. Campground host, Site 1

Lehman Caves

Tour Information

Lehman Caves can only be entered with a guided tour. Along the tour route in Lehman Caves are stalactites, stalagmites, draperies, helictites, shields, and more. All tours are guided by a park ranger who will discuss the history and geology of the cave. Cave tours are 60 or 90 minutes long. The 90-minute tour visits as far as the Grand Palace and is 0.54 miles total; the 60-minute tour visits as far as the Lodge Room. *Children under 5 years of age are not permitted on the 90-minute tour.* A First Room Tour is available for those unable to negotiate the stairs and narrow passageways. Regrettably, Lehman Caves is not ADA accessible. The entrance tunnel is 250 feet long with grades ranging from 5% to 8%; wheelchairs are permitted only if members of your party can control and push your chair both into and out of the cave.



Attention Photographers!

The use of flash photography in Lehman Caves decreases night vision and disorients other visitors. During guided tours, rangers will inform you when and where photography is appropriate. Your cooperation is appreciated.

Advance Ticket Sales

Lehman Caves tours are limited to 20 people per tour and often sell out. To ensure a space, visitors may purchase tickets up to one month in advance. Tickets cannot be purchased over the phone on the day of the tour.

Tickets may be purchased in person at the Lehman Caves Visitor Center or by phone at (775) 234-7331, ext. 242. All tickets must be paid for at the time of purchase. Major credit cards are accepted for phone orders. Phone orders are taken during regular business hours. All advance sales are final; please plan carefully.

Advance tickets must be picked up at the Lehman Caves Visitor Center at least 15 minutes prior to tour time. Unclaimed tickets will go on sale to walk-in customers. Golden Age and Golden Access cards must be presented to be eligible for a discount. Unclaimed tickets will not be refunded.

For Your Comfort and Safety

- The elevation of the cave entrance is 6,825 feet (2080 m).
- There are steps and slopes along the cave tour route.
- Low ceilings may require frequent stooping.
- Trails may be wet and slippery. Wear shoes with good traction.
- Watch your step and use handrails where provided.
- Stay with your tour; rangers turn off lights as rooms are exited.
- The cave is a constant 50° F (10° C) and 90% humidity.
- A light jacket is recommended.

Lehman Caves Tour Prices

	90 Minute Tour	60 Minute Tour	Park Recreation Fees at Work
Adult 16 & Older	\$10.00	\$8.00	The fees paid by visitors to Great Basin National Park for camping and for ranger-guided cave tours are used to fund many important park projects and services. The fees you pay at Great Basin National Park are returned to the park and have been used to:
Youth 5 -15 Years Old	\$5.00	\$4.00	
Infants & Toddlers 0 - 4 Years Old	N/A*	Free	
Golden Age cardholder only	\$5.00	\$4.00	
Golden Access cardholder only	50%	50%	

- * Install new restrooms at trailheads and campgrounds
- * Produce free interpretive bulletins about park features
- * Improve trailheads with new information signs and maps
- * Install the accessible Forest Island Self-guided Nature Trail
- * Purchase equipment for recycling

For the Cave

The Lehman Caves ecosystem is easily affected by our presence and actions. Please help us in our effort to maintain its integrity by following these important rules:

You may bring a jacket, a hand-held camera, and a flashlight into the cave. All other items, including food, water or other beverages, purses, backpacks, camera cases, and tripods are not allowed. Touching or collecting of cave formations is strictly prohibited.

* Children younger than 5 years old are not permitted on the 90 minute tour.

Walks & Talks

Evening Programs

Campfire programs are offered in the summer at Upper Lehman Creek and Wheeler Peak Campgrounds. Programs are 45-60 minutes long and address subjects related to the Great Basin's human history, geology, plants, wildlife, and more. Many programs involve the audience, so bring the whole family and come prepared to learn and have fun! The program schedule changes throughout the summer; times and topics for each week are posted at the visitor centers and in the park campgrounds. Come prepared with warm clothing and a lantern or flashlight. Pets are not permitted at evening programs. Programs are weather dependent.

Bristlecone Interpretive Trail

This trail (1.4 miles one-way with a 600 foot elevation gain) is the best place in the park to see bristlecone pines, many of which are 3,000 - 4,000 years old! At the grove, a series of interpretive panels describes the ecology of these hardy survivors. From the grove, you may continue on to the rock glacier, hike the Alpine Lakes Loop Trail, or return the 1.4 miles to the parking lot (see trail information on page 8). On many summer days, a park ranger will be roving the Bristlecone Trail and will be happy to stop and chat. Be advised that this trail is at high elevation (9,800 - 10,400 feet). Bring water and snacks, and be prepared for inclement weather. The trailhead is located at the terminus of the Wheeler Peak Scenic Drive. If you are not able to visit the bristlecone grove, stop in at the Great Basin Visitor Center in Baker to see a life-sized bristlecone pine tree model and to learn about the survival strategies of these amazing trees!



The Darkest Night Skies

Two-thirds of Americans cannot see the Milky Way from their backyards, and nearly all of us (99%) live in places with measurable light pollution. Here at Great Basin National Park, our night skies are dark — among the darkest in the country, even among other national parks. Join a ranger and amateur astronomers for a celebration of this rare and valuable resource. In this sanctuary of natural darkness you can see stars like few places on Earth! Special stargazing events are scheduled throughout the summer. Check at a park visitor center for dates, times, and location. At the time printing, the following programs were scheduled: May 23-25, June 27-28, July 25-26, and September 5-6.

Program Schedule: Friday, May 22, 2009 - Monday, September 7, 2009

	8:30	9:00	10:30	11:00	12:30	1:00	2:30	3:00	4:00
90 Minute Cave Tour		Daily		Daily		Daily		Daily	
60 Minute Cave Tour	Daily		Daily		Daily		Daily		Daily

Tours do sell out and schedules are subject to change: reservations are highly recommended. For an up-to-date schedule of Lehman Caves Tours, Evening Programs, Star Parties, and other events, please stop by a park visitor center, visit our web site (www.nps.gov/grba), or call us at (775) 234-7331.

Program Schedule: Tuesday, September 8, 2009 - Thursday, May 27, 2010

	9:00	11:00	1:00	3:00
90 Minute Cave Tour	Daily		Daily	
60 Minute Cave Tour		Daily		Daily

Schedules are subject to change.

Purchase your Interagency Annual Pass at Great Basin National Park and receive a FREE CAVE TOUR ticket!

The Interagency Annual Pass covers entrance fees at all National Park Service sites and other federal recreation sites for 12 calendar months. Buy your \$80 pass at Great Basin National Park and you receive one free cave tour - up to a \$10.00 value! Ask a park ranger at a visitor center for details.

Have you ever wanted to work in a national park?

Great Basin National Park can use your enthusiasm and expertise! Volunteers may be able to help the park in the following areas:

Campgrounds

Natural & Cultural Resource Management

Interpretation & Education

The Park Library & Museum

Housing may be available, depending on length and season of service.

Thank you to all the 2008 Volunteers who donated over 6,500 hours to help with campgrounds, trails, visitor services, and resource management projects!



If you would like to help
YOUR NATIONAL PARK
by volunteering, call:
(775) 234-7331, ext. 213.

National Parks: America's Best Idea

Ken Burns mini-series airs on PBS stations September 2009

WASHINGTON – Acclaimed filmmaker Ken Burns can now add “honorary park ranger” to a resume that already includes two Academy Award nominations, seven Emmy Awards, and 20 honorary degrees.

Acting National Park Service Director Dan Wenk recently presented Burns and his production partner Dayton Duncan with honorary park ranger certificates and traditional ranger hats. The awards are in recognition of their six-part, 12-hour series *The National Parks: America's Best Idea*, scheduled to air on PBS stations nationwide this September.

“Ken and Dayton have created a documentary film on the national parks and the origin of the National Park Service that provides Americans an opportunity to reflect on the significance and value of our national parks,” said Wenk. “Their film will assist the National Park Service in communicating important messages and themes, such as the wonder of our natural and cultural heritage preserved in the National Park System; the unique American ideas and ideals that the System represents; and the inclusion of America’s diversity in its past, present, and future.”

Duncan, the series’ writer and co-producer, first thought of making a film about national parks during a cross country vacation in 1998. The project, eight years in the making, traces the birth of the national park idea in the mid-1800s and follows its evolution

for nearly 150 years. Creating the series was a labor of love for Burns and Duncan who both said that many of their fondest memories include experiences shared with family members in national parks.

Burns, the director and co-producer, said the cinematography in the series is the most stunning of his nearly 30-year career. He mixed scenic shots with archival footage and photographs and supplemented them with first-person accounts from historical characters as well as personal memories and analysis collected from more than 40 interviews. Like his prior epic works including *The Civil War*, *Baseball*, and *Jazz*, Burns’ latest documentary has a quintessentially American theme.

“National parks embody an idea as uniquely American as the Declaration of Independence and just as radical: that the most magnificent and sacred places in our land belong not to royalty or the rich but to everyone—and for all time,” said Burns. “While making this series, we discovered more than stories of the most dramatic landscapes on earth. We discovered stories of remarkable people from every conceivable background. What they had in common was a passion to save some precious portion of the land they loved so that those of us who followed might have the same chance to fall in love with that place. Without them, parks would not exist.”

Artist-Writer in Residence

Throughout our nation’s history, artists and writers have brought attention to our national heritage and have played a large part in the establishment of many national parks. Today many artists are able to visit our national park areas and become part of the many Artist in Residence programs offered by our national parks.

Great Basin National Park follows the tradition, offering the Darwin Lambert Artist-Writer in Residence Program. This program was created in honor of the late Darwin Lambert. As a proponent for the creation of Great Basin National Park and other parks, Lambert authored *Great Basin Drama* (available in park bookstores) in addition to other literary works.

This program offers visual and performing artists, composers, and writers the opportunity to live and

work in Great Basin National Park. The selected resident(s) stay in a small cabin, in the park, for 2 to 4 weeks in the fall. No stipend is offered. Residents are required to present one public program in which they describe their work in relation to the park and its natural and cultural resources. Residents must also donate one original piece of their work to the park’s permanent museum collection.

Nevada photographers Trish and Deon Reynolds were the first recipients of Great Basin National Park’s Artist-Writer in Residence in 2007. Kay Malouff, a stained glass artist from Colorado, was the 2008 recipient. Kay donated her time and tireless effort to create a beautiful stained glass panorama of the Park. This stained glass window is on permanent display at the Great Basin Visitor Center in Baker.

For more information, visit www.nps.gov/grba/supportyourpark/artist-in-residence.htm

Great Basin National Heritage Area



In 1998, citizens of Millard County, Utah; White Pine County, Nevada; the Duckwater Shoshone Reservation; and the Ely Shoshone Reservation came together to form the Great Basin Heritage Area Partnership (GBHAP). This non-profit organization works to preserve, interpret and promote the heritage of the region, an area with stories of national significance. The GBHAP believes that their efforts will provide educational opportunities and sustainable economic vitality for the region. Designation of the central Great Basin as a National Heritage Area has been a major focus of the group since its inception. This important designation by Congress was granted in 2006.

The National Heritage Areas program provides resources for the preservation of local heritage. Although this is a federal program, designation as a National Heritage Area does not compromise local interests or control; rather it gives local communities a national designation that helps them obtain funding and other resources to preserve their heritage.

One of the goals of Great Basin National Park is to interpret the resources of both the park and the entire Great Basin region. The GBHAP assists with this task. So much remains to be done, from development of wayside exhibits and restoration of historic buildings, to letting people know how the culture and landscape have interacted here. The Great Basin National Heritage Area Partnership is developing stories of the Great Basin that illuminate not only local history but our nation's history as well.

Recent accomplishments and current projects of the GBHAP include construction of an interpretive and information kiosk near the historic building that houses their offices, completion of a regional marketing plan and revision of their web site: www.greatbasinheritage.org. In 2008, the group received the "Nevada Excellence in Tourism" award at the Rural Roundup from the Nevada Commission on Tourism in Elko for their successful efforts to become a National Heritage Area.

Points of interest in the Heritage Area are many. Standouts include two National Historic Landmarks: the Nevada Northern Railway in Ely, Nevada and the Topaz World War II Japanese Internment Camp near Delta, Utah, and, of course, Great Basin National Park. Further information and brochures are available at the GBNHP office in Baker at the Old Ranger Station, the park's visitor centers, and local businesses. The GBHAP phone number is (775) 234-7171.

Photos, clockwise from top: cattle grazing on open range (B. Roberts), the territorial statehouse in Fillmore, UT (K. Fillman), Shoshone youth in ceremonial regalia (K. Fillman), and the Nevada Northern Railroad in Ely, NV (K. Fillman).

WESTERN NATIONAL PARKS ASSOCIATION

Established in 1938, WNPA operates bookstores at sixty-five National Park Service sites throughout the western United States, with a mission of promoting the preservation of the national park system and its resources by creating greater public appreciation through education, interpretation, and research. WNPA has contributed more than \$40 million to the park service, generated through store sales and member support. WNPA supports parks by producing more than a half million free interpretive items every year.

Currently, the association has more than 200 publications in print, and many new products are introduced every year, such as the new book on Great Basin National Park published in 2007. A catalog of these WNPA publications and hundreds of additional educational products, on a variety of subjects such as national parks, archeology, American Indians, biology, geology, history, cooking, and children's interests is available in the Great Basin National Park visitor center bookstores. You can find those titles not immediately available in the bookstores at our online store at www.wnpa.org.

WNPA supports Great Basin National Park in many ways, such as funding supplies, the park's Junior Ranger program, and the printing of this newspaper.



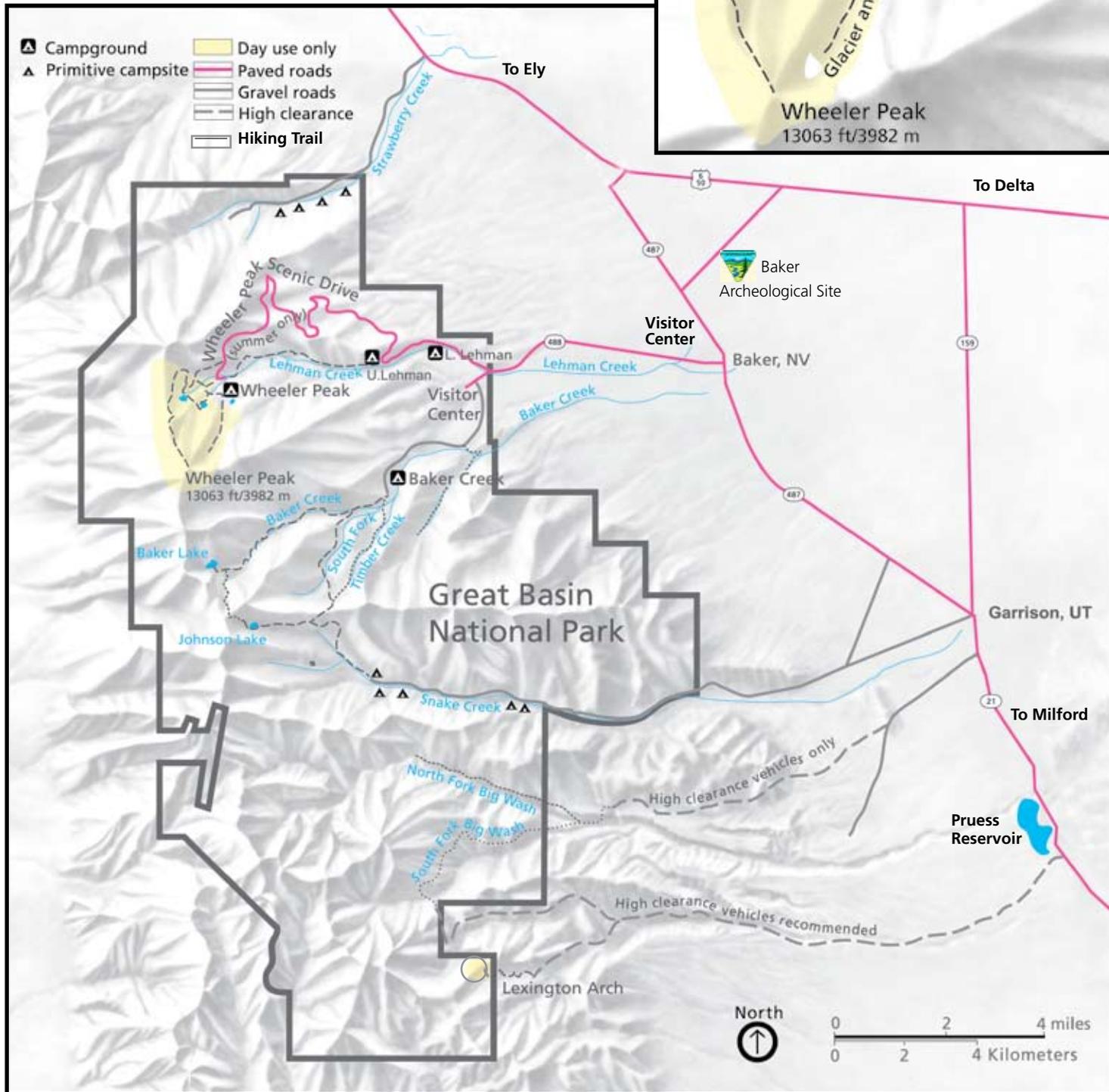
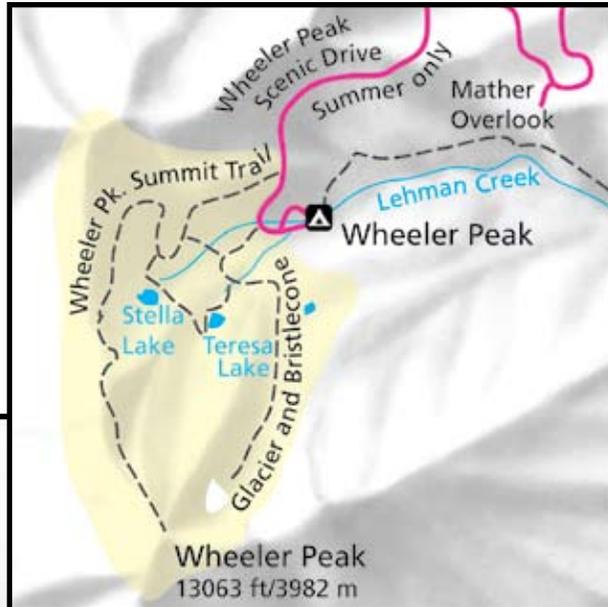
Hiking Information

	Round-trip Distance	Elevation Gain	Starting Elevation	Description
Mountain View Nature Trail	0.3 miles (0.4 km)	80 feet (25 m)	6,825 feet (2,080 m)	This is a leisurely walk in the pinyon-juniper forest. The trail guide (available for loan at the Lehman Caves Visitor Center (LCVC) desk) describes the geology and ecology of the area. The trail starts at the Rhodes Cabin next to the LCVC.
Lehman Creek Trail	6.8 miles (11 km)	2,050 feet (620 m)	7,750 feet (2,360 m)	This trail can be accessed from trailheads in both the Wheeler Peak and Upper Lehman Creek Campgrounds. It passes through diverse habitats, paralleling a creek for parts of the trail. <i>Flagged for winter use.</i>
Osceola Ditch Trail	9.6 miles (16.0 km)	445 feet (drop) (136 m)	8,565 feet (2,635 m)	Begin at the signed pullout on the Wheeler Peak Scenic Drive. Walk down slope through ponderosa pine, white fir and Douglas fir trees to the remnant of an 18 mile long channel built by gold miners in the 1880's. The trail follows the old ditch towards Strawberry Creek.
Wheeler Peak Trail	8.2 miles (13 km)	2,900 feet (890 m)	10,160 feet (3,100 m)	This hike should be started very early in the day because of the risk of afternoon thunderstorms. Along most of the route, the trail follows the ridge up to the Wheeler Peak summit. It is easiest to begin the hike from the Summit Trail parking area. Day use only.
Alpine Lakes Loop Trail	2.7 miles (4.4 km)	600 feet (180 m)	9,800 feet (2,990 m)	The trail passes two beautiful alpine lakes, Stella and Teresa Lakes. There are good views of Wheeler Peak. Begin at the Bristlecone Trail parking area, near the Wheeler Peak Campground. Day use only.
Bristlecone Trail	2.8 miles (4.6km)	600 feet (180 m)	9,800 feet (2,990 m)	Interpretive signs in the bristlecone pine grove explain the lives and significance of these ancient trees. The Glacier Trail continues beyond the bristlecone pine grove to the only glacier in Nevada, nestled beneath Wheeler Peak. Day use only.
Glacier and Bristlecone Trail	4.6 miles (7.4 km)	1,100 feet (340 m)		
Pole Canyon Trail	4 miles (6.4 km)	600 feet (180 m)	7,000 feet (2,150 m)	This hike starts east of the Grey Cliffs Campground area and crosses a small bridge. Once a road, this primitive trail passes through different forest communities, along the creekbed, and into several small meadows. If you are looking for a longer, more strenuous hike, ask a ranger how to connect to the Timber Creek Trail.
Baker Lake Trail	12.0 miles (19.4 km)	2,620 feet (800 m)	8,000 feet (2,440 m)	The trail begins at the end of the Baker Creek Road. It offers nice views of the surrounding peaks and ends at Baker Lake, an alpine lake with beautiful cliffs behind it. Just over a mile up the trail is the cut-off for the loop trail. Pass through ponderosa pines and a beautiful meadow, then return via the South Fork Baker Creek trail.
Baker Creek Loop	3.1 miles (5 km)	870 feet (270 m)	8,000 feet (2,440 m)	
South Fork Baker Creek/ Johnson Lake	11.2 miles (18.2 km)	2,740 feet (840 m)	8,000 feet (2,440 m)	This trail also begins from the Baker Creek Road and follows the South Fork of Baker Creek. It then joins with the Johnson Lake Trail, passing historic Johnson Lake Mine structures just before reaching the lake.
Johnson Lake Trail (from Snake Creek)	7.4 miles (11.8 km)	2,420 feet (740m)	8,320 feet (2,540 m)	Johnson Lake can also be reached by starting at the end of Snake Creek Road. This shorter, steeper route offers nice views of the Snake Creek drainage before reaching the historic Johnson Mill and Johnson Lake. Warning: do not enter any mine structures: stay out, stay alive!
Baker Lake/ Johnson Lake Loop	13.1 miles (21.1 km)	3,290 feet (1,010 m)	8,000 feet (2,440 m)	The Baker Lake and Johnson Lake Trails can be combined into a loop hike. This makes a good overnight trip. The connecting section is a steep route over the ridge between Baker and Johnson Lakes. The ridge top offers spectacular views in all directions. <i>Caution: this trail is very steep and prone to avalanches in winter. Route finding can be difficult.</i>
Lexington Arch Trail	3.4 miles (5.5 km)	820 feet (250 m)	7,440 feet (2,270 m)	This trail leads to a six-story limestone arch. The trail has steep sections. The trailhead is outside of the park, about 25 miles (48 km) south of Baker. The road is unpaved. Check at a park visitor center for road conditions. Dogs on leash are permitted. Day use only.

Park Map

Finding Your Way

The maps shown here are meant as orientation maps and should not be used in place of trail maps. If you are planning on hiking, especially in the more remote areas, please purchase a topographic map at a park visitor center. Many trails in the park are primitive, making route finding difficult. It is a good idea to carry a compass and have basic orienteering skills before heading into the backcountry. The bookstores sell 7.5 minute topographic maps and trail maps, as well as books detailing the trails and routes in Great Basin National Park.



Park Road Access

Wheeler Peak Scenic Drive is paved, but steep and winding. Vehicles and trailers over 24 feet in length are not permitted beyond Upper Lehman Creek Campground. The scenic drive is open three miles to Upper Lehman Campground year-round. The upper nine miles of the road are generally open June through October, weather dependent.

Baker Creek Road is a graded gravel road and is generally open May through November, weather dependent.

Remote Park Roads (Strawberry, Snake, Lexington) are open year-round, but can be muddy or snowy in the winter and spring. High clearance vehicles are recommended for these rough, dirt roads.

Please drive slowly: speeding is the most common cause of accidents on these roads!

Travel distances from Baker: Ely: 63 miles west; Delta: 100 miles east; Milford: 85 miles south-east.

Recreation Hazards

Altitude Sickness is a condition brought on by high elevations often in conjunction with strenuous activity. Symptoms include difficulty breathing, nausea, incoherent speech, and headache. The cure is to descend immediately. Altitude sickness can be life threatening. To avoid altitude sickness, ascend slowly, eat lightly and frequently, and drink plenty of water.

Hypothermia is a serious condition in which a person's body temperature is lowered. It can occur at temperatures well above freezing. Avoid hypothermia by wearing appropriate, layered clothing. Do not wear cotton clothing as it is very cold when wet. Carry extra clothes, drink plenty of fluids, eat high energy foods, and stay dry. Signs of hypothermia include slurred speech and uncontrollable shivering. If someone shows signs of hypothermia, warm the individual slowly, replace wet clothes with dry ones and give the person warm liquids without caffeine.

Drinking Water is essential; it is easy to become dehydrated when hiking in the dry desert air. Carry plenty of water and drink it! All surface water should be chemically treated, boiled, or passed through a filter capable of eliminating harmful microbes and parasites such as giardia.

Abandoned Mines are common in the park and the surrounding region. They can be extremely dangerous. Shafts and tunnels are unstable; do not enter them. Great Basin National Park is currently working to make abandoned mine lands safer.

Driving conditions in the park can be hazardous. Please obey the posted speed limits. Use lower gears on long downhill sections to prevent overheated brakes. Use of seat belts is required in both Nevada and the park. Please stop only at pullouts. Watch for wildlife and pedestrians. Congestion in the visitor center parking areas can lead to accidents. Please use caution.

Cell Phones do not usually work in the park. Do not rely on them!

Hiking is a great way to explore the park as it is possible to experience true solitude. Make sure you are prepared before starting. Weather may change rapidly. Eat frequently and drink plenty of treated water. Trails are listed on page 8. Rangers can recommend other possible routes in even more remote areas of the park.

Backcountry Use

Camping is permitted in the park at least 1/4 mile from a developed site. Camping is not permitted in the Wheeler Peak and Lexington Arch Day Use Areas. Backcountry registration is not required but is free and recommended. Stop at a visitor center to register and to obtain a copy of the regulations.

You are responsible for knowing and following the backcountry regulations which are posted at trailheads and available at park visitor centers.

ATV Use is not allowed in the park.

Mountain Biking is allowed only on developed roads (no trails) in the park. Helmets are strongly recommended. The primitive roads within the park and on adjacent U.S. Forest Service and BLM lands offer challenges for all skill levels of mountain bikers, and some can be connected into loops. For more information on possible rides, check with a ranger at a visitor center.

Pack Trips and Stock Use

Horses, mules, burros, and llamas are permitted on the backcountry trails of the park, but not on paved roads, in developed campgrounds, developed areas, interpretive trails, the Lexington Arch Trail and the Wheeler Peak Day Use Area. Weed-free hay is required 2 days prior to and during your trip. More information is available at the visitor centers.

Pets in the Park are allowed in the campgrounds, but they must be on a leash of not more than 6 feet at all times. Pets are not allowed on trails or in the backcountry of the park, except for the Lexington Arch trail. Leashed pets may be exercised in the campgrounds, in front of the visitor centers, and along roads. These restrictions are intended to prevent molestation of wildlife and to provide for a better experience for other park visitors.

Life in the Cave



The Lehman Cave Millipede (left) will likely be determined as a species “new to science;” the Great Basin pseudoscorpion (right) also makes its home in Lehman Cave. Photos by Jean K. Krejca.

When you walk through Lehman Cave, you enter an underground wonderland filled with marvelous cave formations that come in all different shapes and sizes. Stalactites, soda straws, popcorn, helictites, shields, and draperies are just a few names applied to the decorations that help make the cave so interesting. What might not be so obvious is that while Lehman Cave is full of geologic wonders, it is also home to many different species of cave biota.

Over the past few years, Lehman Cave has been the focus of a cave bioinventory. From May 2006 to April 2007, the cave was visited monthly to conduct inventories of what lived there. Since then, park staff have made quarterly visits into the cave to count the cave critters.

Each cave bioinventory involves two trips. The first trip is to place bait at each of 30 stations. The bait is a dab of old peanut butter, which smells a bit and thus the cave biota can detect it. The second trip is to search a one-meter radius from the bait station to count every visible living thing within it. Along with searching for cave biota, microhabitat conditions of air temperature, soil temperature, and relative humidity are recorded.

The most common cave biota in Lehman Cave are springtails, flies, and mites. Springtails are tiny, only about the size of dandruff, but there are at least eight different species found in just this cave. One thing all springtails have in common is a powerful tail that allows them to spring a long distance, propelling them from danger. One of the dangers springtails might face is getting eaten by larger cave creatures, like millipedes or pseudoscorpions.

The Great Basin Cave Pseudoscorpion (*Microcreagris grandis*) isn't a real scorpion—it doesn't have a stinger on its tail. It does look a little menacing, even though it is only about an inch (2.5 cm) long. It is one of the many species endemic to the park, known to exist only in Lehman and some of the other 44 caves in the park. It was first collected in Lehman Cave in the 1930s.

Several species discovered during the cave bioinventory that are likely new to science. The Lehman Cave Millipede, which is currently being described by a taxonomic specialist. It is tiny, only about 0.3 in (1 cm) long. The Globular Springtail (*Arrhopalites* sp.) is even smaller, only 1-2 mm long. Unlike most springtails that are white or grey, this one is rose-colored. It is usually found near water. A Rhagidiid mite that is about the same size is waiting to get its name. Additional new species have been found in other park caves.

How many visits into a cave are needed to find every species that lives there? Well, on our 17th collecting trip into Lehman Cave, we found a Campodeid dipluran, a primitive, eyeless insect with long antennae and tail-like appendages. We had seen a couple in other caves, but never before in Lehman Cave. Once a suitable taxonomic specialist is located, we can learn if it, too, is a new species. Because there are so many hiding spots in the cave, we wouldn't be surprised if sometime we come across another cave critter that we haven't ever seen before.

As you take your cave tour, think about what else might be in the cave with you. Most likely it won't be looking at you because it doesn't have eyes. It will probably have no pigment, because it doesn't ever see the light of day. And it is likely to be something special, a creature that has learned to live in this unique environment with little food, no light, and few sounds.

Frequently Asked Visitor Questions

What do I do if I become ill, injured, or in need of rescue while in the park?

Be aware that cell phones are not reliable within the park. You should attempt to contact a park ranger, campground host, other park employee, or go to the nearest visitor center. Law enforcement rangers are trained in emergency medicine and search and rescue. Limited emergency resources are available in this remote location. The nearest medical facilities are more than an hour away in Ely, Nevada, or Delta, Utah.

What if I need assistance after hours?

Call 911. There is a pay phone at the Lehman Caves Visitor Center. During the summer months, you can also attempt to contact a campground host.

Why can't I take my dog (pet) on the trail with me?

Pets are prohibited on trails because even the most well behaved dog can still disturb and frighten wildlife, leave behind feces containing diseases transmittable to wild animals, and make other visitors on the trail uncomfortable, detracting from their experience.

Why can't I ride my bicycle on park trails?

Under NPS regulations bicycles are classified as vehicles, which is why they are limited to roadways.

Do I need a fishing license?

State fishing regulations apply, and a Nevada fishing license is required for all visitors ages 12 and older in order to fish in the park. Nevada fishing licenses are available in the town of Baker.

Please do not move fish between creeks.

Whirling disease is expanding in Utah and northern Nevada, and we are trying to keep it out of the park. Thoroughly wash all waders and other gear before entering a different creek.

Why do I have to obey the speed limits?

Your safety, and the safety of wildlife and other visitors, depends on it. Roads tend to be winding, narrow, and unfamiliar to most drivers. Speed kills more wildlife in national parks than any other cause. Slowing down gives you time to respond to an unexpected curve in the road, wildlife, or visitors on foot or bicycle.

Can I pass slower vehicles on the Wheeler Peak Scenic Drive?

No. The entire drive is a designated *no passing zone*. Slower vehicles should use any available pullouts to allow traffic to pass. Please do not obstruct traffic when viewing wildlife or taking pictures.

Do I need a permit to camp the backcountry?

No, however voluntary backcountry registration is recommended and all regulations must be complied with. Group size is limited to 15 persons and 6 pack animals. Larger groups must split up and camp at least 1/2 mile apart. More information on backcountry regulations is available at the visitor centers.

Why can't I take some rocks, a piece of bark, or a few flowers home with me?

It seems innocent enough: just one rock, just one flower. But imagine if every one of the park's 80,000 visitors did that every year. Now we're talking 80,000 rocks and 80,000 flowers removed from the environment yearly. The damage would be incalculable. Please leave natural objects undisturbed so the next visitor can enjoy them too.

Why can't I bring my firearm into the park?

Hunting, shooting, or carrying weapons is not allowed in national parks. For the safety of wildlife, visitors, and employees weapons can be transported in a vehicle if unloaded, disassembled, and out of sight. A firearm or weapon cannot be carried on your person at any time.

Why can't I feed the birds, deer, or other wildlife?

A fed animal is a dead animal. Conditioning any animal to human food ultimately leads to its removal. Remember, even small, cuddly, fuzzy animals are wild and can carry diseases like bubonic plague and rabies.

Where can I build a fire?

In campgrounds, fires are allowed only in the established fire rings. In the backcountry, fires are allowed, **except above 10,000 feet** (this includes Baker Lake) or in the designated Day Use Areas. Please check the Backcountry brochure for further details. Only dead and down (on the ground) wood can be collected for fires. Use of chainsaws is prohibited.

Accessibility

Both **visitor centers** are accessible. The Lehman Caves Visitor Center provides a lift between the parking lot and main level. The Great Basin National Park slide show is subtitled.

All four **developed campgrounds** have at least one accessible site (see p.3). Each campsite has a picnic table, fire grate, and tent pad. These sites are generally located next to accessible restrooms. All sites are first-come, first-served. When campgrounds fill, these sites are made available to all campers.

Lehman Caves

Service animals are permitted. Visitors who are unable to negotiate the narrow passageways beyond the Gothic Palace may join the first part of any 90-minute tour for a reduced fee. Regrettably, Lehman Caves is not ADA-accessible. The entrance tunnel is 250 feet long with grades ranging from 5% to 8%; wheelchairs are permitted if members of your party can control and push your chair both into and out of the cave.

Evening programs are offered during the summer at the Upper Lehman Creek and Wheeler Peak Campgrounds. Both are accessible and are a wonderful way to wrap up a day in Great Basin National Park.

Assisted listening devices are available for use with any ranger-led program, including cave walks and evening programs. Talk to a ranger at any visitor center about using one before the start of the program.

To access the **telephone relay services**, **TTY users** should call (800) 326-6868. The user will be connected to an interpreter and automated system. The voice number in Nevada to reach an interpreter is 1-800-326-6888.

Area Services

-  Convenience Store
-  Fuel
-  Gift shop
-  Laundry facilities
-  Lodging
-  Public showers
-  Restaurant
-  RV facilities

A Lehman Caves Visitor Center & WNPA Bookstore
(775) 234-7331 x212

Lehman Caves Gift and Café
(775) 234-7221

B Great Basin Visitor Center & WNPA Bookstore
(775) 234-7331 x260

Baker Ranch Service Station

Ferg's Firewood

Getaway Cabin
(775) 234-7272

Happy Burro Trad'n Post
(775) 234-7115

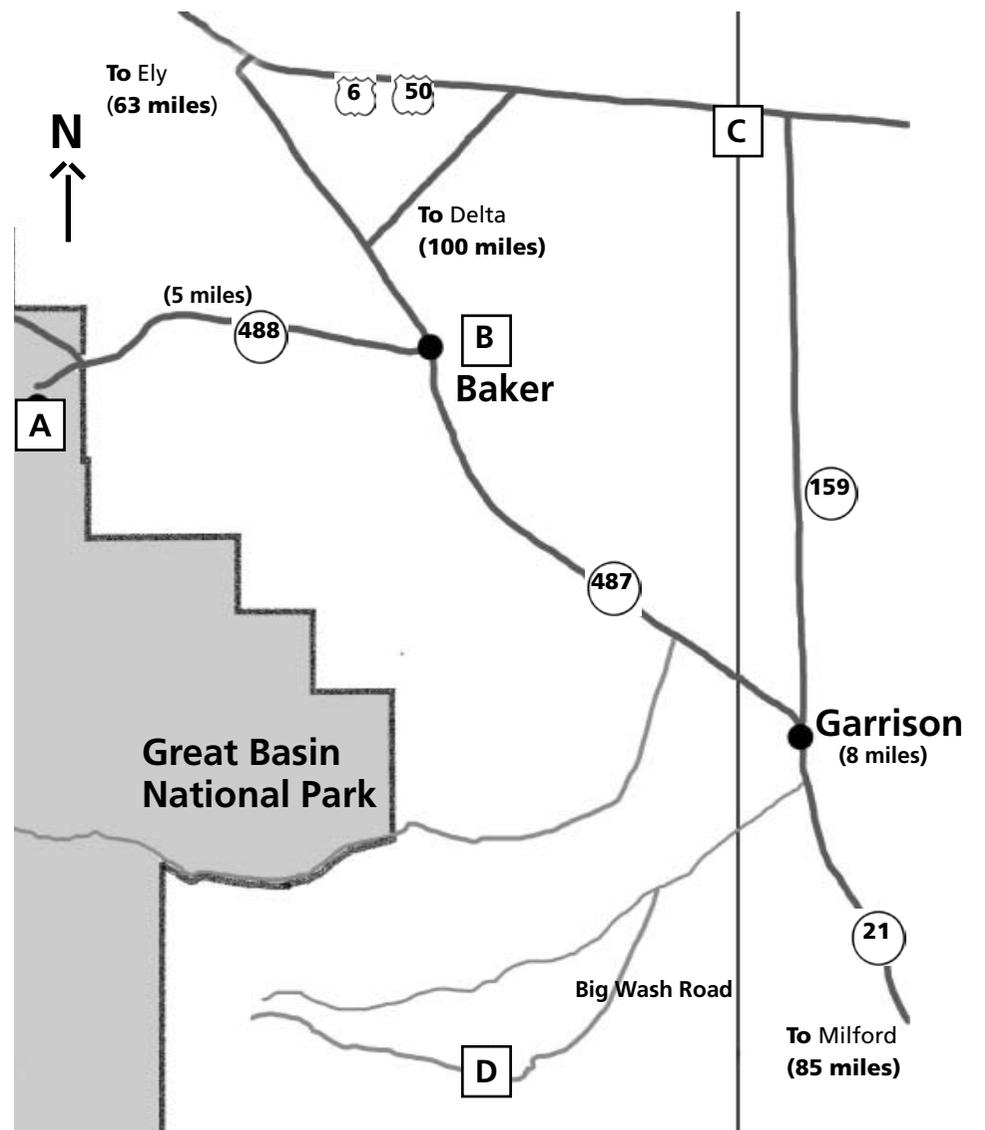
Silver Jack Inn & Sports Hut
Lectrolux Cafe & Art Gallery
(775) 234-7323

T&D's Store, Restaurant & Lounge
(775) 234-7264

Whispering Elms Campground
(775) 234-9900

C Border Inn (open 24 Hours)
(775) 234-7300 year-round

D Hidden Canyon Guest Ranch
(775) 234-7172 year-round



Mileages listed are from Baker.

To learn more about local services, visit www.greatbasinpark.com.

Hey Partner!

Have you heard about the **Great Basin National Heritage Area Partnership**? They are an organization in partnership with Great Basin National Park that among other things is poised to help us tell our stories better. Created by the Congress in 2006 (P.L. 109-338) the Heritage Area, as it has come to be known, includes both Millard County in Utah and White Pine County in Nevada. The Duckwater Shoshone and Ely Shoshone Reservations are also represented. The Heritage Area was established to provide the public with better access to the historical, cultural, natural, scenic, and recreational resources available. As a fully chartered organization, the Heritage Area can receive federal funding on a 1:1 matching basis and apply for grants. It has been designated a 501(c)(3) for donations and the Heritage Area has a Board of Directors and the small staff maintaining an office in the former ranger station in Baker, Nevada.

In the future you can look for the Heritage Area to assist in developing and promoting points of interest including Topaz Internment Camp in Delta, Utah and the Northern Nevada Railway Museum in Ely, Nevada. There is a wealth of information and sites to see just waiting for the Heritage Area to help give them expression. For more information, find them on the web at www.greatbasinheritage.org.

Another invaluable partner is the **Great Basin National Park Foundation**. Designated a 501(c)(3) organization, the Foundation recently celebrated 10 years of providing financial support for the park. The visitor center in Baker and the exhibits in that facility owe a great deal to the fund raising and promotional efforts of the Foundation. The quality of the exhibits is immediately obvious in the model bristlecone pine that greets you as you enter the area. For more information, find them on the web at www.greatbasinfoundation.org

Two other partners that help us bring a more complete park experience to our visitors are the **Western National Parks Association** (www.wnps.org) that operates our book stores in both visitor centers and our Concessioner, housed in the Lehman Cave Visitor Center. Through their efforts, visitors have an opportunity to take home books and reminders of their time spent in the park as well as take advantage of a nice food service with a view!

There are certain endeavors better suited to enterprises undertaken in cooperation with government, and our partners fill that need. Great Basin National Park has more to offer our visitors' experience thanks to their dedication and willingness to take on the challenge.

Snake Valley Businesses

The Border Inn

24 hour service. Motel, restaurant, bar, slots, pool table, video games, showers, gas, diesel, phones, laundry, and souvenirs. Also convenience store and ice. 22 RV spots- full hookups and pull-through spaces. Located on the Utah-Nevada state line on Highway 6 & 50. 13 miles from the park. (775) 234-7300.

D Bar X Lighting & Horns-A-Plenty Antler Art

Hand-crafted chandeliers, wall sconces, tables and more using natural renewable antlers, wooden wagon wheels, and old-fashioned oil lanterns. Thousands of happy customers worldwide since 1993. UL-Approved. All products guaranteed. The workshop, located 17 miles from Baker, is open by appointment. Complete catalog with more than 200 items available on-line at www.Horns-A-Plenty.com. Call for an appointment or a free color catalog. (800) 467-6599.

Ferg's Firewood

Campfire wood- \$5.00 per large bundle. Self-serve, 24-hour availability. Two locations in Baker- follow the signs. Proceeds go to a local, hard working student's college fund.

GAS-TOILETS-LAUNDROMAT-SHOWERS at Baker Sinclair.

Gas & Diesel, Coin Laundry (wash & dry) in downtown Baker, public restrooms, and showers (\$3). (775) 234-7323.

The Getaway Cabin

Tired of motels? How about privacy in a clean, comfortable cabin located in the town of Baker. Room for the whole family. Satellite TV, wireless internet available, fully equipped kitchen, towels and linens provided, fenced yard with picnic area and barbecue. Small pets OK. (775) 234-7272.

Happy Burro Trad'n Post

Located in the famous old "Outlaw" Bar & Restaurant in Baker, NV. We are open daily, 8-6pm, or just knock on the door of our motorhome. Featuring fresh dried fruits, nuts & jerky. A good selection of beverages, coke, pepsi & power drinks. Lots of American Indian made jewelry & other crafts made in the Southwest. A big selection of knives: featuring "Booker," made in Germany, Swiss Army, and others. Also, t-shirts and a great selection of Black Hills Gold jewelry, including a few pieces of Harley Davidson. We also carry a lot of colorful rocks, crystals, geodes, and silver jewelry. For our customers, come in & enjoy FREE WIRELESS INTERNET, HAVE A CUP OF COFFEE, or FREE COLD WATER. We validate Highway 50 "The Lonliest Road" PASSPORT. (775) 234-7115.

Hidden Canyon Guest Ranch

Bed and Breakfast in luxury lodge, or camping in teepees or cabins. Full meal packages available by reservation only. Pheasant hunting packages. Campsites, hot showers, recreation area, children's playground, heated pool, trout fishing, hiking, farm animals. Relaxing environment by running water. Great for retreats or reunions. 14 miles from Baker, in the mountains at the eastern edge of the park, with private access to Big Wash Trail. Open year-round. Reservations required. Hidden Canyon Ranch, P.O. Box 180, Baker, NV 89311. www.hcr-nv.com (775) 234-7172.

High Desert West - Digital Photos For Sale

Missed the perfect shot? Now you can purchase "royalty-free" digital photos of Great Basin National Park and other areas in the Great Basin on-line. Browse through numerous galleries that feature beautiful photos by local photographers. Many sizes/prices available. More photos being added weekly. Easy on-line pay and downloads. www.HighDesertWest.com.

Lectrolux Café, Bakery, Deli, Urban Groceries, Camping & Picnic foods,

Espresso, Full Bar & Wines - Groceries include eclectic menu. Patio dining & Private Garden for breakfast & dinner 7 days/week + Sunday brunch 6am-1pm, Happy Hour every Friday 4-7 pm \$2.00 Microbrews, \$1.50 Buds. 10% off all eat-in food by mentioning this ad. Espresso & Wine Bars. tmarasco@sbcglobal.net. (775) 234-7323. www.silverjackinn.com

LectroLux Ice House Art, Crafts & Antiques Gallery -

at the Silver Jack in Baker: Thursday - Sunday 3pm - 8pm. Art, furniture, books, model trains, sculpture, ceramics, rugs, glass, jewelry, Native American arts and crafts, national and local artists. (775) 234-7323.

Lehman Caves Gift and Café

Located adjacent to the Lehman Caves Visitor Center. Famous for our homemade ice cream sandwiches, we also serve breakfast, lunch, snacks, hand dipped ice cream cones, malts, shakes, frozen treats, and home-baked desserts. The gift shop has Great Basin and Lehman Caves souvenirs, apparel, cards, mugs, books, plush animals, toys and games, pottery, wood and metal arts, jewelry, local and Great Basin crafts, camping and travel items, and bagged ice. Open April through October. (775) 234-7221.

Movie House at the Lectrolux Café, Baker, Every Night 7:30 pm. Dinner from 4pm seated by 7:15! Desserts, wine & spirits bars after 7:15. Movies are free, popcorn available. (775) 234-7323.

Silver Jack Inn (open April - November)

7 cozy Inn rooms, 3 Efficiencies, and 5 RV spaces. Café with patio & private garden dining for breakfast & dinner (6am-10am, 4pm-7:30pm + Sunday Brunch 6am - 1pm). Also sports equipment rentals (Mtn. bikes, snow shoes, X-C skis). tmarasco@sbcglobal.net. (775) 234-7323. www.silverjackinn.com

T&D's Country Store, Restaurant, and Lounge

We have been in business over 19 years. Our store carries a large supply of groceries, packaged liquor, ice, fishing tackle, some camping supplies, and NV fishing/hunting licenses. Sunroom dining & covered patio with fireplace. Well known for our pizza, but have a large variety of delicious Italian, Mexican, American, and Vegetarian dishes at affordable prices. Lounge is a full-service bar with pool table and surround-sound system. Open year round. Hours change with seasons – ask at a visitor center or check our front door. Located in downtown Baker. (775) 234-7264.

Whispering Elms Motel, Campground & RV Park

5 miles from Great Basin National Park, located in beautiful Baker, NV. Offering 25 full-service RV sites, 6 clean motel rooms, bar, large grassy areas for tents, many shade trees, coin laundromat, and clean showers. Bar open daily. Summer only. (775) 234-9900.

Great Basin National Park does not endorse the enterprises listed here, but we do wish to thank them for their generous support in producing this publication as a visitor service.

Leave No Trace

Leave No Trace refers to a method of outdoor recreation which minimizes the impact on the land and wildlife. These techniques also leave the area more enjoyable for the next hiker. More information can be found at www.LNT.org.

Plan Ahead and Prepare

Plan ahead for your safety and enjoyment and to protect the landscape in order to have a safe, enjoyable vacation with minimal impact to the land. Always carry a map, compass, food, water, rain protection, sunscreen, sunglasses, and warm clothing when hiking.

Camp and Travel on Durable Surfaces

When trail hiking, stick to the trail. Do not widen it or cut switchbacks. When hiking cross-country, pick your route to avoid impacting fragile areas, like alpine or wetland vegetation.

Dispose of Waste Properly

Pack out everything you brought in with you, including cigarette butts and food scraps. Bury human waste in a hole 4-8 inches deep. Pick a site at least 200 feet (60 m) from water, campsites, and trails. Do not leave toilet paper on the ground; pack it out with you.

Leave What You Find

Leave the areas you have used (such as campsites) looking natural. Park regulations prohibit collection of anything, including flowers, rocks, or historical and archeological artifacts. Ask a ranger about exceptions such as pinyon pine nuts and berries.

Minimize Campfire Impacts

Build small fires in preexisting fire rings or use a camp stove. The park only permits the use of dead and down wood for fires. Bristlecone pine wood may not be burned. Fires are not permitted above 10,000 feet elevation (3,060 m).

Respect Wildlife

Observe wildlife from a distance. Never feed animals, and keep your food properly stored. Control pets at all times.

Be Considerate of Other Visitors

Be courteous, yield to other users on the trail, take breaks and camp away from others, and let nature's sounds prevail.

Great Activities for Kids and Families



Family Field Packs

The Field Packs Program is an opportunity for families, who have young children, to discover, learn, and document the many resources while they explore Great Basin National Park. Each "themed" pack is equipped with a field journal and a large variety of educational tools for young explorers. Three different packs are available for check-out: Nature Discovery, Tracking, and Night Exploration.

The Field Pack Program is designed to encourage visitors to exercise their imaginations and to explore the park on their own and at their own pace. Packs are available on a first-come, first-served basis and can be checked out (for a suggested \$2 donation) at both the Lehman Caves Visitor Center and the Great Basin Visitor Center. For more details ask a ranger at an information desk.

Alpine Lakes Loop

The trail passes two beautiful alpine lakes, Stella and Teresa Lakes. There are good views of Wheeler Peak. Begin at the Bristlecone Trail parking area, near the Wheeler Peak Campground. Day use only.

Lehman Caves

An amazing playground for your child's imagination! The 60-minute tour is recommended for families with small children as children 4 and younger are not permitted on the 90-minute tour. Please remember that touching cave formations is strictly prohibited!

Campfire Programs

Campfire programs are offered in the summer at Upper Lehman Creek and Wheeler Peak Campgrounds. Program topics are related to the Great Basin's cultural and natural resources and programs last 45 - 60 minutes. Check at a visitor center or on campground bulletin boards for the weekly schedule. Please come prepared with warm clothing and a lantern or flashlight. Weather permitting.

Junior Rangers

The Junior Ranger program is available to our visitors under 12. After completing several activities in the book, attending a ranger program, and doing a service activity like picking up trash at your campsite, participants receive a certificate and a junior ranger badge.

New Exhibits at Great Basin Visitor Center



A sleeping border collie and the spectacular stained glass windows created by the 2008 Artist in Residence Kay Malouff (see related article, p. 6) are among the new exhibits at the Great Basin Visitor Center in Baker. NPS photos.

In December 2008, Great Basin National Park welcomed the second installment of permanent exhibits at the Great Basin Visitor Center in Baker, Nevada. Funded in part through donations raised by the Great Basin National Park Foundation, the exhibits explore the natural and cultural history of the entire Great Basin region. The exhibits have something for everyone, whether you want to look at maps, feel a cracked playa, or look up close at the rings of the oldest tree that ever lived.

The Foundation played a major role in the development of the Great Basin Visitor Center and helped to plan its dedication ceremony, which included a keynote address from the Honorable Senator Harry Reid. The Foundation has also recently completed its 5-Year Strategic Plan which establishes priorities for project development, visitor education and fund raising. Learn more about the Great Basin National Park Foundation by visiting www.greatbasinfoundation.org.

Climate Change in the Great Basin

Climate change has arisen as the world's most pressing environmental issue. Although often considered a controversial topic, historical changes in the earth's climate are well documented. Over the past 100,000 years, these changes, primarily resulting from subtle variations in the earth's orbit, have resulted in ice ages, mass extinctions, and have greatly affected human history.

The Great Basin has played an important role in our understanding of past cycles of climate change. As a result of these studies, we have a detailed record of climate change in the Great Basin and how those changes affected the ecology of the region.

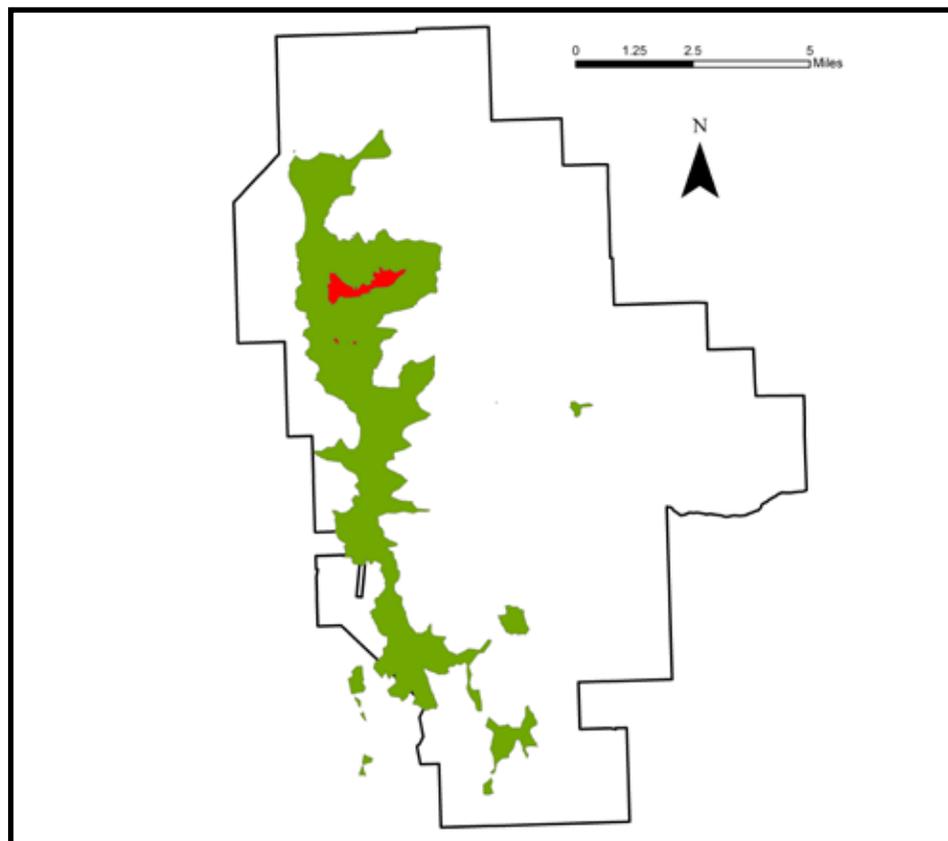
Packrats are medium sized rodents that build nests called middens in caves, rock outcrops and beneath vegetation. Generations upon generations of packrats use the same midden, sometimes for tens of thousands of years. Pack rat urine fossilizes into a rock formation called amberat that encases and preserves the material in the midden. This material, including bones, plants, and pollen, was gathered by the packrats within a few hundred feet of the midden. Some of this material dates back to 40,000 years ago. Scientists can carbon date and identify material from pack rat middens and learn about the distributions of plants and animals over time.

Great Basin bristlecone pines (*Pinus longaeva*) occur on dozens of mountains across the Great Basin. Bristlecones have extraordinarily long life spans; the oldest was dated at nearly 5,000 years old. Each year a bristlecone adds a new growth ring and the width of this ring is proportional to the amount of precipitation for that year. Wide rings indicate wet years and narrow rings indicate dry years. By cross dating rings between living trees and dead trees, scientists can create a precise climate record going back nearly 10,000 years.

The Great Basin consists of scores of individual basins that are hydrologically closed to the ocean. During cool wet periods, these basins became inundated with lakes. The largest of these lakes was Lake Bonneville, which at its peak level 15,000 years ago covered an area nearly as large as present day Lake Michigan. As precipitation decreased and temperatures increased, lake levels lowered. Today Lake Bonneville consists of remnant lakes such as the Great Salt, Utah, and Sevier Lakes. These fluctuations in climate and lake levels left distinctive terraces and shorelines that are still visible today.

Used in concert, packrat middens, bristlecone pines, and lake levels, paint a detailed picture of how climate, flora, and fauna changed in the Great Basin over the past 10,000 years. During this time the climate generally became warmer and drier, lakes shrunk, and portions of the Great Basin became a desert. The climate alternated between extremely hot, dry periods which caused extinctions of montane mammal species to relatively cool, wet periods such as the little ice ages. Plants and animals responded to climate change through range expansions and contractions. For example Bonneville cutthroat trout, once widespread across Lake Bonneville became restricted to montane streams.

While historical climate change in the Great Basin is well understood, the issue of current climate change is less clear. There is, however, scientific consensus that the earth has a natural greenhouse effect, greenhouse gases, particularly carbon dioxide, are increasing, and the earth's surface is warming. Over the past hundred years the climate of the Great Basin has changed. Temperatures and precipitation have increased, snowpack has



A preliminary model based on an increase in temperature of 3°C predicts a loss of over 95% of alpine habitat from the South Snake Range. The green area shown here is the current alpine habitat, which covers 11,200 acres; red shows the predicted, much smaller zone of only 316 acres.

declined, and spring has arrived earlier. These changes are not attributable to variations in the orbit of the earth and are likely due to increases in carbon dioxide, attributable to the combustion of fossil fuels.

Predictions of the effects of climate change in the Great Basin are complex but are apparently being realized. Cheatgrass now dominates over 20% of the Great Basin, fire intensity and frequency have increased, montane mammals have experienced local extinctions, subalpine vegetation has retreated uphill, forest damage by insects has increased, and stream flows are decreasing. These occurrences are at least partially attributed to climate change.

Scientists at Great Basin National Park are actively monitoring park resources to determine the impacts of climate change and what steps to take to protect park resources. This monitoring includes alpine areas, climate, plant and animal distributions and diversity, stream flows, and aquatic ecosystems. The effects of climate change on the park could be dramatic. A preliminary model based on an increase in temperature of 3°C predicts a loss of over 95% of alpine habitat from the South Snake Range.

Climate change has defined our past and is shaping our future. The National Park Service has challenged itself to become carbon neutral by the year 2016. Part of meeting this challenge will include reducing the parks carbon footprint through recycling, increased fuel efficiency, use of green sources of energy such as solar and wind power, and reduced waste streams.

Some ways to reduce your own carbon footprint include: turning off lights and appliances when not in use, reducing driving, recycling, reusing shopping bags, hanging laundry outside to dry, using compact florescent light bulbs, and weatherproofing your home.



What Is The Great Basin?

At first glance, the Great Basin appears to be a desolate landscape not worthy of exploration, but nothing could be further from the truth. The rich diversity of this region may be subtle, but from the sagebrush to the mountain tops there are a thousand secrets to discover.

Defining the Great Basin begins with a choice: are you looking at the way the water flows (hydrographic), the way the landscape formed (geologic), or the resident plants and animals (biologic)? Each of these definitions will give you a slightly different geographic boundary of the Great Basin, but the hydrographic definition is the most commonly used.

The **Hydrographic Great Basin** is a 200,000 square mile area that drains internally. All precipitation in the region evaporates, sinks underground or flows into lakes (mostly saline). Creeks, streams, or rivers find no outlet to either the Gulf of Mexico or the Pacific Ocean. The region is bounded by the Wasatch Mountains to the east, the Sierra Nevada to the west, and the Snake River plain to the north. The south rim is less distinct. The Great Basin includes most of Nevada, half of Utah, and sections of Idaho, Wyoming, Oregon, and California. The term “Great Basin” is slightly misleading; the region is actually made up of many small basins. The Great Salt Lake, Pyramid Lake, and the Humboldt Sink are a few of the “drains” in the Great Basin.

The **Basin and Range** region is the product of geological forces stretching the earth’s crust, creating many north-south trending mountain ranges. These ranges are separated by flat valleys or basins and form an undulating pattern: basin, range, basin, range, basin, range. These hundreds of ranges make Nevada the most mountainous state in the country.



The **Great Basin Desert** is defined by plant and animal communities. The climate is affected by the rain shadow of the Sierra Nevada and Cascade Mountains. It is a temperate desert with hot, dry summers and snowy winters. The valleys are dominated by sagebrush and shadscale. The biologic communities on the mountain ranges differ with elevation, and the individual ranges act as islands isolated by seas of desert vegetation. Because the Great Basin exhibits such drastic elevation changes from its valleys to its peaks, the region supports an impressive diversity of species, from those adapted to the desert to those adapted to forest and alpine environments.

Weather

There is almost an 8,000 foot (2,400 m) difference in elevation between Wheeler Peak and the valley floor. Weather conditions in the park vary with elevation. In late spring and early summer, days in the valley may be hot, yet the snowpack may not have melted at high elevations. The Great Basin is a desert, with low relative humidity and sharp drops in temperature at night. In the summer, fierce afternoon thunderstorms are common. Weather conditions are highly variable. Please come prepared for all types of weather. It can snow any time of the year at high elevations.

Data from Lehman Caves Visitor Center, 6,800 feet.

Month	Average Max.	Average Min.
January	41°F (5°C)	18°F (-8°C)
February	44°F (7°C)	21°F (-6°C)
March	48°F (9°C)	24°F (-4°C)
April	56°F (13°C)	31°F (-1°C)
May	66°F (19°C)	40°F (4°C)
June	76°F (24°C)	48°F (9°C)
July	86°F (30°C)	57°F (14°C)
August	83°F (28°C)	56°F (13°C)
September	75°F (24°C)	47°F (8°C)
October	62°F (17°C)	37°F (3°C)
November	49°F (9°C)	26°F (-3°C)
December	42°F (6°C)	20°F (-7°C)

Regional Directory

Chambers of Commerce

White Pine County, NV
(775) 289-8877

Delta, UT
(435) 864-4316

Beaver County, UT
(435) 438-5438

Recreation Information

Humboldt-Toiyabe National Forest
(775) 289-3031

Ely District BLM
(775) 289-1800

Fillmore District BLM
(435) 743-3100

Bryce Canyon National Park
(435) 834-5322

Cathedral Gorge State Park
(775) 728-4460

Cedar Breaks National Monument
(435) 586-9451

Death Valley National Park
(760) 786-2331

Fremont Indian State Park
(435) 527-4631

Lake Mead National Recreation Area
(702) 293-8990

Timpanogos Cave National Monument
(801) 756-5238

Ward Charcoal Ovens & Cave Lake
(775) 728-4460

Zion National Park
(435) 772-3256

Road Conditions

Nevada DOT
(877) NVROADS (687-6237)

Utah DOT (Winter Only)
(866) 511-UTAH (8824)

California DOT
(800) 427-7623