

PONY EXPRESS TERRITORY COMMUNITY FACT SHEET

GREAT BASIN NATIONAL PARK

Location:

Approximately 5 miles south of US Route 50, six miles west of the Nevada Utah Border. Great Basin National Park is located in east central Nevada, five miles west of the town of Baker.

Plane

The nearest airport is located in Cedar City, Utah, 142 miles away. Major airports are found in Salt Lake City, Utah (234 miles) and Las Vegas, Nevada (286 miles).

Car

From the east or west: From U.S. Highway 6 & 50, turn south on Nevada State Highway 487 and travel 5 miles to Baker, NV. In Baker turn west on Highway 488 and travel 5 miles to the park.

From the south (Utah): Travel north on Utah State Highway 21 through Milford, UT and Garrison, UT, which will become Nevada State Highway 487 as you cross the border. Turn west on Highway 488 in Baker and travel 5 miles to the park.

From the south (Nevada): Travel north on U.S. Highway 93 (Great Basin Highway). At the junction of U.S. Highway 6 & 50 drive east to Nevada State Highway 487 and turn south. Travel 5 miles to Baker, NV. In Baker turn west on Highway 488 and travel 5 miles to the park.

Public Transportation

No public transportation is available to, or in, Great Basin National Park.

DRIVING DISTANCES IN MILES FROM THE PARK:

NEVADA POINTS	UTAH POINTS	OTHER NATIONAL PARKS
Ely 68	Delta 106	Arches 321
Fallon 320	Milford 101	Bryce Canyon 183
Las Vegas 286	Cedar City 142	Zion 187
Reno 385	Provo 190	Capitol Reef 243
	Salt Lake City 234	Canyon Lands 333

Elevation: 5,000' to 13,061

Geography:

Deserts, playas, mountains, rock formations, fossils, springs, caves, creeks, and even a lone glacier. In Great Basin National Park and the neighboring valleys alone, there are 11 species of conifer trees, 73 species of mammals, 18 species of reptiles, 238 species of birds, 8 species of fish, and over 800 species of plants.

Great Basin National Park is located in the Great Basin Desert, one of the four deserts of the United States. The Mohave, Chihuahan, and Sonoran deserts are typical "hot" deserts. The Great Basin Desert is the only "cold" desert in the country, where most precipitation falls in the form of snow. A desert is defined as a region that receives less than 10 inches (25cm) of precipitation per year.

Geology (see it with these stops):

Stop 1: Start at the Visitor Center with a short hike on the ¼-mile long Mountain View Nature trail to see the Pole Canyon Limestone, and pass by the natural entrance to Lehman Caves. Or, take a tour through the cave and walk through the bedrock and amongst beautiful calcite formations.

From the visitor center parking lot, hop in the car and head towards Baker. Make a left turn onto the Wheeler Peak Scenic Drive (vehicles longer than 24 feet in length are not recommended on this road). White granite outcrops are visible to the west. Drive approximately 6 miles up the road to the Mather Overlook.

Stop 2: Mather Overlook. To the southwest, Wheeler Peak stands tall with the cliff face displaying the layers of the Prospect Mountain Quartzite. Glaciers carved the landscape below the peak and part of what is now the Lehman Creek drainage (the creek below you). The glacier probably stopped its advance at a point extending out from the Mather Overlook. Let your eyes follow the drainage down, and they will come to rest on the valley floor. The Snake Valley contained one of the southernmost arms of Lake Bonneville. The rock layers to the east-northeast are also Prospect Mountain Quartzite, as well as the large rocks sitting in the parking area. Take a close look at these rocks. Sedimentary structures, like cross-bedding of sand layers, are preserved in places. Get back into the car and continue up the drive approximately 3 more miles to the Wheeler Peak Overlook.

Stop 3: Wheeler Peak Overlook. From here, you can look directly into the cirque, and view the large patch of ice at the base of the cliff walls. Freezing and thawing ice break rocks off of these walls, and frequently debris can be seen on top of the ice.

Caves

Great Basin National Park contains over 40 known caves, filled with unusual cave life and unique features. Some caves contain unique formations such as folia, bulbous stalactites, anthrodites, and shields. Some caves contain features that suggest that deep-seated, hydrothermal waters influenced the caves' development. The park has high-elevation vertical shafts and horizontal solution caves that have formed along fracture planes.

Please Note: The only caves in the park open to the public are Lehman Caves, and eight permitted wild caves. All other caves remain closed to protect their fragile ecosystems.

Four distinctive groups of caves exist in the park. These groups are Lehman Hill Caves, Baker Creek Caves, Snake Creek Caves, and Alpine Caves. Many of the caves within these groups may have formed together either hydrologically and/or structurally.

Mountains

The "Great Basin" that Great Basin National Park is named after extends from the Sierra Nevada Range in California to the Wasatch Range in Utah, and from southern Oregon to southern Nevada. This is an area where no water drains to an ocean, but drains inward. As big as it is, the Great Basin is only part of an even larger region called the Basin and Range province that extends down into Mexico. The landscape around Great Basin National Park is a good example of what is found throughout the Basin and Range province - long mountain ranges separated by equally long, flat valleys.

Great Basin National Park encompasses most of the South Snake Range. The bulk of the rocks exposed in this range are formed of sediments like sand, mud and limey ooze (silt and clay particles mixed with calcium carbonate) that were laid down on the bottom of a shallow sea during the late Precambrian and Cambrian (around 560 million years ago).

Glaciers / Glacial Features

Wheeler Peak Glacier comes into view on the Bristlecone/Glacier Trail. Great Basin National Park is home to the only glacier in Nevada, and one of the southernmost glaciers in the United States. The Wheeler Peak Glacier sits at the base of Wheeler Peak, in a protected cirque around 11,500 feet in elevation. The glacier measures 300 feet long and 400 feet wide. Exact depth is unknown. There are two types of glaciers. Continental ice sheets cover large areas with ice. Alpine glaciers, like the Wheeler Peak Glacier, are smaller, and found in mountainous terrain. The Wheeler Peak Glacier is the last alpine glacier to survive. With continued warming predicted, it is likely the glacier will disappear in as little as 20 years.

The Wheeler Peak Glacier can be seen from several locations in the park. The Wheeler Peak Overlook on the Wheeler Peak Scenic Drive is the only vantage point from the road. The glacier is seen at the bottom of the sheer rock face of Wheeler Peak.

The Bristlecone/Glacier Trail (4.6 miles roundtrip) will take you to the foot of the glacier. The trailhead for this hike is located at the end of the Wheeler Peak Scenic Drive. The trail begins at an elevation of 9,800 feet and climbs another 1,100 feet. Use caution around the toe of the glacier, as the boulders may not be stable, and small rockslides are common from the cliffs above.

Groundwater in Great Basin National Park

Great Basin National Park is part of two Environmental Protection Agency (EPA) defined drainage areas. The east side of the mountain range is part of Hamlin-Snake Valleys (USGS cataloging unit 16020301) and the west side is part of Spring-Steptoe Valleys (USGS cataloging unit 16060008).

Both Spring and Snake Valleys, neighboring valleys to the west and east respectively, are part of the Great Salt Lake flow system, with water flowing underground to towards the Great Salt Lake in Utah.

Watersheds

A watershed is the area of land where all of the water that is under it (groundwater) and the water that drains Great Basin National Park is part of two Environmental Protection Agency drainage areas. The east side of the mountain range is part of Hamlin-Snake Valleys (USGS cataloging unit 16020301) and the west side is part of Spring-Steptoe Valleys (USGS cataloging unit 16060008). Both of these drainage areas are part of the Great Basin hydrologic area, which has no surface connection to the ocean. All water that falls within the Great Basin stays within the Great Basin unless influenced by humans.

Faults

Nevada is one of the most seismically active states in the country, ranking third after California and Alaska. To blame are the state's many faults, found at the base of almost every mountain range. The basin and range topography of the Great Basin is caused by movement along these faults. As these mountain ranges continue to grow through fault-block activity, earthquakes continue to occur.

Earthquake Activity

Most earthquake activity occurs along the eastern Sierra Nevada mountains, on the Nevada's western border. The most powerful earthquake recorded in the state was a 7.6 magnitude quake that occurred near Winnemucca in 1915. While earthquakes don't occur at any regular interval, historically the frequency of an earthquake of magnitude 6 or higher has been one every 10 years, and for magnitude 7 or higher, one every 27 years.

Lakes and Ponds

Six subalpine lakes are found in Great Basin National Park. Stella and Teresa Lakes occupy glacial cirques near the Wheeler Peak Campground, while nearby Brown Lake is in a glacial moraine. Baker and Johnson Lakes are also in glacial cirques, Baker Lake at the top of Baker Creek and Johnson Lake above Snake Creek. Dead Lake is found in a glacial terminal moraine.

Baker Lake contains two species of introduced fish, brook trout and Lahontan cutthroat trout. All of the lakes contain phytoplankton, zooplankton, and aquatic insects.

Rivers and Streams

Ten permanent streams originate in Great Basin National Park between 6,200 and 11,000 ft. elevation and are fed by numerous springs along their courses. The streams are first and second order headwater streams with an average length of 8 km (5 mi) within the park.

Six streams (Strawberry, Mill, Lehman, Baker, Snake, and South Fork Big Wash) flow eastward into Snake Valley and the Bonneville Basin. The other four streams (Shingle, Pine, Ridge, and Williams) flow westward into Spring Valley and were originally fishless. Outside park boundaries the majority of these streams are used

for irrigation; some water evaporates or percolates into the alluvium before reaching the valley bottom. None of the water flows outside of the Great Basin hydrologic basin.

Springs and Seeps

Although Great Basin National Park is located in the desert, the mountainous terrain rises and intersects passing storms to receive additional precipitation. This precipitation infiltrates the ground and then often emerges as springs and seeps. Those that flow only part of the year are called ephemeral, while those that flow year round are perennial.

Lexington Arch

Rising high above the floor of Lexington Canyon, this imposing natural arch was created by the forces of weather working slowly over a span of centuries. Lexington Arch is unusual in one important respect: it is carved from limestone. Most of the natural arches of the western United States are composed of sandstone. The fact that Lexington Arch is made of limestone leads to speculation that it was once a passage in a cave system. Flowstone, a smooth glossy deposit that forms in caves has been found at the base of the opening, lending support to this theory.

Temperature:

Average Temperatures

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)

Temperatures recorded at Lehman Caves Visitor Center: 6,825 feet.

Climate:

There is almost an 8,000 ft (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 in the higher 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. It can snow any time of the year at high elevations.

Average Precipitation

(measured in inches)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Normal	0.9	1.0	1.4	1.3	1.1	0.9	0.9	1.1	0.9	1.0	1.2	1.2
Maximum	3.2	3.6	5.0	3.0	4.7	3.4	2.1	3.7	2.7	3.0	3.4	3.4
Max. 24 Hr. Precip.	2.2	1.6	1.5	1.6	1.6	1.4	1.1	0.8	2.4	1.1	1.5	1.6
Max. Snowfall	34	39	52	35	23	8	0	0	2	42	48	46
Days with Measurable Precip.	7	7	8	8	7	5	6	5	4	5	5	6
Average No. Thunderstorms	0	0	0	1	5	7	12	12	4	1	0	0

Population: About 12 not including visitors

History:

Great Basin National Park - October 27, 1986

Lehman Caves National Monument - January 24, 1922

The story of the Great Basin is not just one of geology and landforms, but also of people. This region has been home to American Indians for thousands of years. In more recent times, farmers and ranchers, Mormons and sheepherders, all called the Great Basin home.

Meeting Facilities: At the Border Inn on US Route 50 at the Utah/Nevada border

Lodging:

Whispering Elms Motel, Campground & RV Park (775) 234-9900 (summer number only)

Open in summer season; Offers 25 full service RV sites, 6 motel rooms, and large area for tents. Coin laundromat, showers, arcade, pool table, ice, fully stocked bar, and horseshoe pits. Trading post with camping supplies.

Silver Jack Inn & Great Basin Sports (775) 234-7323; Open in the summer season; Offers 7 rooms and 3 efficiencies with kitchenettes and 5 RV spaces. Sports equipment rentals (mountain bikes, snowshoes, cross country skis).

"End of the Trail...er" (775) 234-7302; Open May through Oct.; Features two bedrooms (one queen, one twin) and a kitchenette. This is a bed and bring your own breakfast! Enjoy a private deck with view of the Snake Range and Great Basin National Park, TV, telephone, and wireless internet. No smoking. No pets.

The Getaway Cabin; (775) 234-7272; Open year round; One cabin with room for the whole family. Satellite TV, wireless internet available, fully equipped kitchen, fenced yard with picnic area and barbecue. Small pets okay.

The Border Inn; (775) 234-7300; Open year round; Location: 8 miles northeast of Baker, on US Hwy 6&50 (state line); Gas, diesel, ATM, motel, restaurant, bar, slots, pool table, video games, showers, dump station, phones, laundry, and souvenirs. Convenience store with ice. Offers 22 RV campsites.

Hidden Canyon Ranch; (775) 234-7172; Open year round; Location: 14 miles south of Baker; Bed and breakfast in luxury lodge, or camping in teepees and cabins. Campsites, hot showers, recreation area, children's playground, heated pool, catch and release fishing, hiking, farm animals. Available for corporate retreats, church retreats, or family reunions. Reservations required.

National Park: Campgrounds: Lower Lehman Creek; Upper Lehman Creek; Baker Creek; Wheeler Peak

Transportation: No public transportation is available to, or in, Great Basin National Park.

Attractions / Visitor Centers:

Great Basin Visitor Center (775) 234-7331 x 260. Located just north of the town of Baker on the west side of NV Highway 487. Information desk, exhibits, theater with orientation film, and brochures. Closes for the winter season with the exception of special weekends. Spring Hours: 10am-2pm Weekdays (subject to change); 8am-4:30pm Weekends; Summer Hours: 8am-5:30pm daily.

Lehman Caves Visitor Center (775) 234-7331 x 212. Located on NV Highway 488; 5.5 miles from the town of Baker and half a mile inside the park boundary. Lehman Cave Tours, information desk, exhibits, theater with orientation film, and brochures. Open daily, year round, from 8:00 a.m to 4:30 p.m. Pacific Time. Extended hours in the summer. Lehman Caves may only be entered with a guided tour. Cave tours are offered daily, year round, except for Thanksgiving Day, Christmas Day, and New Year's Day. Park rangers lead all tours, explaining the history, ecology, and geology of the caves. Reservations are strongly recommended in the summer months, as well as over holiday weekends.

Ticket Prices

Tickets are required for cave tours, and may be purchased two ways: In person at the Lehman Caves Visitor Center on arrival. In advance (*strongly recommended*) by phone at (775) 234-7331 x 242, between the hours of 9:00am to 4:00pm Pacific Time, Monday through Friday.

Things To Know Before You Go

The elevation at the cave entrance is 6,825ft (2080m). The temperature in the cave is a constant 50° F (10° C) year round so a light jacket is recommended. Please wear shoes with good traction as trails may be wet and slippery. Children under 16 must be accompanied by an adult.

The only items visitors may bring in the cave with them is a (hand-held) camera, jacket and flashlight. All other items, including purses, backpacks, strollers, tripods, camera bags, food, water, tobacco, gum, and pets are not allowed.

Action / Adventure: Hiking, Fishing, Photography...Stargazing (year-round):

On a clear, moonless night in Great Basin National Park, thousands of stars, five of our solar system's eight planets, star clusters, meteors, man-made satellites, and the Milky Way can be seen with the naked eye. The area boasts some of the darkest night skies left in the United States. One of the best spots in the park is the Wheeler Peak/Bristlecone Trail parking lot at the end of the Wheeler Peak Scenic Drive. Though surrounded by trees, which will limit views of the horizon, viewing stars at over 10,000 feet is unparalleled. Mather Overlook, and other pullouts along the Wheeler Peak Scenic Drive, can provide more panoramic views with fewer obstructions. The Baker Archeological Site, located just outside the town of Baker, offers expansive views from horizon to horizon.

Top Annual Event:

Astronomy Festival: Join park rangers in August and experience out of this world family fun, excitement, and learn about day and nighttime astronomy. Don't have your own telescope? There will be many telescopes of different makes, shapes, and sizes for you and your family to look at the sun, stars, planets and other deep sky objects including nebulae and galaxies.

Tourism Statistics:

The park receives approximately 90,000 visitors per year. About 50,000 people visit Lehman Caves annually.

Additional Quick Facts:

The Bonneville cutthroat trout is the only trout native to Great Basin National Park and East Central Nevada. Ancestors of the current Bonneville cutthroat trout were abundant in ancient Lake Bonneville 16,000 to 18,000 years ago, the remnant of what is now the Great Salt Lake in Utah.

The Hydrographic Great Basin is a 200,000 square mile area that drains internally. All precipitation in this region evaporates, sinks underground, or flows into lakes. No water reaches the ocean.

Cattle grazing was eliminated from Great Basin National Park in 1999. The South Snake Range is still home to 10-15 Rocky Mountain bighorn sheep.

Precipitation patterns are highly variable in Great Basin National Park. The wettest year on record at Lehman Caves was 21.2 inches of precipitation in 1982 and the driest year was 7.4 inches in 1953.

There are 48 miles of perennial streams, and over 400 springs in the South Snake Range, home to Great Basin National Park. Over 75% of wildlife species are dependent upon these riparian areas for food, water, and cover at some stage of their life cycles.

According to the National Park Night Sky Team, Great Basin National Park is one of the best parks for viewing star-filled night skies!

Great Basin National Park is home to Lexington Arch, one of the largest limestone arches in the western United States. This six-story arch was created by the forces of weather working slowly over the span of centuries. This type of above ground limestone arch is rare.

