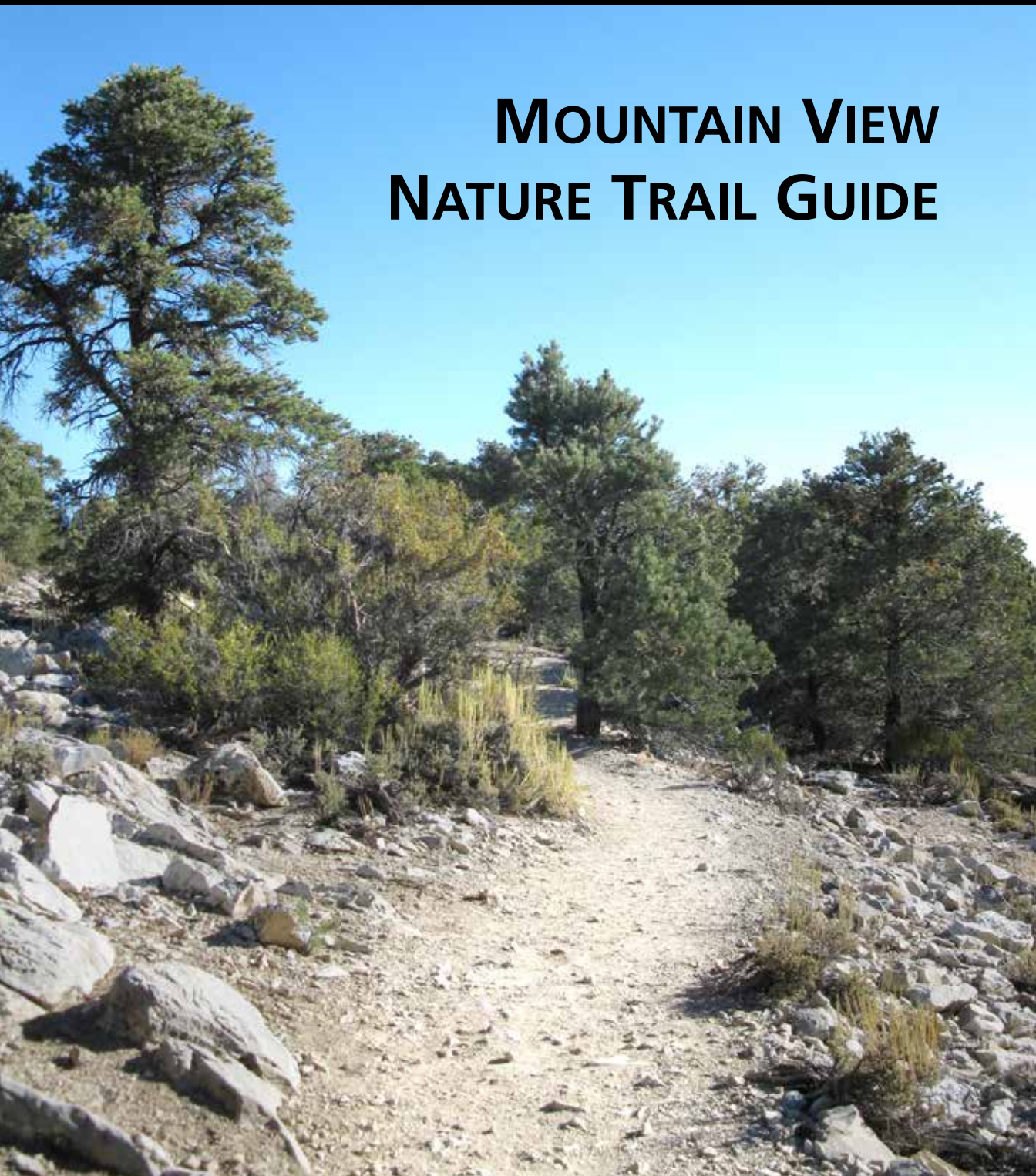
Great Basin National Park

Lehman Caves Visitor Center

# Mountain View Nature Trail Guide



# Welcome to Great Basin National Park!

The Mountain View Nature Trail is a short, one quarter-mile long footpath (400 m.) through a juniper and pinyon forest. Along this hike, you will see how the native plants, animals, rocks, and soils are all different pieces of a larger, diverse environment. Each one depends on the others for various aspects of its existence. Humans have also been a part of this community for a long time, relying on and interacting with this environment for survival and enjoyment.

Come, take a short walk with us, as we experience the elements that have shaped this area for the last 400 million years. Keep an eye out for the **numbered posts** (below) along the path, which match the information found in this guide. Please note, the path is not accessible to wheelchairs or strollers. Also, the trail is almost 7,000 feet above sea level, so the air is thinner than many are used to. Please take appropriate precautions. Lastly, please stay on the trail, so that those who come after you may enjoy the scenery as you see it today.

# Rhodes Cabin

Your journey begins here at the Rhodes Cabin, one of 12 such structures built in the early 1900s. These were places for visitors to stay the night, since in that time it would have taken several days to get here from any other settlement. After the cave became a national monument in 1922, this cabin remained as lodging for the family appointed as caretakers for the cave. Imagine your entire family living in such a small space!

# Pinyon Pine & Utah Juniper

1 Take a look at these two trees. The **Utah Juniper** has scaly, yellow-green leaves and bark that looks like it is peeling into strips. This bark was used by Native Americans to make rope, mats, sandals, and even diapers. The little blue "berries" you might see are actually its cones.

The **Pinyon Pine's** leaves are round, sharp needles more than an inch long. It is the only pine tree whose needles are not bundled together in packets or *facicles*.

The seeds that the pinyon pine produces are used by many creatures in this environment. If you are lucky, you may spot a **Clark's Nutcracker** or a **Pinyon Jay** making a meal of them. Native Americans have also used the seeds as a primary food source for thousands of years, roasting them for use during the winter. In the fall, you can even harvest some seeds yourself and get a taste of how life might have been back then.

# Lehman's Irrigation Ditch

2

In the late 1800's, **Absalom Lehman,** the man who discovered Lehman Cave, planted an orchard of fruit trees in the open field below the road in front of you. Some of the original apricot trees are still there, bearing fruit for you to sample in the summer and autumn. The wooden structure and narrow ditch below are pieces of the irrigation ditch Lehman built to bring water to his trees from a spring two miles away.

# Pinyon/Juniper Community

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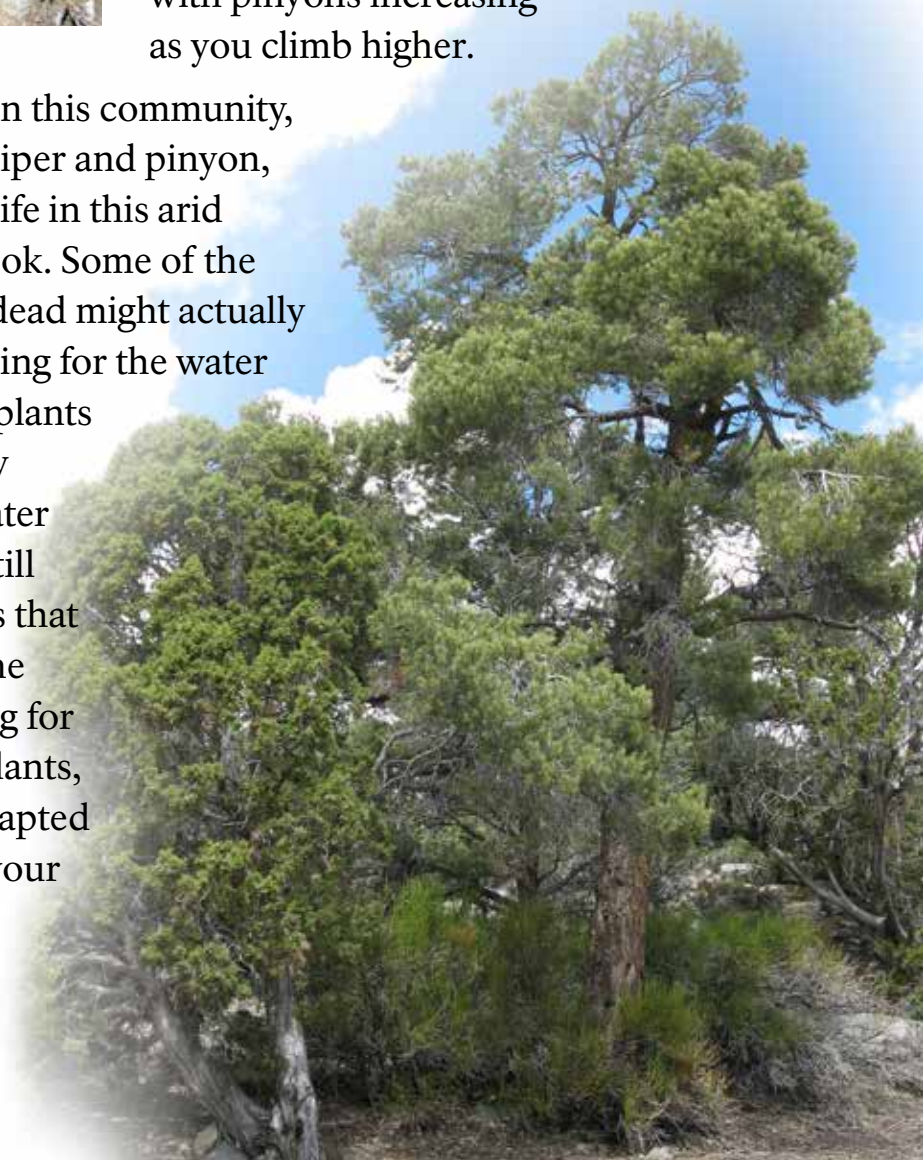
Pinyons and Junipers often thrive together at elevations between 5,000 and 7,000 feet. They can be found all over the western United States and parts of Mexico. Junipers tend to be more numerous at the lower elevations, with pinyons increasing as you climb higher.

All of the plants in this community, including the juniper and pinyon, have adapted to life in this arid climate. Take a look. Some of the plants that look dead might actually be dormant, waiting for the water to return. Other plants have waxy or tiny leaves to keep water from escaping. Still others have roots that extend far into the ground, searching for water. Like the plants, how have you adapted to this place for your own visit?



# Limestone and Marble

4 Look at the landscape around you. Now, remove the mountains and imagine all of it covered by water. This entire area was once a part of a shallow sea that existed around 700 million years ago. How do we know that? The evidence is right beneath your feet!

The limestone and marble you are standing on are composed mainly of **calcite,** a common mineral found in the shells of sea creatures. For nearly 400 million years, these animals lived and died in that sea, leaving their shells behind on the sea floor. Over time, those layers of calcite were crushed and compressed to create both limestone and marble.

# Basin and Range

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Great Basin National Park is only a small portion of the area it represents. The Great Basin stretches from the Sierra Nevada of California to the Wasatch mountains of Utah, and from southern Oregon to southern California. The term "basin" refers to that fact that there is no surface water that flows to the sea here. All the snow and rain that falls either evaporates or collects and absorbs into the ground.

On your way here, did you notice how many mountain ranges you passed through? This landscape of parallel mountain ranges and the valleys between them extends from the Great Basin all the way to Texas and Mexico. When this area was uplifted around 60 million years ago, the crust began to stretch up and out, fracturing into huge blocks. As time went on, some of those blocks were thrust up to become the mountain ranges divided by the broad valleys you see around you.

# Leaks in the Roof

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Around 150 feet right below where you now stand lies Lehman Cave, an amazing and intricate structure that began its existence around one and a half million years ago and is still growing to this day. Many of the cracks in the limestone on this hillside are miniscule passages into the cave below. As rain falls and seeps into the ground, it picks up a little carbon dioxide from the dead matter in the soil, becoming a weak acidic compound we call **carbonic acid.** (*Note: this same compound can be found in the soda you drink!*) As this acid makes its way into tiny cracks and crevices in the rock, it dissolves a bit as it goes, picking up some of the native calcite.

Once it reaches the cave, however, the carbon dioxide gets released into the air, just like opening a soda can, and the water can no longer hold onto that mineral it has gathered. So the calcite gets deposited wherever the water seeps out. The resulting diverse speleothems, or cave formations, create an underground world like something from a fantasy.

# The Natural Entrance

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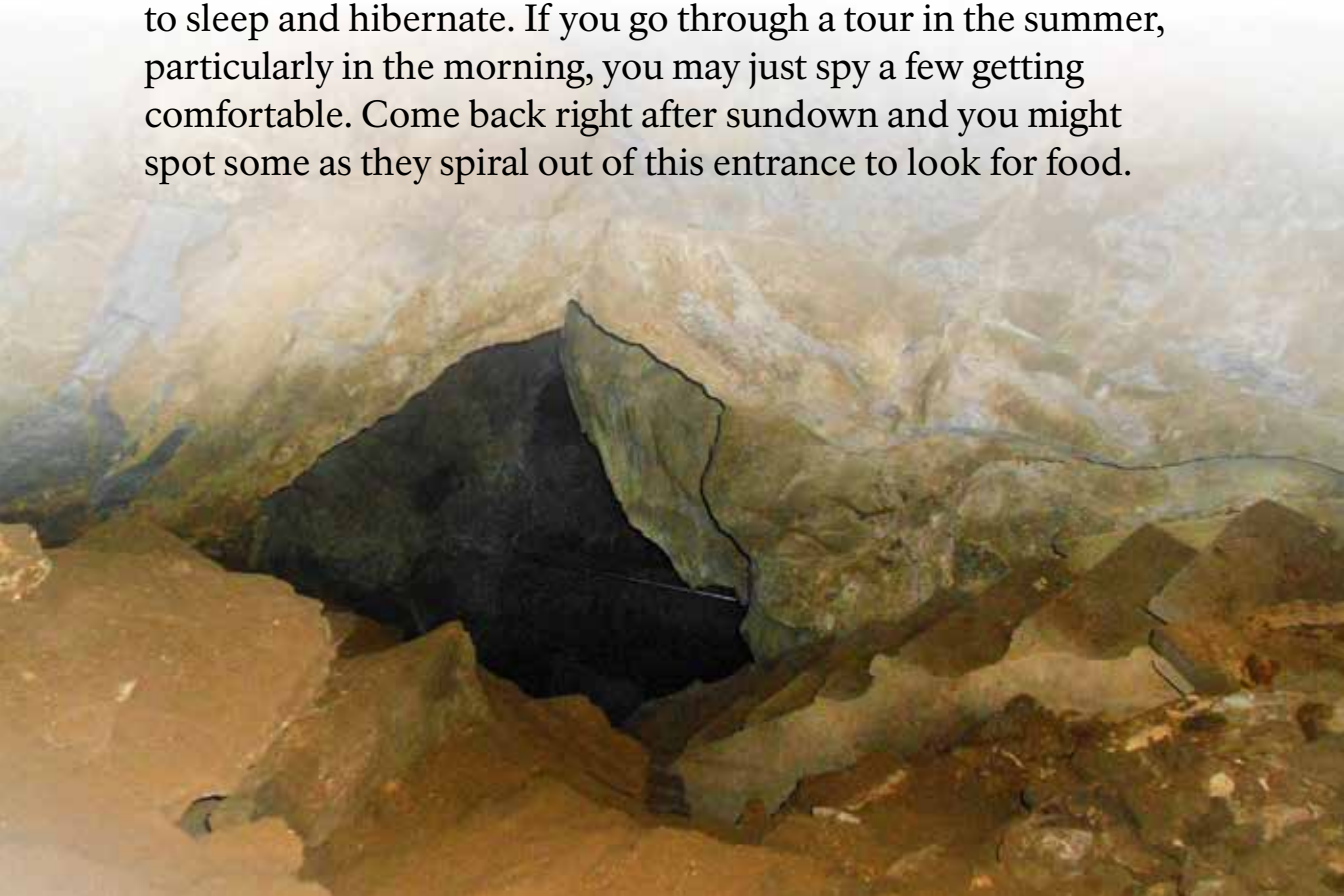
A metal grate stands over the natural entrance into the cave that Absalom Lehman first discovered around 1885. For many years, this entrance was covered with a shed and then a concrete cap. In 1997 the current structure was installed in order to provide better airflow to the cave as well as allow access to the animals that naturally seek out the cave's protection. In recent years, we have started to see bats returning to sleep and hibernate. If you go through a tour in the summer, particularly in the morning, you may just spy a few getting comfortable. Come back right after sundown and you might spot some as they spiral out of this entrance to look for food.



# The Next Step is Yours

Our short journey has taken us through millions of years of history. The shallow sea provided the building blocks for the limestone mountains and caves. The pinyon and juniper forests have helped sustain the lives of animals and people for thousands of years. Lehman and the other settlers in the 1800s brought a new outlook to this land. Through all of this, the interconnection of our environment is plainly visible. You are the next chapter in this story. Take a tour through the cave, hike up to Wheeler Peak or the alpine lakes, or explore a grove of ancient Bristlecone pines. As you experience Great Basin National Park, creating your own memories and making unique connections, you will become part of this land's heritage, just as it becomes part of yours. So whether you are here for the first time or the fiftieth, explore with an open mind and heart, and thank you for helping to preserve this beautiful land.

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