

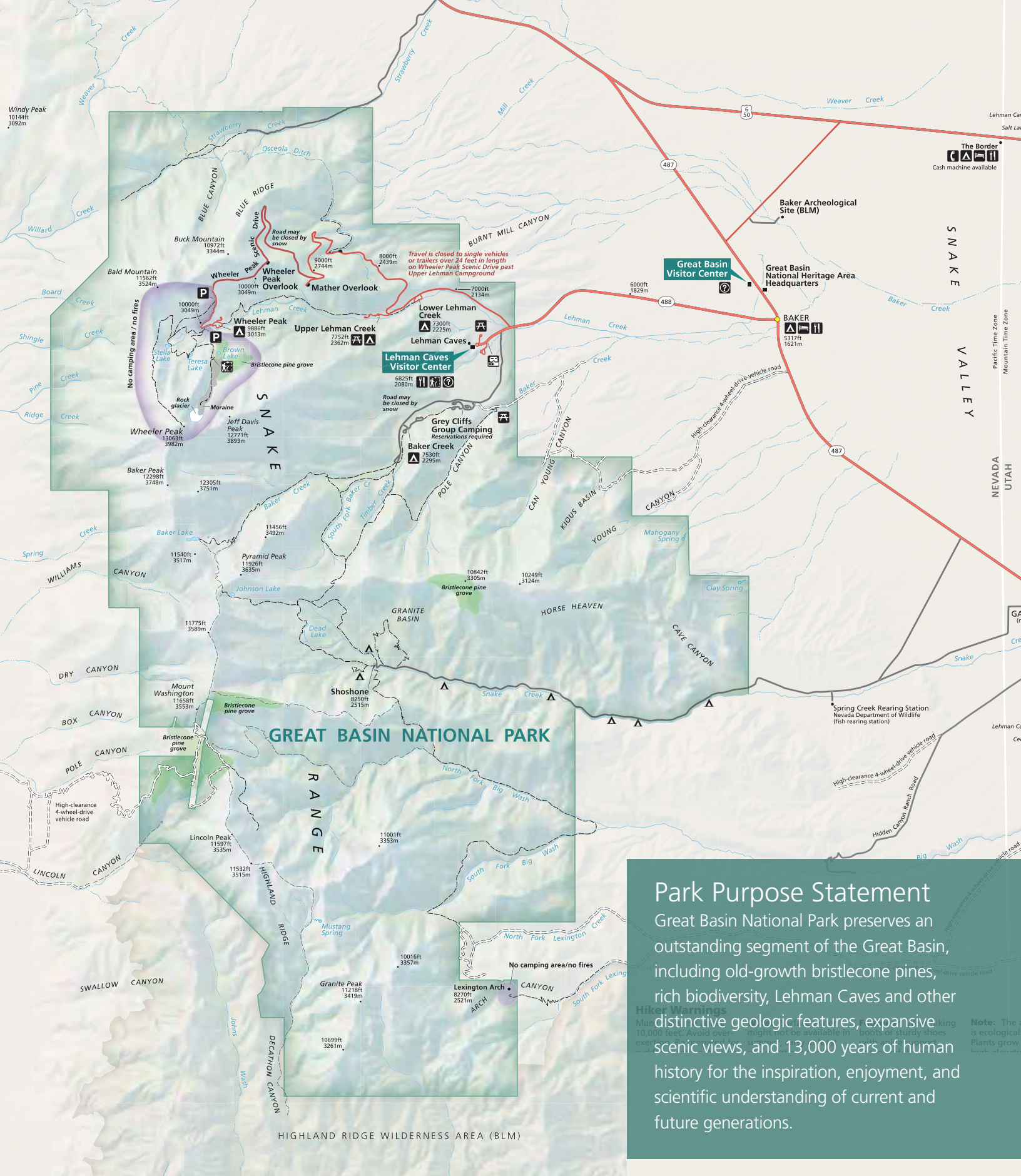


# *Year in Review*



2019





**ON THE COVER:** Great Basin National Park conducted extensive work with bats this year with two major events focusing on bats, our annual BioBlitz and the MOJN Bat Blitz. PHOTO BY JOEY DANIELSON

All photos courtesy of NPS unless otherwise noted.

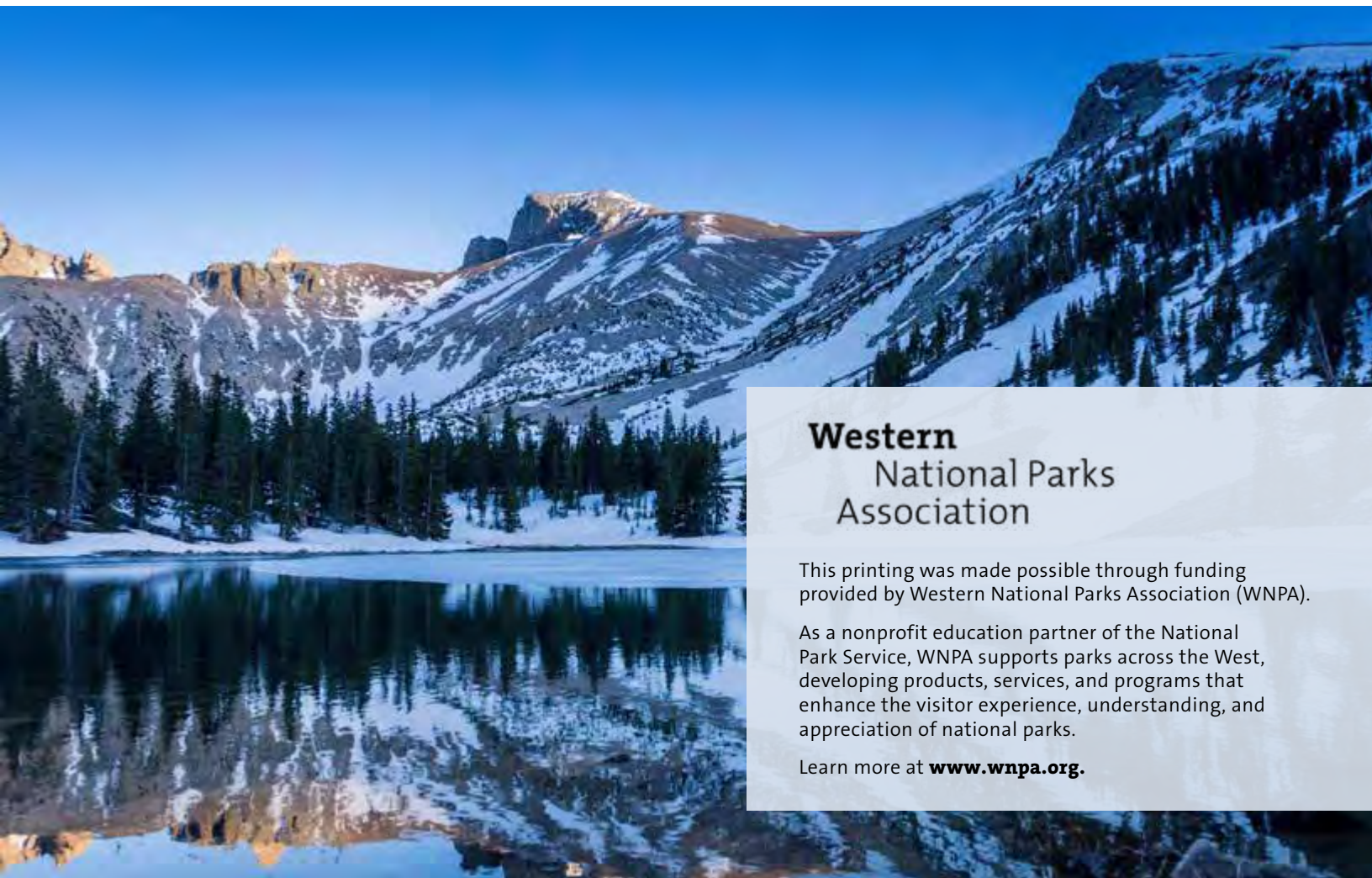
## Dear Friends of Great Basin National Park,

2019 was a successful year for the park. NPS employees, volunteers, and our many partners helped us preserve and protect the park, while providing for the needs of more than 150,000 annual visitors. A National Park Service report shows these visitors spent \$8.8 million in communities near the park. That spending supported 121 jobs in the local area and had a cumulative benefit to the local economy of \$9.0 million.

We continue to wisely use federal resources to reduce our maintenance backlog. Just this year, we received approval to begin projects valued at \$9 million dollars. This includes projects to reconstruct the Lower Lehman Campground, replace aging infrastructure in Lehman Caves, reconstruct the Bristlecone Recreation Area and Summit Trailhead parking areas, protect Bonneville cutthroat trout using high elevation refugia, and stabilize and restore the Strawberry Creek watershed (impacted by 2016 fire).

The park also promoted its “International Dark-Sky Park” status by hosting the 10th Great Basin Astronomy Festival, partnering with Northern Nevada Railroad Museum to host “Star Trains,” and serving over 10,000 annual visitors in our astronomy programs.

In the following pages, you will find many more successes for the year. None of this would have been possible without the support of friends like you.



### Western National Parks Association

This printing was made possible through funding provided by Western National Parks Association (WNPA).

As a nonprofit education partner of the National Park Service, WNPA supports parks across the West, developing products, services, and programs that enhance the visitor experience, understanding, and appreciation of national parks.

Learn more at [www.wnpa.org](http://www.wnpa.org).





It takes a total team effort to help someone who is lost or injured. Park staff and local volunteers help to get everyone out safely.

## Search and Rescue

Emergency Operations within the Search and Rescue field have continued to improve over the past year. Organization, training, and participation across all divisions have greatly contributed to an increased sense of confidence in handling emergencies when they arise.

This year, the Send Word Now program was put to the test. This program is used to notify and dispatch resources in a timely manner. Participants were summoned for a search of the Wheeler Peak area for a lost 13 year old female during the busy 4th of July week. Beautiful weather in the Valley gave a false sense of security at higher elevations where in some areas, feet of snow still covered trails. Search and Rescue members were able to effectively convene, formulate a plan, and execute it successfully by locating the missing party in under three hours from the time of initial notification. The timely and successful response is indicative of the effort and dedication that all team members have contributed over the past year.

Communications within the Wheeler Peak area have been greatly improved by proof of concept testing of a mobile radio repeater. These mobile repeaters once tested can be implemented to expand coverage into remote areas of the Park.



## Wilderness Medicine Program

The first phase of the Wilderness Medicine Program has been a success. Through a cooperative agreement and collaboration with the University of Nevada in Reno, Dr. Thomas Bateman joined the ranks of the Great Basin emergency management team. On his first day of arrival, Dr. Bateman was able to assist by hiking to a distressed person suffering an asthmatic attack at high elevation. His assistance in this instance and many others, such as a possible cardiac event, have been a major asset.

Dr. Bateman will continue to supplement emergency operations when events arise. During any down time, he will be able to provide trainings to Emergency Medical Services personnel. Dr. Bateman is working to check historical statistics to see if there are any preventative measures that can be implemented to prevent an injury or accident from occurring.

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## Continued Partnership with the Nevada Northern Railway

In 2015 Great Basin National Park and the Nevada Northern Railway started working together to provide a once in a lifetime experience for visitors, to ride a train out into the dessert and gaze up to the heavens using telescopes and the naked eye. The Star Train has now become the Nevada Northern Railway's most popular event. This event is staffed by local volunteers, Railway staff, Park Interns, and Park Rangers. This partnership combines two of Nevada's biggest attractions; history and dark nights.





"The Star Train" is a wildly successful partnership between the Northern Nevada Railway in Ely, NV and Great Basin National Park.

## Great Basin National Park Foundation

Great Basin National Park Foundation (Foundation) has been a strong supportive partner with the park. As the primary fundraising group for the park, the Foundation works closely and communicates with the park to understand the needs of the park resources and park visitors. This has resulted in a welcome flood of support.

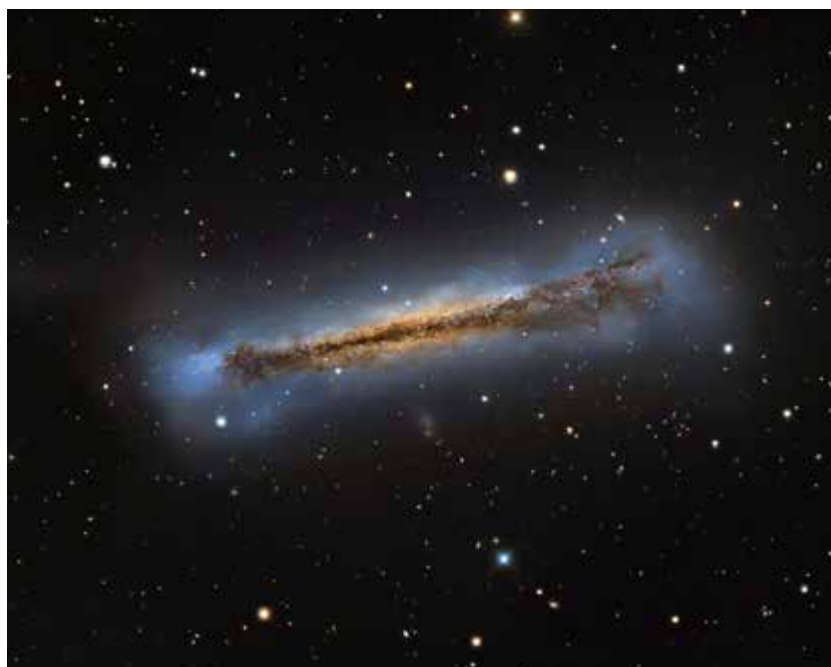
In 2019, the Foundation supported many programs and projects that will help captivate visitors' imagination and curiosity for years to come. These programs included the Reach for the Stars program that reached over 900 students, a community rocket launch with local 4-H youth, and the 10th Annual Astronomy Festival with over 1000 in attendance. Through grants from the Fund for People in Parks, we completed a new exhibit for the Forgotten Winchester and a new bronze map of the Wheeler Peak Cirque.

It is great having a partner like the Foundation. They are just getting warmed-up and everyone is looking forward to a future directed by the partnership and strategic planning.

## Darkest Skies at Great Basin

For years Great Basin National Park has been known as having some of the best night skies in the lower 48. Great Basin is committed to the interpretation, education and protection of the night sky by providing weekly astronomy programs from April to October, assisting the Great Basin National Park Foundation (Foundation) with outreach to schools, and taking dark-sky readings. Over 10,000 visitors experienced an astronomy program, in 2019.

This partnership between Great Basin National Park, the Foundation, and partner universities has yielded research on double star systems and exoplanets. Astounding images taken by the Great Basin Observatory (GBO) are used for grade school outreach education like the "Reach for the Stars" program. With the help of the Geologist in the Parks internship, Great Basin is taking monthly dark-sky readings with an average rating of 21.84 magnitude per arc second squared. As a comparison, a city like Las Vegas would have a rating of 15 or lower magnitude, that is 600 times brighter than Great Basin's night skies.



NGC3628 also known as the "Hamburger Galaxy" taken by the telescope donated by the Niggli Family at the Great Basin Observatory.





## Wilderness Volunteer Partnership

The fall of 2019 marked the first time Great Basin National Park has partnered with Wilderness Volunteers (WV), a non-profit organization founded in 1977 whose mission is to promote volunteer service in America's wild lands.

Twelve volunteers from five states traveled to Great Basin National Park to complete a fence removal project in Strawberry Creek. Over a mile of wire, stays, t-posts, and metal braces were removed. The allotment fence was no longer necessary and posed

a threat of entanglement to wildlife moving through the area. Although important for maintaining a safe corridor for elk and mule deer, this project would not have been completed without the help of the Wilderness Volunteers. The group was also able to take advantage of several park programs and attractions including bat surveys, the astronomy program, Wheeler Peak, and Lehman Caves. We hope to build on this year's partnership and work with the Wilderness Volunteers in the future.

Wilderness volunteers removed old fencing that posed a danger to wildlife.

## Bonneville Cutthroat Trout Reintroduction

In 2010, it was discovered that non-native brook trout existed in the Bonneville cutthroat trout (BCT) restoration area in Snake Creek. Over the next few years it was observed that despite the ongoing efforts to manually remove brook trout from the stream, they were still outcompeting and outnumbering the native BCT. Great Basin National Park received funding from the Southern Nevada Public Lands Management Act (SNPLMA) to restore BCT to Snake Creek within the park's boundary. This is the final year of this project.

The goals of the project were to install a fish barrier near the park boundary, salvage as many BCT as possible, eradicate all remaining non-native fishes, and then reintroduce BCT to Snake Creek. To date, the fish barrier has been installed allowing the restoration of an additional 2 miles of stream, 270 BCT and 440 brown trout were salvaged and released into Silver Creek and Commins Lake respectively, two rotenone treatments ensured the eradication of non-natives fishes, and 118 BCT have been reintroduced to Snake Creek. The reintroduction that occurred this year was only made possible by collaborating with the Nevada Department of Wildlife (NDOW).

## Strawberry Fire: Final Year of Burned Area Rehab

The Strawberry Fire burned 2,790 acres of park land in August, 2016. Sagebrush steppe, pinyon-juniper, aspen, mountain mahogany, and riparian plant communities were impacted by the lightning-ignited fire. After the fire, the park prepared a three-year Burned Area Rehabilitation (BAR) plan. Plan objectives were revegetation of native plant communities, management of invasive plants, and replacement of minor infrastructure destroyed by the fire.

Restoration treatments outlined in the BAR plan are complete. Three aerial seedings were conducted on the Strawberry Fire. A native seed mix was distributed over a total of 3,038 acres during the three seedings. Invasive plant surveys were completed on 1,230 acres over the three year project. Invasive plant treatments focused on cheatgrass and five target forb species with new infestations of Canada thistle, houndstongue, and hoary cress discovered and treated post-fire.

The condition of native vegetation, especially riparian and aspen communities, continues to improve. Management of invasive forbs and annual grasses will continue as will monitoring to determine the success of revegetation efforts.

**May 2019**—Strawberry Creek area reopened for day use only.



## Reading Nevada History in Lehman Caves

“Lizzie McQuitty, Ely Sept 14, 1887” – Lizzie paused in the candlelit cavern after climbing and crawling through narrow passageways. She penned her name on the cave wall to mark the occasion. Many after her would leave their mark beginning a record of “ecotourism” in Nevada.

Park archaeologists and historians are recording artifacts and inscriptions in the caves and researching government archives in the first step toward recognizing Lehman Caves in the National Register of Historic Places.

Inscriptions, trail bridges, and walls of stacked broken formations are intertwined in history with political ambition, transportation, parks, and outdoor recreation in Nevada. After 1885, for a fee, Absolom Lehman guided people into the wonderland of speleothems and placid pools. No one at the time thought of the term “ecotourism”, but a history of Nevada outdoor recreation was beginning.

Lehman Caves and Great Basin National Park continue to lure tourists to the area benefiting the local communities, continuing the legacy of recreation and tourism in Nevada.

## Road Crew

The Road Crew was hard at work before the travel season kicked off. Given the excessive winter snow, they were busy clearing the Scenic Drive for over one month, chugging through up to four feet of snow pack. The previous winter's above-average snowpack impacted operations for months into the summer, beginning in June, with the flooding and subsequent evacuation of the Baker Creek Campground.

Major progress was made on the Astronomy Amphitheater and Day Use Area Refurbishment Project, funded by the Southern Nevada Public Lands Management Act. A rock wall was built around the edge of the amphitheater seating area, power lines were installed to the site, a theater building was set in place and picnic tables and grills were installed in the adjacent picnic area.

RIGHT: Trail crew (left to right); Tammie Huff, Adam Casper, Kirk Lewis, and Loren Reinhold up near Mount Washington.

## The Next Generation

Funded by a Conservation Initiative through the Southern Nevada Public Lands Management Act program, the Park and our partner Great Basin Institute Research Associates will work to rehabilitate the historic Lehman Orchard.

Original trees were planted in the late 1880's. Remaining apricot trees in the orchard are over 130 years old. Records show the original plantings also included pears, apples, and peaches. Pears and other apple varieties selected from local ranches will preserve the pioneer heirloom trees adapted to the local climate and growing season. Peach trees will be selected from nursery stock appropriate to varieties available in the 1880's.

An orchard management plan was prepared to document the history of the orchard and techniques of pruning and planting in the historic period. Pruning trees for historic form makes a wide spreading tree with more open crown. A modern drip systems will be installed to conserve water.

By 2022 we will have irrigation systems in place, trees planted, and educational material available. We hope we will be picking the next generation of apricots, apples, pears, and peaches by 2025.

## Trail Crew

This year's Trail Crew was everywhere working on different projects in Maintenance, Natural Resources, Interpretation and of course maintaining the trails. Being in high demand didn't stop the trail supervisor, Adam Casper and his crew from getting the work done on various park trails. Additionally, the Nevada Conservation Corp (NCC) crew worked on the Baker Lake trail, removing fallen trees, encroaching vegetation across the trail and repaired or replaced water bars, drainages, rocks, and eroding slopes.

Their hard work resulted in better visitor access to one of the most beautiful areas of the park, with spring wildflowers, grassy meadows and a beautiful lake surrounded by a steep walled cirque.





# Coming in 2020!

## LEHMAN CAVES VISITOR CENTER REOPENS

### Late February

After being closed for the installation of new exhibits the Lehman Caves Visitor Center will re-open. The exhibits were funded by SNPLMA. Come explore the new spaces, including a simulated cave!

## WHEELER PEAK CAMPGROUND CLOSED

### Summer

Work will begin on improvements to the Wheeler Peak Campground. There will be partial closures in the campground. Check our website <https://www.nps.gov/grba/planyourvisit/conditions.htm> for current closure information.

## ANNUAL BIO-BLITZ

### July 2020

Volunteer to help the park discover more about the plants, animals, insects or other life that calls the Great Basin home. For updated information and how to sign-up: <https://www.nps.gov/grba/learn/nature/great-basin-bioblitz.htm>

## GRAND OPENING

### August 15, 2020

Over the last year Great Basin has completed so many projects we will have a grand opening celebration for new exhibits, maps, trail re-openings, educational signs and more. There will be a scavenger hunt to help you find all the new items and get a sticker for this special event.

## 100th ANNIVERSARY OF LEHMAN CAVE NATIONAL MONUMENT

### Coming in 2021



## 11th ANNUAL ASTRONOMY FESTIVAL

### September 17-19, 2020

Come see some of the darkest skies in the country! There will be activities for kids, guest speakers, and view night sky objects through telescopes.

National Park Service  
U.S. Department of the Interior

Great Basin National Park  
Baker, NV  
[www.nps.gov/grba](http://www.nps.gov/grba)

