



**NATIONAL  
CONSERVATION  
LANDS**

**New Mexico**  
2023: Annual Manager's Report

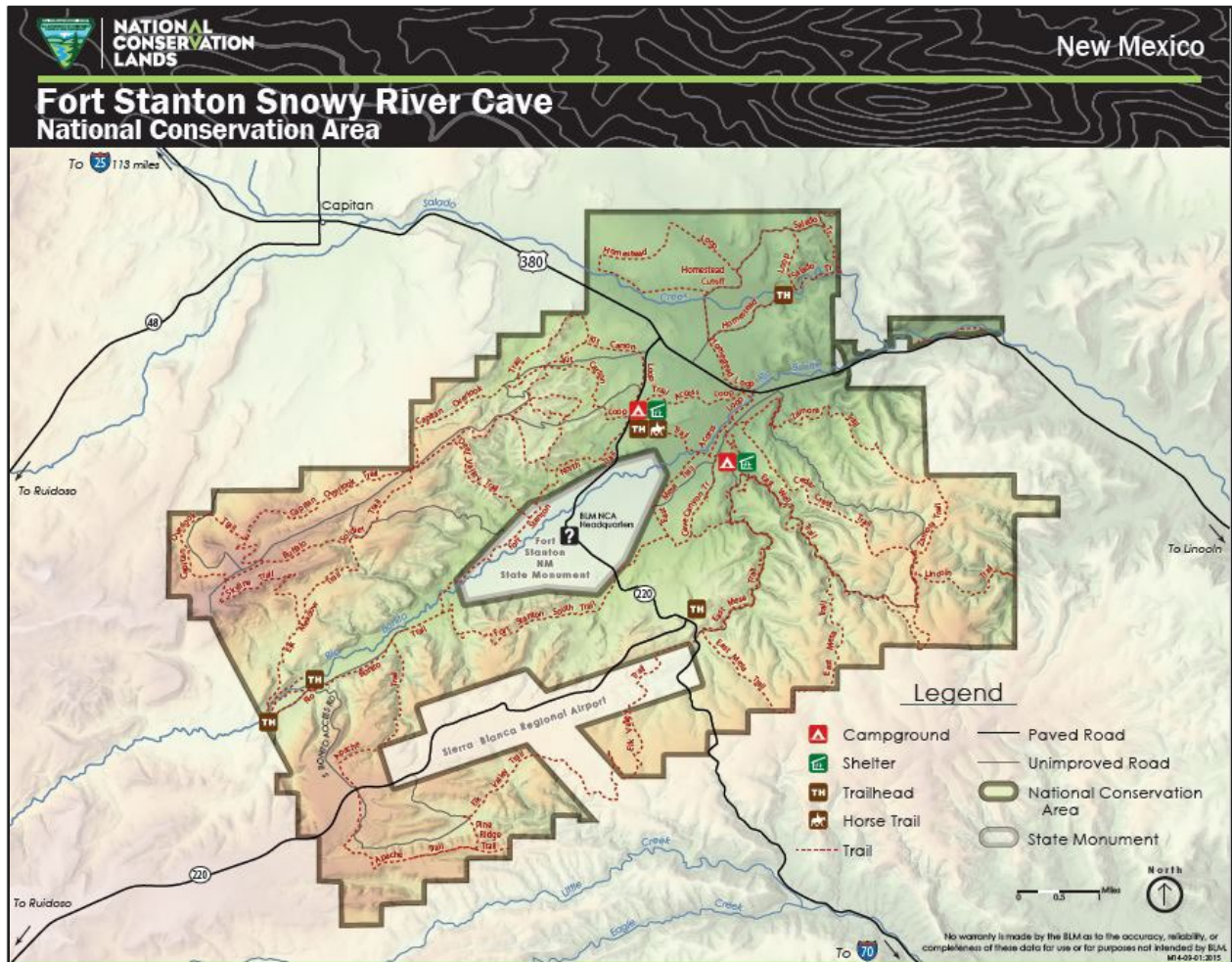
# Fort Stanton-Snowy River Cave

National Conservation Area





# Map



# Accomplishments

---

In 2023, Fort Stanton-Snowy River Cave National Conservation Area (Conservation Area) conducted a sanctioned National Cave Rescue Commission (NCRC) cave rescue training for local first responders. This activity promoted cooperation between local first responders and experts in the cave rescue community and provided hands-on mock rescue scenarios. The Conservation Area also hosted portions of the Sierra Blanca Wildland Fire Academy. This academy strengthens the connections between local firefighting resources and the BLM, while also providing practical instruction in wildland fire methods and tactics.

The Conservation Area hosted two National Public Lands Day events this year. One event included BLM staff working with Girl Scout volunteers to plant native trees at a campground. The second event involved a team of cavers making a trip into Fort Stanton Cave and working on a formation restoration project.

The Conservation Area continues to promote a volunteer program. The campgrounds have volunteer camp hosts year-round, in six-month terms. The hosts are the face of the BLM as they interact with the public daily, especially during the summer and fall months. In 2023, the volunteer camp hosts logged over 2,000 hours of volunteer time assisting the public with any questions or needs, maintaining the campgrounds, cleaning the facilities, landscaping and more.

BLM increased yearly entries into Fort Stanton Cave to 350 for 2023. Cave entries were focused on restoration efforts in the historic section and other projects in the cave. Other projects included trail maintenance, rescue cache replacement, data logger maintenance, several photo-documentation trips, resurvey, digs, lidar and photogrammetry trips to support the Caver Quest program, Majic carpet maintenance trips, evaporation study, and continued installation of live data logger network.



Cave Volunteer

# Challenges

---

The bat populations in the Fort Stanton Cave are potentially at risk from White Nose Syndrome (WNS), a fungal infection that has devastated bat populations in other locations. Swabbing of bats and cave surfaces detected no Pd (*Pseudogymnoascus destructans*) spores, even though WNS has been detected in Lincoln County. The threat of introduction of the fungus by people was addressed by restricting recreational access to the cave. Minimal cave entry was allowed only for scientific and management purposes. 2023 was the third year that all entries into the Cave required dedicated cave gear to reduce potential introduction of the virus to the cave system. Conservation Area management has taken measures to prevent cave break-ins and vandalism which could harm biological values and cave formations. However, with portions of the cave outside the Conservation Area, there are concerns about how to protect the whole cave system. A potential future stressor to the cave's biological and physical features could potentially come from outside the Conservation Area, including impacts to water sources for active cave features.

Stressors on non-cave natural resources result mostly from increased recreation use. Changes in New Mexico's regulations for the hunting unit that includes the NCA resulted in increased use during several hunt periods that were once just for youth hunters no longer have that restriction. Increased UTV use results in unauthorized driving off-road, cross-country, or on trails especially during hunting season, which creates ruts and exacerbates erosion damage during precipitation events. The presence of a new law enforcement officer for the Roswell Field Office has made an impact on being able to prevent or catch some visitors engaged in the illegal acts.

Other challenges come from outside the boundaries of the NCA. Continued urban interface expansion places more homes and related developments such as septic systems and other point-sources of pollution closer and closer to the Conservation Area. Wildland fire risk remains present on the NCA and in surrounding areas. Boundary fence breaks threaten the NCA by providing access to cattle from surrounding ranches.



**A small excavator removes debris and silt from a low water crossing after a rain event.**



# Visitors

---

Visitors to the Conservation Area in 2023 came from a variety of places. The Conservation Area is popular with residents from surrounding communities. It also sees heavy visitation from out-of-state visitors who come to visit other attractions in the area, such as the state historical monuments at Fort Stanton proper and Lincoln, Smokey Bear Historical Park in Capitan, skiing near Ruidoso, and Valley of Fires near Carrizozo. Visitors come for a variety of recreational opportunities: hiking, mountain biking, horse riding, UTV riding, hunting, wildlife watching, and much more.

Over the past several years, recreation activity and opportunity has increased throughout the Field Office and on the NCA. The higher visitation rate increases litter, illegal dumping, user-created roads and new campsites. Staff have had to adjust to mitigate the impacts of increased use. To get a better sense of visitor use, the NCA staff have installed traffic and trail counters at several key points to identify which portions of the NCA are most heavily used and at what times of year. These counters will help to provide more accurate reporting of use.

The Conservation Area continues to be a premier destination for equestrian riders, especially during the summer. In 2023, the Conservation Area hosted two equestrian related Special Recreation Permit events that were staged out of the Rob Jagers Campground and used the NCA Trail system, as well as everyday camping and trail riding.



Rob Jagers campground

# Partnerships

---

Partnerships are essential in carrying out the mission of the Conservation Area. The partnership with Conservation Corps New Mexico has been a huge help with the assistance of interns. The partnership with New Mexico Historic Sites has enabled the BLM to provide maps to the public and install an exhibit at the Fort's Museum.

The Upper Hondo Soil & Water Conservation District helped with multiple projects including thinning vegetation, and eradicating non-native, invasive vegetation. Continued research with US Fish and Wildlife Service and Texas Tech University monitors the effects of vegetation thinning on migratory birds. American Endurance Riders Conference (AERC) worked with BLM to monitor trail conditions during their ride event and share their findings with BLM. The Eco Servants AmeriCorps Trail Crew has partnered with BLM for over a decade to enhance trails and recreational opportunities on the NCA. Healing America's Heroes has secured grant funding to build 12 miles of trails on state land that will connect to BLM trails on the NCA to increase user access across jurisdictional lines and enhance the trails available to the public.

The assistance agreement with the Fort Stanton Cave Study Project ended in 2023. The partnership resulted in cave displays, virtual cave tours, and ongoing new research. The Fort Stanton Cave Study Project will continue to provide volunteer cave research and supporting activities such as outreach and education. A cave survey team mapped 2.5 miles of new passage in the Snowy River Cave Complex in FY 2022, bringing the cave to 44.57 miles of total mapped passage. The Cave is now the 9<sup>th</sup> longest cave in the USA, and the 42<sup>nd</sup> longest in the world. Research scientists have conducted studies in climatology, bat census, microbiology, cave sedimentation, and White Nose Syndrome monitoring. BLM's assistance agreement with PLIA (Public Lands Interpretive Association) continues cave educational programs for 7<sup>th</sup> graders in Lincoln County and Mescalero Middle schools. In 2023, PLIA received the "Outstanding Public Engagement" award for the Caver Quest Academy through the nation-wide Public Lands Alliance Partnership Awards Program.



A smartphone shows the Caver Quest Academy application

# Science

---

The Conservation Area hosts scientific research on both the Area's surface and in the Cave. On the surface, the BLM (with partners Texas Tech University, New Mexico State University, and the Fish and Wildlife Service) is in the 5<sup>th</sup> year of an 8-year study on the effects Piñon and Juniper thinning projects on migratory birds. Below the surface, there are many on-going research projects. Research included studying the geochemistry of the hydrologic system to investigate the source water for the cave; paleo climate, Composition and Metabolic Activity of Microbial Communities; Clastic Sediment Study; and *Pseudogymnoascus destructans* and White Nose Syndrome testing.

The Conservation Area also hosted research including an annual bat count in February, a White Nose Syndrome (WNS) swabbing in April with Roswell Field Office and New Mexico State Office biologists, a UNM PhD student collecting two cores within Ft Stanton Cave to support her work on the investigation of a dynamic subterranean river past for the Snowy River Passage, and a UNM research scientist conducting sample collection for his paleoclimate study.



A researcher takes a water sample in Fort Stanton Cave



# Climate Impacts

---

In 2023, the Conservation Areas received 8.63 inches of precipitation which is significantly less than for the region. Rain events occurred in a monsoonal pattern, with short heavy rain events punctuating longer drier spells. Piñon and juniper trees are stressed from drought and bark beetles. Increased fire danger resulted in Stage 1 fire restrictions on the NCA for portions of the year. The NCA remains in high fire danger and the danger may be increasing as surface vegetation from previous higher precipitation years dries out and increases the fuel load.



Using a trail dozer, BLM installs a wildlife waterer at the Conservation Area.



# Climate Resiliency

---

The Conservation Area is proving to be resilient to climate change. Several plant and animal species are regularly monitored and have populations and geographic distributions that are within historic norms. Preventative fuels treatments and stream restoration projects are helping to maintain a healthy eco-system and reduce the possibility of catastrophic fire or flood events. Developed campgrounds are being planted with historical and native plant species. Ongoing monitoring of rangeland conditions and bird species studies provide a valuable understanding of the biodiversity at the Conservation Area.



A close-up of a Kuenzler's hedgehog

# Social and Environmental Justice

---

The Conservation Area team, supported by the Roswell Field Office conducted outreach to local organizations and clubs and visited special events in the region to inform visitors of the recreational, scientific, and natural exploration values at the Conservation Area. Staff partnered again with the Village of Ruidoso's Parks and Recreation program to staff an information station at the annual Recreation Expo. The staff also participated in a children's archery clinic hosted by the New Mexico Department of Game and Fish.

Educational visits associated with the Caver Quest Academy let students from small and underserved communities—including the Mescalero Apache Reservation—learn about the cave, and for some to enter and explore the cave under the leadership of an experienced BLM caver. Our cave specialist conducted outreach talks about the cave to civic organizations, local lecture series, and community events.

A partnership with Healing America's Heroes provided opportunities for veterans, who had experienced in-service traumas, to fish and ride horses on the Conservation Area. Healing America's Heroes is securing a grant to build trails on State of New Mexico lands adjacent to the Conservation Area. These trails will connect to the network of trails on the Conservation Area expanding opportunities for trail users.

The Conservation Area strives to be a destination for visitors to experience nature, explore science, and recreate in a one-of-a-kind place.



A group of children on a guided cave tour.



# Events

---

Numerous events are hosted and take place in campground facilities and throughout the Conservation Area during the year. The Conservation Area hosted two equestrian events staged out of the Rob Jagers campground. The campground was also host to a wedding. Other events included several 3D archery shoots throughout the year. People enjoy hunting and camping on the NCA during various game seasons. To promote safe hunting NCA staff partnered with the Lincoln National Forest and New Mexico Game and Fish Department to hold a youth archery event. The NCA also hosted three 9-day cave expeditions, along with many shorter weekend expeditions.



**BLM and other agency staff pose with winners of a youth archery event.**

# Words from the staff

---

This year the Fort Stanton – Snowy River Cave National Conservation Area hosted a National Public Lands Day event at the Rob Jagers Campground. A Girl Scout troop from Roswell, New Mexico, planted cottonwood trees, which are native to the area. In years to come these Girl Scouts will be able to come to the Conservation Area and see these trees grow into large shade trees improving the experience at the campground. The team at Fort Stanton – Snowy River Cave National Conservation Area is heartened by this volunteer work. Volunteers willing to give time to help improve public lands like the Conservation Area gives greater value to our role as stewards of this great conservation area.



**Girl Scouts and BLM staff pose with a freshly planted cottonwood at a National Public Lands Day volunteer event.**





**NATIONAL  
CONSERVATION  
LANDS**

# Fort Stanton-Snowy River Cave

## National Conservation Area

Roswell Field Office  
Bureau of Land Management  
2909 West Second Street  
Roswell, NM 88201  
Phone: 575-627-0272

**Report compiled by:** Warren Kasper, NCA Manager, [wkasper@blm.gov](mailto:wkasper@blm.gov), Office 575-354-0099

The mention of company names, trade names, or commercial products does not constitute endorsement or recommendation for use by the federal government.