

priving south on US Highway 285, through the southern Colorado Rockies in autumn, should have been spectacularly beautiful, but low clouds and rain squalls blocked views of golden aspen and high peaks dusted with snow. Yet, by the time I reached Santa Fe, the skies were clear, and they remained so the rest of the way to Capitan, New Mexico.

On Friday evening, I met the new friends I would work with for the next week in the BLM bunkhouse off the "Billy the Kid Trail". Many of the volunteers have explored Fort Stanton Cave for several decades. This is a cave that has yielded a consistent string of discoveries over that period of time. The latest discoveries have made it all the way to the halls of the US Congress with a bill to declare the cave a National Cave Conservation Area.

Saturday morning, organizational and safety meeting, departed for the 10-minute drive to the cave entrance. A security fence surrounds the sinkhole, and the main entrance is gated with a stout gate. During this workweek, other BLM entry permits are denied, while the Study Group sends several work trips into the cave daily. Today, two groups were headed in, one to work on an environmental door and the deepening of and shoring-up of a recently dug shaft in the Don Sawyer Memorial Hall, and the other group to pursue a dig off Helictite Hall. I joined the latter trip, led by John Lyles, an engineer from Los Alamos. Fort Stanton Cave has quite a few large passages and rooms that end in breakdown, and this is an attempt to follow a clay-plugged side passage to circumvent such a breakdown.

This was my first time digging in a cave! Previous work had opened 40 feet of passage, with a limestone ceiling and clay walls & floor, dug open to a height of a foot and a half. One member of the team digs in 15-minute shifts, another fills a plastic tray with diggings, and then three pull and guide the tray out to a spoils pile carefully situated off to the side of a large room. We made perhaps a dozen feet of progress in six hours of digging.

By working on this dig the first day, I avoided tromping through a large-bore passage with a foot or so of water over slippery mud. The next day I did not avoid this, but since I had borrowed a pair of hip-waders, the process was tolerable. So I headed into Don Sawyer the next morning; this huge room, the largest in the cave, is truly cavernous! The work team of eight spent the day excavating two feet out of the bottom of a 50-foot-deep pit that had been dug on the margin of Don Sawyer Memorial Hall to gain entry into a lower level of the cave into Mud Turtle Passage. This entry allows passage to the newly discovered portion of Fort Stanton Cave.

After a full day of digging, some of the team took several biological samples out to be placed in a passage in the new part of the cave known as Snowy River.

The Snowy River formation is a two-mile long calcite streambed discovered in 2001, after an extensive dig through breakdown to the east of the known cave. It was dry at the time it was discovered, but recently, water has begun to flow in the passage.

Read more regarding the water at http://www.nm.blm.gov/misc/snowy_river/snowy_river.htm.

The next day I joined Donald Davis on a dig at the end of a passage known as "Hell of a Thousand Pinches." A 750-foot belly crawl leads to a small room with a clay-plugged passage beyond. Three of us spent the day digging another dozen or so feet into a claustrophobic passage that continues a few inches high for perhaps another dozen feet. A light breeze and gravelly floor, as well as a resident bat, suggest that more passage awaits an ambitious explorer, but we were running out of time for the day. We exited the cave in a wild thunderstorm with torrential rains!

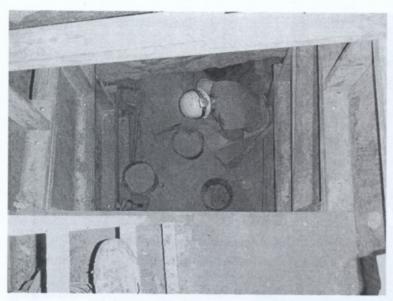


Photos:

Above Photo: Beautiful stalactites in Fort Stanton's Helictite Hall.

Left Photo: The BLM field station for the Fort Stanton Cave Project.

Photographs by Roger Harris.



Looking straight down the excavated shaft that connects Don Sawyer Hall to the Mud Turtle Passage.

Photo by Roger Harris.

A "rest day" followed, and local expert Lynda Sanchez led us on a tour of the old Fort Stanton. The fort was built in 1855 to defend settlers against the Apache; after it was decommissioned in 1896, Fort Stanton became America's first federal tuberculosis hospital and was the location of the first German internment camp during WWII. Later that afternoon, we all went out "ridge walking," trying to locate a "fissure" above the Skyscraper Domes in Fort Stanton Cave, previously located by the 1877 Wheeler Survey, but we were unsuccessful.

The following day, we tackled accessing passages lead off Sawyer Memorial Hall had built climbing pole Mud Carol's Passage, accessed many years ago by a bolt ladder. I and Donald & I photo-surveyed

the passage. Donald found a rodent skeleton that we marked for later study. We both climbed the rope that Wayne had installed across the DSMH up to the Promise Passage and photo-surveyed that passage also.

Thursday was a day set aside so that the Study Project cavers could give a project review and cave tour for BLM Management. I did not participate in the tour, so spent the day on a tour of the Valley of Fires, a Holocene basalt flow west of Carrizozo.

Friday was another "ridge walking" day, exploring for an insurgence that might flow two into Snowy River. After driving up Little that Creek, Wayne dropped Jim, Donald and me in Don the Eagle Creek Valley and we spent four hours walking up the creek bed and over the ridge to be picked up back in Little Creek (DSMH). Steve Valley by Cal. A beautiful autumn day to be a exploring this Permian limestone terrain!

Saturday we returned to the cave for one lumber last day... surveying passage off Skyscraper carted in for the Domes and collecting bones for age dating Turtle and identification. Four of us surveyed 180 shaft, and I got feet of passage and collected four bones in a the honor of specially prepared container. Then one final climbing up to trip through the slippery mud and back to the bunkhouse at dark.

I had now spent eight days at Fort Stanton ... I had seen spectacular velvet formations, a portion of the longest calcite formation placed new bolts known, worked on three digs, done two and fixed a rope, vertical climbs into rarely-visited passages, slogged though wet, muddy passages six times, squeezed through hundreds of feet of very tight passages, and had a terrific time with many new friends.

> AUTHOR'S NOTE. Some comments about digging in a cave: Such an activity seems to defy the "take only pictures, leave only footprints" philosophy of cavers. However, cavers take great care to preserve the resources of the cave, yet have found that clay-plugs and small breakdown blocks, deposited in small passages during the latter stages of cave formation, block access to extensive and noteworthy portions of this cave. Care is taken that 'spoils" are placed in out-of-the-way places in the cave where they minimally impact cave environments.



The dig crew at Helictite Hall, taking a break from their excavating efforts.

The water in Fort Stanton's Main Passage is draining slowly,

but a trip to Don Sawyer Memorial Hall is still wet and muddy.

Photograph by Roger Harris.

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