

n the two decades since the momentous discovery of inner Lechuguilla Cave in southern New Mexico, only one digging and exploration project in the southwestern United States has brought together the same enthusiasm, scientific study, innovation and unique group of participants that Lechuguilla enjoyed during its glory days. This, of course, is the ongoing project in New Mexico's Fort Stanton Cave, coordinated by John Corcoran of Rio Rancho.

Cavers from New Mexico, Arizona and Colorado regularly gather for the week-long expeditions scheduled three times annually, often coordinated with major holidays. Though some cavers spend the entire week, many individuals choose to attend only a weekend or extended weekend to assist with the various underground and aboveground activities.

The 2003 discovery of the spectacular Snowy River passage is a driving force for the expeditions, as the managing Bureau of Land Management officials have specified there can be no additional exploration using the original Priority 7 discovery route. With Snowy River not completely investigated by cavers during the initial exploration trips, cavers have strong encouragement to excavate the new entry route, a vertical shaft dropping from Don Sawyer Memorial Hall to the Mud Turtle passage in the Snowy River section.

Many of the cavers who worked for years on the original, now prohibited, discovery route

are spending their volunteer time on this new excavation. Donald Davis and John McLean from Colorado are two experienced cavers who have visited Snowy River and are committed to completing the new entry shaft into this nationally-significant corridor.

During this spring's April 29-May 7 expedition, Donald designed a new tramway to transport buckets containing digging spoils from the excavation to a designated dumping area. This innovative new tramway uses a climbing rope strung between two pipe anchors, allowing cavers to quickly and efficiently move buckets the 60 feet from the dig to the dump. With the installation of this new tram, allowing buckets to be moved, dumped and returned in only 30 seconds, cavers found they could spend more time and energy in excavating the shaft, rather than transporting dirt and rock over uneven ground. Wayne Walker is in charge of this ongoing dig effort.

By the completion of the Spring expedition, about 2.5 cubic yards of material had been removed. Cavers measured the shaft to be 12 feet deep, about a third of the distance necessary to intersect the Mud Turtle passage below. Continued excavation will involve breaking chunks of limestone breakdown and passing them up for disposal. Plywood shoring is being installed in the shaft to provide safety for the digging cavers, as well as providing space for the eventual installation of a steel culvert and gate once the connection is completed.

In addition to the ongoing connection dig, cavers led by John Lyles are excavating a passage leading from Fort Stanton's Helictite Hall. This dig prospect has good potential and significant airflow to entice future excavation efforts

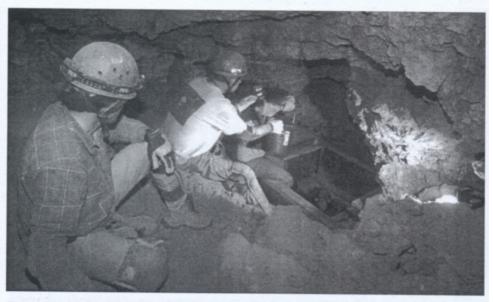
John McLean has been coordinating surface resistivity measurement surveys of the surface over Fort Stanton Cave. Through the use of electrical resistivity in the limestone strata, John can "map" both known cave passageways and chambers, and unknown cave passageways. Such measurements help determine the direction and relative depth of the cave, helping direct future exploration and digging efforts. In addition to Fort Stanton, John has used his computer equipment to map anomalies at New Mexico's Lechuguilla Cave and in the Fly and Marble Cave area of Colorado. At Fort Stanton, John's resistivity lines have identified an intriguing possibility called the Stagecoach Anomaly, located west of the cave's main entrance. No cave is currently known in this region.

Cavers also are spending time on scientific studies in Fort Stanton, including collecting

Photo

Donald Davis receives a bucket on the zip line in Fort Stanton Cave's Don Sawyer Hall during the April expedition.

Photograph by Norman R. Thompson



The bucket brigade in Don Sawyer Hall transports dig debris from the vertical shaft to the zip line, where the material is dumped.

Photograph by Norman R. Thompson

soil samples and inventorying cave passagebaselines for future science projects.

Participants of the Fort Stanton Cave Expe- hours underground. ditions are granted use of a field station protrance is sometimes not permitted.

During the recent Spring expedition, 22 ways. Scientific surveys of this nature serve as cavers provided nearly 700 volunteer hours of work for the Bureau, including nearly 550

Upcoming expeditions are scheduled at the vided by the Bureau near the historic Fort cave, including a July 1-9 expedition and an Stanton, a few miles west of the cave. This October expedition. Project coordinator John former university field station includes two Corcoran welcomes participation, and he bunk rooms, bathrooms, showers, kitchen should be contacted by e-mail at and dining room. Owing to high fire danger in John_J_Corcoran_III@msn.com prior to the the region owing to dry conditions, camping expedition. Interested persons should indiat the unimproved campsite at the cave's en- cate to John the days they will be participating, and the names of cavers in their party.

> Knowledgeable speleologists and geologists agree that Fort Stanton Cave has exceptional potential for major, lengthy extensions. Through the continued hard work of dedicated cavers such as John Corcoran, it is probable this cave will offer surprising discoveries in the decades to come.



John McLean works in the vertical shaft, which is timbered for safety and ease of access.

Photograph by Norman R. Thompson