

ways, Kartchner is a model for future cave commercialization projects.

Experienced southwestern cavers will no doubt recognize some of the names in the book, and consider other regional caving events in the context of the book—more than once, I considered what was happening in Colorado caving at the time of important events at Kartchner Caverns. Colorado cavers will no doubt be surprised to read that Randy lived in Denver for several years in the early 1980s, immediately prior to the team's efforts to convince the Arizona Parks Department into purchasing the cave for development. Whether Randy attended any Colorado Grotto meetings during his years in Denver is unknown; if he did, he never mentioned Xanadu.

By the 1990s, as the State of Arizona began construction of the commercial tour routes, Randy and Gary had to learn to let go, to trust others with the care of their secret cave. Receiving well-deserved accolades for their decades of successful protection, with the opening of the cave to the public on November 5, 1999, the cavers still offered concerns about Kartchner's well-being. Lint in the cave from visitors was a worry, as was evidence that the cave was drying and warming following its opening to the public. Proposed development adjacent to the state park brought more concerns.

In the summer of 2000, Randy was diagnosed with myelodysplastic syndrome, a bone marrow stem cell disorder that results in about a third of the patients succumbing to the illness within a few months to a few years. Despite a bone marrow transplant from his younger sister, Randy died of the illness at age 53 on April 1, 2002, leaving Gary as the lone living discoverer of Xanadu.

Though we can hope that someday the National Speleological Society can honor Gary and Randy for their discovery and their devotion to their 2.4-mile-long cave, for now, we can honor them through experiencing their story in Mr. Miller's well-illustrated book. These two cavers led a "corps of discovery" in a spectacular southwestern cave that rivals the famous Carlsbad Cavern, and as fellow cavers, we can all take pride in their efforts.

"Kartchner Caverns: How Two Cavers Discovered and Saved One of the Wonders of the Natural World," by Neil Miller. The University of Arizona Press, Tucson, 2008. Paper, 216 pages. Available through several online booksellers. \$15.95 list price. ■

Planning for the Future

What should a comprehensive cave information system look like in Colorado?

BY CARL BERN

I published an article in the Summer 2007 *Rocky Mountain Caving* outlining recent activities of the Colorado Cave Survey (CCS) and its policies for data management. The article concluded with a broad vision for fulfilling the potential of the CCS to be a true state cave survey without abandoning its traditional mission of coordinating between cavers and land managers. At the October 13, 2007 meeting of the CCS in Glenwood Springs, we took the dreaded next step: we formed a committee to address the issue.

Any effort to create a comprehensive database of caves in a state is usually met with skepticism and sometimes hostility. Why? Some cavers do not see the benefits of such a system; others fear it will harm caves or cave access; others have never lived in a state with an actual cave survey and just don't know how one works.

So what are the benefits? Through the years, cavers have spent thousands of hours discovering and documenting caves in Colorado. Some of that information gets published (with specific locations carefully scrubbed), but a lot of it remains in personal files as scribbled notes on topographic maps or in stories of half-remembered hikes. All of this information is vulnerable to loss when a caver stops caving in Colorado for one reason or another. A comprehensive database would provide a permanent home for such hard-earned information. A centralized location for information will stimulate new exploration by allowing cavers to assess what is known within the state and focus efforts on other likely areas. A central repository will also help the CCS and the Colorado Cave Rescue Network as they respond to requests for information from land managers or Search and Rescue Groups. By having a better

grasp of where caves are located, the CCS can also more quickly and effectively work to protect them from development, resource extraction, and recreation pressures.

What about the risks? Obviously, releasing data must be done carefully. Any number of sad scenarios could result from releasing the wrong data to the wrong person. On the other hand, responsible cavers should be able to obtain data for projects, research, and even recreation. Cavers are not likely to support a system that becomes a black hole. If cave locations go in, but never come out, cavers will ask "what is the point of contributing?" A balance will have to be struck between making it too easy or too difficult for cavers to obtain data. Striking this balance may be the greatest challenge. It is not impossible, though. Many other states have done it.

How would a cave information system work? That is what the committee is trying to figure out. Our strategy is to meet, discuss a few key topics related to the system, and produce both written and oral reports at the CCS meeting. To date, two written reports have been distributed and are available to interested cavers upon request. These reports give cavers the opportunity to see what is being planned and present comments, ideas, and criticisms. Already, good ideas are coming back to the committee and being incorporated.

The first committee meeting and report focused on how the process would work, the purpose of the database, and creating a classification system for data sensitivity. The second meeting and report considered that classification system and how to make data release more objective and less dependent on the whims of cavers with access to the data. We also discussed having a statewide system of local coordinators to be responsible for

managing the information in specific caving regions.

The whole process may seem rather slow, but it is more important to plan carefully and to have things done right than done quickly. The committee reports, articles like this one, and eventually grotto programs, will all help to make interested cavers aware of the planning process and solicit feedback. When a

final plan for the cave information system is complete, the CCS can vote it into existence. Further improvements could be made once the system is implemented. If the planning for this database is of interest to you, or you have suggestions on how it should work, I encourage you to get in contact with the members of the Cave Information System committee:

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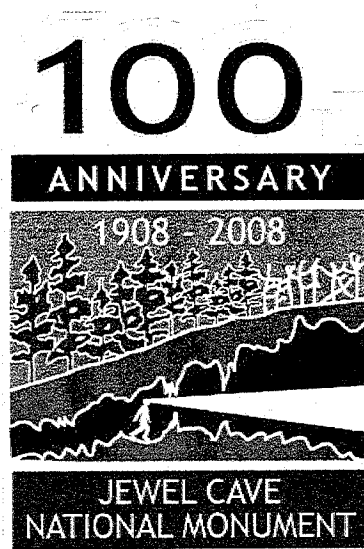
Briefly –

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caver **Dan Bryce**, one of the 80 seminar participants, accompanied the story. Ms. Morey, who has been named director of the Colorado Cave Rescue Network by retiring director **Steve Reames**, cautioned cavers to be “extra, extra careful and don’t get hurt in the first place,” owing to the logistics of rescuing injured or incapacitated cavers from deep within caves ... To attract talented employees to work at the Adventure Mountain Park, the owners of Glenwood Caverns are offering two \$1,000 scholarships to employees who are pursuing higher education. The awards will be presented beginning in 2009, and will consider the number of years an employee has spent at the park and their dedication to increasing visitor satisfaction. Applicants are required to work at least 200 hours or 5 full-time weeks during the previous calendar year.

At New Mexico’s Carlsbad Caverns National Park, high winds blowing across the Guadalupe Mountains on May 1 damaged several power poles on the Xcel Energy line leading to the famous commercial cave. According to an article in the *Carlsbad Current-Argus*, as many as nine power poles were damaged by the gusty winds, which were measured at more than 50 mph. While Xcel crews worked to replace and repair the damaged poles, several portable generators provided electricity to the park. Large generators powered the lights within the cave, as well as the trailers used as the park visitor’s center and gift shop while extensive renovations are underway. Unfortunately, the park discovered that the noise from the generators, along with continuing wind on the surface, persuaded the bats that live in Carlsbad Caverns to forgo their nightly feeding. Park authorities decided to turn off generators each evening during the outgoing bat flight to reduce the noise level and encourage bats to feed ... South Dakota’s Jewel Cave celebrates its 100th anniversary as a

national monument in 2008. Designated as a monument on February 7, 1908 by **President Theodore Roosevelt**, its anniversary will be celebrated through a series of special events and exhibits presented by the National Park Service, with the theme “Generations of



Discovery.” At a February event, National Speleological Society Lew Bicking Award winners **Herb** and **Jan Conn** presented a program about their exploration of the cave in the 1960s and 1970s. During this important era, the Conns explored and surveyed 62 miles of cave passage. Today, the cave has over 142 miles of surveyed cave passage. In early June, *The Canadian Press* featured Jewel Cave in an article about the commercial caves of the Black Hills. The article notes that the Society awarded the park’s current cave specialist, **Mike Wiles**, the Bicking Award in 2007 for his exploration of the cave ... Well-known microbiologist **Dr. Hazel Barton**, formerly of Denver, is profiled in the June 2008 edition of *The Scientist*, the publication for microbiology professionals.

The British-born speleologist, currently a professor at Northern Kentucky University, reports in the feature “Cave Crawler” on her studies of Roraima Sur Cave, the longest known quartzite cave in the world. Located on Venezuela’s remote flat-topped Mount Roraima, the cave contains unusual speleothems and unique microbial life. Dr. Barton is attempting to culture bacteria from the cave in an airtight chamber, studying whether the life can grow and thrive from the nitrogen in our atmosphere. The article also notes Dr. Barton’s studies of Glenwood Caverns in Colorado, where she and **Dr. Norm Pace** of the University of Colorado at Boulder discovered numerous unique organisms living in the cave. According to Dr. Barton, Dr. Pace “pointed out that I could do microbiology in places other people couldn’t go,” encouraging her to marry her scientific studies with her love of caves and caving ... **Ron Ryan**, formerly of Eagle, is one of the founders of western Colorado’s Timberline Grotto. Mr. Ryan, having departed the harsh winters of Eagle County for the warmer climate of Belize, on the Caribbean coast, hasn’t been seen by Colorado cavers for several years. That is, until the SciFi Channel documentary “Mystery of the Crystal Skulls” premiered on May 18. Hosted by NBC Nightly News anchor **Lester Holt**, the documentary about the 13 crystalline skulls allegedly from the ancient Mayan empire included a segment about searching for a lost skull in a Belize coastal cave. Enlisting Mr. Ryan as a cave expert, the team explores the small solutional cave in search for the skull, said to have been hidden in the 1920s by British adventurer **Frederick Mitchell-Hedges**. Facing “poisonous” insects, tight passageways, bats, and crumbling ledges, the team is unsuccessful in their quest. Whether the cave was actually visited by Mitchell-Hedges and his colleagues