

POTATOES AND CAVE OWNERS: THE MANAGEMENT OF MYSTERY CAVE, PERRY COUNTY, MISSOURI

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Abstract

This paper is actually a collection of true stories about the management of Mystery Cave, Perry County, Missouri. Even though some of these events happened a long time ago, I believe they are still useful today, because they probably will happen again somewhere, sometime. The management of this cave has had a long and turbulent history. Perhaps you may recall that some of them happened to you.

Key words: cave management, Mystery Cave, Rimstone River Cave, Tom Moore Cave, Perry County, Missouri

Introduction

Mystery Cave begins as a kind of “Artesian Well” with water that bubbles up out of the ground in considerable volume and flows a few hundred meters along a spring branch, where it drops into the historic, main cave entrance (Figure 1). This entrance was once only a crack in the rocks with water flowing into it until the early 1930s, when it collapsed and opened up to reveal the cave.

The first few hundred meters of the cave were explored by local farmers. Southeastern Missouri Grotto first entered the cave in 1964, and explored a few hundred meters downstream.

Little Egypt Student Grotto of Southern Illinois University, learned of the existence of the cave, and entered it to begin exploration in 1965. The cave immediately was adopted by the grotto, and mapping began, mostly under the leadership of Jim Rodemaker.

I became President of the grotto and director of the Mystery Cave Survey Project, October 4, 1967. By that time, we had a small but very enthusiastic and dedicated group of cave mappers, and explora-

tion and survey shifted into high gear. We enjoyed an excellent relationship with the cave owner. Unfortunately, that idyllic situation was not to last.

Too Popular

The cave was becoming too well known and very popular. More and more people were visiting the cave. Many of them had no interest in scientific exploration and survey. They only wanted to run down big virgin passage and leave the difficult survey work for others to do.

Every weekend, dozens of cars were parked along the gravel road near the cave. Neighboring farmers, one in particular, began to complain about the crowds. He had never been particularly friendly to cavers anyway. Party activity began to happen in the cave. Some of our own grotto members were among the guilty. Please understand that I have nothing against recreational caving. Sport caving is a legitimate activity. I simply believe that it should be done safely and responsibly, with as little impact and damage to the cave as possible. Wild caves are not good places to party in.



Figure 1 Ginny Adams at the historic or main entrance of Mystery Cave.

Cave Gated

It became obvious that we were about to lose the cave unless something was done immediately. We decided to gate the cave. The entire grotto pitched in to do the hard work required. The result was a magnificent, state-of-the-art edifice that promised to solve all of our problems.

You have probably guessed what happened next. The obvious question was, “Who should be allowed to have copies of the key and access to the cave?” After much discussion, it was decided that a committee or board should be elected by the grotto membership to decide.

The Grotto Board

A few qualified “leaders” would be appointed by the Grotto Board, and nobody would actually “own” a copy of the key. Qualification requirements for “trip leader” were rather stringent. This was, in part, an attempt to control the party attitude that was growing among our own membership. Many

applied, but few were chosen. The stage was set for contention. Resentment between those who were “leaders” and those who were not began to grow.

As it happened, our grotto was composed of about 75% Southern Illinois University students, from all around the state, and 25% students from the Chicago area, who were also members of that grotto. Please understand that many of the Chicago people were friends and good cavers. They taught me the rudiments of surveying caves, and I looked up to them. They were my mentors.

One Tuesday evening, in September 1967, the situation finally came to a head. One of the “have not” cavers called me from Chicago. He was going to bring down a large group for exploration in Mystery on Saturday, and was demanding a key to the gate.

I told him to come on down, and I would try to find a leader to meet them there at the cave, and go in with them, as per the rules of the Board. Technically, as Grotto President, I was a member of the Board, but could not vote, except to break

a tie. That never happened. I said I would try to convince the Grotto Board to revise the leadership qualifications so that more of the Chicago members could have their own copies of the key. That way, they could go directly to the cave, and would not have to come to Carbondale to pick up a key. That, of course, was not what he wanted to hear.

A Dispute Erupts

Very late Thursday evening, a large and very irate group of Chicago cavers showed up on my doorstep after a long and tiresome drive down from Chicago to Carbondale.

What followed next was a noisy altercation that almost resulted in my being evicted from my apartment after the neighbors called the cops. I finally just gave them my copy of the key and told them to “go for it.”

Unknown to me, a group had been to the cave the day before and, finding the padlock corroded and silted up, they were able to get into the cave only with great difficulty. They put a new padlock on the gate, and had neglected to tell me about it as yet. Of course, the Chicago group could not get in with the key I had given them. They were not happy cavers!

They hacksawed the padlock off, doing some damage to the gate in the process, and put a new lock of their own on it.

They told me that they would not give us a copy of the key unless “some changes were made,” and that if we tried to do anything about it, they would dynamite the gate.

Those who were interested in the ecology of the cave began saying that the gate was already changing the critter population downstream in the cave. The critters had previously depended upon the input of decomposing wood and organic debris that the gate was now blocking.

Thankfully, the cave owner seemed to be oblivious to all of these political and ecological squabbles. He did not have a key, and did not want one. He had said that we were responsible for the management of the cave, and that “party crowds” were not allowed.

Cave Closed

One such “party crowd” had already been responsible for the closing of nearby Harrington Cave a few years before my time. The Mystery Cave

owner was well aware of that problem since he and the Harrington Cave owner were close friends and neighbors.

The Harrington Cave owner told me that he came home from church one evening to find an enormous crowd of cars parked along the road, and smoke pouring out of the cave entrance “like a volcano.” Investigating, he found a boisterous party going on in the main room of the cave. Most of the participants were drunk and high on (something). Later he discovered extensive damage done to the beautiful formations in the rear of his cave. He closed the cave immediately, and it was only after considerable negotiations that we were able to get in for a few trips to finish the survey of his cave.

What had I done to deserve these problems? I was only a college kid interested in cave science as a hobby.

As it turned out, it never was a good idea to put a gate in the main entrance of Mystery Cave in the first place. The cave entrance was an orifice into which large volumes of water poured during rainy weather. Mud, sticks, logs and debris clogged the gate to the cave ceiling almost immediately. We had to dig it open several times. Cleaning out the debris was a laborious and very time-consuming process. Copperheads were an ever present problem. Nobody wanted to do it. Eventually, we simply removed the padlock and left the gate open.

Mother Nature finally solved the problem for us, in a way. Frost action from increased moisture caused the entrance above the gate to collapse, cutting off entry.

Another Entrance

We were forced to develop another more difficult entrance directly down into the Cathedral Room through a tight joint crack that Terry Pitchford and I had found early in our survey of that part of the cave. That became another long story about political harmony.

Some cavers contended that they had “discovered” this entrance first, and therefore, they had the right to open it by “right of discovery,” not that it makes any real difference who actually found it first, anyway.

Contaminants

The real reason for the decline in population

of cave life downstream in the cave turned out to be the result of increasing pollution from several sources; (1) agri-chemicals, such as nitrogen and phosphorous fertilizers, insecticides and herbicides; (2) organic waste from hogs and cattle; (3) sewage and laundry detergents that came from cess-pools and piping directly down into sinkholes; (4) increasing siltation, the result of bulldozing away the woodlands for the construction of houses; and (5) clandestine industrial dumping in convenient sinkholes late at night.

Once, there had been a shoe factory in Perryville, and shoe soles were stamped out of leather sheets. The left over scrap was dumped into sinkholes as fill all over Perry County. Today, cavers can still follow the trails of these scraps to discover entrances to caves underground. "Follow the shoe leather boys" was advice we often gave to explorers in those days.

One day in September 1969, some friends and I entered the Little Freezy Entrance to nearby Rimstone River Cave for a short tour. Immediately upon emerging into Echo Avenue, we became aware of an awful odor. It was sweet, and yet sickening. It tickled our throats and made us cough. I became almost nauseous. There was a blue scum upon the water. I collected a small amount and ran some

chemical tests upon it in the lab back at Southern Illinois University. Nuclear magnetic resonance spectroscopy data indicated the presence of chlorinated hydrocarbons, methyl and cyanide radicals. We never discovered the identity of this blue scum upon the water. It was probably an insecticide, or a solvent used in the manufacture of plastics, and dumped into a sinkhole upstream.

At one point, sewage pollution became so bad in Tom Moore Cave that the population of isopods increased dramatically (Figure 2). They were so thick you could have scooped them up to make soup out of them.

As pollution began to enter the groundwater in the aquifer far below the caves, the Perry County Planning Commission began to consider ways to solve the problem.

A Park Proposal

One proposal was the creation of a karst preserve state park. I still have a copy of that proposal in my files.

One of our best known and most influential cavers bought into this proposal, and he began talking to cave owners about it. The land owners saw this as a potential, governmental take-over of

their land, which had been in their families for generations. Developers opposed the plan because it would remove vast tracts of land from the market. The influential caver and the Planning Commission wanted the Missouri Speleological Survey to get involved and support the plan.

Wisely, the MSS wanted no part of it. The resulting controversy and political squabble almost split the MSS in half.

Probably, the plan never would have worked even if the park had become a reality. The South Perry Coun-



Figure 2 *The stygobitic isopod Caecidotea antricola in Mystery Cave. The stygophilic Caecidotea brevicauda also occurs there. Photo by David C. Ashley.*

ty karst area is 30 or 50 km (20 or 30 mi.) on a side. To be effective, the park should have covered 1,500 km² (600 mi.²) of land, probably as large as or larger



*Figure 3 Ben Roberts in Mystery Cave.
Photo by Jean Krejca, 2007.*

than Mammoth Cave National Park in Kentucky.
Of course many farmers blamed cavers for this

proposal, and we soon discovered we were no longer welcome in several of the caves we used to visit. It was not the first time, and would not be the last time that cavers were blamed for something they did not do. Yes, cavers make very good scapegoats. But, we continued to have access to Mystery Cave (Figure 3).

Conclusion

So by now, you are probably wondering what do potatoes have to do with all of this? One very hot day in mid-July I was talking to various farmers, trying to learn more about cave leads. One of them was involved in digging out his potato crop and he had very little time for me. Seeing that he was elderly and obviously needed help, I grabbed a pitchfork and pitched in to help him do the job. It was hours of backbreaking work with a pitchfork in the broiling July sun. Upon completion of the task, as we sat together under a shade tree enjoying a few cold beers, he shared with me a wealth of information about the nearby landscape. One of his tips led me toward the eventual discovery of Rimstone River Cave, connected to Mystery Cave. What is the moral of this story? It isn't enough to just grill land owners for information. You have to give them something back in return. Sometimes, you have to dig potatoes.

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