

EDUCATION ABOUT CAVES: ARE THEIR SIDE EFFECTS?

- John Ganter*

A few years ago I was walking through a bookstore when a new title caught my eye: HOT SPRINGS OF THE VALLE ROYALE. I picked up the book and began to thumb through it from the back to the front. There were descriptions of springs, their unique geology, delicate flora and fauna, delights of bathing, historic significance, and the like. I began to feel educated about hot springs. Interested in hot springs. After some minutes of absorption, I reached the front of the book. And there I got a surprise. Springs, the author informed me, are under attack. People are bulldozing them. Filling them with concrete. Somebody do something!

Hot springs quietly discharge water. Steam wafts gently from their limpid pools. On occasion, gas bubbles out of solution. What, I wondered, had innocent hot springs done to deserve such a fate? The springs had done nothing. Except attract people. Do they resemble another natural feature that we know and love? We'll return to the story of the springs after thinking about one of our primary goals as a caving community — and what we may do unintentionally.

Go forth from the darkness and educate

Public education is a major mission of the caving community. The public only values and protects what it understands, and caves surrounded by superstition are not understood. We educate so that non-cavers will join us in demanding that ancient natural features with little economic value will nonetheless be protected from modern threats. People in technological societies do this odd thing: they cherish and protect remnants of wildness that they will never visit, just to know such places exist (Nash 1973).

Caves are occasionally subject to outside threats: quarrying, land development, sewage, runoff from logging, and the like. Someone, somewhere, is shifting costs or byproducts onto the cave. Economists call this *externalizing* costs: my chemical plant makes me a profit and a wage for my employees, with one small detail: we externalize some nasty costs into a circular depression on my property. Now, about the many benefits of polyvinyl chloride. Not so fast, shout the cavers. That depression is part of a karst *system*. The public is mobilized, letters are written, and eventually costs are internalized, reduced and absorbed, and the cave stream runs clean again.

To educate the public to action, we tell about caves. Caves are dark places full of neat things. Big rocks. Speleothems. Bats. Mud. Isopods. Groundwater. Extremophiles. The audience is leaning forward; they are intrigued. Give us more. And our enthusiasm comes forth. Not only are there caves, we say, but *caving*. Mystery. Excitement. Dangers overcome. Adrenaline. Helmets. Carbide lamps. Rappel racks. Big pits. Booty in the survey book. Old Timers Reunion! It's not just a hobby, it's a lifestyle.

Now, 99.9% of the audience is thinking something like, "I'll write a letter save this cave, but my slacks are pressed, tee time is 10 sharp on Saturday and I will never, ever set foot in a wild cave." But notice how seamlessly we have segued from the explicit message *Caves are valuable and should be protected* to the implicit message: *Caves are fun places to go*. And we have to ask what happens when we broadcast this message to 270 million people, the current population of the United States. A land of quick fads and lingering subcultures. What happens over time? Let us consider a cautionary tale.

The multiple legacies of Edward Abbey

Societies take all sorts of unified actions to achieve goals. Some actions succeed, some fail. But the most peculiar actions are those that, when viewed from the future, do something unexpected. Those who study such anomalies call them *unintended consequences*.

We live in a mix of intended and unintended consequences. In the 1800s, there were societies dedicated to the propagation of wonderful things like carp, English sparrows, and kudzu. These were intelligent people. They had the best of intentions and scientific thinking (Tenner 1996). Thanks, guys!

In the social realm, scholars now believe that New Deal programs produced undeniable benefits in the 1930s but also cultures of dependency and entitlement in the '60s and forward. Actions today that address these legacies may produce a few of their own. Does this mean we should not do things? Of course not. But we should try to make sure we are fixing the right problem and not producing more.

Ideas can have unintended consequences. Let us consider the idea of wilderness. The 1950's were the heyday of technological utopianism. Many believed that any place on earth could be brought to perfection by the application of concrete, asphalt, gasoline (with tetraethyl lead, of course, for High Octane), napalm, and American Ingenuity.

Edward Abbey disagreed. He built from the foundations of John Muir, Aldo Leopold, and others and took the philosophy of wilderness to a mass audience. In his *DESERT SOLITAIRE* and other books, Abbey showed the intrinsic values of wilderness and demanded that it be experienced on its own terms: no road building. *Get out of your car and walk*. This change in thinking led to many benefits. Wilderness faced external threats: excessive logging, mining, petroleum extraction, development. Abbey and others catalyzed unprecedented support among the populace, and lawmakers, for protecting wilderness from external threats.

But there was another threat that took time to become visible: an unintended consequence. It

was the impact of hundreds, then thousands, then millions of boot soles walking through wilderness seeking the values that Abbey suggested could be found there.

The Utah slickrock country that Abbey praised is becoming overrun and overpopulated. One observer claims, "Edward Abbey caused it more than anybody. Everybody came in here with a copy of *DESERT SOLITAIRE* in his back pocket" (Weller). How's that for an unintended consequence?

By educating about caves (a natural feature), do we also risk popularizing caving (a human activity)? Caves and cave owners can only take so much traffic, as this letter to the NSS suggests:

"It is with regret that we must inform your society and any associated groups that henceforth we are denying admission to [the cave we own]

There has been a great increase in visitors from far and wide in recent years, and along with that have come abuses of the site and unannounced visits. Though well intentioned, we feel part of the problem has probably been due to the increased knowledge of the site from your guide books.

And, more specifically, the liability insurance costs associated with any public access have risen beyond that which we can absorb." (Taran 1987)

Cavers are always talking about caves, and themselves, but what about cave owners? What do they think about all this advertising? Oh, I meant to say *educating*.

Cave owners: the unconsulted recipients

Cavers often act as if we are in charge of caving. But perhaps the most important people in caving are not cavers, but cave owners. We sometimes forget that 90% of caves in the US are on private property (Thorne 1987). Lots of individual cavers and clubs have excellent relationships with cave owners, but we don't know much about them as a group.

My impression from talking with a small sample of cave owners is that they are concerned about traffic to their caves and their own liability. Cave owners tell me, *a few of you cave explorers are fine. You all seem to know each other and respect the land, the cave, and me as a landowner. Seems like there is peer pressure to behave. But the others have started to show up. They got all the fancy gear, they got their group, but they don't show the respect of cavers. That's a hard thing to teach. I have to start being a policeman, and that's not my job. And if a lot of folks show up, it's just too much trouble even if they behave well. This is our home, not an amusement park.*

Earlier I gave the example of a chemical plant externalizing costs onto others. Do we as cavers externalize by-products of our education onto cave owners? The cave "owner" is really a

surrogate for the cave itself. Visitors who overrun and disrespect a cave owner will do the same thing to the ancient cave.

Conclusions

I believe that increasing "education" about caves has many benefits and some significant costs (see my 1992 article for lists of each). I think that we should try to emphasize the value of caves and karst independent from the activity of caving. Those with genuine interest can be directed to the wide-open doors of the organized caving community. But we don't have to set up huge billboards pointing to those doors or brag about our exploits next to the glossy ads for sport utility vehicles.

The author of the book about springs had worked himself up. These springs are under attack, he informed me. We must educate ourselves and others about the springs, and do something. What he seemed to miss was that the springs themselves were not the problem, it was human traffic to the springs. Traffic that was exhausting the spring owners. Traffic made up of people who *first* cared that they wanted to swim in a spring, and *second* cared about the spring, and *third* about the landowner. What the author seemed to miss was that his book was going to increase traffic to the very springs that he valued. He wanted somebody to do something?

Lots of somebodies doing things was the *problem*, I reflected. Like publicizing springs without their owners' consent. The author would take the book profits while externalizing the costs onto the spring owners. It resembled corporate culture at its worst, but here was an individual "educating" and feeling self-righteous in the bargain.

Yes, I thought, we could pass more laws after the fact. But there have been laws against trespassing for some time now. Well, he wasn't getting my money. I would visit no hot springs. I put the book back on the shelf and walked out, wondering idly if there was some lesson for cavers here. Is there?

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**Comments by Professor Elery Hamilton-Smith,
AM**

Thanks to John Ganter for a truly worth-while critique. Yes, Edward Abbey is turning in his grave - and I have, amongst other things, been one of those who walked in his footsteps. Absolutely spot-on. I have done my share of publicising caves and caving, lived to regret it and sone my best in specific places to quell it. I have

just returned last night from visiting (for research purposes) a very wonderful bat cave site. Back in the 1960s it had become a popular site for bat flight viewing and yobbo caving, then we removed the directional signs, arranged for the Forestry Commission (upon whose land it is) to fell a couple of large trees across the access road and got all references to it deleted from local tourist information. An explanatory sign was placed right at the cave entrance. Visiting gradually diminished, then the forestry people totally wrecked the access road and revegetation proceeding naturally. If one looks carefully, it is still possible to see where the track was, but the evidence is that apart from two motorbikes passing within 50 metres, nobody but researchers have been there in the last twelve months.

What was a seriously threatened bat site now has an immense and very healthy population. We hope it will never be publicised again. Why don't we try much harder to do this to many many sites?