Cavers do not like being told what to do or how to act. Explorers are generalized by die-hard conservationists as reckless and destructive. Conservationists are generalized by explorers as people who want to close caves. There is no way to dissuade the extremists of both camps.

For this discussion discard the extremists and concentrate on the middle, the average caver with only a minor interest in cave gating and headhanded management and just a passing desire to use mining techniques to get deeper into a cave.

The best advice for preserving a cave while doing exploration is to slow the heck down—not exclusively how fast cavers actually move through a cave, but how fast cavers make decisions.

First, address the actual speed issue. Moving quickly through a cave is more about how efficiently you move than how fast you actually try to move.

When most of us started out, every crawl and squeeze was awkward, every breakdown pile was an unstable shifting mass trying to crush us, and every climb was a daunting, holdless mudslope.

As we gained experience and got our “cave legs,” we became more comfortable with these environments. Once we became more comfortable underground, we could move past these obstacles more efficiently and get to places faster.

It is important to make the distinction between speed and efficiency (exerted energy) because a great deal of damage is caused by people trying to keep up with someone who is traveling more smoothly through the cave. Keep an eye on your team, especially if you have newcomers or people who are tired at the end of a long trip. Running them into the ground might make you feel like a cave stud, but when one of the team crashes into a formation or stumbles and puts his muddy glove on a pristine wall, regret will (or at least should) follow. Trip leaders need to recognize these struggles and adjust the trip speed accordingly. Unless the cave is flooding or someone has a bomb strapped to his chest that will explode if you don’t make it out of the cave by a certain time, there is no reason to push the team beyond their level of efficiency.

The speed of decision making also affects the condition of a cave. In the heat of exploration, we commonly opt to tackle problems head on. If we hit a dirt plug, we dig it out—if we hit a wall, we climb it—and if we find a delicate room with a lead going out the other side, we cross the floor and push it. Often it turns out that there was a different route to get to the same place.

Sometimes, it is best to slow down and check all of the passages around that dig or delicate room. Look at the passages you already know beyond that climb to see if there is a way up that doesn’t require bolting. Decisions to move by using higher-impact pushing techniques should be made with as much information as possible.

There is no doubt that a good survey can help in finding routes around
obstacles. While “survey as you go” works for most projects, it does not work all the time.

On the subject of survey and its close cousin cave inventory, I want to suggest what borders on the blaspemous. It is not necessary to survey and inventory every square inch of cave. There are times when only one person goes to the back of a delicate crawl or through a short, well-decorated loop. One caver causes far less impact than a whole survey team going through the same passage. (See survey it or not, page 188.)

Sometimes it is better for the cave if you just sketch the passage rather than survey it—but make sure it does appear on the map. If you leave it unsketched or sketch an open lead, someone will push the passage again and do the damage you hoped to avoid.

Common sense should also apply to inventorying cave passages that have already been mapped. Think about cave inventory (or photomonitoring, impact mapping, or whatever) and ask these questions.

- Is the information we’re getting worth the impact?
- Do we have enough inventory around the delicate passage to characterize the area?
- Should we consider doing no inventory for this area?

For example, Jewel Cave has the world’s “strategic reserve” of manganese and there is a problem with the manganese wandering around the cave on the bottom of cavers’ boots. A complete inventory of the cave would result in more manganese being tracked into relatively pristine areas—so, only enough inventory is done on the previously surveyed passages to characterize the area.

Certainly, these ideas can be abused and some cavers will use them to justify wanton scooping. But it’s impossible to stop the scoopers anyway. I just suggest these ideas as a way to slow down, look at what information you are trying to collect, and see if it is worth additional impact on the cave.

These suggestions are based on my observations and no small number of my own mistakes. This commentary is merely intended as a starting point for discussion and seed for thought. If it slows down just one person and saves one single soda straw, then it was worth it.

**Figure 1.** Fragile cornflakes—should we cross the thin, delicate rafts of this virgin passage? Does it go? Should we survey further? I was asking these questions when I stopped, reached forward to carefully place the slaved flash, gently put a glove in the foreground, and made this photo in a crawling passage beyond the Leaning Tower of Lechuguilla.