**Caving Checklist**

**Trip leaders should require caving trip attendees to read this checklist before going on the trip, to help them understand what good caving is like.**

Caving is fun, but it's dangerous and there is a set of rules for caving considerately, which may not be obvious. The three main things to think about are 1) safety, 2) conservation and 3) consideration of others. This trip checklist is not exhaustive, and after reading it **you are not prepared to just go caving**. This checklist assumes you already know what you're doing to some extent. Hopefully you have caved with good cavers and this is all old news.

There are some links at the bottom of this page.

**1. Safety**

Caving safely is the most important thing. Caving is dangerous, but if you know what you are doing, you should have no problem. Like any other sport, however, there are a lot of gotchas — and even very experienced cavers get in trouble, because just like any other sport, the unexpected can and will happen. To cave safely, you need to have proper equipment, use proper technique, and be prepared for emergencies.

The most common problems in caves come from falling, being hit by falling objects, and hypothermia. Hypothermic cavers are especially likely to fall or do something else dangerous, too, because hypothermia shuts down the brain. Cavers also become lost, get stuck, get somewhere and become too tired to exit, and run out of light. The single biggest risk factor in caving is lack of experience. Experienced cavers are those who have been on hundreds of trips, not dozens (if this seems like a high number, consider what it means to be an experienced skydiver).

There are lots of dangerous sports, but caving is different because if something happens, it's a very serious situation. Cave rescues are incredibly difficult, often take a long time, and are very expensive. They also have far-reaching effects; a cave rescue impacts a lot of people for a long time. The same cannot be said of most other sports. You, and many other people, have serious problems if something goes bad in a cave.

**1.1 Equipment**

You must have the following equipment:

1. A helmet, which stays **on your head** at all times.
2. A headlamp, which is helmet-mounted. Handheld light is unacceptable. Every caver must have a light; if anyone relies on another person's light, the risk of problems is much greater. You should know how to operate and maintain your headlamp before you go into the cave, because you may have to operate it by feel, in absolute darkness, in a tight spot. If it is battery-powered, you need to make sure the batteries are charged. Carbide lamps are seldom used anymore; if you are caving with carbide, you probably know what you're doing and don't need this checklist.
3. Spare parts (batteries and bulbs) for your headlamp.
4. Two backup sources of light, which are completely independent from your main source (extra batteries are not a backup light). Your total light should add up to 72 hours; and you should be able to complete the entire trip using any one of them. **Cyalume glow-sticks are not good sources of backup light**, because they are not mountable, not bright enough and can accidentally get activated and go bad, and there is no way to test them. LED lights are a good choice.
5. A small backpack, or other way to keep your stuff dry and safe. You must not hand-carry your gear, and it should be **secure** so you don't lose it while you are crawling through a passage no bigger than your hips, with your pack strapped to your ankle. Keep in mind that caving is usually a very muddy sport with lots of crawling and other wear and tear on clothes. Your pack will likely be unusable for anything but caving after you get out of the cave.
6. Boots. Not shoes. Waterproof may be good if it's a wet cave.
7. A first aid kit (to be carried by one of the leaders).
8. A hypothermia kit, consisting of a 32-gallon or similar large plastic trash bag, a long-burning candle, and matches. The candle and matches need to be kept in a waterproof container. **Each caver needs their own hypothermia kit**. To use the kit, punch a hole in the bottom of the bag, sit the hypothermic person on his butt with knees raised, and put the candle under his knees. Then put the bag over him with his head poking through the hole, so he is in a little trash-bag tent. He'll warm up fast.
9. Food and water. Even if it's a short trip, you need these in case there is an emergency and you have to stay in the cave. Your food should be "rugged" so it doesn't get crushed. Bananas and peanut butter sandwiches don't survive well.
10. A trash bag and change of clothes. Most people will not let a caver into their car after they come out :-) By the way, cave mud can easily destroy a washing machine, and even if it doesn't, it's liable to remain in the machine and destroy the clothes next time someone washes. Use a hose instead.
11. Container in case nature calls (leaving human waste in caves is unacceptable).
12. Dress to get muddy, wet, and cold, and yet be working hard (think hot and sweaty). This means to avoid cotton and dress in layers. Cotton kills! Caves are just the environment to cause hypothermia, and cotton is the worst fabric. Coveralls are good for the outside layer. Jeans will get destroyed.
13. Highly recommended: Gloves and knee pads. They keep you warmer and prevent injuries, not only to your knees, but they help you move better. You are risking injury if you are mincing around protecting your knees and hands, because you're not paying attention to the rest of your body.

**1.2 Technique**

The following safety rules apply:

1. No hand-held gear. Keep your hands free at all times.
2. Keep your helmet on and the strap buckled.
3. You are responsible for the person in front of you and the person behind you. This way everyone but the first and last person has two people watching and helping. Once you have chosen the order of people in the line, don't change it unless the group stops and decides to re-order itself. Everyone needs to be able to count on knowing who is where at all times.
4. No fewer than four people, ever. If someone gets hurt, at least one person needs to stay with the injured person, and you need at least two more people so there isn't one person leaving to get help alone.
5. No more than ten people. Ten people is really pushing it and should only be attempted in an easy cave. Ten people in a cave is a lot different from ten people on a trail; in a cave, you usually cannot communicate with anyone but the person in front of you and the person behind you. Tough spots become real problems as the trip size grows.
6. Take it easy! Caving is more tiring than you think. Exhaustion is a real safety problem.
7. There needs to be at least one leader, and if there are more than four on the trip, there should be at least two leaders. The leader(s) need to be familiar with the cave, and accustomed to navigating caves without maps or markers. Markers are a bad idea, as conscientious cavers do not leave anything in the cave, and someone else may remove your trail of breadcrumbs marking your way out.
8. The leaders need to be familiar with good caving practices. Familiar means familiar enough to teach others to be good cavers. If you are leading beginners, pause outside the cave for a half-hour or so and teach them what to expect and how to act. Then pay close attention to them, as caving is a skill that takes practice, and they will do things wrong in the beginning.
9. The slowest person sets the pace. A cave is no place to be macho. Don't push people, and don't take risks. Never let your group get separated. It is very easy to get separated, and even an experienced caver can get lost in an easy cave. Remember, you are responsible for the person in front, and the person behind; stay close to both of them, and tell the person in front to wait if need be. Don't feel bad about doing this! It's your duty.
10. Never cave under the influence of anything. If you are the leader, don't allow an impaired person into the cave with you (but don't leave them alone outside, either). It's better to make them sit the trip out than to put your own neck on the line. You should also know if there are any medical problems, including asthma (lots of people somehow neglect to mention asthma, so ask explicitly).
11. If you cave for a while, you will certainly see someone become hypothermic (it might be yourself). Everyone must be on guard. Don't wait to discover it after it's happened; while you wait, someone could get hurt. If you are leading the trip, explain about hypothermia before you enter the cave, and make sure everyone knows the signs and knows to keep an eye on their partners. Caves have just the right combination of environmental factors, and caving is just the right kind of physical activity, to cause hypothermia. Dehydration and exhaustion increase the risk.

**1.3 Emergency Preparation**

1. Always decide ahead of time what cave you are visiting, and make sure your trip description on the website is accurate as far as location and return time. Always let someone know who is **actually going** on the trip (not just who is signed up). Don't leave it open-ended and then decide after you leave. This isn't like hiking, where you can get together and say "where do you want to go?" If this is not an official trip, take the same precautions. Make sure someone knows where you're going, when you'll return, and what to do if you're late (how late till we call help? [Who should we call?](http://caves.org/committee/er-ncrc/emergency_contact.html)). When you get to the cave, leave the same information (all of it!) on your dashboard, visible for all the world to see. This is vital if a rescue is called. If you think you're going to one cave, but go to another, you're doing the rescuers no favors. They need to know who's where before they can help.
2. If something goes wrong, keep cool.
3. If you're lost, don't worry; stay where you are. You notified someone about your trip, told them when you'd be back, and help will be on the way after that time has passed. Keep warm, conserve light, and enjoy the chance to meditate.
4. If someone gets hurt, make sure you don't get hurt trying to help. That makes things much, much worse. Take the normal precautions about shock etc; take a set of vitals, and write them down along with the time you took them (monitor the vitals as needed). Send two competent people out to get help (don't send inexperienced cavers; the extra adrenaline, combined with inexperience or lack of familiarity with the cave, is a disaster). Send car keys, info on who to call, a written description of the problem, a list of what you have and what you need from the rescuers, and a set of vitals with the people leaving. Then stay warm and wait for help.
5. If you run out of light, don't try to go anywhere. You'll only hurt yourself. Wait for help and be thankful you let someone know where you are.

**2. Conservation**

Caves are very special and sensitive ecosystems, unlike any other places in the world, and human disruption is permanent and very undesirable. You should follow the rule "take nothing but photos, leave nothing but footprints, and kill nothing but time." Responsible cavers are respectful and want to avoid any impact in the cave. There is always some impact; you increase the CO2 level in the air, introduce extra energy, light and warmth, and so on. But you can avoid major impact on the cave by following these rules:

1. Don't pollute or leave anything in the cave, period. The next cavers should not know you were there.
2. If you see anything left by the last cavers, take it out. It's the right thing to do. This is why you don't navigate with markers.
3. Caves provide the only habitat for many species of bats, and many of these species are endangered. During the winter they hibernate, and during the summer they raise young. They should be respected at all times. Bats are generally safer than two-legged animals, and do not generally carry rabies or other diseases, but you should never disturb a bat. Specifically,
	* **Caving is a silent sport**! If you disturb a bat by talking, especially while it is hibernating, you may have just killed it. Bats slow their metabolism when they hibernate. If you wake it, just once, its metabolism increases and it will probably not have enough energy to survive the winter. **If you need to communicate, whisper**. Even during the summer, and even in a cave that you don't think is a hibernaculum — it is very important to develop the habit of caving in silence. If you encounter other cavers who are being noisy, try to explain these rules in a nice way. Many cavers don't know about bats, and how will they ever know if someone doesn't tell them? If you see bats, don't even whisper near them; wait till you are away from them to communicate.
	* Don't shine your light on a bat. If you see bats, point them out to others, stay on the other side of the passage if you can, and try to avoid lighting them. Don't take photos, because a flash will probably wake a bat.
4. Never touch formations. They grow by minerals being deposited from the water that drips off them. This process is unbelievably slow, taking tens of thousands of years. If you touch a formation, the oils on your skin will prevent any further growth, not to mention possibly visibly marring it.
5. This is almost too obvious, but if you've been caving and seen broken formations you understand why it needs to be said: don't damage formations. They are not souvenirs.
6. Don't remove anything from caves, other than obvious trash like candy wrappers; even sticks or bones are there for a reason. Many caves have a long human history, and old torches from salt-peter mining, old ladders, bones, etc are legally protected. Aside from the stupidity of removing anything from a cave, if someone turns you in, you're in legal trouble. The NSS also has rewards out for catching anyone vandalizing a cave.
7. If you see anyone being irresponsible, talk to them or turn them in, as appropriate. All responsible cavers do. You're not being a jerk, you're earning good karma.
8. After the trip, **disinfect/decontaminate** any club gear used for a caving trip. It is a good idea to clean the gear before the trip too.

**3. Consideration of Others**

Caves are not like rivers, trails, or cliffs that are owned by the public and open to the public. Cavers are a community, and caves are usually privately owned; the poor judgement of one group of cavers can have a bad effect on the entire community. Every caver knows of caves that have been closed because of some debacle or other. You should not overlook the possible trouble when a cave rescue is needed, either; many cave owners have closed caves after a rescue.

You should obtain permission from the cave owner before going or planning to go. Again, most caves are privately owned. Just because other cavers don't ask, doesn't mean you shouldn't. Many landowners don't want throngs of cavers, but have no time or patience to fight for control of their cave every day (on the other hand, some landowners **will have you arrested** with no chance for an explanation or “I didn't know this was a private cave!”). Just because they don't fight with everyone doesn't mean they are happy about it. They often want you to ask permission and sign a liability waiver before entering. They also have special requests, such as "please close the gate, even if some other idiot went up there without my permission and left it open." Leave everything as you find it (closed gates remain closed), don't disturb crops or animals, and don't climb fences (fence is expensive, especially in steep areas where caves are found, and climbing destroys it). Be as considerate of the landowner as you can. Usually you will know what the landowner wants if you have talked to him or her.

If the cave is on government property, you may need permission in advance from the appropriate agency. If you think a cave needs no permission to enter, check first and make sure. Don't take someone's word for it unless you really know they're on top of things.

Most caves are mapped, but getting a map is a privilege you earn. You can't just go buy a map in most cases. This is to protect the cave, and keep the caving community from being overrun with people who might take advantage of it, without putting in the time to demonstrate a serious commitment to safety, conservation and consideration.

Finally, understand that the caving community has many devoted members who are sensitive to things you don't think are a big deal. If you run into one of these people, try to learn as much as you can from them, and respect them; they can teach you things the average caver can't.