

# National Speleological Society Cave Diving Section

# Frequently Asked Questions

For the General Public, Vadose Cavers and/or Non-Cave Divers Cave Diving is a highlytechnical form of diving and caving. When dry-zone cavers and open-water divers first become interested in exploring underwater caves, there are some basic questions they have. While many of those questions can be answered within this Web site, or by reading books on cave diving, this page condenses them into one convenient resource. If you have any questions that you feel are basic-level but are not addressed here, then by all means please contact us at Webm...@NSSCDS.org and let us know so we can add to this page. This page is always under construction so any input you have will be valuable. There are two sections: BASIC and SPECIFIC. The BASIC section is targeted for individuals who know nothing about caves and maybe only a little about diving. The SPECIFIC section are questions/answers that are targeted toward individuals who are perhaps seriously considering or preparing for a cavern/cave diving course.

## Q: Why does anyone want to go in "those" underwater caves? A:

This is probably the hardest question to answer because the answer is different for everyone who cave dives. Most underwater caves are quite beautiful, especially in the clear water regions of north-central Florida, and the rugged jungle cenotes in and around Akumal, Quintana Roo, Mexico. This beauty can be attributed due to their cave formations, passageways, mineral encrustations, silt formations, unique fauna such as blind cave fish, and even bacteria colonies.

Most anyone who has been in a cavern zone has seen the beauty of the sunlight shining through the opening. Other cave divers are entranced with the difficulty: they enjoy a challenge. The cave passageways are usually complex and the trained cave diver must plan carefully. The planning for and successful execution of a cave dive through a cave can be enormously satisfying.

Other cave divers simply love the technology: they are equipment junkies. This isn't always a good thing, but even with a minimalist approach to cave diving, there is quite a bit of gear required, and certainly quite a bit of preparation, cleaning, adjusting, assembling and reassembling. The diver, too, must be careful to keep their second most important piece of equipment in shape, too: their body.

## **Q:** What's the MOST important piece of cave-diving equipment?

**A:** The mind of the diver. With the proper training and proper attitude, the divers mind can conceive of, prepare for, and execute successful cave dives for many, many years without incident.

#### Q: What is a successful cave dive?

#### A: The one you return from.

#### **Q:** What is the most dangerous part of the dive into a cave system?

**A:** The drive to the dive site. Cave diving done by properly trained and equipped cave divers is statistically safer than bowling... Yes! Bowling!

Okay, okay, the statistics say something like 3% of bowlers and scuba divers die each year, and since cave divers are a sub-set of scuba divers, I've made the assumption that a smaller percentage of cave divers die than bowlers. It's been pointed out to me quite, er, pointedly, that this is a fallacy, but then we all know that there are lies, damn lies, and statistics. My point is that I'm trying to make a point. If you're a bowler, please don't dis me on this. Sorry for the digression.

So the most dangerous part is when you get in your car, truck or van and drive to the dive site. If you don't want to die in an underwater cave, then don't go IN the cave. Don't even go in the water. Nothing is "perfectly safe" and neither is cave diving. It is a very dangerous activity for the untrained, unexperienced, poorly equipped... (Here's the main point -->) But a well-equipped, educated and prudent cave diver has more to worry about driving to the dive site and walking to the water than what happens during the dive.

#### **Q:** What about all those deaths we hear about?

**A:** First, understand that newspapers seem to love to sensationalize any death in an underwater cave. Headlines will read "MAN-EATING CAVE KILLS ANOTHER DIVER". The problem with this is, caves don't kill people. Stupidity usually kills people, either because they were not properly trained, or they were stupid in not maintaining their equipment. Almost all of the deaths attributed to underwater caves are open-water divers completely untrained in the specialized techniques required to survive a cave-dive. What open-water divers don't realize is, no amount of experience in open-water will prepare them for an underwater cave. Even in recent years, there have been instructors and so-called technical divers who didn't come back from a cave dive. This is because they were not properly trained. So, caves don't kill divers... a diver is 100% responsible for their own safety each time they go in the water.

#### **Q:** But shouldn't we just close up underwater caves to prevent deaths?

**A:** Well, since more people die while bowling, shouldn't we ban bowling from the U.S.? What about skydiving, rock climbing, kayaking, or even swimming down at the local YMCA? That's statistically more dangerous. The answer to these questions is always the same: education. Both the NSS-CDS and the NACD (National Association of Cave Divers) support a program where warning signs are posted just inside a cave entrance. These signs warn the curious diver that they should not proceed into the cave unless they are properly trained and equipped. Some of the signs include a depiction of the Grim Reaper, to underline the life-or-death decision the diver is about to make. Just about anyone can rent an airplane, get a army-surplus parachute and jump out of a plane. It is no less ridiculous an idea than entering a water-filled cave. Unfortunately, for a lot of people, access to water filled caves is much easier, and the PERCEIVED danger much less. Again, the answer is education. This Web site is yet another way in which the NSS-CDS hopes to educate, in general, the public and, more specifically, open-water divers to the dangers of diving into water-filled caves.

#### Q: So, cave-diving is just a recreational sport, like kayaking or sky-diving?

**A:** No. While many cave-divers have only recreation in mind, the NSS-CDS and its members supports both educational and scientific endeavors into the phreatic (underwater) cave zone. Many members are physical scientists who are interested in the geology, hydrology and biology of underwater caves. Many areas of the country rely on ground-water for drinking supplies for millions of people. Cave-divers have been instrumental in many cases in pro-actively preventing pollution-creating businesses from being set up in environmentally sensitive areas. Yet other cave-divers have found and recovered unique biological specimens

from caves which contribute not only to our general knowledge of our world, but to specific biochemical knowledge that has resulted in useful medical and consumer products. Allowing properly trained and motivated cave-divers into a cave can result in surveys and maps showing the extent of the cave, the flow of the water, water samples for analysis, reports and samples of unique flora and fauna for analysis, and a better understanding of the natural resources under our feet. The NSS-CDS encourages its members to maintain good land-owner relationships which always prove beneficial to all parties.

# **Q:** I'm an open-water diver with about 50 dives, and I'm interested in becoming a cave diver. What should I do now?

**A:** First, you must have advanced open-water certification from any of the major scuba certification agencies as a pre-requisite to training as a cavern diver. While a Rescue Diver course is not required, the rigors of Rescue Diving may give you a better idea of the rigors of cavern and cave diving. Also, the more dives you have -- meaning, the more experience you have in many different situations -- the better prepared you will be for learning about and dealing with the underwater cave environment. 50 open-water dives may not be enough for most divers, especially if many of them were in sheltered coves or lakes. You also need to become introspective and decide how you would deal with emergency situations. Has a fin ever fallen off your foot? Have you ever been entangled in a line or other object underwater? Have you ever kicked up some silt or been in a very low- or no-visibility situation? Have you ever had your mask kicked off by another diver? Have you ever run low on or out of air? How did you handle these situations? Did you ever feel panicky? Did you take steps so that that problem will never happen again? Do you take adequate care of your equipment? And... can you hold your ego in check, and end a dive because things aren't going right?

#### Q: What does ego have to do with cave diving?

**A:** Ego, stress, motivation, judgement... understanding and dealing with these psychological aspects are all critical in successful cave diving. While cave divers are probably pre-judged as being young, macho daredevils, that may be true only above the water line. Once in the water, even the most confident and virule diver has to know when to "call the dive", in other words, turn around and head on out when things start going wrong, or, simply, when they get a "bad feeling." If you don't think you can do that, then cave diving is not for you.

#### **Q:** How do I find the right instructor?

**A:** Not only is this an excellent question, but your choice will color your entire cave diving experience. So do your homework. Find someone that not only does a good job of teaching, but does it with a style that is comfortable for you. Talk to everyone you can. Ask them all kinds of questions about their training and their instructors. But, since almost everyone only takes a single course from one instructor, it can be difficult for them to be objective, so you also have to be wary of TOO glowing a report. You should also contact the instructors that you are thinking about. You can see a listing of all NSS-CDS instructors on the NSS - CDS Cave Training Website.

#### **Q:** How can I prepare myself ahead of time for my class(es)?

**A:** Other than meeting the requirements, the two best things you can do is 1) to dive as much as you can, in as many different situations as you can, and 2) you can read some of the books that are available for cave divers. The two best books to start with are Sheck Exley's "Blueprint for Survival", the "NSS-CDS Student Workbook" and the "NSS Cave Diving Manual".

#### **Q:** Where can I get the right equipment?

**A:** Do you know what the "right" equipment is? Probably not. Equipment considerations are taught throughout the cave diver training course, so it is unlikely you'll really know prior to that. However, you can always talk to a variety of cave divers, look at their gear and ask questions like why did they choose this, why is that there, etc. However, one prudent approach is to rent a good deal of your gear for the course. Many instructors will have a wide variety of equipment, giving you the opportunity to try out different brands, different configurations.

However, some instructors teach a strict Hogarthian configuration which will almost explicitly define the equipment you will need and use. Others instructors prefer to expose the students to ALL brands and types, and let the student decide which is best. This is another question you could ask when investigating instructors. Neither approach is bad or good, just different.

## **Q:** What is the Hogarthian configuration?

**A:** While many instructors don't believe in the Hogarthian system, many others approach it as being the most common-sense way to configure your gear. Within the tight-knit cave diver community, it is akin to a religious war... kind of like IBM PCs versus Apple Macintosh. NSS-CDS instructors have the perogative to instruct either the Hogarthian system, or any other configuration, as long as it is safe and functional. For excellent coverage of the ideals behind the Hogarthian configuration, review this paper.

#### **Q:** Cave diving equipment is expensive! Where can I get it cheap?

A: There is no good answer to that. The problem is, what equipment are you going to use? Brand A may be widely available, and widely discounted; Brand B may be manufactured in small lots, available only directly from the manufacturer, and require a mortage on your house! Until you take your course, learn about and decide on which equipment you will need, you really shouldn't be spending a lot of money up front. The exception to that guideline is, if you have a dive buddy who is a cave diver and he/she wants you to dive with the same gear and configuration as them, then your problem is easier (but it's still a problem). This isn't necessarily the best approach, but there is some validity in having the same "kit" as your primary dive buddy. But if your dive buddy is sloppy, or made the wrong decisions, had a lessthan-enlightened instructor, then you're making the wrong decision, too. Maybe you should get another dive buddy! The other issue is: cave diving equipment IS expensive. There is no way around that! Even at wholesale prices (which you are unlikely to get), you could spend \$4000 putting together a kit, the double tanks, the manifold, the backplate and harness, wings, dual regulators, SPG, knife, primary and backup lights, etc., etc. All your equipment should be of the highest quality since you are betting your life on it. But that is the real point here: if you have a problem with your gear 1000-feet back into a cave, you aren't going to be able to dig a hole through the limestone to surface: you have to deal with it. Given that situation, do you REALLY want to go cave diving with less than the best regulators, etc.? I didn't think so... The redundancy required by cave diving means that your kit will be almost twice what an open water diver would spend. So, in summary: it will be expensive, but ask around and you might find good sources.