

## **Cavern Diver**

Thank you for expressing interest in a Cavern Diver course. This document will explain what you can expect from the course, give you a brief background on my diving history, and give you a list of items you will need for the course. If you have any questions, please feel free to send me an email ([ken@sallot.org](mailto:ken@sallot.org)) or give me a call (352-870-5367).

The most important thing is that I want every student to understand the “why” we do things the way we do. That means I expect and encourage questions throughout the course.

## **Course Description**

Do you dive in the springs of North Florida regularly and want to see what's around the corner? The Cavern Diver Course is a safety course designed to introduce students to the techniques and skills needed to safely enjoy the natural beauty of the caverns in North Florida. The Cavern Diver course allows graduates to explore the areas within the daylight zone by training you with the proper planning, procedures, and techniques to dive in caverns safely.

This course serves three purposes:

1. It teaches the student how to dive within the overhead environment in the daylight zone and other limitations of cavern diving.
2. It teaches the student about the risks and hazards of cave diving without the proper gear or training.
3. It is the first step in the training for cave diving.

What's in it for you?

You will learn buoyancy, trim, and propulsion techniques that will make you a better diver.

You will gain knowledge that helps you to appreciate our natural environment.

You will learn techniques to manage stress and anxiety, making you a more comfortable and confident diver.

## This is not a cave diving course!

I need to stress this point – while this course is the foundation for cave training and is a good base to begin technical training, it is **NOT** a cave diving course.

What makes Cavern Diving different from Cave Diving? Cavern diving is within the daylight zone, no more than 200' from the surface, and can be safely conducted using regular recreational gear with a few minor modifications.

If you have ever done a dive in Blue Grotto or the Ginnie Springs Ballroom, you have already done a cavern dive. However, this course will teach you the fundamentals of how to dive these locations safely.

## Who this course is for:

- The certified diver who has interest in moving forward with overhead environment diving and expanding their diving techniques, capabilities, and more!
- Divers interested in learning more about the formation and environment of the springs and aquifer in North Florida!

## Course prerequisites:

(these requirements must be met prior to commencement of training):

- Minimum age 18, 15 with parental consent
- Certified open water diver
- Own your own basic scuba gear (Mask, Fins, Wetsuit, BCD, Regulator)

## Recommended Pre-reqs:

- Advanced Scuba Diver
- Nitrox
- 25 dives

## What you can expect to learn:

The Cavern Diver course takes an in-depth look at all of the following and more:

- The environment behind the aquifer system in North Florida, and some of the threats that environment is facing.
- Policy for cavern diving
- Gas management procedures and management to include dissimilar volumes

- Psychological considerations of overhead diving
- Equipment considerations including:
  - Cylinder options
  - Regulator options
  - Buoyancy compensator/harness options
  - Proper weighting
  - Reel options
  - Equipment configurations
- Communication (light and hand signals)
- Swimming techniques
  - Body posture/trim
  - Buoyancy control
  - Line following
  - Propulsion (finning) techniques
- Physiology
  - Breathing techniques
  - Stress management
- Cavern environment
  - Spring and sinkhole development and formation
  - Aquifer resources
- Cavern conservation
- Problem solving
  - Emergency procedures
  - Equipment failure
  - Silting conditions
- Accident analysis
- Cavern diving etiquette
- Review of dive tables and decompression theory

Some of the required skills you will have to demonstrate include:

- Properly deploy a guideline
- Properly follow a guideline with eyes open and closed (simulating loss of visibility)
- Air share with a buddy with eyes open, following a guideline
- Air share with a buddy with lights off and eyes closed, using touch contact while following the guideline
- Remove and replace mask while in contact with the guideline
- Demonstrate conservation, awareness, and back referencing techniques
- Demonstrate light/hand signals and touch contact
- Demonstrate anti-silting techniques
- Simulate a primary light failure and use back up light to exit
- Demonstrate buoyancy control, proper trim, and propulsion techniques
- Equipment check and matching
- Demonstrate adequate pre-dive planning

## What's in it for you?

Upon successful completion of this course, graduates may engage in cavern diving activities without direct supervision so long as the following limits are adhered to:

- The diving activities approximate those of training
- Planned dives do not exceed diver's current certification level
- Penetration is limited to the "rule of thirds," OR 1/6th if using doubles to a maximum depth of 100 feet
- Penetration is limited to 200 linear feet from the surface
- Proper cavern diving equipment must be used
- Maintain a continuous guideline
- No restrictions or areas that are too small for 2 divers to swim side by side
- Safety stops as appropriate or necessary

## Cavern Course Schedule (typical)

Typically, my cavern course runs 2.5 days.

We will meet the afternoon of the first day for the lecture and equipment review, usually beginning at 12:30PM. The lecture and equipment review typically take five to six hours, and you will want to have a pen and paper to take notes with.

On our second day, we will meet at Ginnie Springs, usually at 8AM. In the morning we will work on our "land drills," which is where we will practice running a guideline and our emergency protocols. Then we will get in the water for the first of our dives. We will conduct two or three dives in the open water basin before breaking for lunch. During lunch we will do a video review of your in-water work from the morning. In the afternoon we will conduct two cavern dives in the Ginnie Ballroom, I will lead the first dive, and one of you will lead the second dive. During these dives we will practice a few skills, including deploying a backup light, performing an air share, and exploring the cavern. After those dives we will conduct a video review of the afternoon.

On our final day, we will either meet at Peacock Springs State Park or Manatee Springs State Park. We will do two cavern dives before taking a lunch break, during lunch we will review your final exam and cover any additional material. After lunch we will conduct an additional cavern dive.

### A note about water time and thermal stress

It is not uncommon for students in my Cavern course to accumulate 180-200 minutes of bottom time and be in the water in excess of four hours between pre-dive drills and post-dive review. Although the springs average about 70° F, this amount of time in the water can leave divers feeling chilled. Please consider this when choosing your thermal protection, and at the very least, please wear a hood.

## **My Diving and Teaching Background**

When I was a child, my mom worked in the travel industry doing PR throughout the Caribbean, as a result, most of my formative years were spent around the water. My first scuba dive was when I was ten years old and living on Grand Cayman. I was certified as a NAUI Junior Scuba Diver in 1981, when I was twelve.

Every year my wife and I spend at least one vacation in the Caribbean, I spend much of that time underwater. One of my favorite places to dive is on any wall – there's something about peering over the edge into the blue abyss below that always gives me goose bumps.

I started cave diving in 1994, and completed my cave training in January 1995. Since that time I have completed over 1000 cave dives in the United States, Mexico, Bahamas, and Belize. For me, cave diving is an activity where I can find peace and solitude away from all of life's distractions. Plus, the idea of visiting a place that only a few people have been before is quite a thrill – more people have walked on the moon than have seen some of the cave passages I have seen.

I became a scuba instructor in 1995 and I am currently a NAUI, SDI/TDI, IANTD and NSS-CDS Instructor, and can teach specialties including full cave, side-mount, DPV and utilizing mixed gases to dive to depths as great as 330'.

Living in North Florida since 1989, I have seen the steady decline in the water quality of several of our springs. Several of our springs are now in critical shape, and fresh, potable water is a major issue for the 21<sup>st</sup> century. Because I live here, I spend much of my free time involved in research and exploration diving projects to try and help protect our springs.