

Date: Tuesday, September 08 2009 @ 00:00:00 CDT  
Topic: Gear

## Scuba diving dry in Arizona - It's a dry heat

by John Flanders, Academy of Scuba - <http://www.academyofscuba.com>

As the summer rolls to an end around the country, the Phoenix area is still scoring 100 degree days. Unlike most cities around the United States, summer doesn't come to an end on Labor Day weekend. In fact, it is common to have 100 degree days well into the month of October. And, when those cool days come, it is a welcome relief to most residents in the valley of the sun.

However, for us Scuba divers, Labor Day is a signal to start thinking about the cooler water that will soon follow. Diving in the Phoenix area is a year round activity. In fact, most divers prefer the winter months as the water is clearer, more dive sites are available (due to lake conditions) and there are less boaters on the water. The trade-off: water temperatures get significantly cooler in the winter months.

While the west coast water temperatures may be pushing low 50s and even high 40s in the winter time, the lakes around Phoenix Arizona range in the mid 50s to low 60s. This leaves a lot of Phoenix divers shivering for warmer waters. However, for many hearty divers, they are suiting up in a heavy 7mm wet suit with hood and gloves or, some divers, desiring to stay longer and head to deeper colder realms of the local lakes may be in a dry suit. Jeff Varner, owner of AZ Divers on 40th Street and Bell, says "many of his divers have switched over to diving dry, because it's simply more comfortable in cold water". Varner continued to say, "that this is the time of year, before the water gets cold, when divers come in and start asking about dry suit classes and purchases".

Dry suits work on the premise of sealing off your body from the cold water, using an air tight suit. Neoprene or latex seals on a diver's neck and wrist, keep water out of the suit. Underneath the suit, a diver wears thermal protection to keep him or her warm. Of course, this air space must be managed. When a diver gets in the water, pressure is applied to the outside of the suit and starts to collapse on the diver. At some depth, this can be a crippling squeeze. Divers have a valve on their suit, usually mounted on the chest, which has a low pressure inflator hose attached to it from his or her Scuba tank. To keep the squeeze to a minimum, a diver can add air to (1) reduce the suit's squeeze, and (2) the air acts as an insulating source. Air is a much better insulator than water. A body in a wetsuit conducts heat 20 times faster than a body in a dry suit. This type of heat loss can cause diver discomfort causing a premature end to a dive or, worse, can be a cause of hypothermia. Of course, like your lungs, mask, ears and BCD, a dry suit becomes an additional air space to manage. As a diver, managing air spaces is vitally important. Managing your ear and mask air space is as easy as blowing into your mask or equalizing your ears. Managing the air space in your lungs is done by following the number one rule of scuba diving -- never hold your breath. Managing your BCD and a dry suit is key to proper buoyancy. Proper buoyancy means that you are in complete control of

yourself underwater. You, generally, remain neutrally buoyant preventing uncontrolled ascents and bouncing off the bottom which can cause impaired visibility or damage aquatic life.

“Simply put, the biggest benefit for dry suit divers is staying warmer longer underwater”, says Tim Moore, a local Phoenix instructor. “While the benefits are significant and obvious, you have to weigh those advantages with the cost and training issues”, Moore continued.

There are two types of dry suits. The most common dry suit is a tri-laminate shell with latex seals. Known as “tri lam”, this type of dry suit has incredible flexibility and uses ranging from tropical caves to ice diving. The tri laminate shell has little insulation to it. However, it comfortably allows you to put an insulating barrier underneath it. The thicknesses vary depending on water temperature. The other dry suit type is neoprene dry suits. The sizes range from 1mm to 7mm. These tend to be less flexible. However, neoprene acts as the insulator. Thus, multiple barriers are not necessary. In some cases, such as with a 7mm dry suit, a bathing suit and tee-shirt is all that is needed underneath. Costs can vary wildly on a dry suit. A low end neoprene dry suit can cost as little as a high end wet suit. However, a high end tri laminate dry suit can run a couple of thousand of dollars.

While materials are the predominant factor in determining price, dry suit options can certainly spike the cost of new suit. Options for dry suits include a variety of accessories include zip seals, zipper location, valve location, thigh pockets, built in shoes, suspenders, and of course, the suit’s colors. Options, at the time of ordering, seem expensive. However, dry suits tend to last a lot longer than wet suits. So, you options aren’t the place to skimp. Buy what you want, as you should only have to buy a dry suit once.

Off the Rack or Custom Fit?

While many shops around town have “off the rack” dry suits available for sale. Fit is the absolutely most important factor to buying a dry suit. A poorly fitting dry suit can cause a loss of flexibility, air management issues, and discomfort. Not many of us are a perfect off the rack fit. A little to tight in one area and a little too loose in another is very significant while diving. I strongly advise to choose a custom fit option for your dry suit. Your local dive shop can measure you and determine exactly what you need to order your dry suit.

Training Considerations

Unlike a wet suit, you can’t just jump in the lake and dive a dry suit. Even a seasoned diver will find his or her first several dives clumsy and uncomfortable. It is imperative at this early stage that new dry suit divers get properly trained. Most dive shops, in Phoenix, offer dry suit classes. Prices range from \$100 to \$150 including a certification card upon successful completion. A dry suit class usually has a little self study and classroom work. This is where you will learn the characteristics of a dry suit.

Classroom lecture is followed by a 1 to 2 hour pool session or shallow water session so you can ‘dial in’ in the mechanics and special skills necessary to dive a dry suit. After a pool session, dry suit divers are taken out into the open water and complete two training dives with an a qualified specialty instructor. Once you are certified as a dry suit specialty diver, practice is essential. It is generally recommended that new dry suit divers spend a significant time, with a qualified buddy, practicing the skills learned in their dry suit course. Special attention should be placed on slow ascents and

safety stops. After a couple of dozen dives, it is common for to hear divers say they prefer diving dry. It's also common to hear new dry suit divers question why they did this in the first place. When you find yourself in that position, keep practicing.

Diving dry is a financial, time consuming, and educational commitment. This commitment offer numerous rewards and allows divers to maximize their dive season. No longer is a diver restricted to warm waters or being cold and uncomfortable in cold water. Whether it's a deep wreck, a long cave penetration or that mid winter need for blowing bubbles, dry suit diving is a safe way to keep warm.

This article comes from Arizona Scuba:

<http://arizonascuba.com>

The URL for this story is:

<http://arizonascuba.com/modules.php?name=News&op=NEArticle&sid=5>