Making Waves in 2014

As we head into the holidays we take pause and reassess our year past and look towards what we want for the year to come. This has been a turbulent year: an economy struggling to maintain growth, tragedies from bombing in Boston, a fertilizer plant explosion in Texas, and more recently a super storm in the Philippines. For this we pray for hope and healing in our country and abroad. These turbulent events show the strengths and resilience of families and communities as they overcame what began as a negative experience. The immediate response to aid and assisting the victims and families was incredible.

This year made me reflect on the scuba community and how my business has been affected by the events presented this year. One significant impact has been the change to our focus and rebranding the magazine and the shows. In the scuba industry, it has been my experience we tend to isolate ourselves, preferring to spend time with familiar faces and keeping our distance. We find ourselves believing only divers would understand how we feel; this couldn’t be further from the truth. As we have expanded our focus and become a more inclusive magazine, we have come to realize our concerns are shared by other businesses in all watersports.

The “greying” of the market and lack of young people joining outdoor sports is a universal concern. All outdoor sports are facing this reality and feel the consequences. The “internet” generation are those who seek comfort on the couch and live vicariously through their Avatars. They are much less likely to seek actual outdoor adventures. I have been embraced by new communities and our incredible employees who are partners in growth.

As we head into the new year, we celebrate our gratitude for our growth as a business and a community. This year we celebrate not for financial success but for gratitude for friendships, family, community and our incredible employees who are partners in growth.

This December we wish you, your family and friends happiness, faith and hope. Happiness of the year completed; a time of reflection at hand. Faith as we weather the storms and seek shelter and cling to our families. And Hope, for the coming year; a better economy, a positive world, and a better harvest for those in need.

From our “family” to yours, Happy Holidays & Adventures!
Frozen Fins: Ice Diving in the Northeast

By Michael Salvarezza & Christopher P. Weaver
Photos courtesy Eco-Photo Explorers

When the temperatures dip below freezing, and the bitter winds of winter begin to blow, many divers retreat to the comfort of their living rooms. With gear stowed and log books closed; many Northeast divers begin to dream of warm summer days and the dives to come. Some divers escape the grip of the ice and snow and travel to far away destinations, leaving the winter behind for a brief time to get their diving fix.

But for the adventurous diver who wishes to extend the local dive season and embrace the challenge of extreme cold water diving a different type of diving frontier awaits. So, let’s go diving…beneath the ice!

Ice diving is one of the most exhilarating activities local divers can undertake. Despite its obvious danger, ice diving can be conducted safely with the proper training, equipment and techniques. The rigors of diving below ice, with water temperatures at or near freezing and with surface conditions even worse at times, can be physically and mentally challenging.

But the rewards are great. Besides the thrill of penetrating below ice covered surfaces, and the sense of accomplishment of having conquered yet another hostile environment, divers will see an aquatic world that continues to exist and thrive despite the harsh conditions of the season.

First, a word of caution…ice diving should never be conducted without proper training from a qualified dive instructor as part of a certification course. But, depending on were you live, you may find that your local dive shop does not offer an ice diver certification course. Don’t despair! With a little research, you should be able find a shop that does. In fact, we had to take our PADI Ice Diver Certification at a dive shop three hours away from home, but it was well worth the effort.

Generally, these courses consist of several hours of classroom work followed by a series of dives out on the ice. Because of the need for ice-covered surfaces, these dives are often conducted on lakes and inland bodies of water where the surface has frozen completely over. There are numerous locations in the northeast where these dives are conducted. Three such locations are Lake Ronkonkoma on Long Island, Oneida Lake, near Syracuse in New York, and Lake George, in upstate New York, but there are many others throughout the region.
For divers who would like to experience a great weekend getaway, the Lake George area offers a Winter Carnival (www.lakegeorgewintercarnival.com) in February. Besides ice diving there are many other family oriented events, such as NYS Motorcycle and ATV Ice Races, Outhouse Races, Hot Air Balloon Tethered Rides, Cook Offs and even a Bonfire.

So, what’s involved with ice diving?

Besides training, ice divers must pay careful attention to preparing the dive site; they must be diligent about using the right equipment, strictly adhere to established procedures and make sure that adequate protection from the elements is available.

Before divers can enter the water, a proper dive site must be created by first evaluating the ice conditions. First, the ice surface must be of sufficient thickness and strength to support the entire dive team, and any transport vehicles such as snowmobiles. It’s also a good idea to measure the bottom depth if you are not familiar with the area. Once the ice is determined to be safe for diving operations, the second step is to prepare the dive site.

Cutting the dive hole requires special cutting equipment; such as handsaws, breaker bars, chippers, augers and/or chain saws. There are several options regarding the shape of the dive hole, which can be circular, square, rectangular, or triangular. Triangular holes are often preferred because there is less ice to cut and the corner angles makes it easier to enter and exit the water. The size of the hole should be large enough to accommodate two divers and a safety diver at one time. On the surface, a visible marker should mark the dive site. Often, a tall branch is used which can be left behind to indicate that there was an opening here that is now being left to re-freeze.

Once the hole has been created, additional markings are desirable to help divers under the ice more easily find their way back to the opening. If there is a covering of snow, concentric circles are dug in the snow surrounding the site at predetermined intervals, along with intersecting lines and arrows that point towards the opening. In this manner, ambient light will penetrate below the surface in the shape of the markings, which can help a disoriented diver find their way out from under the ice. Sometimes, this surface “design” takes the shape of a wagon wheel, the most commonly used surface marking system.

With the site created and secured, preparation for the actual dives begins. Of critical importance to the divers is the proper functioning of the dive equipment, the adequacy of the diver’s thermal protection and, perhaps most important of all, the securing of a safe and effective rope system.

Regulators must be rated for use in cold-water environments. Divers exploring below the ice must guard against regulator freeze-ups, which will inevitably cause free-flowing conditions. Some divers employ special shunts on the hoses near their second stages to enable them to quickly turn off the flow of air in the event of a free-flow. Divers also must be careful not to exhale into the second stage while above the water in freezing conditions, as this will frequently cause a freeze-up. Redundant air supplies are another important safety consideration in these situations.

Divers should not under-estimate the effect of cold water on their bodies. Even with dry suits, divers are advised to use under garments rated for these temperatures. Integrated glove systems, which allow for the easy flow of air to the hands, are also beneficial as is an ice cap underneath the regular wet or dry hood.

Because of the danger of diving in an overhead environment such as a frozen lake, ice diving is a team diving activity that is made up of support personnel, divers, tenders, and safety divers.

The line tender is responsible for playing out and taking in line so that the diver does not get tangled. Ropes are attached to the diver’s chest harness via a locking carabiner to minimize the likelihood of the rope disengaging from the diver. Safety ropes leading to the divers are secured to the ice surface using ice-screws, which prevent the rope from accidentally slipping into the water.

A safety diver is always suited up and ready to enter the
water at a moment’s notice is to assist the primary diver in the event of a problem. Safety divers will always have their own line tender.

Communication to the diver or to the surface is accomplished by simple line pulls. Each series of tugs on the line means a different thing. It is vitally important that divers and tenders agree and understand all rope “commands.” While there may be variations to these techniques employed in different locations, the general principles are the same. And because different techniques might be used, it is all the more reason to carefully rehearse with all the divers working the site what techniques will be used on the dive.

While divers in the water are often comfortable, the surface conditions can be quite harsh. The flat surface of a lake affords little shelter from the wind, and the temperatures may be far below freezing. Some form of protection from the elements should be brought onto the ice if at all possible to guard against hypothermia while donning and doffing equipment as well as keeping divers warm between dives. Even a small tent can serve as a windbreak, which can mean all the difference while waiting on the surface between dives.

Diving beneath the ice, divers enter a completely alien and spellbinding world. Often, the winter water is clearer, affording unheard of visibility. And, while the winter temperatures have chilled the lake water, fish have nowhere to go…so they still thrive in these frigid waters. Divers can often observe aquatic life that is often difficult to approach in the summer months.

And for those who are looking for activities beyond observing the underwater environment, ice divers often search for sunken equipment and other items of interest. For example, in many northern lakes, ice divers are sometimes approached to salvage sunken snowmobiles and other types of equipment that have fallen through the ice.

So, the snow is falling outside. The temperatures are below zero. The wind is howling from the north. Seems like a good day for diving…