



Cold Water Survival, Hypothermia, Rescue & Recovery

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Hypothermia is a subject that my son and I, members "back in the day", of a USCGAux Cold Water Team, were trained in. Recently, amongst the professional life-saving community, whispers started that we have had it all wrong, that data, from US Navy studies from the post WW-II era on "Time of Useful Consciousness" on molded dummies with internal brass skeletons, didn't calibrate to live testing conducted by various scientific and medical studies done in the last couple of years. Further, medical testing of the effects of cold water on the human physiology would lead one to believe that the standard "fireman's hoist*" of a stricken mariner, taught everywhere, could in fact lead to a worsening of the effects of cold water on the victim, even leading to death. This column is about that.

The Cold Facts

Back in August 2010, while attending the National Convention of the US Coast Guard Auxiliary in Phoenix, AZ, I attended a presentation on this topic by a Canadian organization called Cold Water Boot Camp (www.coldwaterbootcamp.com) which works in cooperation with many life saving organizations, including the US Coast Guard.

In the video part of the presentation, I saw a good friend and fellow member of US Coast Guard Forces - Mario Vittone, USCG Marine Safety Specialist and former Helicopter Rescue Swimmer Instructor - featured in the video as one

of the guinea pig subjects. In the past, Mario would ping me with commentary on hypothermia. "Vin, some of this stuff is not lining up with the latest data. Be careful!" The problem I had was in sorting out that which was still good and that which was good to go - as in "outta here!" There was no official report to rely on. Well, not only was there now an official scientific report to rely on, but I could talk directly to one of the subjects - Mario Vittone, USCG. In fact, Mario has published a detailed article on the subject - <http://mariovittone.com/2010/10/the-truth-about-cold-water/> - which I want to acknowledge here as an underlying source document to this column.

Traditions Die Hard at Sea

It isn't easy convincing mariners that a life-time of tradition and practice is wrong. And not everything we know and practice on this subject IS wrong. Here are the facts:

The first phase of cold water immersion is called the cold shock response. This we've had right. Data now shows that roughly 20% die in the first two minutes. They take on water in that first uncontrolled gasp, panic and drown, plain and simple. In some, the cold shock triggers a heart attack. Surviving this stage requires you to stay calm and get your breathing under control. If you don't, your life is measured in minutes and you won't need your other hand to count them. A further consequence of

this phenomenon is that you will rapidly lose your physical capacity to swim. Even the strongest swimmer can't fight Mother Nature - your body's natural reaction to all this cold water is to protect the inner core. It does this by constricting blood flow to the outer extremities and keeping as much warm blood as possible around the inner core. We had this right too. I've often described it as "being drunk without the booze." Fine motor skills go, followed by gross motor skills, followed by, well, death by drowning. You can't swim without arms and legs (read: extremities) working.

What we had completely wrong was this. To quote Mario Vittone directly:

It is impossible to get hypothermic in cold water unless you are wearing flotation, because without flotation - you won't live long enough to become hypothermic.

This leads me to the next thing we had completely wrong - "that a 50 year old man would last 50 minutes in 50 degree water." All the timings are wrong - if you had a life-jacket on. The good news is that we last longer, far

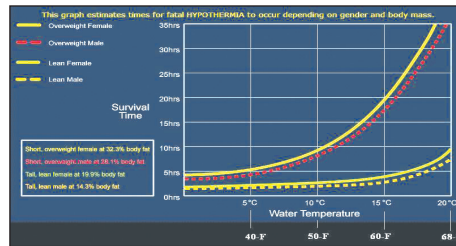
longer, before losing consciousness and ultimately reaching the point of no return. See the table.

Don't Lose Them During Rescue!

One of the things we also got wrong, alluded to at the start, was how to rescue them. The presentation showed rescuers keeping the victim horizontal - not vertical, ever - while getting them into the boat! This is because of what is called post-rescue collapse. Hypothermia makes everything colder, which makes it slower and closer to the edge of collapse. The rescue itself is stressful to a fragile heart - potentially leading to cardiac arrest. They keel over right in front of you, as you haul them over the gunwales and try to get them out of wet clothes (*a struggle in itself*) and into dry ones. Quoting Mario Vittone again, "Until everything is warmed back up - out of the water and dry is good enough - mobility comes later."

*With two rescuers, one with each arm of the victim, would "bob" the stricken mariner up and down, "1-2-3 and HEAVE in" and use some the natural buoyancy of the human body to help the rescuers get the person out of the water, over the gunwales and into the boat.

BTW, if you are interested in being part of USCG Forces, email me at JoinUSCGAux@aol.com or go direct to the D1SR Human Resources department, who are in charge of new members matters, at DSO-HR and we will help you "get in this thing..."



Tides for Moriches Inlet starting with October 9, 2013							
Day	High/Low	Tide Time	Height Feet	Sunrise/Sunset	Moon	Time	% Moon Visible
Wed. 9	Low	4:06 AM	0.1	6:56 AM	Rise	11:50 AM	17
9	High	10:35 AM	3.5	6:20 PM	Set	9:50 PM	
9	Low	4:55 PM	0.1				
9	High	11:07 PM	2.9				
Thur. 10	Low	4:58 AM	0.2	6:57 AM	Rise	12:48 PM	26
10	High	11:35 AM	3.4	6:18 PM	Set	10:52 PM	
10	Low	5:55 PM	0.2				
Fri. 11	High	12:11 AM	2.9	6:58 AM	Rise	1:39 PM	37
11	Low	6:03 AM	0.4	6:17 PM	Set	11:57 PM	
11	High	12:37 PM	3.3				
11	Low	7:04 PM	0.3				
Sat. 12	High	1:14 AM	2.9	6:59 AM	Rise	2:24 PM	48
12	Low	7:20 AM	0.4	6:15 PM	Set		
12	High	1:40 PM	3.3				
12	Low	8:13 PM	0.2				
Sun. 13	High	2:17 AM	2.9	7:00 AM	Set	1:05 AM	60
13	Low	8:34 AM	0.4	6:14 PM	Rise	3:05 PM	
13	High	2:42 PM	3.3				
13	Low	9:14 PM	0.1				
Mon. 14	High	3:20 AM	3.0	7:02 AM	Set	2:13 AM	71
14	Low	9:38 AM	0.2	6:12 PM	Rise	3:41 PM	
14	High	3:44 PM	3.3				
14	Low	10:08 PM	-0.1				
Tues. 15	High	4:21 AM	3.2	7:03 AM	Set	3:21 AM	80
15	Low	10:34 AM	0.1	6:10 PM	Rise	4:15 PM	
15	High	4:44 PM	3.3				
15	Low	10:57 PM	-0.2				
Wed. 16	High	5:17 AM	3.4	7:04 AM	Set	4:28 AM	88
16	Low	11:27 AM	-0.1	6:09 PM	Rise	4:48 PM	
16	High	5:37 PM	3.4				
16	Low	11:44 PM	-0.2				

Weather Forecast E Moriches, NY (11940)	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed
	Oct 9	Oct 10	Oct 11	Oct 12	Oct 13	Oct 14	Oct 15	Oct 16
	Partly Cloudy 65°F 51°F	Few Showers 65°F 53°F	Few Showers 65°F 54°F	Few Showers 65°F 52°F	Few Showers 63°F 51°F	Showers 66°F 52°F	Cloudy 67°F 52°F	Few Showers 67°F 52°F



FISHING WITH TONY

RECENT HEATWAVE KEEPS BLACKFISH FROM CHEWING

by TONY SALERNO

If you weren't already aware, the start of blackfish season debuted this past Saturday. For the most part, the action was slow to start. If you are wondering why, it can easily be blamed on the string of 80 degree days we've seen in the last couple of weeks as the culprit. However, fret not, as the season is just getting underway and there are still plenty of porgies, sea bass and bluefish for the asking around the island.

Along the south shore, those fishing with green and fiddler crabs did see a few togs although most were on the small side. Those who did have a keeper or two did weigh fish to 7-pounds caught off the Fire Island, Moriches and Shinnecock reefs. Further west, there were better catches of togs to eight pounds of which white crabs did have the edge on the bigger togs. Both the Hempstead and the Atlantic Beach reefs are showing positive signs of another banner season. In the meantime, shore bound jetty jocks have been drilling away at fish anywhere from Rockaway to Shinnecock. Regardless where you fish along the south shore peak tog fishing is still a good month away.

Those of you looking to fill the freezer with tasty porgy and sea bass fillets won't have to travel far from any of the inlets along the south shore bays, as all the reefs and local rock pieces are in good supply of the bottom dwellers. Don't be surprised if a few triggerfish and bluefish mix in with the catch as there are plenty of both species lurking the obstructed bottoms. Whether it is Sheepshead Bay, Point, Lookout, Captree, Moriches, Shinnecock or Montauk, the fall wreck bonanza has started and will continue to strengthen in the next few weeks. Therefore, pick a nice day and get on out.

Along the north shore, there are still just too many porgies around for any truly solid tog action. Again, fret not, as a solid cold snap and a few chilly nights will be just the right ingredients to give the togs the shot they need to start ending up in angler's coolers. Keep in mind that the blackfish regulations have changed for the 2014 season. This year, togs must measure 16-inches in total length with the same bag limit as last year of four fish.

In the meantime, while waiting for the tog action to ignite, you can keep your hands full with all the porgies you can handle at all the local necks and points. In addition, you'll have plenty of sea bass joining the fun, only this year; there are plenty of keepers around to make things very interesting. In fact, this season thus far has been the best in recent memory for sea bass along the north shore. Again, pick out a nice day and go have a blast.