



KELP KRAWLERS DIVE CLUB

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Dive Accidents - by Jerry Ehrlich

Dive accidents, they happen and we can learn from them. To get a good grasp on accident analysis we have to look at a bunch of accidents and find a common thread. This is how the cave diving community improved their accident rate to an acceptable level.

These statistics are not easy to come by, DAN reports on about 30% of the accidents worldwide. There are other agencies that collect data, like the BSAC <http://www.bsac.org/techserv/incprep03/intro.htm> and various web based organizations. If you are interested in learning more about dive accident causes and prevention, divingaccidents@yahoo.com, is a very good resource.

What struck me about looking at accidents is that very few of them are true equipment failures. Equipment is involved in many accidents, but the divers inability to deal with relatively simple malfunctions appears to be the issue that turns inconvenience into disaster.

A diver on the East Coast suffered a near fatal embolism trying to deal with a free flowing BC inflator during an ascent. The diver was a very experienced diver with over 500 dives. He reported he could not detach his inflator hose because he was wearing three fingered mitts and he could not manipulate the fitting.

This will be reported as an equipment failure. How could this accident have been prevented? Maintenance is the first issue here. Regular gear maintenance is a part of diving and if we do not want to do it or cannot afford it, we should not be diving.

The next issue is diving a gear setup that is functional. Think about the obvious failure points in your setup and see if you can manage them. Do

our gloves allow us the dexterity to deal with valve shutdowns and inflator issues? If you have a pony bottle and you cannot reach the valve, it can become a liability when relied upon. A piece of gear must above all be functional and we must have ownership of it. By ownership, I mean we can manage its function during a dive. A valve we cannot reach and open or close, we do not own.

Having our gear squared away is only part of the equation. Do we have the presence of mind to deal with a minor inconvenience without turning it into a major problem? We cannot turn to glass underwater when something goes wrong. Think about dealing with a problem and at what depth you are comfortable resolving it with a calm, mindful demeanor.

Lets take a problem like a stuck dry suit inflator. Are you comfortable resolving this problem? Unhook your dry suit inflator, vent suit, maintain buoyancy, abort dive. Are you comfortable doing this at 30 feet, 40, 50, 60, 120 feet? However you truly answer yourself is your depth limit.

Other issues like flooding or losing a mask, out of air, regulator free flow, etc should all be given the same assessment.

After we have defined some realistic limits based on our gear, its functionality and our ability to use it we need to factor in environmental conditions. If you are comfortable dealing with a loose inflator hose at 60 feet, how about at 60 feet in zero visibility, how about a flooding mask in a ripping current?

We do not have to go far to reduce our accident risk and the person with all the answers is you. :o)

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MEMBERSHIP

Kelp Krawler dues:
\$15 for a single membership
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May Meeting Attendance:

Al Bauer, Mike & Karen Beyer, Janet & Scott Boyd, Wayne Campbell, Don Chase, Jerry Ehrlich, Steve Griffith, Don & Tamera Hamil, Duane Hamrick, Jerry Helm, Steve Fornoff, Becky Lundin, Phil Pedack, Greg Volkhardt and Jamie Welsh for a total of 18 people.

We all enjoyed a great talk by John Rawlings of Advanced Diver Magazine. He talked about all the research that went into finding the car of Russel and Blanch Warren, that disappeared in Lake Crescent about 75 years ago.

Calendar of Events

June 15th: Club meeting.

June 19th: Swap meet and breakfast

July 20th: Club meeting.

August 17th: Club meeting.

September 21st: Club meeting.

October 19th: Club meeting.

November 16th: Club meeting.

December ?: Christmas Party

Treasurer's Report: Wayne Campbell

We have "around" \$900, not including a \$300 check that hasn't been deposited yet.

Dive Reports

Sund Rock - May 23, 2004 - Steve Griffith

Becky Lundin and I dove Sund Rock North Wall today. It was a great dive (name one that isn't) despite the fact that visibility was not good.

We got to Hood Sport n Dive and paid our gate fee just in the nick of time. While we were there, student divers from 2 or 3 Oregon based shops were getting tanks filled. After leaving the shop, we scurried over to the dive site in time to get a pretty decent parking place.

One dive briefing later, we were in the water, and despite the visibility, began to see lots of neat stuff. We spotted lots of rock fish, a couple of wolf eels, tons of plumose anemones, and a couple of crabs. The most unique sightings were a Lewis's Moon Snail and a lemon peel nudibranch. We also saw lots of smaller nudibranch, hermit crabs, and several small jelly fish.

Our dive plan called for an initial descent to 70 feet to work the wall in a northerly direction; then to crisscross the wall in increasingly shallower depths. This worked out well, as it gave us lots of time to look closely and see some of the smaller residents of the wall.

Overall, it was a great dive while we were in the water. Once we got out, we found the dive site had been converted to an I-5 style parking lot. We decided to not dive South Wall, opting to talk with Mike Beyer and Jerry Ehrlich before going back to the shop for air fills; then home to get some other chores done.

It was a great day! The sun was out, and the water was wet! Hope to see more KelpKrawlers out diving the next time I go!

C ya in the water!!

(You can also read Mike Beyer's Titlow dive report on the yahoo Kelp Krawler group list archives.)

Titlow Beach Dive Report - Steve Griffith

Several Kelp Krawlers started their holiday weekend in grand fashion, with a club dive and barbecue at Titlow Beach Park.

We arrived to find adequate parking, and immediately commandeered a picnic table. Mike Beyer fired up the grill, and hamburgers with all the trimmings, potato salad, and baked beans (you get someone else to unzip your dry suit!) were the order of the day.



Chef of the day - Mike Beyer



Karen Beyer & food table

Prior to getting wet, we paired off into buddy teams, and got a dive briefing from Mike. Light current was scheduled for 2 p.m., so we were in the water accordingly. Naturally, the current gods had not read the current tables, so the advertised light current didn't actually occur until after we'd been in the water for a while.

We all concentrated our dive around the old ferry pier pilings, and all saw a lot of the same things. There were plumose anemone aplenty, rock fish, crabs, cabezon, and ling cod. Mike and Karen Beyer spotted an adult wolf eel (unusual in that it had adopted the color of its surroundings, so was more brown than the grey we are accustomed to seeing at Sund Rock). They also spotted an octopus. Steve Griffith and Jeff Evans spotted a juvenile wolf eel. It was only about 4 inches long, and was more red in color.

Divers included Mike & Karen Beyer, Steve Griffith, Jeff Evans, Jeff Hamilton, Becky Lundin, and Carla Thurmond. All experienced a great dive at a site we don't often dive. Hopefully, we'll have more Krawlers join us on club dives in the future!



Steve Griffith and Jeff Hamilton

Dive Reports Continued

Kelp Krawlers Lasso Crabs at the Rodeo - by Greg Volkhardt

In terms of diving interests, we certainly have a diverse dive group. Photographers, tech divers, videographers, boat divers, shore divers, scooter divers, cavern divers, instructors, dive masters, you name it. And some who will try anything. That diversity was very evident at the annual Crab Rodeo. The dive was held on Sunday, June 06. Two Kelp Krawlers (Steve Griffith and Greg Volkhardt) went crabbing. Three Kelp Krawlers (Becky Lundin, Sue Treinen, and Katie Morgan) went reef diving. And one Kelp Krawler (Don Noviello) did both! Two Kelp Krawlers (Carla Thurmond and Mike Beyer) just showed up for the camaraderie. Well, maybe it was the chow!!?

All of the divers met at about 9:00AM at Hood Sport n Dive. As always, Mike and Ron were there helping everyone get their gear together and ready to dive. The resident crabbing expert, Al, doled out advice for the would-be crabbers. The crabbers jumped in the water around 10:00AM and the crab hunt began. The lion's mane jellyfish were out in full force, and avoiding a lip full of stinging nematocysts became quite a challenge as we concentrated on finding crabs. Personally, I wasn't up to the challenge (ouch!!!), but my comrades faired better. We all did pretty well, but not outstanding in getting crabs. I caught three and Don and Steve got two.



Crab chef Greg Volkhardt, and Mike Beyer

Everyone was back after the dive and soon we were cleaning and cooking crabs, and eating potluck fare. I brought sodas and Steve bought some beer and soon we were all sipping beer or sodas. Carla was being a two fisted drinker as she had both.

Speaking of Carla...What a great crab provider. As I mentioned earlier, Carla did not go diving. But she said she had her crab trap and her floaty thingy with her and low and behold, she showed up at the potluck with two crabs. I was impressed! After mentioning earlier in the week that we only had a couple of people diving for crab on Sunday, she emailed me back that she

would go out on Saturday and set her pot and get crabs for the Rodeo. Low and behold, there they were! I only became suspicious when I saw the Patty's Hood Canal Seafood receipt in the bag she brought them in. It seems there is more than one way for a Kelp Krawler to get crabs. Well, as you'll recall, I mention that this dive group is diverse!and that some will **try anything!**



Carla Thurmond, Don Noviello, and Steve Griffith cleaning crabs.

The Kehloken - Scott Boyd

The Possession Point Ferry is one of the richest dive sites in Puget Sound. The wooden, diesel-electric ferry, originally 227' long and 44' wide was built in 1926 as the *Golden State* for use in San Francisco. In 1937, it was purchased by the Puget Sound Navigation Company and converted into the Washington State Ferry, *Kehloken*. Infamous for its sad role in 1942 of transporting the Japanese residents of Bainbridge Island to Seattle for placement into California relocation camps, the *Kehloken* provided nearly 50 years of faithful service. In 1975, she had outlived her useful life and was sold for \$25,000. She was then towed to Lake Union to be converted into a club house and restaurant, but in 1979 was set on fire and burned to the waterline.

This turned out to be a blessing for Puget Sound divers, as what remained of the *Kehloken's* wood hull was then towed out to Possession Point on the South end of Whidbey Island and intentionally sunk in 80 feet of water. The *Kehloken* is now an amazing and abundant artificial reef, and a popular spot for diving.

Last Saturday, May 29th, the Boyd's and Hamrick's paid a visit to the Possession Point Ferry Wreck and found every inch completely covered with huge anemones, beautiful sponges and tons of fishing gear. Huge Ling cod and pregnant rockfish were spied throughout the vessel along with dozens of mating painted greenlings (in their brown phase for mating). The old boiler and tail shaft are still easily recognizable in the wreckage of the old engine room. The majority of the wood ribs still stand upright, although the sheathing has long since fallen to the bottom. This makes navigating the wreck very easy.

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The Kehloken - Scott Boyd - continued

When we arrived, there were several boats over the site, so we anchored near the stern and dropped down the anchor line to the wreck. Visibility was limited, and we could just make out the sides of the wreck from the anchor, so we ran a guideline from the anchor to the wreck (so we could find our way back to the anchor again). There was a bit of a current, and it took about 20 minutes to swim slowly to the bow along the starboard rail, then only about 5 minutes to drift back to the stern along the port side. This left a lot of time to drop down into the hull and explore all the ship's machinery. Every square inch was covered with healthy marine life, which makes this a critter watcher's delight. When we eventually surfaced after a great dive, all the other boats were gone, and we soon found out why. It was blowing, and the waves were getting rather large. This made getting back into the boat very entertaining (for the onlookers anyway), but we all made it back in safely, and can't wait to visit the site again!

Solo Diving...Its Just Not a Good Idea - by Greg Volkhardt

I've been diving for quite awhile...over 20 years. And over that time my thoughts on solo diving have flip-flopped back and forth. Upon completing my open water class, I was full of the self righteousness of a newly trained student. We learned to ALWAYS DIVE WITH A BUDDY! I followed it faithfully, and wouldn't think to do otherwise. However, as time went on and my skills improved, I started thinking the buddy system is not what it is cracked up to be. After all, weren't most of my dive partners of the "Same Ocean" variety? I put together my first redundant system, a 13-cu ft pony bottle, in the mid-1990s and began to think otherwise and do more solo dives. My thinking flip-flopped again in 1997-98, when I began reading George Irvine's thoughts on buddy diving in the Techdiver Email Discussion List. According to George, its not the buddy system that's the problem, it's the slovenly way most divers approach implementing the buddy system. George advocated diving only with divers who embrace its ideals to the letter. Since then, I've almost always dove with buddies and have tried to be attentive to my buddy during each dive. However, sometimes objectives or desires cause me to consider doing a solo dive. I had a reminder during my dive at the Crab Rodeo as to why these desires should be resisted.

Don Noviello, Steve Griffith, and I were planning on hunting crabs. Where Steve and Don were diving single tanks and swimming, I was diving double tanks and planning to use my DPV. I was also thinking of spending most of my time at around 80ft as I figured there were a lot of crabs at this depth, but was concerned about the amount of time that the single tank divers would be able to spend there given the length of sea bottom that would need to be traversed to reach it. Given what I perceived to be very different objectives, I opted to do the dive solo and let Don and Steve dive as a buddy pair.

Since I was diving double tanks with two independent regulator systems and an isolator manifold, my kit was fully redundant

and adequate for a solo dive. Nevertheless, this did not guarantee that the dive would be enjoyable as I was soon to find out.

I jumped off the Rest-Awhile Marina dock and headed out across the flat on my scooter. I reached the edge of the drop off, at 15-ft depth, and headed down, pausing periodically to clear my ears and adjust buoyancy. At 60-ft, I began to hear what appeared to be a significant air leak. Of course, a buddy could tell me right away where it was; but I could only guess. It sounded like it was coming from the regulator on my left post which I thought not unlikely since I had recently changed my regulator configuration. So I shut down my left post. I could still hear the leak, so I bled my backup second stage to drain the line. The sound of the leak soon stopped, so I figured my left post regulator was the problem. Before shutting it down, I'd noted that I had about 110 cu ft of gas. Since gas was plentiful, I decided to ascend to 20-30ft and continue the crab hunt. As I ascended, I vented gas from my wing and suit. It seemed that I had to vent my wing quite often, but didn't think much of it. At 25-ft I started finding crabs, so now I was carrying my goody bag and canister light head in my left hand and operating the scooter with my right. After about 20 minutes, I started wondering if my left post regulator had truly been the problem and decided to open it again. This would allow me to check the leak and take a peak at my pressure gauge. I opened it and...no bubble sound, 75 cu ft remaining in the tanks. All was well. I headed a little deeper and there was the bubble leak sound again. So I stopped and shut my left post once again. Soon the leaking stopped. It's the left post regulator for sure. I saw no crabs at 40 ft and ascended back to 15-20 ft and continued searching. After 5 more minutes, I start to hear the sound of escaping gas again. Buoyancy control is getting difficult and it was then that I realize the power inflator on my wing is periodically adding gas to the bladder. This is why I was having the buoyancy problems and having to vent gas from the wing so often. I disconnected the inflator hose and re-opened the left post.

At this point, the problem was solved and I continued the dive, orally inflating the wing as necessary. I was about 50 minutes into the dive before getting it figured out. What started out as a fun crabbing dive turned into a not-so-fun dive as I spent so much time thinking about and trying to correct the problem coupled with some task loading in the form of carrying a goody bag and light head in my left hand, operating a scooter with my right, dealing with buoyancy problems, trying to find crabs for the potluck, and avoiding lots of jellyfish tentacles (Did I Mention The Jellyfish Tentacles?). I have no doubt that a good buddy would have helped me to diagnose the problem quickly and I could have had a much safer and more enjoyable dive.

Obviously my objectives didn't line up with those of the other crab divers, so rather than diving solo I should have adjusted my objectives to match theirs. Although we can often resolve our problems ourselves, having some help only makes diving all the more safe. This dive was a good reminder for me as to why we dive the buddy system. I would advocate that all Kelp Krawlers dive the buddy system and practice buddy skills such as gas sharing and underwater communication on each dive.

Spotted Ratfish: *Hydrolagus colliei* - by Scott Boyd

Ratfish (also called chimaeras) are a cartilaginous fish that have an odd, rabbit-like mouth filled grinding teeth (hence their name). Ratfish are an ancient species that are closely related to sharks. They evolved during the Devonian period (about 340 million years ago), and really haven't changed since that time.

Female ratfish grow to about 3', with the males being significantly smaller. Males are easy to identify by the claspers located behind the pelvic fin and the doorknocker-like cephalic tentaculum on its forehead (a clasping organ used to grasp the female during mating). The spotted ratfish ranges from SE Alaska to Baja California.

Ratfish feed by crushing shrimp, clams, worms, sea stars and fish with their incisors. They are found primarily on sand or muddy bottoms from SE Alaska to Baja California at depths from 0 to 3000'. They actually prefer deeper water, and the greatest concentrations can be found from 600' to 1500' of depth off our coast.



Divers frequently encounter ratfish in shallow water during late spring as they head to the shallows to mate. During a recent dive we observed 4 ratfish that were circling individual shallow depressions in the sand, looking for a mate. Each boldly swam right up to our lights and hovered inches away before returning to their little patch of ground. Once they complete their courtship rituals, the female will lay a spoon shaped egg capsule. The extrusion process can last up to 30 hours after which the capsule is towed along behind the female for about five days until it is planted in the sand.

Ratfish look somewhat odd as they swim because they flap their large, wing-like pectoral fins for locomotion rather than using their tail. The spine of the ratfish is venomous, but only dangerous if you're dumb enough to actually grab the fish. The spine is only used defensively, and the species is very mild mannered and approachable by divers. It's easy to tell when you are beginning to frighten the fish, as it will briefly raise it's spine in a defensive pose (i.e. it's time to give the fish a little more space).

Ratfish are one of my favorite fish species. They are so ugly they are cute, and I can't help but thinking that someone made a mistake when they were putting the fish together some 340 million years ago.

June 15th Club Meeting - Anything Goes!!

In lieu of having a speaker for this month, we are going to talk about..... DIVING!!! A few years ago, we had a meeting where everyone just sat around talking about diving, and we all had a blast! After all, isn't that what a dive club is about?? Finding dive buddies and talking diving?? So bring your stories, bring your questions, bring your calendars and let's talk diving!!

A couple of great examples are Greg's article on solo diving, and Jerry's on accident management. Let's talk about ways we can improve our diving. What are the attitudes that we bring to the dive with us; have we practiced skills lately; have we tried to learn a little more about the underwater environment, and the critters that reside there? What are our objectives while diving? What makes the dive "fun"? And, where are some of your favorite places to go diving??

Meeting starts at 7pm, at Dirty Dave's Pizza on Martin Way. Hope to see you all there!

Breakfast & Swap Meet - June 19th

Our annual breakfast and swap meet will be held on Saturday, June 19th, at the **Rest-a-While Marina**. Breakfast includes made to order omelets (by our chef, **Paul Boardman**), potatoes, bacon, sausage, french toast, fruit, coffee, and juice. Breakfast will be served from 8 am to 11 am.

Bring your extra or no longer used dive gear (we ALL have some!!) to sell, buy a raffle ticket or two, and bid on the auction item.

This is another fun event, and the food is excellent! **So please, sign up to volunteer. The more people we have, the less work it is for each of us.** And remember to bring your dive gear, so that you can get a dive in at **Sund Rock, Octopus Hole, or Jorstead Creek** after breakfast!!

Dive Safe and Play Nice!!!!