



UNDERCURRENTS

Newsletter of the Bluegrass Dive Club / www.bluegrassdiveclub.com

OCTOBER 2022

Volume 52, Number 5

October Newsletter and October Club Meeting

Date: Tuesday, October 11th
Time: 7:30-PM (business)
Social at 7:00

Location: Roosters
Address: 2640 Richmond Rd
Lexington, KY
Program: Diver Hand Signals
Presented by Bart Bertetto

President's Message

By John Geddes



I would again like to thank Billy Forbes for coming to our last meeting. It was great to hear about some of the old times and how the Club got started.

As the year is starting to come to a close it's that time of the year to be thinking about serving on next years Board. So contact Kris Harn if you are interested you will see her name over in the next column Right now we have 3 openings for the slate. Its your Club, lets keep it going!!

The program for this meeting will be Safety Guy the one only Bart Bertetto, So come out and join us 🚩

The Editor's Notes

By Terri Anderson



Gavin and I are looking forward to our Cayman Dive trip in November. It will be my third trip to Compass Point with the Bluegrass Dive Club but Gavin's first trip to Grand Cayman.

In the meantime, we are busy sailing the Ionian Seas and discovering the beautiful Greek Isles. 🚩



2022 BGDC Officer's

John Geddes, President	608-0682
Kris Harn, Vice President	333-6911
Kathryn Bowers, Secretary	619-0166
Dan Miller, Treasurer	948-5133
L. A. Bowe-Geddes, Trip Director	553-6251
Bart Bertetto, Safety Info Dir.	502-299-3656
Alex Fassas, Webmaster	582-1600
Terri Anderson, Newsletter	502-791-4088

Vice President Report

By Kris Harn



Per the Bylaws elections are to be in the month of November. As of now there are three open offices, these can be filled or any office by calling me and nomination can be made from the floor. We need nominees for elected board positions: Secretary, Safety Information Director, and Newsletter editor. 🚩

From the Treasurer

By Dan Miller



2022 Membership Dues \$10.00

Student with ID
Single & Family (1 diver)
Family (non divers)
Family (2 or more divers)

Renewal: Please send payment to the address listed below, please make sure there is a correct indication of your mailing address, phone number and it is very important to indicate an email address.

Contact / Mail to: Bluegrass Dive Club c/o
Dan Miller
824 Gunpower Drive
Lexington, KY 40509

New Members: Visit the website to fill out an on-line form or to access a Microsoft Word printable form. [CLICK HERE](#). 🚩

Secretary's Report

By Kathryn Bowers



A note from the Secretary

It feels good to be enjoying the social contact of in person meetings again. It also feels good to be signed up for a club dive trip and the expectations that go with it. I can't wait for our November 12th departure for Grand Cayman. Although I have been to the Cayman Islands before, I have never stayed or been diving on the East End of Grand Cayman. I have heard fantastic things from other club members about the diving there and am looking forward to experiencing it for myself.

I will not be returning in 2023 as the Club's Secretary or any other officer position, so someone else needs to step up and put themselves forward. The club's board must approve the 2023 officer's nominations at its meeting on October 25th, 2023. Elections will be held at our November 8th, 2023 meeting. Do not worry as I will continue to be an active member of the Bluegrass Dive Club and hope to enjoy future trips, meetings, and social events.

This is YOUR club, so make it and take it where YOU want it to GO. 🚩



Trip Director Report

By Leigh Ann Bowe-Geddes



As Alex noted in his article, the BGDC Grand Cayman trip is only a couple of months away.

We have 14 people taking this trip to Compass Pointe November 12th-19th. There is still a possibility of adding, if anyone is interested. This is always a great trip, because Grand Cayman has so many beautiful dive sites, and so much underwater life. This is my personal favorite resort; the valet service makes the experience more enjoyable, and the dive staff is always outstanding. If you are interested in going, check in with Alex.

We are taking suggestions for 2023 dive trips, and I would love to hear from any of you who have specific requests for places you would like to dive in the next year, or even two years. In this spirit, we are including a bit of fun, with this crossword puzzle on U.S. coastal and territory diving. 🚩



Webmaster

By Alex Fassas



Tales from the Web

Changing Seasons

Change: we almost always resist it, yet it most surely will come. I am sure that we will still have a few warm Summer days yet here in Kentucky, but the signs and feel of Fall are all around us. It is always with some internal conflict that I do not want to let go of Summer, yet I welcome the Fall season. It is also most wonderful that in different parts of the world that one places Summer is another's Winter. That, plus a passport, time and a little money and it can be any season that we want. We may be the only species to travel for non-biological reasons, such as food, water, procreation, just for the experience. I am not sure if this is fact but am willing to be proven wrong.

Grand Cayman dive trip update

And speaking of travel, because we can and maybe need it...

The stage is set for a great club trip to Compass Point on Grand Cayman in the Cayman Islands. We have 14 folks signed up and going on this trip. Some on the trip have accomplished dive refresher training; this is never a bad idea for skills that we only use infrequently. The group Trip Leader is Alex Fassas. I will be reaching out to those on the trip to gather some information and communicate what you can expect at each stage of this trip. If the idea of joining any of your dive friends at Compass Point from November 12 – 19, 2022 sounds enticing, let me tease you further. Current water temperature is 82.5 degrees Fahrenheit, visibility of 110 feet. Roll out of bed onto the boat. Valet dive service; you don't touch your equipment all week after arrival; the folks in

Webmaster Cont.

the green shorts will handle everything. Even hauling tired and happy divers up the ladder. If you have interest in being a late addition for this trip, please register ([Compass Point, Grand Cayman club dive trip – 11/12 to 11/19/2022 | Bluegrass Dive Club](#)) and let us make sure what accommodations at the resort are still available before booking airfare.

Webmaster's Update

I laughed at the term "Webmaster", as if anyone is really a master of any technology. Our lives are full of technology in almost every aspect of every moment of every day. Some things do make our lives easier and some frustrate us at most every turn. I do appreciate when you let me know when you find a club related technology resource that isn't working as expected, is in error, or the communication format or message is not easily accessible and understood. I can almost always learn something new or how to communicate better from you. Thank you for the feedback. You can always reach me via our [Contact Us | Bluegrass Dive Club](#) web form. 📧

Bluegrass Dive Club 2022 Calendar

October

11, Tuesday Club Meeting
25, Tuesday Board Meeting
(Nominations)

November

8, Tuesday Club Meeting (Elections)
29, Tuesday Board Meeting

December

10, Saturday Christmas Party (Pending)
20, Tuesday NEWSLETTER

Safety Information Director

By Bart Bertetto



I Learned About Diving Safety from That

My mission is to provide you relevant safety information for your use. Each article will focus on a specific safety risk. I will draw from my experience, hopefully yours, and the dive community to highlight real risks that we must be aware of. So, if you see or hear of something that we could all learn from, please pass it to me. There is nothing like first-hand experience to drive a point home. This month's lesson is:

Scuba Regulator Hose Failure

Note from Bart: This is a repeat of an earlier article that is very pertinent to any diver getting back into scuba or making their first trip after the long Covid interruption. Spend some quality time with your regulator buddy before you get wet.

When I first thought about regulator hose failure, my mind immediately went to a recent event I witnessed. (That's the same regulator hose that we this entrust our lives to.) I then quickly recalled two similar instances, one personally, that I also won't forget. The worst of these was a total separation of a fellow diver's low pressure hose on the dive boat during pre-dive prep. The loud whoosh got everybody's attention. Being an aircraft engineer who worked with pressure hoses and connections, I was very interested and examined the failed parts closely. The hose fitting that screws into the regulator first stage was completely corroded through! What if that failure had happened on the dive? We'll talk about that later. My personal experienced was when I got back into diving after a long hiatus and was enthralled by the air integrated dive computer I demo'd in the pool. So the dive instructor lent me his spare reg with one of the

Safety Information Dir. Cont.

computers for my first Caribbean trip. I was familiar with the reg and the computer but had not used this set. During the diving I heard a progressively louder noise and my buddies said one of my hoses was really bubbling. On the boat the high pressure hose was now hissing profusely from the swaged (crimped) fitting at the reg 1st stage. The hose looked old and sure enough it was original with just a new computer put on it. The other event was many years ago on a California boat when someone was looking for an o-ring for a badly leaking hose, also at the reg 1st stage fitting. I offered my o-ring kit and looked at the fitting and reg port (where hose screws in). Both had significant salt deposits that had damaged and interfered with the o-ring seating thus preventing the hose from sealing. After carefully cleaning the parts to prevent contamination of the reg and/or the hose (not ideal on a boat), a new o-ring did the trick. I'm sure that after each of these experiences I must have shaken my head and said that that should not have happened.

Accordingly, this article is going to talk strictly about regulator hose failures and how to prevent them. We'll also look at the underwater failure situation.

1. Hose Maintenance and Inspection.

Concurrent with your routine regulator service, all hoses should be removed, inspected, cleaned, and o-rings replaced. Every inch must be examined closely. Special attention must be given to the swaged (crimped) metal end fittings for evidence of corrosion and salt deposit buildup. Hoses should be replaced if worn, damaged, or beyond recommended service life. Make sure the shop does a thorough job and provides you documentation/photos of any discrepancies. This will indicate how well you have been taking care of your hoses. If your regulator does not see a shop regularly, you should learn to do this

yourself. There is plenty of good information on the web and from equipment manufacturers.

- 2. Corrosion and/or Salt Deposits.** These are totally different animals and not necessarily indicative of each other. Generally, the chrome plated brass hose fittings and connecting regulator ports and tubes have good corrosion resistance. But they are not corrosion proof. Corrosion can take place in areas where salt water is entrapped such as mating threads of the hose fitting and reg port, damaging both. The thin protective chrome plate can also wear off from normal service. Corrosion should be suspected if there is any discoloration or hard crusting on the surfaces, especially the threads. Corrosion damage to the metal can only be confirmed by cleaning and close examination. Salt deposits, while not damaging to the metal, can build up and interfere with the function of the fitting, port, and o-ring seal as well as contribute to loss of chrome plating. Deposits can be cleaned away with no detrimental effects. Both corrosion and salt deposits can be checked and prevented by frequent cleaning and regular inspections. And remember, hoses are a lot cheaper than regulators to replace.



Blue-green discoloration; possible corrosion

Safety Information Dir. Cont.



Heavy salt deposits



Clean and not so clean hose fittings

- 3. Pre-dive Inspection and Post-dive Cleaning.** Before each dive, give your hoses a good inspection along with the rest of your regulator. Ask for assistance from someone knowledgeable if you have any concerns. Post-dive, a good cleaning is imperative to prevent corrosion, salt deposits, and sand/debris accumulation. Along with your reg, hoses should be soaked in warm water and flushed well with fresh water. Work any swivel connectors back and forth to clean them. After your last dive, slide back the hose strain protectors to expose the connections and soak, flush, and remove any deposits or debris with a tooth brush. Air dry the areas thoroughly. Look for any evidence of corrosion, especially in the threaded areas. Examine the swaged (crimped) metal fitting at the hose ends

for any hose or fitting damage. DIY'ers can periodically, unscrew the hoses from both ends and examine the threaded fittings and o-rings. Note that different size fittings take different size o-rings. Carefully remove the O-rings and clean the fittings and o-rings with a soft cloth. Sparsely lubricate the o-ring with silicone grease before re-installation. Do each hose end and fitting individually so as to not mix up any o-rings.

A word on hose strain protectors: There has always been a debate as to whether they do more harm than good in that they can entrap salt water, sand, and debris, contributing to corrosion and salt deposit build-up. In my opinion, hose protectors are worthwhile to provide strain relief to the swaged end fitting, prolonging the life of the fitting. This is common practice in industry applications where the fitting is subject to stress and strain. Your garden hose a perfect example. With a little attention and cleaning, these concerns can be alleviated. There are also flow-through strain protectors on the market like these:



- 4. Hose Treatment and Storage.** Hoses must be treated with the care that a life critical piece of equipment should receive. Consider the high energy gas containment and delivery device they are and the wear and tear they endure. Follow all manufacturer's instructions and precautions when handling hoses. To reduce stress on the swaged fitting, don't let hoses hang or swing from your reg. Support the weight of the hose and

Safety Information Dir. Cont.

connected 2nd stage/computer as much as possible. Carry your reg by the loosely coiled hoses. Don't coil tightly, bend, twist, or kink your hoses. Protect them carefully with your reg from impact damage at all times, especially when on the boat; brass is a rather soft material. Pack them carefully with your reg when you are on a trip. Finally, remember to open your tank valve slowly to reduce the stress and strain that 3000psi will impact on the hose parts and materials, again, same as for your reg.

5. **Hose Failure under Water.** Lastly, let's talk about a hose separation or rupture underwater. You can find videos of just that on the web. It can be scary but need not be threatening. A test conducted by a leading dive magazine found that with a 3000 psi tank and total rupture of the low pressure hose, you have approx 80 seconds before tank is empty. (The high pressure hose took 22 minutes due to very small orifice at 1st stage port.) Depth had no appreciable effect. You should have plenty of time to evaluate the problem and to find your buddy or team and make an Alternate Air Source Ascent with one of them, just as you've been trained. Along with your out-of-air sign, the escaping air and noise should make it obvious to your alternate air buddy what your predicament is. But the noise and bubbles could also be very distracting and your tank should be turned off.

Well that about covers it. The lesson I took from this information is to diligently take care of my regulator hoses and faithfully follow good buddy or buddy team practices whenever diving.

Remember: Safe diving is fun diving 🚩

Some pics from Grand Cayman

