



UNDERCURRENTS

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

July 2017

Volume 47, Number 07

July Club Meeting

Date: Tuesday, July 11th
Time: 7:30-PM (business)
 Social at 7
Location: The Racquet Club
 3900 Crosby Rd.
Program: Blue Heron Bridge

President's Message

By Tracey Combs



Summer is finally here! The Dive Club Dale Hollow trip is just around the corner. Sign up on the website ASAP. Belize, Curaçao, and Africa are coming soon, the website has all the details. **If you need to make any changes to your existing reservation, please contact Dan Miller or the trip leader. Please do not contact the resort or the travel agency directly.** Remember if you have any trip ideas or suggestions to let someone on the dive trip committee know so we can help you plan your bucket list trip.

Details on the annual Pig Roast are available on the website at [Pig Roast](#). Mark your calendars for August 12th at Mike and Sherry McCann's home. I hope to see everyone at the regular meeting July 11th and Happy Independence Day. 🇺🇸



The Editor's Notes

By Steve Gahafer



Not a lot going on from my end. Just a reminder that the up coming Dale Hollow trip still has some room for anyone else that wants to join in on the fun but you need to contact John Geddes ASAP. If anyone has any diving associated pictures they would like to see in the newsletter please email them to me. 🇺🇸



2016 BGDC Officer's

Tracey Combs, President	621-4066
John Geddes, Vice President	223-7926
Mike Sullivan, Secretary	266-4516
Dan Miller, Treasurer	948-5133
Doug Geddes, Trip Director	621-3178
Rick Stephan, Safety Info Dir.	223-3719
Kim Hudson, Webmaster	614-937-1955
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Steve Gahafer, Newsletter Editor	229-9408
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Vice President's Report

By John Geddes



Congratulations on Door Prizes for Maryanne O'Canna for winning the Papa John's and Mike Sullivan for winning the Club Membership for next year.

Ok, let me get this right. The new Members in the picture are Jerry and Janet Hensley. My apology to Jim and Linda Frendenberger for listing them as the new members in last months issue.



This month program will be by Janet Hensley on the Blue Heron Bridge.

Something else on my mind -

Dale Hollow is on us now, there is still room on the boat!!, so book your spot and get your camp site. For more of the details, see the article on Dale Hollow.

Steve will be putting some more pics in the Newsletter of past Dale Hollow Trips, as you will see its just about anything fun above or below the water that makes this a fun filled day!



Dale Hollow Dive Trip

By John Geddes



July 22nd is the date for the Dale Hollow Dive. This is a fun and relaxing weekend on the lake and an opportunity for local and inexpensive diving. \$20.00 per person secures you a spot on the pontoon boat and these are new boats. Wow!

There is a maximum capacity of 10 people on the pontoon. The BGDC has reserved one pontoon boat only. Sign up now to ensure you have a spot. Some people like to bring their own boats too and no charge for that.

In terms of lodging, I have made reservations at the Dale Hollow State Park Campground for Friday, July 21st and Saturday, July 22nd at site CC001, this is a cabin with AC. I would encourage you to make campground reservations in the L Loop; this is the best for shade after coming back from a day on the lake. Lodging at the State Park Lodge is always full, but you can keep calling to get in.

Breakfast is on your own; sometime we meet as the Lodge and bring your lunch and drinks for the boat. Also, bring something for the Saturday night potluck, we will plan that later. 🚩



Trip Director's Report

By Doug Geddes



DALE HOLLOW July 22, 2017

Don't forget to sign up for our annual lake trip. The club is furnishing the pontoon boat, with only a \$15.00 charge to cover the expenses for the fuel. This is always a great time to relax and socialize. Come early on Friday night and eat at the State dock buffet. It is always worth the money, then enjoy a buffet breakfast in the morning. What a great way to start the weekend. Camp sites still available, just don't wait too late. Check it out on our website [Dale Hollow](#)



BELIZE 2017

Looks like this trip had taken off, just like Dominica. We now have at least 20 persons and still growing. Please check with Dan before buying airfare, to make sure we have rooms. The resort is filling up and we have used up our allotment, but hopefully we can get more. Check out the website [Belize 2017](#).



CURACAO 2018

Another great trip being offered by the dive club to one of the best looking islands in the Caribbean. This should be a great check out dive for the upcoming Africa trip for those that haven't been in the water for a while. This trip is now up on our website at [Curacao 2018](#). Check it out. It is a great place for non-divers also, so bring some friends to paradise.



AFRICA DIVE & SAFARI 2018

Yes, it is almost time to purchase your air fare for this trip that has been in the works for a year or so. If someone finds a great fare, please share it with us, so others might join you, but you need to make sure it works with the times we need to arrive in Africa. I will try and get that info out to you. We still have a room or so reserved, but if they call we will have to give it up, so if you are on the fence, please consider grabbing it before it is gone. Check the website [Africa 2018](#). 🇳🇪



From the Treasurer

By Dan Miller



2017 Membership Dues

Student (High School or College ID) ...	\$10.00
Single & Family (1 diver).....	30.00
Family (non divers)	30.00
Family (2 or more divers)	40.00

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](#). 🚩



From The Secretary

By Mike Sullivan



GENERAL MEETING Tuesday, June 13, 2017

The general meeting was held on June 13, 2017. There were 22 members present. A DVD was shown of the Club trip to Indonesia in 2009. The drawings this month were won by Maryanne O'Canina and Mike Sullivan. The Club Pig Roast will be held on August 12th at Sherry and Mike McCann's house. See the website for directions. Please bring a dish to serve 12 people. The board will meet on June 27th at the Tates Creek Public Library on Walden Drive at 7:30 PM

BOARD OF DIRECTORS MEETING Tuesday, June 27, 2017

The Board meeting was held on June 27, 2017 at the Tates Creek Public Library. The Treasurer, Dan Miller was absent. The Treasurer Report as of June 27, 2017 was presented by the Club President. The Dale Hollow trip has only 4 people signed-up but is still planned. The Club Pig Roast will be held on August 12th at Sherry and Mike McCann's house. See the website for directions. Please bring a dish to serve 12 people. The board will meet on July 25th at the Tates Creek Public Library on Walden Drive at 7:30 PM. 🚩



Safety Corner

By Rick Stephan



Remember, safe diving is fun!

Note: This month's article comes from thedivelab.wordpress.com. It comes from DAN and discusses potentially who might be most susceptible to DCS.

We all know divers who seem to bend (if not break) the rules of safe diving, without any ramifications. Why don't they get bent? It may just be because their physical makeup allows them to do so. I thought these results were an interesting look into some of the research that goes on in the background. It may not apply to you specifically, but it may be a breakthrough some time in the future.

But, don't be hoping that you fit the model, keep thinking safety and follow the tables and your computer. As I always say - safe diving is fun!

Can a Test Identify Divers Who May Be More Susceptible to DCS?

Are some divers prone — or resistant — to gas bubbles after diving?

Decompression sickness (DCS), which may occur in divers after decompression from a dive, is dependent on the combined dose of gas saturation during the dive and the rate and magnitude of decompression. However, there is a great variability of outcomes in subjects exposed to the same dive profiles. The variability decreases as the severity of exposure increases. DCS is correlated with the degree of venous gas emboli (VGE), or "bubbles", in circulation after a dive. Generally, the higher the VGE grade (more bubbles) the greater the probability of DCS, and vice versa. Similar to DCS, there is a great variance in the probability of VGE appearing postdive. Some researchers who practice VGE detection have hinted that some divers bubble after most dives and may exhibit a high bubble grade (HBG) and others tend not to bubble at all or rarely exhibit HBG. The former are often labeled as *bubblers* (or *high bubblers*), while the

latter are labeled as *nonbubblers* (or *low bubblers*).

Given that risk of DCS in the absence of VGE is very low, nonbubblers could theoretically make provocative dives and be safe; on the other hand, the bubblers would be at greater risk of DCS and should dive more conservatively. A test that could distinguish bubblers from nonbubblers could help divers choose the proper dive exposure severity and help limit their chances of experiencing DCS.

Unfortunately, the existence of bubblers and nonbubblers has not been confirmed — and especially not that this distinction persists over the entire range of dive conditions and dive profiles. While it seems likely that normal biological variability may provide for such phenomenon, the distribution of proneness to VGE is more likely normal than dichotomous, meaning that most divers may be in between the two polar values — bubblers and nonbubblers who represent a small part of the population. Nonetheless, the concept is appealing and worth exploring because some divers could benefit from this knowledge.

The variability of decompression outcomes has been studied throughout the history of diving medical research. There was hope 30 years ago that a cause of that variability could be soon discovered. A study showed that complement — a group of proteins in the blood serum that helps the immune system remove harmful pathogens — appeared to be activated by VGE in some subjects and not in others. It seemed that this could be established by a simple blood test.

In one study 15 subjects were tested in vitro for susceptibility to complement activation in their plasma mixed with air bubbles. Seven of the subjects tested susceptible and eight were not susceptible. Susceptible divers were exposed to dives with a maximum depth range of 36-54 msw and a duration of 50-30 minutes respectively. After all dive profiles, the subjects manifested VGE grades between 1 and 3.7 (average 2.8). Out of 11 dives, five dives made by three divers resulted in DCS.

The eight nonsusceptible divers made 14 dives at a depth range of 36-72 msw and a duration of 50-40 minutes respectively, which was likely to

produce two times more DCS than the previous dive series, according to the U.S. Navy decompression risk calculator. Divers bubbled on all dives, and the mean bubble grade was 3.1 (2-4). None developed DCS.

In a flurry of studies that followed, these clear-cut results were never repeated. It became evident that complement response to VGE in vivo varies like any other physiological parameter and that there is no correlation between its postdive changes and DCS.

Several points from this study are useful for the discussion of individual susceptibility to DCS:

1. All divers in this study developed significant VGE load postdive. There were no nonbubblers or low bubblers.
2. Despite a 100 percent incidence of VGE and high bubble grade, only a few divers developed DCS.
3. The dives tested were severe enough to cause DCS, but the number of subjects and exposures were small enough to have a random occurrence of a cluster of DCS in just one group of divers.
4. Other studies with a large enough number of tested subjects have shown a greater variability of complement response and no correlation with bubble grade or DCS outcome.

It is still hoped that at a less severe exposure typical of recreational diving, the distribution of high and low bubblers may still be of practical consequences for dive safety. However, the development of reliable tests for bubbling proneness and a demonstration that the classification holds for the given set of dive conditions would be a long and tedious scientific endeavor with no promises of success. 🚩



Bluegrass Dive Club 2017-2018 Calendar

- June 13 General Meeting
- June 27 Board Meeting

- July 11 General Meeting
- July 22 [Dale Hollow](#)
- July 25 Board Meeting

- August 8 General Meeting
- August 12 [Annual Pig Roast](#)
- August 29 Board Meeting

- September 12 General Meeting
- September 23-30 [Belize](#)
- September 26 Board Meeting

- October 10 General Meeting
- October 31 Board Meeting

- November 14 General Meeting
- November 28 Board Meeting

- December TBD **Christmas Party**

- January 9 General Meeting
- January 25 Board Meeting

- February 13 General Meeting
- February 10-17 [Curacao](#)
- February 22 Board Meeting

- March 13 General Meeting
- March 29 Board Meeting

- June 2018 10-23 [Africa](#)

Dive Committee Members

Doug Geddes – Chairman	621-3178
Tracey Combs	621-4066
Ralph Covington	621-3862
Mike Sullivan	266-4516
Ed Sullivan	C@Meeting
John Geddes	223-7926