



UNDERCURRENTS

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

February 2010

Volume 40, Number 2

February's Club Meeting

Date: Tuesday, February 9th
Time: 7:30-PM (business)
Social at 7
Location: The Racquet Club
3900 Crosby Rd.
Program: Ed Gabe, Speaker

President's Message

By Rebecca Singer



As we all shiver in this very wintry weather, we are getting ready to send a group of divers to Little Cayman. I, for one, am inspired to jump to the Trip Reports section to see what's coming up and sign up for a trip that takes me somewhere tropical and *warm*!

We have a special treat for the meeting on February 9th, 2010. Ed Gabe, from New Horizons Diving Center, will be giving a talk on how to take care of your gear and how your gear works. We are so appreciative of Ed for being willing to do this month's program. ...And speaking of New Horizons, don't forget that paid dive club members can enjoy a 10% discount when they shop at New Horizons.

Stay tuned for some new trips for 2010 and 2011. Doug Geddes and his Trip Committee have been working overtime to get some new trips up and running for this year, and to plan some additional trips for 2011. They've been doing great work and you should see at least one new trip for 2010 up by our February meeting. Thanks to the Trip Committee for all their hard work. If you have a trip you're interested in seeing the club pursue,

please let Doug or another member of the Trip Committee know. We always welcome the input from club members.

Stay warm and I'll see you at the meeting! 🚩

The Editor's Notes

By John Geddes



After the Kissy Kissy pics from last month's issue, let's go back to some great shots by Doug Geddes from the Indonesia trip.

Like to thank everyone for their articles this month, makes me look good... 🚩



2010 BGDC Officer's & Staff

Rebecca Singer, President	552-0880
Krisy Carty, Vice President	497-4333
Maryanna O'Canna, Secretary	277-2634
George Fleischmann, Treasurer	873-9539
Doug Geddes, Trip Director	224-3197
Rick Stephan, Safety Information Dir.	223-3719
Mike McCann, Webmaster	255-3937
John Geddes, Newsletter Editor	223-7926

Vice President's Report

By Krisy Carty



2010 is shaping up to be a great year. I am proud to announce that as a club we are celebrating our 40th anniversary. I cannot think of a better way to celebrate than getting wet! Thanks to the generosity of fellow member Ed Gabe, we will all have this opportunity soon, as Ed will be offering a Peak Performance Buoyancy clinic for current club members only. There clinic can hold 4-8 members per date, so book your space soon by calling New Horizons @ 859-277-1234. Your reduced fee of \$70-\$80 can also be applied to the PADI Peak Performance Buoyancy course offered by Ed over the summer with New Horizons Dive Center. I have taken this course and it has made diving much more relaxing.

A trip to **Key West** October 6th-10th, 2010 has been approved by the board and is going to be a fun filled trip. We will be diving the world's 3rd largest barrier reef system, the USS Vandenberg, and staying on Duval Street in the heart of Key West. The diving offered is extraordinary. Don't wait to sign up for this trip; it is going to fill up quickly.



I am pleased to welcome to the club a very long list of new members and visitors.

Welcome **Travis and Lavon Land** of Nicholasville. I had the pleasure of meeting Travis and Lavon on several local dive trips last summer. They

definitely are passionate about the sport and have recently started an underwater videography company. We wish you success on your business venture and congrats to Travis on your PADI Instructor Certification.

Welcome **Gary and Gloria Hensley** of Georgetown. Gary is an Advanced Open Water diver with his latest dive experience being the Belize Aggressor III. We hope you have the opportunity to expand your dive experience on one of our future trips.

From London, we welcome **Edward and Gwen Sullivan**. Their interest in club trips has brought them to join BGDC. I know you won't be disappointed. The club plans some great trips and we are excited that you are a part of the group.



Last, but certainly not least, I would like to extend my thanks to a few visitors at the January meeting. **Justin Byall**, an instructor with New Horizons, was my instructor for basic open and advanced open water certification. Thanks Justin! He has 14 years experience as an instructor with 1000+ dives. **Ronnie Fulton** from Georgetown joined us for the first time in January. Ronnie's last dive experience was in the Florida Keys and the USS Vandenberg. We extend you both a warm welcome and hope to see you again.

To say that January was an eventful month for memberships is an understatement. Remember to pass along information about the club to any fellow divers that may be interested. Without members, the club could not exist. Remember, memberships fees were due January 1st. Send your dues in as early as possible to get the most out of your membership. Happy Anniversary BGDC, see you on February 9th. 🚩

Dale Hollow Weekend

By Corrine Wells Mulberry



July 17th-18th, 2010

The Dale Hollow Lake trip is scheduled! This is a great trip for both divers and non-divers. We have **one** 30' double-decker pontoon boat reserved for the weekend (12 person capacity). If we have more than 12 people sign-up (we often have 18-20 people!) a second boat will be reserved if it is available. Pontoon boats are often in short supply at the marina, so if we have a bunch of folks sign up at the last minute, we may not be able to get a second boat. First come, first served – get your reservations and payments in as soon as possible to secure your spot!



On Saturday, July 17, 2010, we will enjoy lake diving, swimming, relaxing and a pot-luck dinner in the evening. On Sunday, July 18, 2010, we will enjoy more lake diving, swimming and relaxing on Dale Hollow Lake. RSVP so you don't miss out! The cost is \$15.00 per person per day for pontoon boat users. For members that bring their own boat, no fee is required; however, a reservation form and waiver form for each person is needed.

Visit the BGDC Website and sign-up now for the Dale Hollow Lake Trip so you don't miss out. 🚩

Buoyancy Clinic

By Ed Gabe



As promised at the last meeting, I am happy to offer a private Buoyancy Control Clinic for BGDC members. The goal is to help divers to become more comfortable in the water through coaching on precision buoyancy control, body posture, weighting strategies, breathing control, and more. The end result is that you will be more relaxed on dives and they will last longer. This will be a one-night program so that it is convenient and easy for participants. Here are the details:

Monday, February 22 from 6:00pm to 11:00pm. We will meet at New Horizons where we will have a classroom session, and then we will go to the UK pool from 9:00pm - 11:00pm for in-water learning and practice.

Divers should use their own equipment for optimal fit and learning, but New Horizons will supply what people don't own at any extra cost. Everyone needs their own swimsuit, towel, and mask/fins/snorkel at a minimum.

I need at least four participants to run the program, and I will take a maximum of eight. The cost will be \$80 per person if four or five sign up; it will be discounted to \$70 per person if six to eight sign up. If this one sells out right away and the interest is there, I will offer another clinic later this spring.

If divers want to "upgrade" their training to the full PADI "Peak Performance Buoyancy Certification," they will be able to join one of my summer classes for a BGDC discounted rate of \$50, which will include a full day of open water diving, coaching, and video review.

To sign up for this clinic, please come to New Horizons and pay a \$25 deposit to hold your place. The remainder will be due on the night of the clinic based on how many participants there are.

Any questions are welcome and can be directed to me at GUEdiver@yahoo.com. I hope this provides a valuable service to some BGDC members. 🚩

Bonaire 2011

By Rebecca Singer



Don't miss out on a great opportunity to dive in Bonaire for an incredible price. The club trip is June 11-18, 2011. We still have a bit over a year before we travel to Bonaire but please think about signing up for this trip. We rarely see such good prices.



Each 2 bedroom villa sleeps four people and the price includes 7 nights at the resort, daily breakfast, 6 days of unlimited shore diving, and the truck rental (1 per villa) for only **\$620 per diver**. You can add 6 boat dives onto your package for only \$127! This is a don't miss opportunity.

To make it even sweeter a deal, if you sign up before August 1st, 2010 the deposit is only \$100!!! If you sign up after August 1st, 2010 the deposit is raised to \$200 so it's worth it to sign up now! Bonaire is a great destination for divers and non-divers alike.



If you have any questions about the trip, feel free to contact Rebecca Singer at rasinger1@gmail.com or talk to her at the regular club meeting. She would be delighted to help you decide to join the trip. You may also find additional information on the Bonaire 2011 trip by visiting the Upcoming Events section on the club website. . 🚩

From the Treasurer

By George Fleischmann



2010 Membership Dues

Student (High School or College ID)	\$10.00
Single & Family (1 diver)	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 or Mail to: Bluegrass Dive Club
% George Fleischmann
9048 Clifton Road
Versailles, KY 40383-9077



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

Safety Corner

By Rick Stephan



Note: While the weather is cold and we are starting to think about dive trips and warm beaches, I thought it might be fun to test your knowledge a bit with some scuba trivia. Test your general knowledge about the history of diving, dive physiology, some nature/animal characteristics – and some other fun facts. See how many you can get right.



Remember, safe diving is fun!

Scuba Trivia

1. Which ruler of ancient times descended underwater in a diving bell?
2. Why are J-valves and K-valves so called?
3. What deep diving records have been held by mathematicians?
4. Air in a scuba tank can be contaminated with gases like carbon monoxide. Can it also contain pollen?
5. Why can't divers localize the source of a sound underwater?
6. What is the origin of the distress call Mayday?
7. After Mayday, what is the next most serious emergency/distress call?
8. What is the density of water at a depth of 20 meters?
9. Name the world's most venomous creature.
10. After the Great Barrier Reef, what is the second largest reef system in the world?
11. What is the difference between hyperbaric, hypobaric, alternobaric and dysbaric?
12. What contribution did Leonardo da Vinci make to scuba diving?
13. What is a "mermaid's purse"?
14. How high above sea level does the atmospheric pressure drop to half an atmosphere?
15. Are fish warm-blooded or cold-blooded?
16. Can fish drown?
17. Can fish get decompression illness?

18. What mistake did Captain James Cook make in New Caledonia on 7 September 1774?
19. How many hearts does an octopus have?
20. Name the film:



21. Why do things appear to change color underwater as you descend from the surface to 25-30 meters?
22. What role did shellfish play in the Cold War?
23. What is the reason for the 40 meter depth limit on recreational diving?
24. How deep can fish live?
25. What contribution did the astronomer Edmund Halley make to diving?
26. What is a coral colony doing when it bleaches?
27. Air is 21% oxygen, 78% nitrogen and 1% other gases. What other gases?
28. In what war did the first attack by a submarine take place?
29. What is "Aristotle's Lantern"?
30. Which of the marine mammals are herbivores?
31. Who first proved that decompression sickness is caused by bubbles of nitrogen?
32. How many arms does a cuttlefish have?
33. What is an operculum?
34. There are ____ feet in a fathom, 100 fathoms in a ____, ten ____ in a nautical mile, and a nautical mile is ____ of the equator.
35. Plankton is one of the three types of living organisms in the ocean. What are the other two?
36. What does goats' fondness for corn have to do with diving?
37. Why do diver's knives rust although they are made of "stainless steel"?
38. What is the largest animal species that has ever lived?
39. Nitrogen dissolves into the body's tissues at a rate proportional to the difference in partial pressures (Henry's Law). Is this also true for helium and oxygen?

The answers are in the back of the Newsletter. 🚩

Trip Director's Report

By Doug Geddes



LITTLE CAYMAN 2010

Well as I have said many times, it ain't over until it is over. We have added 2 more persons to this trip and were able to take advantage of the free trip that we had earned, but didn't have enough persons to use. We now have 12 persons total going on this trip. This should be a great time for all. If you changed your mind and might want to go, it still might be possible, but time is getting short. I would need to double check on a room before you could commit. Drop me an email if you think you want to add on.



FIJI 2011

Hard to believe this trip is now only a year away. We are still full at the moment, but you never know, so if you have an interest, you need to fill out a reservation form and get on the list. We are working on possible side trips for the front end of the trip. If anyone going or not going has an idea about a possible location for us to go or see, drop me a line.

DIVE COMMITTEE MEETING

Your dive committee met a few weeks ago and had several interesting trips for the upcoming years. A couple of those trips should have an article in this newsletter about them. We will discuss a few of those to get some input at this meeting. If you know of any location that would be of interest to you, please let one of them know. 🚩

The Webmaster's Tip

By Mike McCann



Have you ever found something on a web page or in an email that was just too small to read properly? This is aimed at the article Krisy recently sent out advertising potential new trips, but in her article, most people simply did not realize they needed to click on the icon to get a bigger picture.

There are several other ways to alter the size of a web page or email for easier viewing, both text and pictures.

First, if you have a mouse with a wheel in the center, while you are viewing the item too small to read, simply hold down the CTRL key and roll the wheel. One way will shrink the picture and text; the other way will expand it. If you make it too large for your screen, scroll bars will automatically appear to assist you in navigating the screen. This feature also works in Microsoft Office (WORD, EXCEL, etc.) or any other program that allows you to alter the size of an image. **One disclaimer:** - If you purchased an aftermarket mouse, plugged it in and discovered it already worked so you didn't bother to load the installation software that came with the new mouse, many of these features may not work. If you still have the CD, go back and install it now. If not, you can probably find the installation software on the manufacture's web page.



Second, you can invoke the "magnify" feature built into windows. Go to START, All Programs, Accessories, Accessibility and click on Magnifier. This will split your screen with one portion being a greatly magnified view of the rest of your screen. Wherever the cursor is pointing will move that portion of the screen to the magnifier window. If there is a button to click or a field to fill in it can be managed in the regular size portion of the screen or the magnified portion of the screen.

Third, there are many "freeware" offerings on the Internet for little pieces of software that turn your cursor into a floating magnifying glass or similar gadgets to magnify a portion of your screen. Go into Google and search on "Screen Magnifier." You will be overwhelmed with offerings. 🚩

From The Secretary

By Maryanna O'Canna



Board Meeting 1/26/2010

The 7:30pm meeting was attended by Rebecca, Krisy, Doug, George, John, and Mike. Jason Carty attended as a guest. Rebecca called the meeting to order. George presented the treasurer's report, and it was approved.

Krisy presented an update on the recent new members and information on a buoyancy clinic to be taught by Ed Gabe. Doug presented an update on the dive trips scheduled for 2010 & 2011. All reservations and payments for the Little Cayman trip have been completed.

There was also a discussion on additional trips for both 2010 and 2011 currently being investigated by the dive committee. Several new locations were presented by Jason and Krisy Carty. A new 2010 trip to Key West was approved and information will be posted soon.



John suggested a newsletter change, to put a welcome photo of new members in the newsletter, was approved. Jason Carty presented work on new club t-shirt design and cost. This was approved to be taken to the next step. The Board began a discussion on how to improve the graphics on communications to club members. The discussion will continue at the next Board meeting which will be at 7:30pm on February 23rd, 2010.

Rebecca adjourned the meeting. 🚩

Bluegrass Dive Club 2010 Calendar

February

9, Tuesday	Dive Club Meeting
23, Tuesday	Board Meeting
27, Saturday	Little Cayman Trip

March

9, Tuesday	Dive Club Meeting
23, Tuesday	Board Meeting

April

13, Tuesday	Dive Club Meeting
27, Tuesday	Board Meeting

May

1, Saturday	Club's Derby Party
11, Tuesday	Dive Club Meeting
25, Tuesday	Board Meeting

June

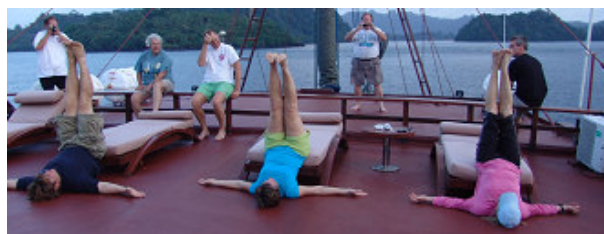
8, Tuesday	Dive Club Meeting
29, Tuesday	Board Meeting

July

13, Tuesday	Dive Club Meeting
27, Tuesday	Board Meeting

August

10, Tuesday	Dive Club Meeting
21, Saturday	Club Pig Roast
31, Tuesday	Board Meeting



September

14, Tuesday	Dive Club Meeting
28, Tuesday	BOARD Meeting

October

12, Tuesday	Dive Club Meeting
27, Tuesday	Board Meeting

November

9, Tuesday	Dive Club Meeting (Elections)
30, Tuesday	Board Meeting

December

11, Saturday	Club Christmas Party *
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Trivia Answers

1. Alexander the Great.
2. In the first US Divers mail order catalog, each product was given a letter code. The valves were codes J and K.
3. Swiss mathematician and computer guru Hannes Keller holds the all-time deepest open water dive record. He dived to 1000 feet of sea water off California in 1962, breathing a mixed gas. The cave diving depth record was held several times by diving hero and high school mathematics
4. No. Biological material is completely incinerated because of the enormous partial pressure of oxygen.
5. In air, there is a slight delay between arrival of a sound at one ear and at the other. In water, sound travels 8 times faster, and the delay is so short as to be imperceptible.
6. m'aider is French for (to) help me.
7. Pan-pan. (Mayday is "we are in grave and imminent danger to life"; pan-pan is "we are in danger"; securite is "there is danger/risk to vessels".)
8. The same as it is at the surface: about 1 kilogram per liter (62 lb/cu ft). Water is practically incompressible at these pressures.
9. The Australian box jellyfish *Chironex fleckeri* (a.k.a. Sea Wasp, Indringa, Fire Medusa).
10. The Belize Barrier Reef.
11. *hyperbaric* (Hyperbaric Medicine) means pressures greater than normal; *hypobaric* means pressures less than normal; *alternobaric* (Alternobaric Vertigo) refers to alternating or changing pressures; and *dysbaric* (Dysbaric Osteonecrosis) refers to unwanted or damaging effects of pressure.
12. He is credited with inventing (on paper) the first scuba apparatus.
13. The egg case of some sharks.
14. 5500 meters (18,000 feet).
15. Cold-blooded (they do not produce their own body heat).
16. Yes. Fish drown if the oxygen content of the water falls too far. Also, some sharks have to keep swimming in order to circulate water over their gills; if they become entangled they can drown.
17. Yes. Many bony fish have swim bladders which are filled with air and control their buoyancy. If they are dragged up in a net, they can suffer decompression barotrauma.
18. He tasted a pufferfish (the liver and roe), almost succumbing to tetrodotoxin poisoning.



19. Three.
20. Wake of the Red Witch (1948) starring John Wayne.
21. Water filters out the longer wavelengths of light (red - yellow) more readily than the shorter wavelengths (blue - violet) so that everything appears more blueish at depth.
22. They provided suicide pills. In 1962, a U2 spy plane piloted by USAF Major Gary Powers was shot down over the Soviet Union. Powers disobeyed his orders to commit suicide if captured. His suicide pill contained *saxitoxin*, a lethal neurotoxin found in shellfish.
23. It is arbitrary - there is no physiological reason for choosing 40 meters in particular.
24. There are fish at all depths. In 1960 the crew of the bathyscaphe *Trieste* saw a sole on the bottom of the Mariana Trench, at a depth of 10933 meters.
25. Halley patented the first practicable diving bell (with a replenishable air supply) in 1690.

26. Expelling its zooxanthellae. The animals, which make up the coral colony normally, live in symbiosis with algae called zooxanthellae, which provide most of the animal's energy by photosynthesis. Pigment in the zooxanthellae gives coral its blue or brown color. Under stress the coral zooids expel their zooxanthellae (or most of them) and consequently lose color.



27. Mostly argon. Unpolluted dry air at sea level is 78.08% Nitrogen, 20.95% Oxygen, 0.93% Argon, 0.03% Carbon Dioxide, and traces of Ozone and inert gases. Moist air contains 0-4% water vapors, and polluted air contains fractions of a percent of sulphur gases.
28. The American War of Independence. The American submarine Turtle attacked HMS Eagle in New York harbor in 1776. (This is the first authenticated attack by a submarine.)



29. The mouth of a sea urchin.
30. Only the dugong and manatee.
31. French physiologist Paul Bert, in 1878.
32. Ten (8 short arms, two long tentacles).
33. Operculum: 1. The hard bony flap covering the gill slits in fish; 2. A plate-like structure on the foot of a gastropod that seals its shell; 3. Any lid-like covering.

34. A fathom is 6 feet. A cable's length is 100 fathoms. Ten cables' lengths are one nautical mile. A nautical mile is the length of one minute of longitude at the equator.
35. *Nekton* and *benthos*. (Plankton is organisms which drift; nekton are organisms which can swim; benthos live on the bottom).



36. Haldane's pioneering experiments on decompression were performed on goats. Goats are extremely fond of corn, so it was a sign of illness when they could not even be tempted with corn.
37. This is not a particular property of diver's knives. The stainless steel used for making knives is less corrosion-resistant than the stainless steel used for making dishes, plates etc. The composition of stainless steel involves a tradeoff between its resistance to corrosion and its ability to hold a sharp edge.
38. The blue whale, *Balaenoptera musculus*.
39. Yes for helium, No for oxygen. The oxygen content of body tissues is regulated by the haemoglobin buffer and does not conform to Henry's Law. [Oxygen toxicity occurs when this system is overwhelmed.]

