

# UNDERCURRENTS

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

August 2011

Volume 41, Number 8

# August's Club Meeting

Date: Tuesday, August 9th Time: 7:30-PM (business)

Social at 7

**Location:** The Racquet Club

3900 Crosby Rd.

Program: DVD Bonaire Dive Trip

### President's Message

By Tracey Combs

Happy 40 years Bluegrass Dive Club! Where else could we have so much fun? We get to meet new people, go to wonderful new places, and breathe underwater – What a life!

I want to remind club members of a couple upcoming events: the Dive Club Pig Roast and Pool Party and the New Horizons Diving Center (NHDC) Treasure Hunt and Pig Roast. Both events are coming up in August. The Dive Club Pig Roast and Pool Party will be held August 20<sup>th</sup>. Please join us in celebrating the 40<sup>th</sup> Birthday of BGDC. The 2011 NHDC Treasure Hunt and Pig Roast will be held August 13<sup>th</sup> at Falling Rock Park in LaGrange, Kentucky. Pre-registration is required because space is limited. Registration is \$55 and open to the first 50 people. Registration costs include a t-shirt, the treasure hunt, and food at the pig roast. The festivities will begin at noon on August 13th. Anyone interested in more information can stop by the shop or call 859.277.1234.

We are in the printing stages of the Diver Directory for all of our members. If you joined as a family and do not want those under 18 years old listed please email me their names so they will not be included. This will be available to members only and we will be using your phone number and email on file. I reached can be by email at traceysdc@hotmail.com. Thank you for your assistance.

Be sure to look for our upcoming trips and I hope to see you at the next meeting. ▶

#### The Editor's Notes

By John Geddes



I had a few more of the Bonaire Trip but I think I will go ahead and put the Dale Hollow weekend of fun in this month. I was there also and it was a great geta-way and the lake was like bath water. For those who did some diving, the water was clear and those who did some, well, a lot of skiing were not too sore. Great run Noel and Patrick.

#### 2011 BGDC Officer's

Tracey Combs, President	621-4066
Corrine Mulberry, Vice President	913-0892
Kris Harn, Secretary	278-4246
George Fleischmann, Treasurer	873-9539
Doug Geddes, Trip Director	224-3197
Rick Stephan, Safety Info Dir.	223-3719
Mike McCann, Webmaster	255-3937
John Geddes, Newsletter Editor	223-7926

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# Vice President's Report

By Corrine Mulberry

The Program for the August meeting will be on the June 2011 **Bonaire Dive Trip by Noel Hall**. I can't wait to see the video and pics!

<u>Visitors:</u> At our July meeting, I welcomed one visitor – Chris Wilson from Lexington. I wasn't able to introduce Chris to everyone as he slipped out to play racquet ball with Lainey Geddes. (At least that's what they told me.) Chris is not yet certified, but he is being certified soon along with Lainey. We will get a chance to get to know Chris more on the Dale Hollow Dive Trip.

<u>New Members</u>: Regretfully, there are no new members to announce this month.

<u>Marketing/Advertising</u>: We are continuing to get the word out about our fabulous Club.

- We have a sent a personal "welcome/please join the BGDC" email to all of the folks who were visitors at meetings this calendar year.
- We are advertising our Club meetings on LexGo (http://www.kentucky.com/entertainme nt/) and in the Lexington Herald Leader newspaper.
- BGDC business cards are available for members so that you have a handy reference to provide to people.
- BGDC bumper stickers are also available for members.
- BGDC license tags are available for \$2.00 each (and free for new members).
- We're looking into getting BDGC caps with our logo on the front. More on the design and cost as this unfolds.

I look forward to seeing you all at our August meeting. Cheers. ►

# **Trip Director's Report**

By Doug Geddes



**ELEUTHERA 2011** 

We have filled three 4 bedroom condos and are looking forward to getting on with this great trip. We have to release any remaining rooms by August 8. If you are still considering this trip you will need to find others to help you fill a condo. We cannot let someone join now as a single, unless you are willing to pay the single rate. I know this is going to be an awesome trip. Can't wait.



PHILIPPINES 2012

We lost several of our early people due to other plans, so we are down to around 14 persons. We are looking to fill this trip back up to around 20. I can't believe we set this fantastic trip and it hasn't already filled up. This is the destination that many of you wanted and now you haven't signed up yet. If you are considering this trip, please let me know as soon as you can. If I don't get more reservations soon, I will be putting this trip out on our guest list and see if I can pick some more divers up. You won't find a better dive destination for the prices that we have. Check out our website for more details and then sign up.

# **Trip Director's Report Cont.**

#### COZUMEL 2012

Yes you are reading it right. We are heading back to Cozumel in June of 2012. The dates are firm and we are going June 16 – 23. We will be staying at the Scuba Club near downtown Cozumel. We had a lot of input on several places, but in the end we decided it would be best to stay close to town. This trip will run less that a \$1000 for a week of diving. Airfare to there should be better pricing than some other places. We should have a signup on the web, once we get all of our 2012 pricing together. Keep this in mind, it will get full quick.

Doug and Patrick in the buffet line Friday night



### TRUK LAGOON (CHUUK) 2014

We have put a hold on a week in January 2014 for the live aboard Odyssey. We are awaiting pricing for the boat during this time period. Once we get the numbers, we will put together a trip page. We just wanted to get this one in your plans for 2014. We also plan to tag a trip to Yap the week before. We are trying for the full moon week. According to George, that is the best time for Manta's. You can Google the boat if you want advance info on it. We have done this boat before and it was an awesome trip.

# From the Treasurer

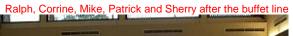
By George Fleischmann



#### 2011 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 / Mail to: Bluegrass Dive Club

% George Fleischmann 9048 Clifton Road Versailles, KY 40383

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 Kris Harn



July 12, 2011 Regular meeting

24 people in attendance. Tracey opened meeting at 7:37. George gave Treasurer's report. Corrine reviewed upcoming trips and mentioned Pig Roast on Aug 20. Newsletter delayed per Mike. Rick talked about safety kits. Mention of Louisville's ecology dive. Meeting ended at 8:13 with Gilboa video.

#### July 26, 2011 Board meeting

Tracey, Doug, Rick, Kris, John, George, Mike & Corrine were present. Tracey started meeting at 7:04. George gave Treasurer's report and it was filed. Corrine reviewed videos for regular meetings. Kris finalizing attendance list and name badges. Doug reviewed trips. Rick went over trip leader questionnaire. Tracey went over letter to the plaza in Bonaire. John stated deadline for newsletter is July 28. Doug went over new Trips to Cozumel and Truk. Board approved John sending out newsletter to membership. Corrine checking into prices for upcoming T-shirts, hats & luggage tags. Tracey closed meeting at 9:40.



### **Local Diving**

By Corrine Mulberry



### **Gilboa Quarry**

### Findlay, Ohio September 3<sup>rd</sup> – 5<sup>th</sup>, 2011

We have a new local dive trip destination for 2011. Gilboa Quarry in Findlay Ohio for Labor Day weekend, September 3<sup>rd</sup> through the 5th. <a href="https://www.divegilboa.com">www.divegilboa.com</a> Gilboa Quarry is approximately 4 - 4.5 hours from Lexington; perfect for a 3 day weekend!



Please visit our website and click on "Upcoming Events" to get all the details about this trip. We will travel (carpool) to Findlay, Ohio on Saturday morning and dive Saturday afternoon and perhaps a night dive as well. We will stay at the Drury Inn Saturday night (and eat their free appetizers, drink their free drinks and enjoy their free hot breakfast in the morning!) and travel back to the Quarry for more diving all day Sunday (with an option night dive as well). We'll stay overnight at the Drury Inn on Sunday and travel back home on Monday. For a double occupancy room for two nights and two days of diving, the cost will

# **Local Diving Cont.**

only be \$125.00!! Here's what you get for your money:

- Two nights' accommodations (double occupancy) at the Drury Inn (Sat & Sun)
- Two hot breakfasts (Sun & Mon)
- Three happy hour drinks each evening (yup, even the alcoholic kind)
- Hot appetizers and snacks each evening
- Quarry Entry Fees for two days (Sat & Sun)
- And more coffee, wi-fi, exercise room, indoor/outdoor pool.



Air refill costs are <u>not</u> included; nor are any rental fees (tanks, etc.).

This will be a great new local adventure for the BGDC. I hope many of you will be able to participate. See our website for details and to sign up. Registration, waiver forms and deposit are due by August 3<sup>rd</sup>. If you have additional questions, feel free to contact me. I hope you will join in with exploring this new local dive destination. ▶



# **Safety Corner**

By Rick Stephan



This month's article comes from scuba-doc.com and deals with something we are seeing almost every day this summer – the afternoon thunderstorm. There are a lot of misunderstandings about what you can and can't do when lightning is in the vicinity. Our swim meets made everyone get out of the water for 30 minutes after a lightning bolt was seen or thunder heard, and the clock restarted every time there was another flash of lightning. I guess better safe than sorry certainly applies here!





Diving safety should apply some common sense also. What if you were out in the ocean in a boat, is it safer in the boat or in the water or under the water?s Well, read on, this may bring up some interesting questions for you, but if nothing else, you will learn a little bit more about this amazing but common occurrence.

As smart divers you know you are responsible for your own actions and your safety, but maybe this info will help you make the decisions more easily.

And there they go by





Remember, safe diving is fun!

#### **Lightning and the Diver**

#### **Oceans Rarely Hit By Lightning**

NASA has shown with satellite imaging that the oceans rarely get hit with lightning. Apparently the surface water does not heat up enough to cause the positive charge needed for lightning to occur. Potentially, lightning is the biggest weather danger for divers. Every year, lightning kills more people in the US than tornadoes or hurricanes. Only floods are more deadly. During the last three decades, floods killed an average of 139 people a year, lightning 87, tornadoes 82 and hurricanes 27 in the US, according to national Weather Service figures.



Kris and Belle

The question should be "what cautions should the scuba diver take?" Should he get out of the water? Is he safer in the water than in the boat? If shore diving - stay in the water or go ashore?

Over the years around ten percent of the lightning deaths in the US have been in or

near the water- the statistics don't show how many victims were diving or swimming, how many were on boats and how many were on beaches. Lightning is likely to strike the highest thing around, which is why we're told not to take shelter under trees during thunderstorms. If you're in a boat during a thunderstorm, the boat and everyone in it are the highest things around; they're prime targets for lightning bolts. While people on land can take shelter in buildings or vehicles, those aboard a dive boat that's caught by a thunderstorm far from shore have no place to take shelter. Diving underwater may not be an option. Lightning that hits the water could be deadly because its electricity flows through water.

Ralph the cook



Scientists know little about what happens when lightning hits water. The electrical current probably spreads in all directions, weakening as it spreads out. Since large numbers of dead fish aren't found after thunderstorms move across bodies of water, the current probably weakens in short distances.

Still, a diver who happens to be underwater when a lightning bolt hits nearby could become part of an unintended scientific experiment on just how quickly the current weakens.

I can find nothing about a possible standoff distance, probably since a prediction cannot be made regarding the location of the strike. Assume that it will hit the highest point, however, and the answer would be to get out of the boat or stay in the water if shore diving.

We just don't know the answer.

Ron Holle, research meteorologist, NOAA National Severe Storms Laboratory, Norman, Okla. has this to say about lightning and water:

"Large numbers of lightning flashes strike oceans, lakes, rivers, and ponds. If there is nothing protruding higher than a body of water or flat ground, then a flat surface is hit.





The area of a swimming pool is small, so it's not usually directly hit. However, the area affecting a pool is quite large. This area includes the surrounding power and telephone lines, and the plumbing around the pool and inside the bathhouse and other structures. These are usually unsafe places during a thunderstorm because the current from a lightning strike will travel easily through the standing water, showers and other plumbing. Since the pump, lights and other facilities have power lines linked to the plumbing, a hit to any part of a pool complex can affect all of it.

Water does not "attract" lightning. It does, however, conduct current very well. It's not clear how far lightning travels through water. People have been killed or injured by direct or indirect strikes while in or on the water, boats, docks, piers, surf, surfboards, canoes, while fishing, and so on. In most cases, it appears

that the strike was within a few tens of yards of the person. But the current can extend farther through plumbing or wiring so the distance of influence can be greater.

A little socializing before dinner



In general, there is less lightning per area over water than over land. This is due to the fact that water bodies are usually cooler than land during summer. For this reason thunderstorms are less likely to build or continue to develop over water than over heated land.

The current in a lightning bolt is as high as 30,000 amperes --- about 150 times more than ordinary house current of 200 amps. It's easy to see how this much electricity is deadly. Fortunately, many lightning victims aren't hit directly, if all the charge doesn't go through them. This is why about six out of every seven persons hit by lightning survive, although sometimes with serious injuries and lasting ill effects.

Waiting for the dinner bell



Lightning will often hit something, such as a tree, a wire fence or a boat mast. Most of the electricity flows through the object that it hits, but some jumps to hit a person or people.

This is called a 'side flash'. Such side flashes have killed people talking on the telephone or taking a shower inside otherwise safe buildings, following through phone lines or water pipes after hitting the ground. People are also sometimes injures when lightning hits the ground and follows it to where they are standing.

Lightning can affect all parts of the body, but the usual cause of deaths is heart stoppage. The electrical charge disrupts the heart's rhythm, stopping it. Usually, however, the heart will quickly resume beating. The electricity is more likely to paralyze the brain's respiratory center. The victim will die from lack of oxygen unless someone nearby can quickly perform artificial respiration to get the victim's breathing going again. This may have to continue for hours before the victim begins to breathe normally.





A Lightning Safety Group, which met at the 1998 American Meteorological Society convention to update safety recommendations, noted in its report: "Generally speaking, if an individual can see lightning and/or hear thunder, he or she is already at risk. Louder or more frequent thunder indicates that lightning activity is approaching, increasing the risk for lightning injury or death."

The report also notes that "many lightning casualties occur in the beginning, as the storm approaches --- Also, many lightning casualties occur after the perceived threat has

passed." In fact, the danger can persist as long as thirty minutes after the storm has passed and the last thunder is heard.

Lightning always comes from a thunderstorm cloud, but has been known to hit as far as 20 miles from the nearest cloud, far from the storm's rain. This is why the group says seeing just one lightning bolt or hearing one clap of thunder should be a warning to get into a safe place.

And we did



If you're caught in a boat, about all you can do is crouch down in the boat's center and stay as far away from any metal surfaces, and radios or other electrical gear that might be attached to an antenna.

If you see lightning, knowing which way the wind is pushing the clouds will make a big difference. If the wind is pushing the clouds your way, it's time to head for shore. If you see lightning, the flash to bang method can also help determine whether lightning is moving closer. (Sound travels about one mile every five seconds).

If caught at sea in a thunderstorm:

- --Stay in the center of the cabin
- --Keep arms and legs in the boat do not dangle in the water.
- --Discontinue all water activities
- --Disconnect and do not touch any electronic equipment.
- --Lower, remove or tie down the radio antenna and other protruding devices if not part of the lightning protection system

--Avoid making contact with any part of the boat connected to the lightning protection system. Avoid touching two components that are connected to the system at the same time, such as the gear lever and spotlight handle. NOAA has this to say about lightning and water:

- -Get out of the water; it's a great conductor of electricity.
- -Stay off the beach and out of small boats or canoes.
- -If caught in a boat, crouch down in the center away from metal hardware.
- -Swimming, wading, snorkeling and scuba diving are NOT safe.
- -Lightning can strike the water and travel some distance beneath and away from its point of contact.
- -Don't stand in puddles of water.

The US Navy Manual does not address the problem that I can find.

So-- what to do? If I were diving in a thunderstorm, I'd get out of the water. Before diving? I'd not dive during and for thirty minutes after the storm.

However, we might want to alter our recommendations considering this answer to a question to Science Update posed about lightning and fish kills. This was sent to us by Jeff Wiberg.

"Does lightning fry fish? I'm Bob Hirshon and this is Science Update.

Today's question comes from Matthew Dabney of Longmont, Colorado.

#### Matt:

"Why is it that we're directed to get out of water during a lightning storm to avoid electrocution? Do fish get electrocuted when the lightning strikes a lake?"

We asked Don MacGorman, a physicist at the National Severe Storms Laboratory in Norman, Oklahoma. He says that as long as the fish are underwater, they're probably okay

#### Don:

"Basically lightning stays more on the surface of the water rather than penetrating it. That's because water is a reasonably good conductor, and a good conductor keeps most of the current on the surface."



So, when lightning hits the water, the current zips across the surface in all directions. And if you're swimming anywhere in the vicinity, it'll probably hit you. But below the surface, most of the electricity is instantly neutralized. So the fish are generally spared.

Of course, if the fish happen to be surfacing, they're at risk just like you are. And Dr. MacGorman adds that some electricity does penetrate the water, right at the strike point.

"So fish under a lightning strike can be killed, if it's close enough to the surface. But it has to be much closer than you do on the surface of the water."

Considering this answer - and if you have diving gear and adequate air - the best place for you to be would be underwater (not on the surface swimming).



# Bluegrass Dive Club 2011 Calendar

#### **August**

- 9, Tuesday Dive Club Meeting
- 20, Saturday Club Pig Roast
- 30, Tuesday Board Meeting





#### **September**

- 13, Tuesday Dive Club Meeting27, Tuesday Board Meeting
  - The little folks on the cabin floor



#### <u>October</u>

#### Eleuthra Dive Trip

- 11, Tuesday Dive Club Meeting
- 25, Tuesday Board Meeting



#### **November**

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





#### **December**

10, Saturday Club Christmas Party

