



UNDERCURRENTS

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

August 2013

Volume 43, Number 8

August Club Meeting

Date: Tuesday, August 13th
Time: 7:30-PM (business)
 Social at 7
Location: The Racquet Club
 3900 Crosby Rd.
Program: DVD on Bonaire

President's Message

By Tracey Combs



Summer is almost over, but there is still some great weather for diving and of course getting together with your fellow divers. Our Annual Pig Roast is on Saturday, August 17th, 3:00pm at Doug and Maryanne Geddes' Lake House. Bring your swim suits and your game face for the volleyball match. Also, bring a dish to share with 10 – 12 people, because we have to EAT!! The pig and sodas will be provided by the club.

New Horizons Diving Center is hosting their 2013 Underwater Treasure Hunt and Cookout on Saturday, August 10th. It will be at the Holly Bay Picnic Area at Laurel Lake. Divers and Non-Divers are welcome. Please go to their website, www.newhorizonsdiving.com for more details or call to make your reservations.

Our August meeting will be on Tuesday, August 13th at the Racquet Club. Everyone is welcome and I hope to see you there! 🚩

The Editor's Notes

By John Geddes



Let's try some Sunsets from Club or Club Members Trips. 🚩

Bali



2013 BGDC Officer's

Tracey Combs, President	621-4066
Corrine Mulberry, Vice President	913-0892
Kris Harn, Secretary	278-4246
Dan Miller, Treasurer	948-5133
Doug Geddes, Trip Director	224-3197
Rick Stephan, Safety Info Dir.	223-3719
Mike McCann, Webmaster	255-3937
John Geddes, Newsletter Editor	223-7926

Cabo San Lucas



Vice President's Report

By Corrine Mulberry



I hope you all enjoyed the "Name that Location" game show program at the last BGDC meeting. Let me know, if the feedback is positive, we will try to do it again sometime. Who knew some of you had so much hair a few years ago!

The Program for the August BGDC meeting will feature diving in Bonaire - a DVD by Connie Goins. Thanks to Connie for sharing and to Mike Sullivan for bringing it to us. With the upcoming Bonaire trip in September, it will give us a taste of the diving to be experienced. Thank you!

If you have diving information that you would like to present at a Club meeting (past or potential dive trip, etc.), I would love to hear from you. Please contact me so that we can put you on the calendar. 913-0892 or mulberryc1@gmail.com

At last month's meeting, we welcomed **Timothy Unger** to his first BGDC meeting. A fellow diver who lives in Lexington, Timothy is semi-retired from Toyota Mtg and heard about the BGDC through New Horizons (Thank you New Horizons!). Timothy is Open Water Certified and has Advanced Nitrox training as well. He has about 60-70 dives under his belt, but hasn't been able to go diving since 2007. He's looking to get back in the water and is looking for "good friends, good food and good times". Well, Timothy....look no further. {We're also known as the Eat and Dive Club}. We look forward to seeing again soon Timothy and **WELCOME**.

I want to thank members for their continued support and guidance to the Board. As a result of your expressing concerns (e.g. *How many blasted times do I have to fill out my name and address for a dive trip!!!*), the Board has successfully implemented a new

automatic waiver process that seems to be working well. Keep your comments coming (the good, the bad, but not the ugly)!

Chuuk



Board Nominations for 2014: Our President, Tracey Combs, will soon announce the formation of the Nomination Committee for Officers for 2014. Please consider volunteering your time and skills as a Board Officer. If you are even remotely interested, please give me a call at 913-0892 or send me an email mulberryc1@gmail.com and I can fill you in on the some of the responsibilities, pluses and minuses, etc.

- President
- Vice President
- Secretary
- Treasurer
- Trip Director
- Safety Information Director
- Newsletter Editor
- Webmaster

A slate of Nominations for BGDC Board Officers will be submitted to the Board at the October 2013 Board meeting. Officers serve for one calendar year.

See you at the meeting and at the Pig Roast! 🍖

Chuuk



Attention, Pig Roast Location

Still hosted by Doug and Mary Ann, but new location this year. Here are Doug's direction...

Straight out Nicholasville Rd (US 27) towards Somerset, after you cross over Camp Nelson Bridge, go about 2 miles and turn right on hwy 152 towards Herrington Lake. Stay on 152 until you cross over the Kennedy Bridge. After you cross over the bridge go about another mile and turn at the Chimney Rock marina/camp grounds sign. When you get to the marina bear left and go up the hill on Chimney Rock Rd. My cabin is up at the top of the hill on the right. Parking will be on the left in the field across from my cabin. Pull thru the farm gate. Bring your swim suits; we have a pool and hot tub there. Hopefully we can still play some volley ball and cornhole. Allow about 30 minutes from Man-o-War and fellowship will begin at 3:00pm on August 17th. Call if you get lost: 859-621-3178. 🚩

British Virgin Islands



Trip Director's Report

By Doug Geddes



BONAIRE 2013

If you haven't heard we are going to Bonaire as our Mystery Trip. The dates are Sept. 14-21. If you are thinking about going, you need to get your reservation and payment in full sent in right away. But before sending a check, you will want to let me make sure they have a room available. We had to turn back in our unused rooms a week or so ago. I do have a spot for a female to room with another female already booked. Check out our website for details. It is getting late to add on this one, so you need to act quickly if you want to get on this one.

TRUK/YAP

We are still full at the moment but we are looking for someone to put their name on the waiting list just in case we lose someone. Our air has been bought for this trip. If you didn't get the email with your locator number on it, let me know. Dan will be sending out a final bill in the next month or two. If you want, you can still be sending in monies so it won't be a big hit at the end. We haven't charged for the Yap portion of the trip yet, so we will have the balance of the boat and Yap to send out. Check out the web, if you think you have an interest in joining us if a spot opens up. 🚩

Philippines



From the Treasurer

By Dan Miller



2013 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](#). 🚩

Fiji



From The Secretary

By Kris Harn



BOARD MEETING 06/25/13

Meeting called to order at 7:37pm. Tracey, Dan, Corrine, Kris, John, Rick, and Mike in attendance. Corrine went over July video. Rick went over Newsletter article. John asked for newsletter articles to be in by 6/27. Tracey went over trip reports. Cancellation of Dale Hollow approved. Meeting ended at 8:30pm.

Bonaire



REGULAR MEETING 07/08/13

Meeting started at 7:39pm. 19 people in attendance. Tracey gave Treasurer's report. Doug updated membership on Gordon's illness. Corrine introduced guest: Tim Unger. John let membership know that newsletter was out. Mike asked that Insight users give him their new Time Warner email addresses. Rick went over his newsletter article. Steve gave update on Dive shop. Corrine gave out door prizes, winners were Tim and Brian. Corrine, Kris, and John handled Guess that picture game. Best "Darn" Team were the winners of the game. Doug gave trip reports. Meeting ended at 8:42pm. 🚩

Safety Corner

By Rick Stephan



Note: *I know you've been waiting with bated breath to get to this month's article, so wait no more! This is the conclusion to the about.com discussion of nitrogen narcosis. This month we look at factors which tend to exacerbate your chances of getting narced as well as how to handle these better. While we can't eliminate the chances of getting narced, we can understand it better and learn to deal with it – whether it happens to us, or to our dive buddy. Most effects wear off before you even hit the surface, but we should still be concerned with it – especially since narcosis tends to help us make poor decisions.*

So, read on and increase your understanding of dealing with this very real risk to your safety. Know that your safety may well depend on your ability to handle this phenomenon, so figure it out and be ready.



Remember, safe diving is fun!

Nitrogen Narcosis and Scuba Diving Part II

By Natalie Gibb

What Should a Diver Do If He Experiences Nitrogen Narcosis?

Ascend. The narcotic properties of nitrogen and other gases are proportional to the partial pressure at which a diver breathes them. The deeper a diver descends, the greater the partial pressure of the gas, and the greater the narcosis. To reduce or eliminate the narcotic effects of nitrogen and other gases, a diver should ascend at a safe rate to a depth

at which his thinking clears and he no longer feels the effects of narcosis.

What Factors Increase the Likelihood of Narcosis During a Dive?

Any factor that alters a diver's mental, physical, or emotional state may increase his susceptibility to narcosis. Here is a brief list of *some* of the factors that may increase the probability of a diver experiencing narcosis underwater.

- **Increased Carbon Dioxide Levels**

Carbon dioxide is narcotic, and amplifies the effect of narcosis caused by nitrogen and other gases. Heavy exertion and improper breathing techniques may increase the amount of carbon dioxide in a diver's body.

Little Cayman



- **Fast Descent**

A very fast descent may temporarily increase the carbon dioxide level in a diver's body as he approaches the bottom. A diver who descends very quickly may feel a strong narcotic "hit" as he reaches his planned depth. This effect is generally temporary, but can be surprising the first time it is experienced. To avoid a narcotic hit during descent, make sure to perform a slow, controlled descent.

- **Stress/ Excitement**

Stress, anxiety, and excitement may cause a diver's body to release adrenaline, which somewhat alters his brain chemistry and central nervous system function. The effects

Safety Corner Cont.

of adrenaline, like the effects of carbon dioxide, amplify narcosis.

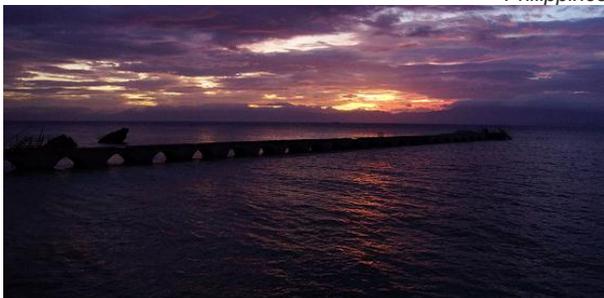
• Fatigue

Exhaustion, as most people will agree, affects a person's mental processes. Just as altered emotional states can augment narcosis, so can altered mental states. A diver who is extremely fatigued would do well to alter his dive plan to minimize the possibility of narcosis.

• Alcohol and Other Drugs (Even Prescription Drugs)

Alcohol and other barbiturates depress the central nervous system. The anesthetic properties of nitrogen and other gases at high partial pressures combine with depressants such as alcohol to amplify narcosis. Drugs that stimulate the central nervous system can also alter a diver's mental processes and augment narcosis.

Even some over-the-counter and prescription drugs (such as some antihistamines) alter a diver's brain chemistry sufficiently to increase his susceptibility to narcosis. Never engage in deep diving when using any medication unless cleared to do so by a diving doctor.



How Can a Diver Eliminate Narcosis Completely?

Only two methods exist to eliminate the effects of narcosis.

1. Don't Dive Deep

This is pretty obvious. Narcosis is related to the partial pressure at which a diver breathes the narcotic gas. Partial pressure is directly proportional to depth. To avoid narcosis, don't dive to depths where narcosis is experienced. The depth at which a diver will experience narcosis varies among divers, so a certain amount of trial and error (under the watchful eye of a dive professional or experienced buddy) is necessary. A general rule to avoid most narcosis is to keep your dives shallower than 100 feet.

2. Take a Trimix Course and Use Trimix on Deeper Dives

Trimix is a breathing gas composed of nitrogen, oxygen and helium. Helium does not produce narcosis in divers. By replacing some of the nitrogen and oxygen in a diver's breathing gas with helium, a diver can reduce or eliminate narcosis. Furthermore, helium is a very light gas, and helps to reduce the density of the breathing gas, and therefore the work of breathing. By reducing the work of breathing, a diver lowers the partial pressure of carbon dioxide in his system, which helps to further reduce narcosis.

How Can a Diver Reduce the Effects of Narcosis?

When diving deep on air, every diver will be affected by narcosis. Research has shown that even divers who do not "feel" narcosis and appear to function normally are still affected by narcosis. When faced with novel situations, problem solving, and tasks requiring manual dexterity on deep air dives, all divers will function more slowly and with less precision. The first step in becoming a wise diver is to accept that on a deep air dive, you will be affected by narcosis, even if you do not notice it. *Narcosis is unavoidable.* Once a diver accepts this, he can manage narcosis more effectively and be a better diver.

Safety Corner Cont.

- **Over-Learn Basic and Emergency Diving Skills**

Narcosis affects a diver's ability to think, as well as his manual dexterity. If a diver has to think through diving skills when performing them, he will not be able to execute the skills efficiently or effectively when he is narced. The trick is to practice both basic and emergency diving skills to the point that a diver can execute them automatically without thinking. A diver must practice skills repeatedly over a long period of time before skills become automatic. This is a good argument for not allowing new or inexperienced divers on deep dives.

Gaining shallow-water experience with specific dive environments (such as caves, shipwrecks, and currents) will help a diver over-learn a dive environment before embarking on a deep dive.

Indonesia



- **Make a Clear, Simple Dive Plan and Execute It Slowly and Deliberately**

Review your dive plan several times, even the night before the dive. Review the dive plan on the boat and before descending. Be sure that the plan is clear and logical to all divers involved.

Studies have shown that a diver trades accuracy for speed when narced. Plan to execute tasks and handle situations slowly

and deliberately and you are less likely to lose accuracy and make a mistake.

- **Write Important Information on an Easily Accessible Slate**

Narcosis affects a diver's memory. Nothing is worse than realizing halfway through a dive that you don't remember the tank reserve pressure or maximum dive time. At minimum, jot down your no-decompression limit, the maximum depth, the predetermined dive time, and your tank reserve pressure on your slate. Yes, it is possible to program a computer with this information, but it is nice to have it written down just in case your computer magically puts itself on gauge mode. It is also a great idea to sketch a map of the dive site on your slate to help with orientation.

British Virgin Islands



- **Determine Your Limits Slowly**

Increase your maximum depth slowly over many dives until you start to understand your limits. Do not dive to 140 feet on your first deep dive. Get used to deep diving slowly.

- **Avoid Behaviors That Exacerbate Narcosis**

Remember that diving in an altered mental state, such as when exhausted, medicated, drunk, stressed, or excited can all augment a diver's narcosis. Plan dives to avoid heavy work and quick descents whenever possible. Do not be afraid to cancel diving plans if you are sick or nervous. Remember the Golden Rule of Scuba Diving: Any diver can cancel the dive at any point for any reason.

Safety Corner Cont.

Can a Diver Build Up Tolerance to Narcosis?

No. A diver can gain experience with narcosis, learn how his body functions at depth, and become comfortable with his altered emotional state. Knowing what to expect on deep dives eliminates much of the stress of deep diving, and divers who gain experience may feel less narcosed on deep dives because of their lower stress level.

However, even a diver who feels comfortable and appears to be in complete control is still affected by narcosis. When faced with new skills, problem solving, and other novel mental and physical tasks, experienced deep air divers behave just as slowly and inappropriately as new deep divers. Over-learning tasks and becoming comfortable on deep dives may lull an experienced diver into a false sense of security. When things really go wrong and a diver has to problem-solve underwater, the affects of narcosis become apparent.

Careful, conservative dive plans and an understanding that you *will* be narcosed to some extent during deeper dives on air will go a long way in improving a dive's safety.

British Virgin Islands



The Take-Home Message About Narcosis and Scuba Diving:

Would you go to the dentist, breathe some anesthesia, and then joy-ride an airplane home though unfamiliar territory? I hope not! But a diver who dives deep on air and gets

narcosed for fun is essentially doing the same thing. He is piloting complicated equipment through an unfamiliar environment in an impaired mental state. This is less than intelligent. Before engaging in deep air dives, seek proper instruction and gain experience slowly. To a certain extent, mild narcosis can be managed with proper preparation and procedures. 🚩

Philippines



Bluegrass Dive Club 2013 Calendar

August

- 13, Tuesday Dive Club Meeting
- 17, Saturday Club Pig Roast
- 27, Tuesday Board Meeting

September

- 10, Tuesday Dive Club Meeting
- 24, Tuesday Board Meeting

October

- 8, Tuesday Dive Club Meeting
- 29, Tuesday Board Meeting

November

- 12, Tuesday Dive Club Meeting (Elections)
- 26, Tuesday Board Meeting

December

- 14, Saturday Club Christmas Party

How about a Sunrise in Grand Cayman

