



# UNDERCURRENTS

Newsletter of the Bluegrass Dive Club / [www.bluegrassdiveclub.com](http://www.bluegrassdiveclub.com)

April 2017

Volume 47, Number 04

## April Club Meeting

**Date:** Tuesday, April 11th  
**Time:** 7:30-PM (business)  
Social at 7  
**Location:** The Racquet Club  
3900 Crosby Rd.  
**Program:** It's a surprise

## President's Message

*By Tracey Combs*



Happy Spring everyone.

A special **THANK YOU** to Seaweed Diver, Tina, JR, and Andrea for a wonderful presentation. The group really enjoyed meeting you and seeing some new products. Check out their website at [www.seaweeddiver.com](http://www.seaweeddiver.com) and keep them in mind for gear service.

Don't forget to share all of your "Bucket List" dive destinations with Doug Geddes or someone on the Dive Planning Committee. We are always looking for future trip locations and we want your feedback.

We will be having our annual [Derby Party](#) on May 6th at Doug and Susan Geddes' home. Make sure you check out the web site for all of the details and directions to their home. As always, bring a dish to share and some extra cash for those bets. Derby Hat anyone???

Our next meeting is Tuesday, April 11th. I hope you can join us for some great conversation, education, and entertainment. 🚩

## The Editor's Notes

*By Steve Gahafer*



I hope everyone is doing well. It looks like maybe the weather has broken although it really was not much of a winter. The dive committee has been working hard on some trips and John Geddes is working on mixing things up for door prizes and programs. If you have not been to a meeting in a while you should join us at the next one on April 11<sup>th</sup>. 🚩



## 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
	<a href="mailto:Khudson4974@yahoo.com">Khudson4974@yahoo.com</a>
Steve Gahafer, Newsletter Editor	229-9408
	<a href="mailto:sagahafer@gmail.com">sagahafer@gmail.com</a>

---

## Vice President's Report

---

By John Geddes



Congratulations to Tracey Combs for winning the Door Prize for Cracker Barrel and Charlie Denham for the coupons at Mark's Feed Store. Enjoy guys.

A special thanks to our guest Tina, JR and Andrea from Seaweed Diver for coming in and telling us a little about their work and dive shop.



I enjoyed seeing some of the new products they brought in to show us. Hope to see them again.

We had two guest at the meeting and now two days later they have fulfilled the membership ap and sent their check in, so Welcome aboard Jerry and Janet Hensley from Danville. Thanks everyone for making them feel in their words "Welcome and feeling at Home."

As of newsletter deadline I am still working on the program for April's meeting, so pop in at meeting and see what I came up with.

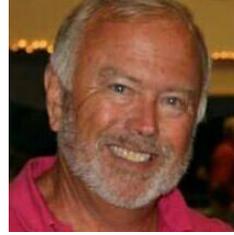
*Something else on my mind* - I know sometime we like to seat with our buddies at the meetings, but I would like to ask if we have guest would someone please join them at their table or invite them to your table and tell them what we are all about. 🚩

---

## Trip Director's Report

---

By Doug Geddes



### DALE HOLLOW 2017

We have a date and a pontoon rented for July 22<sup>nd</sup> weekend. We will dive on Saturday only with a cookout following the dive. We have two people already signed up to go on this trip, but space is limited, so you need to sign up as soon as you can.

### BELIZE 2017



We have close to a full group going this September trip to Ramon's. If you are considering going on, you need to sign up soon so you don't get left out. Click on the link [Belize](#) and check out all the choices that are offered for this trip. Not saying we can't get more rooms, but we only have 6 on hold, so don't wait too much longer.

### CURACAO 2018

This trip is yet to be up on our website, but should be soon. Dan has found a great resort closer to town and yet far enough for great diving. This trip will be around the end of February and should be a great tune up for our Africa trip goes. Prices are around what is normal for Caribbean diving. Keep your schedule open for this fabulous trip.

## AFRICA 2018



This trip is shaping up greatly. We have 15 persons that are signed up and we are still looking for more. Our trip agent is saving a couple of rooms for anyone that might want to add on, but don't count on this too long. Once the resorts get a need for these rooms, we won't be able to accommodate any request. Check this [Africa](#) once in a lifetime trip planned for June 10 to two day safaris and one week of diving. Doubt this trip will ever be offered again, so you need to take advantage of it now. 🚩



## 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 Minutes

Tuesday, March 14, 2017  
General Meeting

- I. CALL TO ORDER 7:36 PM
  - a. There are 30 members and guests present.
- II. OFFICERS AND DIRECTORS REPORTS:
  - a. TREASURER MILLER
    - i. Treasurer Report as of February 28, 2017.
    - ii. The Dominica Refund amounts have been emailed to travelers.
  - b. VICE PRESIDENT JOHN GEDDES
    - i. The program this month was presented by the Seaweed Dive Shop of New Albany, Indiana. Tina Conrad, J.R. Sparks, and Andrea Vivona made presentations on the following items offered by the Dive Shop:
      - Equipment
      - Service
      - Website
      - Training
      - Trips AvailableThe Dive Shop also has an onsite, outdoor pool available for training and to check out new equipment.
    - ii. We had two guests tonight, Janet and Jerry Hensley from Danville.
    - iii. The drawings were won by Charlie Denham and Tracey Combs.
  - c. SECRETARY SULLIVAN
    - i. No Comments.

- d. TRIP DIRECTOR GEDDES
    - i. Fifteen people have signed-up and paid the required deposits for the Africa trip scheduled June 10-23, 2018. There are still an additional 3 rooms on hold.
    - ii. The trip to Belize scheduled for September 23-30, 2017 currently has 8 people signed-up.
    - iii. The trip to Curacao is approved by the Board and is currently scheduled for 17-24 February 2018.
    - iv. The trip to Dale Hollow is scheduled for one day only on July, 22, 2018.
  - e. WEBMASTER HUDSON
    - i. The new website is still under construction but is becoming functional.
    - f. NEWSLETTER EDITOR GAHAFFER
      - i. Please send pictures for the newsletter.
  - g. SAFETY INFORMATION DIRECTOR STEPHAN
    - i. This months article from the cdc.gov and provides an overview of things you may want to consider in traveling to some of our remote dive locations.
  - h. PRESIDENT COMBS
    - i. Richard Rabek is currently having medical issues and the Club's prayers are with the family.
    - ii. Future, possible trips could be Bimini, and Indonesia.
- ADJOURNMENT 9:03 PM



## Board of Directors Meeting Minutes

Tuesday, March 28, 2017  
MEETING MINUTES

- I. CALL TO ORDER COMBS
  - a. Meeting began at 7:44 PM
- II. APPROVAL OF AGENDA SULLIVAN
- III. OFFICERS AND DIRECTORS REPORTS:
  - a. TREASURER MILLER
    - i. Absent
  - b. VICE PRESIDENT J GEDDES
    - i. Absent
  - c. SECRETARY SULLIVAN
    - i. No comments.
  - d. TRIP DIRECTOR D GEDDES
    - i. Absent
    - ii. The Club trip to Belize 23-30 September of 2017.
    - iii. Africa trip in 2018 currently has 13 people that have paid the required deposit.
  - e. SAFETY INFORMATION DIRECTOR STEPHAN
    - i. The article this month is about determining the proper weight to use while diving.
  - f. NEWSLETTER GAHAFER
    - i. Articles are due Friday.
  - g. WEBMASTER HUDSON
    - i. The new website is getting close to becoming active
- IV. NEW BUSINESS COMBS
  - i. The Board will meet April 25, 2017.
  - ii. Other trips discussed are Indonesia, Bimini, and Cozumel.

MEETING ADJOURNED AT 8:35 PM 🚩



## Safety Corner

By Rick Stephan



*Remember, safe diving is fun!*

**Note:** Okay, this month's article might be a little controversial. I've expounded in the past about the need to make sure you are properly weighted. Too much, you are wasting air and energy trying to stay neutral at the beginning of your dive. Too little, and you are struggling to get down at first and getting really risky at the bottom of your tank as you start floating up without even trying to ascend. Many of our experienced divers have figured out what they need, but a change in equipment or a change in your fitness may have a significant effect on your buoyancy.

In reviewing material on the web, there are a number of articles about how to estimate your lead requirements. There are even some "automatic" buoyancy calculators: just put in your weight, your exposure suit type, your tank size and type, and the dive environment (salt or fresh water), and it will tell you how much weight to use. Well, that might be a starting estimate, but in playing around with them, almost all of them seemed to really overweight the divers. Body weight does not tell the calculator percent muscle/bone to fat weight. Exposure suits get old and less buoyant. No estimate was given for possible positive buoyancy of your BCD. So, I picked this article, from sportdiver.com to put in the newsletter. It seemed to look at all the parts, and also recommended actual water testing to validate estimates before going into open water.

I still highly recommend taking a short buoyancy control class – preferably at the dive location you are visiting, so the dive conditions and rental equipment and tanks are pertinent to your evaluation. Any skills for scuba, especially things that will make you a safe diver and a safe buddy, are important to practice. As always, remember, safe diving is fun!

## Buoyancy Calculator: How to Figure Out How Much Weight You Need for Diving

By [John Brumm](#)

How much weight do you need to wear as a diver? Correct weighting depends on your personal buoyancy needs and is influenced by a number of factors — from the composition of your body to the thickness of your wetsuit. You can get a rough estimate of how much weight you need by using our buoyancy calculator.

The rule you often hear — that you should float at eye level — is about right for the end of your dive, when you will weigh 5 pounds less. (Most of that loss is the weight of the breathing gas you will use up.) So you need about 5 pounds of extra lead at the beginning of the dive.

Divers are generally taught to define this as being neutrally buoyant at 15 feet deep while wearing an empty BC and carrying a nearly empty tank. But how do you get there? There's the basic ballpark method — carry 10 percent of your body weight in lead. Or there's the surface float method — in full scuba gear, load enough weight to enable you to float with the water at eye level (some would say at the hairline).

Here's how:

### STEP 1: Calculate for Your Body

How much weight do you need to make your body neutral? Take a few weights into the water wearing just a swimsuit. You will be perfectly weighted when you can hang motionless with half a breath, and sink when you exhale. (Using a snorkel can make this test easier.)

*Tip for Shaving Ballast Weight:* Lose weight. Also, work to turn build some muscle. Fat mass is a lot more buoyant than muscle mass, so any fat you can lose and any muscle you gain will lower your buoyancy deficit.

### STEP 2: Calculate for Your Exposure Suit

Wearing your exposure suit, get into the water and repeat the procedure outlined in Step 1. Then take the total amount of weight required to get neutral, subtract Step 1's total, and you'll

have the net buoyancy budget for your exposure suit.

*Tip for Shaving Ballast Weight:* If water conditions permit, cut down on the thickness of your wetsuit. A wetsuit can have two to three pounds of buoyancy for every millimeter of thickness. If you wear a neoprene drysuit, consider that compressed or crushed neoprene suits have much less buoyancy than standard neoprene. If you wear a fabric drysuit, remember that thinner undergarments have much less buoyancy than the puffy stuff.

### STEP 3: Calculate for Your BC

BCs can be a huge source of inherent buoyancy, especially the older, full-featured models that have lots of traditional-style padding. It used to be common for BCs to carry upwards of four pounds-plus of inherent buoyancy, which means, of course, that you need four pounds-plus of extra lead on your weight belt to compensate for it. Fortunately, most modern BCs carry much less inherent buoyancy.

To test your BC's inherent buoyancy, submerge it while venting all exhaust valves to bleed air from the bladder. Knead the padding in the shoulders and backpad and behind the pockets to release air bubbles. Slowly rotate the BC to enable any trapped air to escape. Be patient, allow plenty of time for water to displace the air in the material. When you stop seeing bubbles, release the BC into the water column. If it heads to the surface you've got some inherent buoyancy to deal with. Add weights until the BC will hang neutrally buoyant in the water. Then count up how many weights it took to get there and you'll have your number.

*Tip for Shaving Ballast Weight:* Buy a modern BC. Models that have come onto the market within the last three or four years carry, on average, from one to 2.5 pounds of inherent buoyancy, and some carry none at all. Note: while most manufacturers don't provide the inherent buoyancy of their BCs, you can always find that info in ScubaLab BC reviews.

### STEP 4: Calculate for Your Tank

The buoyancy characteristics of tanks vary widely. For example, a standard aluminum 80 is

1.6 pounds negatively buoyant when topped off, and 2.8 pounds positively buoyant at 500 psi. That's close to a four and a half pound buoyancy differential between the beginning of a dive and the end of a dive that, of course, needs to be dealt with by adding ballast weight.

A steel tank, on the other hand, tends to start off negatively buoyant and stay that way. For example, a high-pressure 80 is about nine pounds negative when full and three pounds negative when empty. That's three pounds that can be removed from your weight system.

*Tip for Shaving Ballast Weight:* Switch from an aluminum cylinder to a steel cylinder. A properly-weighted diver who goes from an aluminum 80 to, say, a HP steel 80 could theoretically take six pounds off his weight belt.

#### **STEP 5: Calculate for Everything Else**

Gather your reg, gauges, knife, fins and any other items you regularly dive with, place them in a neutrally buoyancy mesh bag, and submerge it. The goal here is primarily to see if the total package is positively buoyant. If it is, add some weight until it becomes neutral. If it's negative it probably won't be by much, so consider it a ballast slush fund. It's not working against you, and that's all that matters.

#### **STEP 6: Put It All Together**

Add it all up. This should be very close to your target ballast weight requirements, and it should also give you a clear picture of where your biggest buoyancy challenges lie. To double-check your calculations, gear up with all the components you measured separately, get back into the water and repeat Step 1. If the above scenario played out like it's supposed to, you should be floating at eye or forehead level in a relaxed position. When you exhale you should start to slowly sink. If not, you couldn't be more than a pound or so off your target. Make the final adjustment and go diving.

#### **ADJUSTING WEIGHT FOR SALTWATER AND FRESHWATER**

By how much do you have to change your weight belt when going from fresh to salt water? To be

accurate, you have to consider the whole package: diver plus equipment.

Stand on the bathroom scale with the equipment and weight that makes you neutral in one medium or the other. Or you can estimate. A standard aluminum 80 tank weighs 32 pounds, a 7mm wetsuit is about 8 pounds. For regulator, mask, fins, etc., figure about 15 pounds. Include your weights.

Going from fresh water to salt? Multiply by 0.025 and add that amount.

Going from salt water to fresh water? Multiply the total by 0.025 and subtract that amount from your weight belt or integrated-weight BC.

Example: You weigh 175 pounds and your equipment adjusted for salt water weighs 75 pounds, for a total of 250 pounds.  $250 \times 0.025 = 6.25$ . Subtract 6 pounds from your weight belt for fresh water. 🚩



# Bluegrass Dive Club 2017 Calendar

- January 10            General Meeting
- January 31            Board Meeting
  
- **February 2-11**        **Dominica**
- February 14            General Meeting
- February 28            Board Meeting
  
- March 14                General Meeting
- March 28                Board Meeting
  
- April 11                 General Meeting
- April 25                 Board Meeting
  
- **May 6**                    **Derby Party**
- May 9                    General Meeting
- May 30                  Board Meeting
  
- June 13                 General Meeting
- June 27                 Board Meeting
  
- July 11                  General Meeting
- 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**
  
- **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

