



UNDERCURRENTS

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

September 2014

Volume 44, Number 9

September's Club Meeting

Date: Tuesday, September 9th
Time: 7:30-PM (business)
 Social at 7
Location: The Racquet Club
 3900 Crosby Rd.
Program: Local and Social

President's Message

By Tracey Combs



Our Summer months are fading away and we are heading into Fall, but we are still thinking about diving. A huge thank you to the Doug Geddes for hosting the Pig Roast again this year. We really appreciate the hospitality. I also want to thank all of those wonderful cooks and volunteers who supplied a delicious dinner and helped with all that was needed.

Don't forget to take a look at the upcoming 2014 and 2015 trips. The dive committee works hard to plan the trips and we appreciate their efforts. Reserve your spot today! As always, if you have ideas or locations that you would like to suggest, please do so.

Please keep our fellow divers who will be traveling to Grand Cayman this month in your thoughts. We wish them safe travels and wonderful diving. The T-shirts for this trip will be brought to the meeting on the 9th.

See you soon! 🚩

The Editor's Notes

By John Geddes



This month we have the pics from the Pig Roast. If all goes well, next month, pics from Grand Cayman and for the people on that trip I will be sending an e-mail for last minute information. 🚩



2014 BGDC Officer's

Tracey Combs, President	621-4066
Corrine Mulberry, Vice President	913-0892
Mike Sullivan, Secretary	266-4516
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

Vice President's Report

By Corrine Mulberry



September's Program will feature local diving and social events held this year. We will be entertained with smiling faces from the Derby Party, social-cookout meeting, Dale Hollow Lake dive trip and Pig Roast.

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



It's time to begin thinking about nominations for Officers for the BGDC for 2015. Elected positions include:

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

The Board has appointed a Nominations Committee to develop a slate of proposed nominees for elected Board positions. The slate will be presented to the Board in October and members will vote during the regular

November meeting, If you are interested in learning more about elected positions, or have any thoughts, ideas or suggestions for potential nominees, please contact a Nominations Committee member:

Corrine Mulberry – mulberryc1@gmail.com
859-913-0892

Tamara Williams -tamaraw@twc.com
859-273-0878

Noel Hall - noelhall@aol.com
859-552-5276

Brain Elkins – brian_elkins@msn.com
859-684-0224



Nominees for elected positions must be in good standing (dues paid), have been a member for at least one full year and be at least 21 years of age.

There's quite a bit of behind-the-scenes work involved with maintaining and running the BGDC Club. For 2015, we are fortunate to have many incumbent officers who are willing to continue to serve us, however some of our officers are wishing for a break. Recruiting new people to serve on the BGDC Board to help effectively run the Club is important for keeping the Club active and healthy. If you have ever considering participating more with the Club, the nominating committee would like to hear from you and would be more than glad to discuss the functions of the Board, the responsibilities of various positions or any facet of the Club with you. Serving on the Board is an avenue for bringing new ideas

Vice President's Report Cont.

and a voice to the Club. So.....give us call or shoot us an email!



Are there any perks? Yes. Please see our By-Laws for the specifics, but, basically, when the Club earns a “freebie” on a trip (hotel/dive package) that discount is divided among all Members participating on the trip. If a second “freebie” is earned, that discount is divided among the Board. For example, if we received 1 free room for every 10 rooms booked at a resort and we had 27 rooms booked, the first discount would be divided among all of the trip participants and the second discount would be divided among the Board. The Board receives these discounts as “dive bucks” (not cash). These “dive bucks” can be used on future BGDC trips and are valid for two years from the date of the distribution. 🚩



Trip Director's Report

By Doug Geddes



GRAND CAYMAN 2014

Yes, the trip is just a few days away. This should be an awesome trip. Please keep all of us in your thoughts and prayers as we head out for this trip on the 13th. If you didn't sign up for this one, you need to sign up for the next one in February.

DOMINICA 2015

The numbers are finally starting to grow for this trip. We only have spaces for 20 people so you need to go ahead and sign up for this trip. This is one of the best dive locations in the Caribbean and almost guaranteed great weather because of the location of the island. Go to the website and check it out. The weeklong trip is only \$1200 for an ocean view room. Don't wait too long and let this get away from you. It has been a while since we were there and we probably won't go back for quite a while, so you need to sign up and go on this one.

PHILIPPINE 2016

We are still working on getting this up on the web, but our trips dates are January 23 – Feb 6 with a few more days before and after the trip for travel. The cost of the resorts will be less than \$2500 for both weeks. Start putting away some money to go on this great trip. It has been one of my favorite dive locations, land and water. 🚩



Costa Rica

By Corrine Mulberry



June 6-13, 2015

The Planning Committee has put together a great, economical, land & water-based Costa Rica trip for next June (2015). This trip involves 2 resorts – 2 nights at the Arneal Volcano area and 5 night at the pacific coast Villa Sol. Mark your calendar and complete the reservation form to secure this trip.

Volcano Lodge, Arneal Volcano Area



- Standard Room - Diver \$1,243.00/Non-diver \$988.00 (double occupancy)
- 2 night accommodations with **2 breakfasts** at Volcano Lodge in the Arneal Volcano area
- 5 night accommodations at Villa Sol – **all inclusive with breakfast, lunch, dinner, snacks, alcoholic and non-alcoholic drinks.**
- Three 2-tank boat dives (Additional dives to Bat Island or Catalinas or other destinations are available.)

- Many land-based activities ziplining, horseback riding, day pass to Hot Springs for massages, relaxation and ultimate pampering, canyoneering, hanging bridge tour, jungle boat tour, etc.
- Includes 3 group transfers - from Liberia Airport to Volcano Lodge; Volcano Lodge to Villas Sol (**with lunch**) and back to Liberia Airport. 🚩

From the Treasurer

By Dan Miller



2014 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



July 29, 2014

BGDC Board of Director's Meeting

The meeting was called to order at 6:49 PM.

In attendance were: Tracey Combs, John Geddes, Doug Geddes, Dan Miller, Mike Sullivan, Mike McCann, and Rick Stephan.

Rick indicated he was doing the August program concerning Pre-dive Checks and has submitted the program to John for the Newsletter.

Tracey suggested and Mike McCann made a motion to reimburse the Bartettos \$40 for a previous cancellation of the Sunday portion of the Dale Hollow weekend.

Dan needs to ensure that the NITROX divers on the Grand Cayman have paid and forwarded to UDT before arriving.

Tracey indicated that she is working on a design for the Grand Cayman shirts.

Doug indicated that a \$1,000 deposit is required by UDT for the Dominica trip.



Doug indicated that the Club needs to encourage more members to sign-up for the Costa Rica trip.

Doug has received confirmation of the dates for the Philippines and 9 rooms are reserved.

Mike McCann indicated that the membership form is on the Club website.

Dan indicated the membership list for the retention status is coming to Mike Sullivan.

Rick suggested that albums be created by the Club on the Facebook page for better organization of photos being posted.

The Pig Roast has been changed to August 23, 2014.

Dan submitted the Mid-Year Review for the board.

Dan submitted the monthly Treasurers Report.

There being no further business, a motion was made by Mike Sullivan to adjourn. The meeting was adjourned at 8:27 PM.

From The Secretary Cont.

August 12, 2014

BGDC General Membership Meeting

The meeting was called to order at 7:40 PM. There were twenty-two members in attendance. Dan handed out a form to those members that will be making the Cayman Islands trip to be completed before they arrive.

Dan reviewed the July Treasurer's Report and made a point that the Club was on track with Annual Budget that had been reviewed by the Executive Board on 29 July 2014. Corrine stated that Rick would not be here tonight for the monthly presentation but that a safety game would be played later in the meeting by all members. Corrine reviewed the Dale Hollow weekend trip. Mike Sullivan asked if there was anyone who did not have a nametag. Tracey held-up a design for the Cayman Island trip shirt that has been selected. Doug spoke about the Dominica trip and that NITROX would be available but would be extra. He also indicated that there are numerous flight options for getting there and that the approximate cost is just over \$1,000.

Doug is also working to fill the mystery trip location for 2015. He also restated the dates for the Philippines trip are 23 January – 6 February 2016. Corrine spoke about the details if the Costa Rica trip for 6 – 13 June 2015. John Geddes indicated that the August newsletter has been sent and was asking if everyone had gotten it by email.

Mike McCann indicated that everyone seemed to be getting emails and newsletters through Yahoo Groups. Tracey reminded everyone about the Pig Roast on 23 August 2014 at Doug's house.

The winners of the safety quiz were Dan Miller and Jennifer Clifton with all correct answers, Richard Rabek came in second and Brian Elkins was third place. The meeting was adjourned at 8:58 PM. ▀

Safety Corner

By Rick Stephan



Note: *This has been an unusually wet summer, with lower temperatures and not as many chances to enjoy the warmth of the sun. BGDC members know that any day is a good day for diving, but as we get a bit older, we also want that natural warmth to soak into those bones, making us feel better and ready for the next item on the fun agenda.*

Quick, what's the largest organ on the human body? (No Charlie, not that!!) Of course, it's the skin. So, on the upcoming Cayman trip, or future trips, when we get to the destination, maybe there are a few things we should do before stripping down and flopping on lounge chair at the pool.

There is nothing like a painful sunburn to ruin a dive trip, and even just a few minutes of unprotected sunning can give you one that will prohibit other activities that you've been waiting to do since you put in that first deposit so many months ago. In this month's article, found on-line in Dive Training Magazine, a doctor helps us understand the skin's sensitivity to the sun, what the sun can do, and how to protect yourself. Some of the information is pretty academic, but some was new news to me.

Read on then, and add this information to your arsenal of safety knowledge. A healthy diver is a safe diver,



Remember, safe diving is fun!

Safety Corner Cont.

Protection from the Sun

By Paul S. Auerbach, M.D.

It's very tempting to lie out in the sun, to soak up the warmth, to work on a tan. I know my first instinct when I reach the warmth of the tropics is to strip down to my swim trunks, put on my sunglasses and begin to soak up the rays. Unfortunately, that's not a good thing to do. What I ought to do is coat my exposed skin with sunscreen, put on a broad-brimmed hat and try to protect myself as much as possible from the relentless ultraviolet radiation. For thousands of years, until modern times, sunbathing and a suntan have been associated with good health. That concept has never been proven. In fact, although pale, untanned skin may not appear as "healthy" as a bronzed look, it's healthier. I can't begin to count the number of people who have had a dive trip ruined because of a sunburn, which can be sufficiently severe to cause a victim to be laid up for days. Remember, it's a burn, and it can be just as bad as getting caught in a fire.



Catching Rays

Solar radiation that strikes the Earth includes 50 percent visible light (wavelength 400 to 800 nanometers), 40 percent infrared (1,300 to 1,700 nm), and 10 percent ultraviolet (UV — 10 to 400 nm). Sunburn is a photosensitivity reaction caused by exposure of the skin to ultraviolet radiation (UVR) from the sun. UVA

is 320 to 400 nm, UVB is 290 to 320 nm and UVC is 100 to 290 nm. UVC is filtered out by the ozone (a tri-atomic form of oxygen) layer of the atmosphere. UVB is the culprit in the creation of sunburn. UVA is of less immediate danger, but is a serious cause of skin aging, drug-related photosensitivity and skin cancer.

Ultraviolet exposure has many variables: the time of day (greatest between 9 a.m. and 3 p.m.), season (greater in the summer), altitude (there is a 4- to 6-percent increase per each 1,000 feet/304 m of elevation above sea level), location (greater near the equator) and weather (greater in the wind).

Divers are at particular risk for sunburn because water may reflect 10 to 100 percent of UVR, depending upon the time of day, location and surface. ("Flat" is more reflective than "chop.") Most clothes reflect (light-colored) or absorb (dark-colored) UVR. However, it is important to note that wet cotton of any color probably transmits considerable UVR, so snorkeling in a plain white T-shirt may provide very little protection from the sun.

Skin darkening occurs immediately upon UVA exposure, as melanin (pigment) already present in the skin is released. This effect only lasts for 15 to 30 minutes. Tanning occurs after a minimum of three days of exposure, as additional melanin is produced. If the skin is not conditioned with gradual doses of UVR (tanning), a burn can be created.

A person's sensitivity to UVR depends on his or her skin type and thickness, pigment in the skin and weather conditions. Well-hydrated thetic sprays, many of which contain benzocaine, should be avoided, as they can occasionally cause sensitization and an allergic reaction. Menthol-containing lotions may be helpful. Topical steroids do not diminish sunburn.

If the victim is deep-red in color without blisters (first-degree burn), a stronger anti-inflammatory drug, such as ibuprofen, may be given. An extensive nonblistering first-degree sunburn can make the victim nauseated and weak, with low-grade fever and chills. This victim should be encouraged to drink enough

Safety Corner Cont.

balanced electrolyte liquids to avoid dehydration. Since the skin is the major thermoregulatory organ of the body, a diffuse sunburn will make the victim more prone to hypothermia upon exposure to cold. This is obviously problematic for a diver. It will also be painful to don and doff dive equipment, as the straps rub across sensitive burned skin.

Topical steroid creams may be used if blisters are not present. Topical steroid preparations should not be applied to blistered skin, because wound healing may be delayed and infection potentiated. On the other hand, aloe vera lotion or gel may be soothing and promote healing. Vitamin E is an antioxidant that, when mixed with aloe vera, may soothe the skin. However, this hasn't been proven to promote healing any better than aloe vera alone.

With severe sunburn in which blistering is present, the victim has by definition suffered second-degree burns. Gently clean the burned areas and cover with sterile dressings over antiseptic ointment or cream.



A Guide to Sunscreens

Sunscreens absorb light of a particular wavelength, act as barriers or reflect light. A traveler should choose sunscreens based on the estimated exposure and on his own propensity to tan or burn. Remember that there is no such thing as a safe tan, as sun exposure is directly linked to skin cancer. In

addition, long-term exposure to ultraviolet radiation from sunlight causes premature skin aging and loss of skin tone. "Photoaging" refers to these effects, and is characterized by increased wrinkles, loose skin, brown spots, a leathery appearance and uneven pigmentation.

Para-aminobenzoic acid (PABA) derivatives, which are water-soluble, are sunscreens that absorb UVB (not UVA) and accumulate in the skin with repeated application. The most commonly used PABA derivative is padimate O (octyl dimethyl PABA). The most effective method of application is to moisturize the skin (shower or bathe) and then apply the sunscreen. For maximum effect, this should be done at least 15 to 30 minutes prior to exposure, and the skin should be kept dry for at least two hours after sunscreen application.

When PABA itself is used, a recommended preparation is 5 to 10 percent PABA in 50 to 70 percent alcohol. However, PABA is now used infrequently because its absorption peak of UVB at 296 nm is too far from 307 nm, where UVB exerts its greatest effect. Furthermore, it causes skin irritation, a stinging sensation, and can stain cotton and synthetic fabrics. The PABA derivatives are less problematic.

Benzophenones are sunscreens that are more effective against UVA. These should be used in 6- to 10-percent concentration. Because they are not well-absorbed by the skin, they require frequent reapplication. Photoplex™ is a broad-spectrum sunscreen lotion that contains a PABA-ester combined with a potent UVA absorber, Parsol 1789. This is an excellent sunscreen for sensitive people, particularly those at risk for drug-induced photosensitivity.



Safety Corner Cont.



By the Numbers

Sunscreens come in different concentrations. A higher sun protection factor (SPF) number (range 2 to 50) indicates a greater degree of protection against UVB. The SPF number assumes a liberal (approximately 1.25 ounces per adult) application of the sunscreen. In general, a sunscreen with an SPF number of 8 or less will allow tanning, probably by UVA exposure. People with sensitive or unconditioned skin should use a sunscreen with an SPF number of 10 or greater. Fair-skinned people who never tan or tan poorly (types I, II or III) should always use a sunscreen with an SPF number of 15 or greater.

“Substantivity” refers to the ability of a sunscreen to resist water wash-off. Good waterproof choices include Vaseline™ 15, PreSun™ 29, Sundown™ 30, Bullfrog™ 36, Sawyer Products Bonding Base™ 45, Solbar™ 50 and Aloegater™ 40. Layering sunscreens doesn’t work well, as the last layer applied usually washes off.

Waterproof sunscreens applied to cool, dry skin should be used at least 10 minutes prior to water exposure for proper absorption. They

should be reapplied liberally after swimming or heavy perspiration.

Some authorities recommend using a sunscreen of at least SPF 29, with the rationale that most people underapply or improperly apply them. Bald-headed men should protect their domes. All children should be adequately protected. However, avoid PABA-containing products in children less than 6 months old. Persons sensitive to PABA may use Piz-Buin,™ Ti-Screen,™ Sawyer Products Bonding Base™ 45, Uval and Solbar products. Eating PABA does not protect the skin.



Total Block

For total protection against ultraviolet and visible light, a sunblock can be prepared from various mixtures of titanium dioxide, red petrolatum, talc, zinc oxide, kaolin, red ferric oxide (calamine) and ichthammol. These preparations or similar commercial products (“glacier cream”) are used for lip and nose protection. Micronized titanium dioxide can be prepared in an invisible preparation (e.g., TiScreen Natural™ 16 and Neutrogena Chemical Free™ 17) that does not cause skin irritation. Sunblocks that prevent infrared transmission may help prevent flares of fever blisters caused by the herpes virus.

Substances that are ineffective as sunscreens and that may increase the propensity to burn include baby oil, cocoa butter and mineral oil.

Many effective sunscreens, particularly those advertised to stay on in the water, are

Safety Corner Cont.

extremely irritating to the eyes, so take care when applying these to the forehead and nose. Near the eyes, avoid sunscreens with an alcohol or propylene glycol base. Instead, use a sunscreen cream.

There are also newer sunscreen/ insect repellent combinations, such as Coppertone Bug & Sun™ and Banana Boat Bite Block.™ Bug Guard™ contains Skin-So-Soft™ (mostly mineral oil) in combination with citronella, enhanced by a sunscreen.

A new line of medical clothing, Solumbra® by Sun Precautions, is advertised to be “soft, lightweight and comfortable,” and offers 30+ SPF protection. The phone number for the company is (800) 882-7860. Frogskin, Inc., (800) 845-9531, also manufactures high-SPF protective clothing. Sunday Afternoons, (888) 874-2642, manufactures comfortable broad-brimmed hats with neck shields advertised to provide a 97-percent UV block.



Melanoma

Melanoma is a type of skin cancer that can be caused by UVB light exposure. Regular use of a sunscreen with sun protective factor (SPF) of at least 15 during the first 18 years of life may reduce the lifetime risk of developing

melanoma by more than 75 percent. Persons with light skin and a tendency to burn rather than tan are at increased risk for the development of melanoma.

If you spend a great deal of time outdoors, it's important to recognize the features of skin cancer. You should regularly inspect existing moles, birthmarks and other skin lesions. Since melanoma is often found on a person's back or other area that cannot be easily inspected, it is wise see a dermatologist for a proper evaluation.



Your Eyes and the Sun

Exposure to UVR can lead to a “sunburn” of the cornea (clear surface of the eye). This most often is a problem for a diver if he or she stares out over open water for a prolonged period of time. Skiers and mountaineers call this phenomenon “snowblindness.” The cornea absorbs UVR below 300 nm, which includes a fair portion of UVB. Radiation of wavelengths longer than 300 nm is transmitted to the lens of the eye and over time can cause a cataract.

High exposure to UVB can cause a corneal burn within one hour, although symptoms may not become apparent for six to 12 hours. Symptoms include excessive tearing, pain, redness, swollen eyelids, pain when looking at the light, headache, a gritty sensation in the eyes and decreased (hazy) vision. Similar symptoms occur when the surface of the eye is physically scratched.

To avoid corneal damage from the sun, wear protective eyeglasses or sunglasses. The

Safety Corner Cont.

lenses should block 99.8 percent of UVB light. If they are advertised for mountaineering or specifically for ultraviolet protection, they also block out considerable UVA light.

Sunglasses should be equipped with side protectors and, if necessary, optional nose guards. Frames should be prepared with wraparound temples and retaining straps or lanyards. Polycarbonate lenses, which are lightweight, scratch-resistant and shatterproof, can be manufactured to absorb 99 percent of ultraviolet light. In general, amber, yellow, orange, brown or rose lenses filter out blue light and increase the perception of contrast. Green and gray lenses soften glare and transmit a spectrum that does not increase contrast. Glass ambermatic or photochromic lenses (darker in bright sunlight), which contain millions of silver halide crystals, darken when exposed to ultraviolet light close to the visible spectrum.

So enjoy the warmth, but don't "worship" the sun. Respecting the power of solar radiation and keeping yourself well-protected is the best way to maintain a good complexion, sharp vision and a healthy, uninterrupted dive trip.



Sun Sensitivity

The following drugs and plants can cause increased sensitivity to UVB rays:

Drugs

Tetracycline, doxycycline, vitamin A derivatives, nonsteroidal anti-inflammatories,

sulfa derivatives, thiazide diuretics and barbiturates

Plants

Lime, citron, bitter orange, lemon, celery, parsnip, fennel, dill, wild carrot, fig, buttercup, mustard, milfoil, agrimony, rue, hogweed, Queen Anne's lace and stinking mayweed



Sun-Reactive

Skin Types

Dermatologists classify sun-reactive skin types (based on the first 45 to 60 minutes of sun exposure after winter or after a prolonged period of no sun exposure) as follows:

Type I: Always burns easily, never tans

Type II: Always burns easily, tans minimally

Type III: Burns moderately, tans gradually and uniformly (light brown)

Type IV: Burns minimally, always tans well (moderate brown)

Type V: Rarely burns, tans profusely (dark brown)

Type VI: Never burns, is deeply pigmented (black skin)

Skin Cancer Self-Exam

You should consult a dermatologist whenever

Safety Corner Cont.

you notice a change in (or new development of) a skin lesion. Here's what to look for when conducting a self-exam:

- Irregular, ragged, jagged, notched, or blurred border
- Asymmetrical appearance (one portion different than the rest with respect to color, darkness or texture)



•Change in appearance or features (size, color, texture, sensation); onset of pain in a lesion; rapid growth of a lesion

•Recent growth, bleeding, itching, scaling or tenderness

•Discoloration (black, dark brown, blue, red, white, mottled) 🚩



Bluegrass Dive Club 2014 Calendar

September

- 9, Tuesday Dive Club Meeting
- 13, Saturday Grand Cayman
- 30, Tuesday Board Meeting



October

- 14, Tuesday Dive Club Meeting
- 28, Tuesday Board Meeting

November

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

December

- 13, Saturday Club Christmas Party



Dive Committee Members

Doug Geddes – Chairman	885-2215
Tracey Combs	621-4066
Ralph Covington	621-3862
Mike Sullivan	266-4516
Gordon Green	C@Meeting
Ed Sullivan	C@Meeting
John Geddes	223-7926