President’s Message

Fall is here! And winter is just around the corner. The leaves are turning, there's a delicious crispness in the air, and the sunrises and sunsets can be absolutely stunning. If you've been in the water recently, I'm sure you noticed a lot changing beneath the surface as well. I don't know about you, but the colder months are some of my favorite times to dive around here. No more baking in the sun and delaying putting on my drysuit until the last possible second, only to then run to the water to try to cool off. I look forward to gearing up early, warming up between dives with warm apple cider, and grabbing one of my favorite brews at the post-dive debrief.

September was a very active diving month. Every weekend, with the exception of the first, had at least two hosted dives. And the last one had four! We've also had a surge in the number of mid-week dives that is really nice to see. Sometime, maybe I'll play hooky and join you on one of your "Slacker" dives. Don't tell my boss. To all the amazing dive hosts that took the time to organize a dive: Thank you! The time you take to do this is really appreciated. October is shaping up to be another busy month as well, with every single weekend, already, having at least two dives posted.

Speaking of upcoming dives in October. Our annual Underwater Pumpkin Carving Contest will be on Saturday, October 29th! This is an amazing tradition where we host a multi-club dive, so far Boeing Seahorses, Moss Bay, Emerald Sea, and the UW Underdawgs. If you're able to make it, I encourage you to attend. This includes those who may just want to come and hang out, and have no desire to carve a pumpkin underwater (but why wouldn't you??). This is a social event as much as it is a dive. Come out and support your local dive community, I'm sure it'll be a blast. And there will be prizes! Who doesn't like prizes!?

Josh Schripsema
President, MBDC
Cover Photo

Taken by: Doug Miller
Location: God’s Pocket, British Columbia
Camera data: Nikon D7000 f/14 1/200 ISO 200 with a 60 mm Nikon macro lens.
This is a 5 inch long helmet jelly (Periphylla periphylla) and is normally not seen in shallower water around here although they are common in Norway.

New Members

Kiliii Yuyan      Shaun Darragh      Winston Walker
Alex Krikunov    Andrea Petersen    Jim Griffing
Edward Smith     Larry McLean

Welcome to the Club! You’ve joined one of the most active and social dive clubs in the region.
As you can tell from Meetup we have a steady stream of activities going on for divers of all experience and skill levels. You are also invited to attend the monthly club meeting. This is a great opportunity to meet club members in person, hear from interesting speakers, and get into the swing of things. Details are on the Meetup site.

- First time dive hosts will receive a 5 fill air card from Lighthouse Dive Center.
- If you get 6 Club members to attend you will also earn a 10 fill card from the dive shop of your choice.

That’s almost $100 for very little work, but lots of fun. Everybody wins!

October Monthly Meeting
October 5, 2016
Sunset Hill Community Center

Our speaker this month is Nirupam Nigam, who will be telling us about his recent work in Alaska for the Department of Fisheries.
Exercise Timing and Diving
By Sue Bream

I don’t know about you, but my exercise regimen is really important to me. Do you ever find yourself making the decision to forego your morning workout because you plan to dive later that day? Personally, I would rather get my exercise in so that if I don’t end up diving, at least I don’t miss a workout day. Can you relate to this?

Alternatively, perhaps you wanted to get in an early morning run while on a dive vacation before heading out for another great day of diving because you don’t want to miss out on too many runs while on a 10-day dive trip.

We have all been told not to mix diving with working out on the same day or you risk getting decompression illness (DCI).

We take all of the other important precautions (adequate hydration, follow our gauges, religiously perform our safety stops, etc.,). If you exercise on dive day, the timing of exercise is another significant precaution, or is it?

How Soon Can You Dive Post-Workout?
What is the safety concern with diving and working out? The answer is in the bubbles.

Heavy workouts can cause an increase in bubble formation. The formation of these bubbles can put you at an increased risk for DCI, plain and simple. The bubbles are related to the increase in micronuclei activity (tiny little bubbles, which grow into larger bubbles), which is a direct result of greater muscle and joint loading from an intense exercise session.

Essentially, if you work out vigorously (high impact or high heart rate) too close to diving, most of the research out there indicates that you might be putting yourself at risk for DCS. This applies to an intense weight workout as well as aerobic exercise.

Bear in mind that individual fitness levels impact what is an easy or intense workout for different people. If you are a distance runner, then a 3 mile run at a moderate heart rate would be totally different than for someone who never runs more than 2-3 miles and finds it to be a heart-pounding workout.

Do I go for my morning run on a dive day, or not? According to some experts, if I run or workout at least 4-6 hours prior to diving, keep my effort level at moderate or below, I significantly reduce my risk of DCI.

It also important, just like any other dive day, to make sure and rehydrate post-exercise. Other recent research suggests that a workout as close as an hour before diving helps reduce bubbles and risk of DCI.
Some studies have shown that an exercise bout 24 hours prior to diving has a risk-reducing effect for DCI. This is not conclusive however. There appears to be a lot of room for more research in this area.

Ideally, if you exercise regularly and also dive frequently, you can figure out a plan that keeps you doing both, safely. Diving on Saturday? Run on Friday and Sunday. You get the picture.

What is the best approach? Dive within your limits, err on the conservative side with your dive profile, time any vigorous or high-impact activities as far away from your dive as you can, especially if doing multiple dives.

**What about Post-Dive Working Out?**

After diving, you are also at an increased risk of bubble formation, thus increasing your risk for DCI, if you immediately jump into a hard workout. Basically, this has to do with an increase in blood pressure allowing bubbles to move from the venous system to the arterial system in the body.

Some studies do find that light activity might actually help the body to off-gas, thus reducing your risk for DCI. It generally takes about 24 hours to really eliminate residual nitrogen from your body.

I find that I rarely feel like exercising post-diving anyway…a light walk or swim (if on vacation) might feel good though. Lately, post-dive activities have included a trip to the pizza joint and a nap!
Conclusion

I hope that this helps some of you who have asked yourself the same question? If you can, leave a window of at least 4-6 hours between exercising and diving. Does this apply to walking the dog? Of course not, unless you walk your dog at a brisk pace uphill for an hour! The same goes with gentle yoga or stretching.

Diving in itself is not adequate for getting and staying fit. Yes, it is exercise, can be very energy-consuming, and requires strength (especially cold-water diving), but none of these are sustained for a long enough time to really improve fitness.

It is recommended that you exercise regularly to enhance your diving experience and longevity. This includes both aerobic exercise (more than just easy walking or stretching for 20 minutes a couple times/week) as well as weight lifting.

The bottom line is to use good sense. Maximize the time between diving and exercising. A diving day is not a good candidate for an intense workout day. That includes an intense post-dive hike on a tropical vacation.

Sue Bream is an ACSM and ACE certified Personal Trainer, certified Pilates instructor, and Health Coach, as well as avid scuba diver.

Questions? Email her at sue@suebreamfitness.com. Find her at www.suebreamfitness.com.
Raja Ampat

Text and photos: Steve Metzner

All of the photos were taken with a point and shoot Olympus XZ2 (which I flooded), Dual Sub Sea strobes. Aperture range f 5.6 to f8, SS 1/125 - 1/200 and ISO 100

Short story—Sue and I signed up for the Raja Ampat trip with TL Sea Travel and off we went in Spring 2016.

Long trip! It took almost 2 full days to get there.

Felt very rich, one US dollar was worth 13,500 Rupiahs.
First stop Gam Island and land based Papua Explorers. Beautiful isolated resort, incredible diving. Most of the diving at Raja Ampat was active, current driven.
Red Clownfish

Cuttlefish
One dive stands out, Fam Island.

We did an 80 minute drift dive over a continuous spectacular reef of undisturbed stoney corals. Didn't see any signs of coral bleaching. Lots of dolphins, some reef sharks and a very cool manta cleaning station. Tough to take photos here as we were always in motion.
Second stop Ambon Island and Maluku Divers. This was a real transition from pristine coral reefs to a strait that was well populated BUT an incredible array of bizarre sea life.
Ambon Island was a photo smorgasborg; flambouyant cuttlefish, rhinopias, winged scorpionfish, nudibranchs, frogfish, blue ringed octopus, tiny shrimp and crabs, leaf fish, ribbon eels, sea snakes, wunderpus and psychedelic urchins. Like all trips, went waaay too fast.

Counting the days to our next adventure!
For Sale:

One Rigid Boat tender in good condition.

- 10’ 4” LOA, looks like an inflatable and has the stability of an inflatable but is all fiberglass.
- Two storage compartments, two seats with cushions.
- More info on these unique boats at www.rigidboats.com.
- This is a nice stable small boat for diving.
- These are $7,700 new, asking $1,000.

Contact: Doug Miller at doug@milltechmarine.com or 425-246-6499.

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For Sale:

One Yamaha 9.9 HP, 4 stroke, long shaft outboard, in excellent condition.

- Includes gas tank.
- Cost $2,500, asking $1,000.

Contact: Doug Miller at doug@milltechmarine.com or 425-246-6499.
Looking for a break and some diving somewhere new? Why not rent our cottage on the water for a weekend?

Karin and I bought the house next door as a vacation rental. It is a 50-year-old two-bedroom wood cottage. The cottage is fully equipped with kitchen, wood stove and laundry facilities and features an awesome deck over the water out front and a beautiful forest and hiking trails behind. And of course, there are steps down to the water giving you direct access to diving, kayaking and more. We have mapped out four distinct dive sites in the reefs out front plus if you have a boat there are numerous other sites minutes away including Waterman Wall, Wautaugua Beach and Orchard Rocks.

For more information and reservations check out our website at: www.forestlanecottage.com or send me email at douglas@milltech.com.
Rescue Diver Refresh!

October 18, 2016

If you are Rescue Diver certified, we have an evening in the pool for you!

When was the last time you threw a rope bag to someone in the water?

When was the last time you practiced surfacing an unconscious diver off the bottom, removed both your gear and the victim’s gear, started rescue breaths, and began towing?

Ya — thought so!

On October 18th you can come to the pool and we will refresh some of your Rescue Diver skills.

The two-hour session begins at 8:30 pm at the Juanita Pool in Kirkland. Cost is $10 paid to Bellevue Divers.

You must be Rescue Diver certified (any agency) to participate and provide your own gear for the session.

Contact John Downing at johndo88@gmail.com or 425-941-5852 with questions

CPR and AED course

November 12, 2016

The Emergency First Response CPR & AED course teaches the basic principles of CPR. It also teaches how to deploy and use an Automated External Defibrillation (AED) in an emergency situation.

This class is offered as a half/day workshop on November 12th. The $30 cost includes the course content, a pocket mask with O2 inlet port, and certification card.

If you are interested,
contact John Downing at johndo88@gmail.com
Quillfish - Apparently a very rare find. It was swimming like a snake when David Rosenbaum and I happened across it.
Gunnel - Although the focus is ever so slightly off this one came out great with the gunnel peering out from his shelter. I am unsure where this shot was taken at, I think Z's reef?
This was taken on a Skyline dive. This fish, like so many things at skyline, had such incredible colors I just had to stop for it.
Shooting Gallery

Photo by: Myra Wisotzky
Camera data: Canon G16, f 8, 1/100, ISO 160. Two Sea & Sea YS-01 strobes

Sea star reclining on a bed of Orange Zooanthid at Shangri La, Blakely Rock Reef
Shooting Gallery

Photo by: Myra Wisotzky
Camera data: Canon G16, f 7.1, 1/800, ISO 100. Two Sea & Sea YS-01 strobes

Moon jelly mid-water at KVI Tower
Shooting Gallery

Photo by: Myra Wisotzky

Camera data: Canon G16, f 8, 1/125, ISO 100. Two Sea & Sea YS-01 strobes. Nauticam CMC compact macro converter.

Strange sea-bed fellows at Keystone Jetty. Vignette due to macro lens—not a great photo but an interesting behavior.
Photo by: Hal Everett
Camera data: Canon 70D in Nauticam housing with 100mm, f2.8 macro lens. Two YS-D2 strobes in TTL mode with optical synching. Subsea +5 diopter. F20, 1/100sec., ISO 160

Cockerel's nudibranch at Keystone Jetty
Shooting Gallery

Photo by: Hal Everett

Camera data: Canon 70D in Nauticam housing with 100mm, f2.8 macro lens. Two YS-D2 strobes in TTL mode with optical synching. f 20, 1/100 sec., ISO 160

Rose-pink Cuthona nudibranch at Keystone Jetty
Photo by: Hal Everett

Camera data: Canon 70D in Nauticam housing with 100mm, f2.8 macro lens. Two YS-D2 strobes in TTL mode with optical synching. Subsea +5 diopter. f 20, 1/125 sec., ISO 160

Lingcod eye at Keystone Jetty
Red Irish Lord eye at Skyline Wall

The fish eye shots reveal some interesting (to me anyway) features of fish eyes not seen in many, if any, mammals. The vast majority of fish I have seen here and abroad have tear-drop shaped pupils. The reasons published for this are really only speculation by “experts” about the optical advantage of this anatomy. As seen in this shot, the eccentric part of the pupil extends well beyond the crystalline lens. I believe this is more related to fluid flow in the eye rather than optics. I have not figured out a way to prove it however. The Red Irish Lord eye has multiple, fine orange pigment spots in the cornea, which in most animals is totally clear. The obvious reason for this is camouflage, but again, that is only speculation.
Shooting Gallery

Photo by: Hal Everett
Camera data: Canon 70D in Nauticam housing with 100mm, f2.8 macro lens. Two YS-D2 strobes in TTL mode with optical synching. f 20, 1/100 sec., ISO 160.

Juvenile Wolf Eel at Skyline Wall
This was shot at Skyline on Sept 22nd, I was using a stacked diopter with a total magnification of 14. I was hoping to get closer to my subjects for better detail. I had some success, but this one to me was the best with two others a close second.

The Grunt Sculpin was in between the rock wall and a small boulder, which made it difficult to get the lights in there, so I shot it from the top with this result.
Anilao Critter Overload
March 14-24, 2017
Crystal Blue Resort

Octopus and seahorses and nudibranchs, oh my!

Air Package: $2106 Nitrox Package: $2222 (dbl.occ.)

Join us for 10 critter filled days at the macro diving capital of The Philippines, Anilao. Your dive package at Crystal Blue Resort includes 29 dives, including 3 night dives, all meals, transfers from Manila, and presentations on Natural History and macro photography. Guided diving with 4 guests per guide enables you to see more of the marine life and photograph those “bucket list” critters. There will also be the opportunity to dive beautiful offshore coral reef sites, with masses of reef fish and clear blue water. The prime dive season is short in this area, so booking far ahead allows us to secure space. A $600USD deposit will hold your spot. Space is limited. For further information, please contact scubamarli@gmail.com.
About Marker Buoys

The Marker Buoy Dive Club of Seattle meets at 7:00 PM, the first Wednesday of each month (except July, which is our annual picnic) at the Sunset Hills Community Center, 3003 NW 66th St. 98117 in Ballard. The Marker Buoy Dive Club is one of the most active dive clubs in the Pacific Northwest. Membership level is around 180. Our members include some that are new to diving or to the Seattle area as well as those with over 1,000 dives in their log.

In addition to hosting many dives each month, monthly meetings are held at the Sunset Community Center in Ballard. Monthly meetings give members an opportunity to give reports on club dives of the previous month, information on upcoming dives, and occasionally slide and video presentations of dives. A guest speaker related to scuba diving, the marine environment, or something of interest to divers is featured every month. Club-sponsored activities include over 100 dives each year, dive planning parties, an annual picnic, and an annual banquet.

General Club Policies

DIVER’S EDUCATION
The club will reimburse members $15 for successful completion of advanced certification courses that increases the member’s competency and safety. Limit of 3 reimbursements per club member per calendar year. Courses that qualify are advanced diver, rescue diver, dive master, instructor, nitrox, DAN O2 Provider, and initial First Aid & CPR (non-renewal). Reimbursement for other courses subject to board approval. Just show proof of course completion to David Riley, Treasurer, for your reimbursement.

MEET UP/ MARKER BUOYS
Join our members only on-line web group! Find a last-minute dive buddy, ride, or directions to a dive, trip reports, as well as our newsletters:

http://www.meetup.com/Marker-Buoy-Dive-Club/

WEIGHT BELT REPLACEMENT POLICY
The club will reimburse any member who ditches weights in what they consider an emergency during any dive, anywhere. The reimbursement is for replacement cost of all items ditched and not recovered, up to a maximum of $150.

SPONSOR A DIVE, EARN AN AIR CARD
Dive hosts receive an Air Card good at local dive shops when 6 Marker Buoy members participate on the dive. The Club Oxygen Kit counts as a buddy as long as one member of the party is O2 trained. Limit of 1 Air Card per club member per calendar month. The club has two O2 kits - currently with Fritz Merkel and Steve Kalilimoku. To request an air card, complete the “Dive Host Air Card Request Form” and submit it to the Treasurer, Dave Riley.

Membership
Members must be a certified diver and 18 years or older. Any certified diver under 18 is welcome on club dives if a parent is a club member and comes as their buddy.

MARKER BUOY 2016 BOARD

President: Josh Schripsema  Treasurer: David Riley  Webmaster: Justin McClellan
Vice President: Steve Kalilimoku  Programs: Bob Bailey  Event Director: Andrea Naert
Secretary: JoLee Ford  Newsletter: Myra Wisotzky  Refreshments: Catherine Knowlson