I’m going to take a bit of a serious note this month and end with something lighter.

We are a Dive Club that is made up of people who have a shared interest in diving and in getting together to socialize about diving. Sometimes we network with each other for things that are not relevant to the Club and what the Club’s purposes are. When that happens it is great but sometimes those interactions don’t go well and there are hard feelings generated between the members. It’s a shame when that happens but those disputes or differences of opinion should not be dealt with through the Club. We need to keep them out of the Club forums and communications. The Club and its members do not want to be involved in those situations and the Club’s communications forums are not the proper methods to be used to resolve those disputes.

The Board has a mandate to look out for what is in the best interest of the Club as a whole and to act in the best interests of the membership as a whole. Our membership is open to anyone who expresses an interest in joining, meets the requirements in and is willing to sign the Membership Agreement and pay dues. While we expect our Members to conduct themselves appropriately and in accordance with Club policies during Club events, a Member’s conduct outside the purview of the Club is their own business. It is not our place as the Board to take any action against a Member unless their conduct has a direct impact on the Club. We hope people will recognize that this is the appropriate standard for the Board and the Club generally.

Now for the lighter side:

Saturday October 25th we will be holding the Annual Pumpkin Carving Contest with the Boeing Seahorses Dive Club. There is information elsewhere in the Newsletter and it is our featured Meetup. This is a fun event and whether you are an experienced carver or a first timer I think that you will find it interesting. So, find a buddy, buy a pumpkin and design a carving. In fact why not try it out beforehand on a practice dive. Then head to Alki and put your skills to the test. We’ve included an article dealing with the most challenging part of the dive (How to sink a pumpkin) so you can learn from someone who has been there and given the matter much thought. There will be prizes in several categories, coffee and pastries before the dive and hot dogs for the après dive festivities while judging takes place. I hope to see lots of you there and look forward to seeing the results.
Cover Photo
Taken by Steve Kalilimoku

The image was shot during the Saltwater Park club picnic with my Canon point and shoot ELPH 300 with the built-in flash turned off. I used my hand held Princeton light directly overhead to get the shot I wanted.

My dive buddy Ken Gatherum and I were on the 2nd or middle rock pile at about 70ft. The Anemone looked like any other one, until I shined my light on it from above. It casted this image with the light falling off into the shadows as the rock curved away from me to the bottom.

New Members

Welcome to the Club. You’ve joined one of the most active and social dive club’s in the region. As you can tell from Meetup we have a steady stream of activities going 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 and get into the swing of things. Details are on the Meetup site.

Greg Justice
Caryl Hunter
James Rakowski
James Lamont
Lynne Downing
Kristen Bromenshenkel
John Downing

Guest Speaker
By Gene Coronetz

The tentative speaker for November is Club Member Jim Rakowski who will be talking about diving\ snorkeling with Whale Sharks off Isla Mujeres Mexico.
**Rules:**

- Must dive with a buddy
- BYOP - Bring Your Own Pumpkin
- Pumpkin cannot be punctured in any way before reaching final carving depth of 10'.
- Pumpkins may be stenciled beforehand with a marker as long as no holes exist.
- Only items found during the dive may be added to the pumpkin
- Teams must return to dive site entrance within 60 minutes of official start.
- All participants who are not club members must have a signed release of liability.
- Any type of carving tool is allowed as long as it is in a sheath.

Judging will be done by everyone around (so be sure to bring your friends to cheer for you!).

Hot Dogs, Snacks and Hot Cider will be provided following your dive.
Hey, where did you learn that?

Walking amidst the bystanders prior to the recent underwater pumpkin carving contest, I overheard an excuse that precluded one diver from participating. What do I do if I didn't bring enough weight to get my pumpkin underwater? That would be embarrassing! One of the rules in the carving contest was that the diver had to first submerge the intact pumpkin to 10 feet before puncturing. How did the groups that participated determine the amount of weight to use to get their prize pumpkin submerged? I surmised it was mostly hit and miss. It was obvious some of the participants did an overkill. Others came close to the embarrassment factor. Just how do you determine how much weight it takes to sink a buoyant object?

After pondering this issue for several weeks, it dawned on me. It’s all about buoyancy. Duh! As a diver, we are taught in our basic open water class all about Archimedes Principle where “any object wholly or partly submerged in a fluid is buoyed up by a force equal to the weight of the fluid displaced by the object”. If an object displaces an amount of water weighing more than it’s own weight, it is positively buoyant and will float. If an object displaces an amount of water weighing less than it’s own weight, it is negatively buoyant and will sink. Divers aim to achieve neutral buoyancy (neither positive or negative buoyant) where they are the most efficient with their movements in the water. We’ve all done weight checks and understand the consequences for being heavily over-weighted in the water; we sink like a rock and burn through our air in no time trying to stay off the bottom. That’s fine, but our pumpkins don’t swim and don’t intend to. What’s the connection? We only need to add the minimum amount of weight to the pumpkin to get them to sink. They are more easily handled underwater when they are properly weighted. Now do you understand? Remember, this is a contest of wit and speed, and a little bit of artistic talent.

A). One method of determining the amount of weight needed to sink an object is to first calculate the volume of the object in cubic feet. If the object takes the shape of a rectangular object, then volume is determined by multiplying the length by its height, then multiplying this by its width. If the object is spherical or shaped like a ball, then volume is determined by multiplying the radius of the object (one half its width or diameter at its greatest point) by itself 3 times, then multiplying this by 4.187. Since we’re metrically challenged, complete your calculations in feet. For example, instead of using 18 inches, use 1.5 feet to end with your volume in cubic feet.

B). A more accurate way to determine the volume of an object is to use the submersion technique. Find a bucket that your entire object will spacially fit into. Place the bucket in the center of a tub or tray. With the bucket empty, fill it to the brim with water. Now slowly allow your object being measured to sink into the water filled bucket. The water being displaced will flow over the rim of the bucket and into the tray below. Now place a board over the object that will extend across the rim of the bucket and push down upon the board submerging the object just below the surface of the water. You have now displaced an amount of water equal to the volume of your object. Remove the bucket from the tub or tray and measure the amount of water displaced, in gallons. A useful hint is that 16 cups is equal to 1 gallon of water. Since 7.48 gallons is equal to
1 cubic foot, determine your liquid volume by dividing your number of gallons displaced by 7.48. As with the previous method, you will end with your volume calculated in cubic feet.

Seawater is denser, therefore more buoyant than fresh water. In fact, 1 cubic foot of seawater weighs 64 pounds compared with only 62.4 pounds for freshwater. If your intended sinking will occur in seawater, multiply the volume of your object by 64 pounds. This will give you the weight of the seawater displaced by your object. Now, pull out your purchase receipt for your object; pumpkin, watermelon, etc. Since you were charged by the pound, it should likely indicate the dry weight of the object. Subtract this weight from the weight of the water displaced. The difference in the two weights is the weight needed to achieve neutral buoyancy. Adding a few copper pennies to this will achieve negative buoyancy and your object will sink. This is all well and dandy on paper, but does it actually work? I intended to find out. Pumpkins were now out of season and all that I could find in the produce section of my local grocery store were melons and gourds. Of those, nothing closely resembled a sphere. I walked around picking up melons, gourds, and an occasional frozen turkey, carefully measuring and weighing them. I had brought my calculator and had etched “4.187” on the back of my hand. I decided that bigger would be more impressive and would accurately express what I might expect to see in competition. Thinking I had just missed the Thanksgiving underwater turkey-carving contest, I settled for a 15.18 pound watermelon shaped somewhat like an oblong sphere for my test object.

I first categorized my melon as a sphere and not rectangular. I then performed a simple volume calculation. My spherical calculations yielded an equivalent weight of displaced seawater of 24.06 lbs and a net difference of 8.88 lbs needed to achieve neutral buoyancy. I then performed a more accurate submersion test. The tubs I hold my dive gear in proved useful. My melon displaced 2.17 gallons or the equivalent volume of 0.29 cubic ft of water and a weight of 18.096 lbs of seawater. This would suggest that I only needed 2.916 lbs to achieve neutral buoyancy. Adding a 3 lb weight to the melon would complete my goal. Had my melon been more spherical, I’m sure the accuracy of the simple formula would have been sufficient. Either way, I see a well planned sinking. No embarrassing moment here!

While you are at the produce market, ask the produce clerk for an onion bag. They make really nice goody bags for submersing your pumpkin. Put both the pumpkin and the associated offsetting weight in the bag and close it up. With the proper weighting, it won’t be a drag. As a note, the club’s Weight Belt Replacement Policy does not apply to weight belts lost while tethered to a pumpkin or turkey, even though associated with a club-sponsored event (read the fine print). Ok, where did I learn all of this cool stuff? Some of it is basic math but a lot of it is diver education. On the topic of buoyancy, most of the concepts used to sink an object are simply the reverse of what is needed to raise a submerged object. Some of this is first discussed in basic open water diving then expanded upon in the advanced courses like wreck diving, rescue diving, and even the dive master course. What a way to enhance your diving. The club certainly promotes continued diver education so find a dive instructor within the club or one of the local supporting dive shops and check it out.

Don’t miss the club’s underwater Christmas tree decorating contest coming up shortly. How do you sink a tree?
A few weekends back, Marker Buoy hosted its first-ever dive and social event. As a response to member opinions gathered following the picnic in July, it was decided that getting together for dives as well as a BBQ would be great. Plus, this allowed us to expand our range to include the southern part of the Sound.

MBs arrived about 0930 and a base camp was quickly established. We had several tables, a couple of pop-ups for shade and a BBQ grill. Randi W, Jill G, Catherine K and Ken G staffed the site and enjoyed the warm sun and conversation.

Divers (about 12 MBs hit the water that day) geared up for slack about 1045. The long surface swim wasn’t too bad for the first dive. The viz wasn’t great but there were several lovely pictures taken (already uploaded to Meetup). The first dive lasted about an hour and then all returned for lunch.

Coals were lit and the burgers, hot dogs and ribs smelled great as they cooked. Everyone brought generous contributions and a fine meal was shared by all. Eventually, dive two arrived and again, lasted about an hour for most divers.

As the day dwindled down, everyone cleaned gear, helped disassemble the pop-ups and carry things back to the cars.

We had a great time, peaceful and content under the bright blue sky, with warm companionship and a delicious shared meal.

Special thanks to Randy Williams who FINALLY got me to get some reasonably wrist seals by stealing my drysuit and taking it to Tacoma Scuba and who helped me reconfigure my troublesome weighting issues. A huge Marker Buoy thank you to the folks who acted as shore support and gear guardians. And my personal thanks to Kimber and Jill who picked up a pretty big pile of picnic gear and hauled it to and from my place. No way was all that going to fit in my Mazda!

Stay tuned for more such Marker Buoy dive and social events all around Puget Sound. They are a great chance to dive, eat, relax and enjoy the companionship of the diving-est club in the region.

See you on the beach!
Lu-Jac’s Quest—San Juan Islands

July 29th & 30th, 2014

Text by Bruce Brown
Photos by Ken Gatherum and Carl Baird

This past July a group of underwater photographers headed out to the San Juan Islands on the Lu-Jac's Quest. Can you say Cameras? The cameras were huge and were parked all over the boat because they would not fit on the camera holding area. We estimated all the cameras were valued at $75,000 plus or minus.

There were a number of Marker Buoy divers including Carl Baird, Bruce Brown, Drew Collins, Ken Gatherum and Myra Wisotzky. We also had three divers from Florida - Chris Guglielmo, Suzanne Bushnell and Heiko Kiera. Chris is a professional underwater photographer based out of Ft. Lauderdale, Florida. Chris and Suzanne also operate the Gug Underwater Gallery in Ft. Lauderdale.

Heiko specializes in high definition footage of American Alligators, American Crocodiles, all venomous snakes from Coral Snakes to Rattlesnakes. His clients include Smithsonian Institution, Walt Disney, National Geographic and The Discovery Channel.

**Day 1 - July 29:** The dive sites were Iceberg Point located at the south end of Lopez Island and Long Island Wall located at the south end of Lopez Island.

The viz was exceptional with NO current. Perfect for photography. Long Island Wall drops off to 200 feet but we spent most of our time diving in the 70 foot range.

The visibility here was great with 40 + feet of visibility and lots of critters. There was lot to see from the kelp forest to the fields of strawberry anemones.

**Day 2 - July 30:** The dive sites were Eagle Point located at the south end of San Juan Island, then followed by a second dive at Long Island Wall (south end of Lopez Island).

A great time was had by all. The resulting photos tell the complete story.
Photos by Ken Gatherum

Carl Baird moving in on a critter

Drew Collins Scouting photo location
Drew Collins and Myra Wisotzky

Carl Baird on Long Island Wall
Pectin Scallops abound

Suzanne Bushnell photographs a field of Strawberry Anemones
Suzanne Bushnell swims through the kelp forest
Photos by Carl Baird

Pink Scallop

Scalyhead Sculpin
Strawberry Anemones

Three -Lined Nudebranch
Shooting Gallery

Ken Gatherum had a great idea to provide a section in the newsletter for photographers to showcase a particular photo they are proud of. I will post as many photos as are sent to me, as long as they are accompanied by a description of the photo and the camera data, as shown by the debuting entry and example by Ken.

Long Island West Wall
By Ken Gatherum

The Long Island Wall is one of my favorite dive locations in the San Juan Islands. Located on the southwest corner of Lopez Island. Strong currents provide ideal conditions for colorful invertebrate marine life on the wall. Located about 25 yards from the south end of the wall, a large colony of strawberry anemones start at about 50 feet and runs down to about 75 feet. This location is home for Puget Sound King Crab, Wolf Eels and Red Irish Lords.

Depicted in this photo is a large Crimson Anemone which often serves as a home for Candy Striped Shrimp and small crabs. This is truly an unwater photographer’s paradise.

Camera Data: Canon EOS 5D Mark III with Sigma 15mm f/2.8 EX Diagonal Fisheye Lens, Nauticam NA-5DMKIII Housing and dual Sea & Sea YS-D1 Strobes. Exposure: 1/60 sec at f/9.0, ISO 1250
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Critter expert and outstanding underwater photographer Marli Wakeling is combining forces with Crystal Blue’s Mike Bartik for a Philippine adventure in the Spring of 2015. Price includes food, lodging, diving, surface transportation from Manila to the resort. Not included are air to and from Manila, and alcoholic beverages. A $500 deposit is required to hold a spot. If you are interested, please contact Marli Wakeling.

Objectives: Nudibranchs, frogfish, mimic octo, blue-ring octo, wonderpus octo, blue ribbon eel.
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 150. Our members include some that are new to diving or to the Seattle area. Many have over 1000 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 at Woodland Park, 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 Kimber Chard and Gene Coronets. 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 2014 Board

President: Mark Wilson  Treasurer: David Riley  Webmaster: Dave Ballard
Vice President: Kimber Chard  Programs: Gene Coronetz  Event Director: Andrea Naert
Secretary: Doug Miller  Newsletter: Todd Olsen  Refreshments: Catherine Knowlson