

PARADISE Dive Club

February 2006

Visit us at <http://kelp.chem.ucsb.edu>

Volume 12, Issue 2



President's Log

by Dan Lindsay

I can't even remember the last time I dove! Between work and adverse weather, the dive opportunities seem to be rarer and rarer. I'm taking this time to get your attention to participate in some of the other non-diving activities that we have coming up soon with the Paradise Dive Club. Next weekend we will rendezvous for a hike up to the old Hot Springs in Montecito. Join us if you can on the 5th at 11 a.m. Details are in the activities section. We're also going for it again with the second Invitational Golf Ball Dive—Goleta Beach, on the 12th.

Also during the 'low season' we'll be continuing with movie night, where dive-intensive movies are coupled with copious amounts of popcorn and fun with other PDC members. Consider joining us for one of these evenings.

Keep your schedules open in May as we start to plan for our annual campout at Santa Cruz Island. Please let us know if you are interested in joining us this year.

We're also looking into a summer weekend in San Diego for dives on the *Yukon* and other nearby sites. Again, let us know your interest in such a weekend.

Once again we will have club t-shirts available for sale at the meeting. We've gotten a lot of different colors this year with a good selection of sizes.

One final plug, for our raffle. As you know, our annual dues are fairly low for the number of activities we provide (like barbecues), so jump on in and join the raffle that's held at the monthly meeting. Proceeds go right back into financing club activities. As the old-timers know, it's usually the first-time visitors who clean up during these raffles, so make a donation toward an excellent chance to win something special!

Sponsors. We have a special relationship with the local dive shops—they like us because we dive and spend money in their shops, and we like them because they're right here and we can try before we buy. Remember to show your club card for your discount and mention that you're with the Paradise Dive Club—the largest dive club in the Santa Barbara area.

Join the club, get cool stuff

- ∂ Monthly meetings with entertainment
- ∂ Raffle prizes (who doesn't like prizes?)
- ∂ Great dive buddy pool
- ∂ Beach & boat dives, including weekly night dives
- ∂ Club BBQs & other activities
- ∂ Free airfills & gear discounts at local dive shops
- ∂ Right to proudly wear the official PDC T-shirt (because we do have the coolest logo)

Mark your calendars...

We meet on the last Tuesday of the month

Rusty's Pizza, Goleta

in the Kmart Center, 270 Storke Road

6:30 pm - social hour

7-8:30 pm - feeding frenzy, meeting,
raffle prizes, entertainment



Bulletin Board

- We are moving our Paradise Dive Club listserv over to Yahoo! Groups—keep an eye out for an e-mail invitation to subscribe. You do not have to sign up for a Yahoo! account in order to subscribe. Our club e-mails are how we send out information about upcoming events and communicate with our members between meetings and newsletters, so we do hope you'll sign up to continue getting these messages.
- Upcoming events at the SB Maritime Museum: JASON Community Day on Saturday, 2/4, to celebrate this year's JASON expedition with live broadcasts, arts & crafts activities for the kids, and more. The tall ship *Lynx* will be in the SB Harbor on 2/18-20; step aboard for a tour or an adventure sail. On 2/28, Mike Pyzel will be offering an adult ed course at the Museum on "Cruising Skills for the Channel Islands." Visit www.sbmm.org for more details.

2nd Annual Golf Ball Dive February 12 at Goleta Beach (second attempt)

We tried this in December but got rained out. Here's hoping for better luck in February!

Join us at Goleta Beach, by the pier, at noon on Sunday, February 12, for our second annual Invitational Golf Ball Dive.

Here's your chance to clean up the ocean and have fun doing it—plus the chance to win fabulous prizes!—with an underwater scavenger hunt for golf balls.

Bring your own lunch if you want to hang out on the beach afterward.

Paradise Dive Club Officers

President - Dan Lindsay	964-5020
Vice President - Steve Trainoff	571-1622
Secretary - Bruce King	452-7590
Treasurer - Mark Silva	453-2001
Membership - Rob Budny	684-5650
Newsletter - Stacey Janik	637-4487
Sgt at Arms - Laurie Van De Werfhorst	685-9710
Entertainment - Mark Bursek	564-1923
Raffle - Ralph Goldsen	681-0400
Webmaster - Will Chen	560-8069
Historian - Cheryl Weakliem	967-2827

Sponsors:

Anacapa Dive Center	963-8917
Aquatics	967-4456
Blue Water Hunter	564-6677
Truth Aquatics	962-1127

Visit our Web site at
<http://kelp.chem.ucsb.edu>

E-mail newsletter articles to
sjanik@gmail.com

Membership: \$30/year (May-April); \$25/year for renewing members. Includes monthly newsletter. For details or to join, contact the membership coordinator, Rob Budny, at rob.budny@gmail.com.

February 5 Hot Springs Hike

The surf's up and the water's cold, so we're headed for the hills—the Montecito foothills, that is. Join us on Sunday, February 5, 11 a.m., at the trailhead to Hot Springs for a fun and invigorating hike.

Directions will be sent out by e-mail and given at the meeting.

Get on Board! February Boat Trips

- 2/5 on *Peace*, 7 a.m. departure to inner islands, \$110. Call Anacapa Dive Center, 963-8917.
- 2/20 (President's Day) on *Spectre*, 7 a.m. departure to Anacapa & Santa Cruz, \$85. Call Aquatics, 967-4456.
- 2/26 on *Truth*, 6 a.m. departure to inner islands, \$110. Call Anacapa Dive Center, 963-8917.
- Check the Truth Aquatics calendar at www.truthaquatics.com/calendar.htm for open boat dives and extended trips; if you've never been on a multi-day trip to the Channel Islands, you're missing out!

Wrecks as Bioclutter

article & photos by Carl Gwinn

When my sister and I were children, we collected shells from the bottom of the ocean in Kentucky: the Ordovician Ocean. Thick masses of crinoids, bryozoans, and brachiopods surface there, in reefs of half-billion-year-old limestone. I now know that those animals represented a sudden departure (during the immediately preceding Cambrian period) from previous, much simpler forms. As a diver, I see their nieces and nephews on the ocean bottom today; and I'm a slightly more distant relation myself.

The seemingly infinite amounts of plastic and aluminum we produce, as well as the extinction of so many other species, are now forming a geological layer that will certainly bemuse intelligences a billion years hence, should any visit this planet. Our period may represent a similar dramatic explosion of paleontological forms, perhaps followed by some more measured further evolution.

A few months ago I had the opportunity to see a few of these fossils in the process of formation in our own Channel Islands National Marine Sanctuary, on a cruise to monitor archaeological resources aboard the *R/V Shearwater*. Trip leaders were Coastal Maritime Archaeology Resources President Mark Norder and CINMS Cultural Resources Coordinator Robert Schwemmer. We viewed three wrecks, of different states of age and preservation: fossils in the process of forming, or failing to form.



Something, probably a boat anchor, had torn off the canopy since the previous survey a year earlier. The engine had dropped deeper into the sand. This fossil seems unlikely to make it to its billionth birthday.

The majority of our dives were on the *Winfield Scott*. This passenger vessel, originally built to carry 49ers to the California goldfields, plowed into Anacapa Island in a thick fog in 1853. The crew and passengers all survived, as did the valuable cargo including gold bullion. Most of the passengers had to stay in Frenchy's Cove for several days while the rescue ship dropped the gold off in San Francisco before returning for them. Despite the age of the wreck, a surprising amount has survived. Big sections of the paddle wheels have become encrusted with coralline algae. The line "of his bones are coral made" drifted through my head. With Ranger Ian Williams of the National Park Service, I tested the reliability of underwater surveys, by repeated measurements. I found it an exhausting and disorienting task to swim the tape between benchmarks, like some schoolyard game gone too far. A huge piston lies on the sea floor: the ship's engine developed a pressure of only 17 inches of water, so gigantic pistons were needed to yield useful power. Development of stronger steel has already relegated these anatomical features to evolutionary history. But, aided by the coralline algae, the bones of this creature may survive at least a few more centuries.

On a Sunday of perfect weather we dived on the *Aggi*, a sailing ship that survived into the age of steam and steel, as a low-cost, low-speed transport. While the *Aggi* was being towed to Panama in 1915, a severe storm forced the tow rope to be cut. The *Aggi* drifted ashore at Talcott Shoals on Santa Rosa, where she became the object of battles over salvage, and a convenient set for films with nautical themes. Robert Schwemmer might smile and call the thick growth of kelp "bioclutter." Underneath, much of the wreck remains. Her structure forms much of the bottom in that particular area, with occasionally recognizable parts of masts or engines. Already at an evolutionary dead end during her life, she has a good chance for a long afterlife.



A Grumman Avenger, one of two torpedo bombers that collided and crashed on a training mission during WWII, lies at 125 feet in the channel. Careful work by Captain Terrence Shinn found a small bump by depth sounder. Mark and Robert dropped a line at the spot, and made the first dive on the wreck. They reported the airplane in good shape, though degraded from previous visits.

With CINMS Research Coordinator Sarah Fangman, I dropped quickly down the marker line, then swam upcurrent along the trail that the anchor had dragged through the brittle stars in the sand. The light airplane's skin is peeling away as seawater dissolves the aluminum. In the brief time before our dive computers demanded that we ascend, we photographed and videoed the wreck.

Ed Stetson's Catalina Trip: April 28-30

Ed is organizing his 26th annual trip to Catalina this spring, April 28-30. Details will be announced at our next meeting, or contact Patty Bryant at patty_bryant@cox.net.

This is a terrific event and an annual tradition for many local divers. Diving will be at Casino Point, or you can book your own boat trips. There will be a group BBQ at Bird Park on Saturday night.

SCUBA Show 2006: June 24-25

The 2006 SCUBA Show will take place June 24-25 at the Long Beach Convention Center. This is the 19th year of this popular event, which includes all kinds of diving-related exhibits, new gear expos, and dive travel offers, many offering free drawings or show discounts. There is a continuous underwater film festival and special dive seminars (available at additional charge) on topics like photography, travel, and critter behavior. General show admission is \$9, and discount coupons are available at dive stores. For more info, visit www.saintbrendan.com.

The Medes Brothers: Pos, Neut & Neg

by Lance "the One-Armed Bandit" Rennka

On their first trip to the ocean, the Medes brothers were excited by the beach and surf. They saw several boys their own age, bodysurfing by pushing off the bottom just before the wave broke and riding the churning foam to the beach. Neg said, "Looks like fun, last one in is a rotten egg!" Not wanting to be a "rotten egg," the boys raced into the water. They dove through a breaking wave and swam a short distance beyond the surf zone. As soon as they stopped swimming, Neg sank. He struggled to the surface, splashed a bit, yelled, "I can't stay up!" and sank again. Pos yelled to Neut, "I'll get him!" and tried to dive down to the bottom, but only managed to waste energy. Neut said, "You stay here, I'll get Neg." Neut easily dove to the bottom, spotted Neg, and brought him to the surface. Pos grabbed and supported Neg on the surface as he spluttered and coughed. The three Medes brothers had just learned a physics lesson—Archimedes' Principle.

The Single Most Important Piece of Dive Gear: The Weighting System

At dive sites around the world, the same statement is heard: "You don't need that much weight." With new divers, trained in wetsuits, that may be a correct statement at a warm-water resort. However, many divers never really learned their physics lessons and... everyone's different.

Having experienced people in the pool, without gear, who need 16 lbs. to be neutral, the first criterion in proper weighting is basic body buoyancy—how much does it take to make you neutral in a pool, without equipment? People have different buoyancy changes when breathing, varying from 2 lbs. to 6 lbs.—that's why you do fin-pivots (new divers tend to inhale deeply, hold their breath, exhale quickly, inhale quickly, and hold their breath—survival programming when underwater). These can be up to $16 + 4 = 20$ lbs. body buoyancy, without any dive gear. The next

consideration is how much buoyancy your protective suit requires to be neutral—the average $\frac{1}{4}$ " farmer john requires 20 lbs., so $20 + 20 = 40$ lbs. And then you must take into consideration the change in buoyancy as the fabric on your suit gets wet—up to 4 lbs. negative change, usually noted at the beginning of the second dive. Then the change in buoyancy as you use up your air—72 cubic feet = 3 lbs. and 80 cubic feet = 4 lbs. positive.

Weighting System Criteria

At the beginning of your dive, you must be able to submerge by dumping the air out of your BCD and exhaling to do a foot-first descent (much easier to equalize). At the end of your dive, you must be neutral (slightly negative is OK) at the 15 ft. stop, with 500 psi of air in your tank—make sense? You do the math on how much weight you need.

Comfortable in the Water Criteria

Weights should be balanced on the sides (no list) and slightly forward of the centerline of your body (face down). Fix the weights so they don't move! Some divers may need ankle weights, shoulder weights, or thigh weights for proper body positioning when neutral. This is a Center of Buoyancy (CB) vs. Center of Gravity (CG) exercise—more physics. Body position "stability" is the "spread" between the CG (weights) and CB (BCD). A controlled descent should be made in a horizontal, slightly head-up, attitude (so you can look around)—how you swim under water. When you ascend, the "bubble" in your BCD moves to your shoulders for a head-up attitude.

It Takes What It Takes!

Blame the Medes Brothers. There's a reason the Buoyancy Control Device was developed, it's much more than just a surface flotation device. A great dive club exercise is to plan a diver buoyancy check day/dive. Your dives will be a lot easier if you get your weighting system set up correctly for consistent, proper body positioning during: descent - dive - ascent - 15 ft. stop.

Mystery Foam on SB Beaches

article & photos by Steve Trainoff

Gretchen and I experienced a strange phenomenon at Hendry's on January 3. I think it is an object lesson on why you don't want to dive right after a rainstorm. The sand was covered with 2-3 feet of a thick white foam. I had heard about this effect, but have never seen it in person.



I don't know if it is entirely "natural," but apparently algal blooms or other sources of proteins are stabilized by the carageenans from the kelp. The strong wave action whips it up into a thick froth. Carageenan from kelp is a big industrial chemical that is often used in food and cosmetics. For example, most beer has some added to stabilize the foam and give it that nice thick head.

On the other hand, I find it highly suspicious that this froth was MUCH thicker at Hendry's than it was at Haskell's. I suspect that some of the protein is from urban runoff (i.e., sewage). I haven't seen the water quality report for that week, but I would be willing to

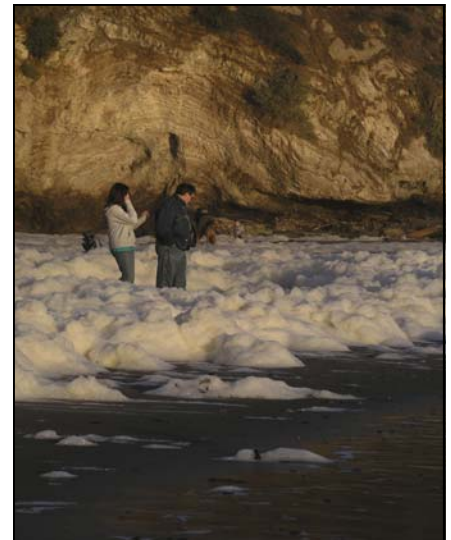


bet that the bacterial levels were sky high. The surfers didn't give it a second thought, though, since the waves were gnarly. I heard one surfer ask another, "Dude, what is this white stuff?", to which the other replied "I dunno... some sort of toxic waste," as they continued wading through it.




Somehow I just don't trust it when the surf "jiggles."

Editor's note: Julie Bursek of NOAA says that water tests were performed to determine the exact nature and cause of the mystery foam; we should be able to report results in the next newsletter.



February 2006

Don't forget...
MONTHLY MEETINGS
January 31 and February 28
 Rusty's Pizza in Goleta

Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1	2	3	4
5 Hot Springs hike	6	7	8	9	10	11
12 Golf ball dive	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27					

Night Dives

Upcoming Events

- Hot Springs Trail hike, Montecito foothills, 2/5, 11 a.m.
- Golf ball scavenger hunt, 2/12, Goleta Beach, noon
- Annual campout on Santa Cruz Island, coming up in May

February Meeting Entertainment

Chris Voss
 from the California Abalone Association

Thursday night dives: To find out where the group is diving or to be added to the night dive e-mail list, sign up at http://groups.yahoo.com/group/PDC_midweek_dive or send e-mail to PDC_midweek_dive-subscribe@yahoogroups.com.



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