

PARADISE DIVE CLUB

Reef Check



Upcoming Meetings

Club meetings at Cody's Cafe

7:00pm, but show up early for dinner and socializing.

June 30

July 28

August 25

Deco Stops

5:30pm, 2nd Friday
after the club meetings

Club Sponsors

- [Truth Aquatics](#)
- [Santa Barbara Aquatics](#)
- [Blue Water Hunter](#)
- [The Eagle Inn](#)
- [Channel Island Dive Adventures](#)

Editor's Note

This special edition of the club's newsletter is dedicated to Reef Check. Club members Véronique Lisi and Michel Giroux decided to take the training after a presentation by a volunteer about this organization at a recent club meeting. This is their story of that training as recounted by Véronique. Images in this article used with permission from Reef Check.

Reef Check

Véronique Lisi

Back in January, a volunteer from Reef Check gave the PDC a presentation on what they do and how we can get involved. Halfway through the presentation, I told myself: "is she **really** telling me I can scuba dive for science, or do science while scuba diving? Could it be that, with some training, I could combine my two passions in one activity? Where do I signup!"

That night, I worked (not so) hard to convince my "always wanted to be Cousteau" husband that this was a great opportunity for both of us to enhance our scuba diving and gain a truly unique Californian experience. And so, not long afterwards, we were signed up and waiting for our study material.

Fast forward to the Monday before the class, when we received our study packages. We spent the week studying about 80 flashcards of fishes, inverts, and algae while reading the manual on why and how to conduct a Reef Check survey.

Here comes Saturday and up to San Luis Obispo we drive for a weekend of class and pool training. We meet with Dan Abbott, our instructor from Berkeley, a scientific diver who has contracted for Reef Check for some time and now works full time with the organization. We also meet our fellow trainee,

Dive Club Officers

President	Paul Bullock
Vice President	Michel Giroux
Past President	Kellen Tobin
Treasurer	Jim Axtell
Secretary	Rich Cirincione
Membership	Ivan Girling
Sergeant at Arms	Lynn Axtell
Entertainment	Juan Beltranena
Social Media	Jacek Smits
Publications	Jacek Smits

Mission Statement

Paradise Dive Club is a diving and social club. The Club provides a setting that allows continued growth in our sport and one where friendships can develop and flourish. Paradise Dive Club promotes fun, safe diving related activities and environmental awareness. The Club was founded to provide social and recreational opportunities to people with mutual interests in snorkeling, scuba and free diving, and to educate and inform its members and the general public in matters related to diving and the ocean, particularly in regard to issues involving coastal Santa Barbara County.

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Gary, another member of the PDC and Jenny from Colorado, who self describes as a landlocked marine biologist.



Reef Check Training Materials & Slate

During that weekend, we went into details over the survey protocol and learned how to identify, in an instant, every species that are being monitored in the program. We sweat over brown and olive rockfishes, the sargo and the pile perch and the various abalones. We trained in a pool on how to lay out a transect and practiced counting urchins using poker chips. We left Sunday evening after acing all our exams and more excited than before about the upcoming trip to do the “real thing”.

Two weeks later, we board the Peace dive boat out of Ventura for a 2-days training trip to Anacapa island. We meet there with the LA class of another 4 trainee, a number of volunteers doing their annual recertification and a large group from UCSB who decided to go the extra mile and get a Reef Check certification. Overall, 24 of us leave early Saturday morning for the island.

We suit up for the first dive. The goal: do an invert and a algae survey and come back to the boat. Sounds pretty easy right? Just follow the already laid line, and record, on a 2m (-6 feet) wide band, all the inverts you see. It turned out not so easy at all! First of all, you can't really see 2m wide and so you need to move constantly from left to right. It is also fairly hard to remember which red urchin you have counted (they kind of look all the same) and which crowned urchin you have not. In between the

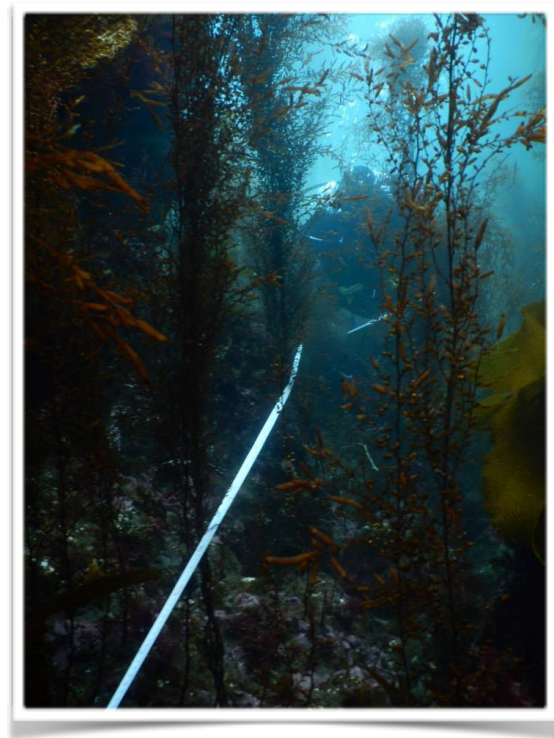
surge, the kelp, the rocks underneath which you need to look, the large male sheephead which constantly disturbed me, and the large number of species, I finished my transects exhausted!

I regrouped with my buddy and back to the boat we went for a debrief. It turns out that this was actually an unusually dense transect. We discussed what we may have missed, what we did right and wrong and so on before we proceeded to two other training surveys on that day. Do I have to mention that that night, after dinner, I fell in my bunk and slept like a rock!

The next day, we all got tested on the invert, algae and reef composition transects. For this particular transect, one needs to record at every meter (~3 feet) the substrate, cover and relief of the reef. This day, that meant working your way in a very dense kelp forest, in a shallow reef with high surge and wedging yourself between rocks to identify a random point at the bottom of the reef. I do not think I ever cursed as much in all my dives put together as I did on that one single dive! But the data that came back was spot on with what the experts and my buddy had recorded.



Michel Giroux Compiling Data



Transect

Both Michel and I were able to pass those three transects surveys and had some time to practice fish transects, the one we knew would be the hardest. The reason being that fish actually move, quite fast, and that at the same time you are following your heading, laying out 30m (~100 feet) of tape, and swimming at a relatively slow speed, you need to identify, count and size to the nearest cm (~1/3 of an inch) the fishes you see. We both have training in wreck dives and penetration and so following a heading and laying out a line was fine with us. We also practiced so much our fish ID that this is now second nature. The only

difficult area was the sizing. Turns out that we almost got checked out on this survey as well, we just need to practice, as we expected, the sizing before our data can be considered good quality enough to be included in the Reef Check database.

The training is now over and I had time to do some leisure dives since then. Even though the training was demanding, this experience has been truly an amazing one and I am very, very happy I did it. I now am like the master builders of the Lego movie: every dive I make, every fish/invert/algae I see brings up a name and characteristic list and this truly enhances my diving experience. I also have never seen as many abalones and lobsters as I have since my training!

If you are willing to work hard for reef monitoring, you should definitely consider Reef Check citizen-scientist program. Take a look at [this video on YouTube](#) to see what others think of scientific diving. You can also help in a number of other ways as described on [Reef Check's website](#).



Group Photo of Reef Check Training

Upcoming Club Events

- First Saturday of the Month: August 1, September 5
- Monterey Camp & Dive Trip: July 9-13
- Underwater Photo Contest & FSotM: September 5
- LA County Coast Beach Dive: TBD
- Pumpkin Carving Contest: TBD

Odds & Ends

Staff Writer

Reorganization of Existing Anatomy for Self-repair

Experimenting on the moon jelly *Aurelia aurita*, the [Goentoro Lab](#) at Caltech found that the jelly ephyra repairs itself not by regenerating lost parts, but by reorganizing existing body parts and arms to regain radial symmetry. Link to [article at PNAS](#).

Many New Species Found in the Philippines

Researchers from the California Academy of Sciences led by [Terry Gosliner](#) have found about [100 new marine species](#) during an expedition to Puerto Galera in the Philippines.

Shifting of Marine Habitats

The [National Science Foundation](#) reports on research showing that warmer, lower-oxygen oceans will push marine animals away from the equator.

The Club's Mailing List

It is a (very) low volume mailing list but we do send out the occasional announcement and it provides members with a communication channel to ask questions or to arrange diving opportunities by sending email to pdclub_members@paradisediveclub.org. Paid up members will be added automatically.

If You're Reading The Print Edition

If you're reading the print edition and want to find out about the links included in this newsletter, take your favorite web browser to www.paradisediveclub.org/newsletters, or scan the QR code to the right with your smartphone, and download the electronic edition.

