



Buddy Line

Annual Meeting Dec. 8 at Asian Art Museum

by Ralph Wolf

Mark your calendars for NCRD's annual meeting on Thursday, December 8th, at the San Francisco Asian Art Museum. The formal meeting to elect Board members for 2006 will be at 7:30pm in the classroom right next to Café Asia. You'll want to come earlier than that, though, to check out the museum and share a good meal and quality time with your fellow divers.

The museum is open late on Thursdays. Evening hours begin at 5:00pm, and admission is only \$5 (free for museum members). NCRD has a private tour scheduled at 5:30pm, which will include some of the museum's 500-year-old shipwreck artifacts. Space is limited on the private tour; please email diveplanner@rainbowdiver.org to reserve your spot.

Even if you have to miss the tour, you can still join us for dinner at 6:30 at Café Asia. They have surprisingly good food, given their modest prices and cafeteria-style format. Light snacks, beer wine, and six types of authentically

prepared green tea are also available.

We'll keep the meeting short to allow time to enjoy the museum. But, electing Board members is essential for the health of our club. We've got good momentum and a lot of great stuff planned for next year and want you to be a part of it. To keep it from getting too dry, we'll have door prizes and maybe even a holiday gift for you, too.

From Hwy 80W or 101N, take the 9th St/Civic Center exit. Follow 9th St until it crosses Market and turns into Larkin. Follow Larkin to the Museum, 2 blocks later. Parking meters are free on the civic center plaza starting at 6:00pm. The last hour of metered parking costs \$2.50 in quarters.

Editor's Log

by Karen Doby

That time of year is fast approaching when our thoughts naturally float to holiday cheer, parties, and spending time with family and good friends. The NCRD Board is well into the spirit of looking forward to 2006 and invites you to attend our combo meeting of the general membership, end-of-year holiday party and annual election. This year's event will take place at the SF Asian Art Museum on December 8. Don't miss it! Ralph Wolf's cover article details what's in store for you.

In case you're wondering what this election fuss is all about, Ralph also lifts the cover to give you an inside peek at how your dive club works. Check it out on page 4.

November's *Vision* trip was a huge success, providing not only great dive adventures, good food, and superb company but also a front-row seat at Navy maneuvers at San Clemente Island. David Zippin reveals all on page 5 as our motley NCRD crew weaved its way through the Northern and Southern Channel Islands.

This issue's creature features focus on animal encounters, starting with Whale Sharks on page 2 by yours truly, followed by Dean Bradley's incredible account of diver interactions with Caribbean squid on page 6. She even has photos to show how it's done!

You may have noticed a couple of new items in our last issue. October marked the official debut of the club's new logo in print. On page 8, Jack Johnson explains the four elements of the new logo and why they were chosen to represent our club.

Also, we continue our new tradition of advice from our Dear Dive Nerd, who this week waxes poetic on <drum roll> camera and strobe batteries! I'm amazed that so many interesting points could be made on this timely topic. With many people now carrying cameras underwater, it demonstrates the extent to which our Dive Nerd is willing to work for you!



Baby Horn Shark, sighted on November's *Vision* trip

Photo by Ralph Wolf

First Glimpse: Utila Whale Sharks

Ten *a-ha*'s my mother never told me about whale shark diving

by Karen Doby

When GLUG invited NCRD to a week of whale shark diving, I could hardly contain my excitement! Imagine swimming alongside the biggest fish in the sea in a stream of migrating mammoths, feeling dwarfed time and time again as their giant, 30'-long bodies swoosh past with slow sweeps of their powerful, spotted tails. This dream urged 3 NCRD'rs to Utila a year early, unwilling to wait for GLUG's adventure in May, 2006. We wanted to see whale sharks, and we wanted to see them *now!* June is, after all, "whale shark high season" in Honduras' Bay Islands.

Dive books failed to prepare me for the experience of being with a whale shark for the first time. They didn't warn that my breath would catch and my heart would stop at first sight. I was amazed at how widely my eyes would stretch to absorb the shark's enormity, at how awe would make me forget to raise and point a camera. And afterward, the books would give me no words to describe how it felt to be awash in a giant sea of white spots.

Nor were the practical aspects of whale shark diving anything as I'd imagined. Hindsight lends insight to many things that might be helpful in an Utila dive guide. Here are a few that may be of interest to NCRD'rs planning to dive with GLUG next May:

A-ha #1: *Don't believe the weather report!*

Utila doesn't have its own weather station. The nearest reports come from the neighboring island of Roatán and from San Pedro Sula on the Honduran mainland, and neither is accurate for Utila.

It's common for thunderstorms on the coast and even on Roatán to bypass Utila completely. Despite a forecast for rain, heavy thunderclouds and thunderstorms in Roatán and San Pedro Sula, we enjoyed perfect sunny weather during our entire week on Utila. A few nights, raindrops tap-danced on our rooftops, and magnificent lightning shows could be seen far over the mainland.



Surface cruising (above) and feeding (below)



A-ha #2: *Listen when your travel agent suggests flying through Houston.*

Four international airlines serve Honduras. These are American Airlines and Taca via Miami, Continental through Houston and Newark, and Delta via Atlanta, none flying all the way to Utila. The AA flight from Miami to San Pedro Sula (airport code: SAP) entails an overnight stay in SAP. Taca leaves Miami early enough in the day that an overnight is not required, flying via El Salvador to SAP. Continental avoids overnight stays, flying via Houston to SAP. These international flights connect in SAP to a propeller plane bound for La Ceiba, where we change to a tinier plane into Utila.

The two local connecting flights to Utila add about US\$160 to international travel costs. An agent is useful for booking flights on Atlantic Airways or Sosa Airlines since neither uses computerized reservation systems, and flight times can change unexpectedly. The resort manager should confirm all return flights, as the Utila airport is truly no more than a wooden bench in the middle of a mosquito field. No airplanes, no ticket counters, no airline agents, nada.



A-ha #3: *There is no real "season" for whale shark sightings.*

Locals say Utila has no "season" for whale sharks, that whale shark sightings occur sporadically, year-round. Other credible sources say the best time is March-April, while some say the best time is September. One resort on the island claims June as "high season".

A-ha #4: *Locals don't support guarantees of whale shark encounters.*

Locals frown upon dive operations who advertise whale shark encounters. Operators who use airplanes and helicopters to guarantee whale sharks are "taking it too far". People should play fair and work to find the animals; otherwise, there's no real accomplishment. Above all, whale sharks should be respected and not harassed. Locals tell the story of one trip organizer who would bring pods of divers to Utila for the sole purpose of whale shark diving. He broke all the rules: hogging the boil, repeatedly harassing the animals, even spoiling other groups' experience of the animals. In reaction, the local community established its current rules and regulations. The predominant feeling is "Diving is great here, with or without whale sharks. Utila reefs are beautiful. If you happen also to see a whale shark, it's just icing -- cherish the experience."



Now you see 'im ...



... now you don't (length approximately 20')

A-ha #5: *Whale shark "diving" is skin diving, not SCUBA.*

The search for whale sharks is carried out during the surface interval between the two morning boat dives. Unlike other areas, in Utila whale sharks are rarely seen near the reefs. Although SCUBA dives focus on the beautiful walls and nearshore fringing reefs of the island, whale sharks are typically sighted in the deeper, offshore blue waters where not much else is likely to be seen. SCUBA diving with whale sharks is permitted only for members of registered scientific research expeditions. All others may don only mask, fins, snorkel and suit. Touching, grabbing or riding whale sharks is prohibited.

A-ha #6: *Don't leave your snorkel in the hotel room, even if the captain swears that whale sharks are no longer in the area.*

When we first inquired about whale sharks, neither boat captain nor divemaster was encouraging as whale sharks hadn't been sighted in Utila for several weeks. The captain surmised that they had already moved north to Belize. Every morning, we heard the same

story. By the fourth day, I had given up hope and left my snorkel back at the resort. As luck would have it, that was the very day that whale sharks appeared!

A-ha #7: *You can't spend the entire dive day with whale sharks.*

Regulations discourage harassment, so boat captains may attempt no more than two contacts daily with the animals. After that, the boat must leave the area. First, the captain brings his boat into a circular "boil" of jumping baitfish and watches for the feeding whale shark to approach the surface. When the captain yells "go", everyone noisily piles into the water at once – with no concept of a soft entry! If snorkelers enter prematurely, the whale shark alters its path to avoid them, while stragglers may miss it altogether. Jumping exactly at captain's command puts divers very close to the animal -- just above, to the side or in front of the shark. Although the shark swims slowly, it quickly outdistances surface bobbers in about 20 seconds before they lose sight of the animal in the blue. Snorkelers who swim alongside or atop the shark will get more time with it.

A-ha #8: *Getting a good photo of a whale shark can be difficult.*

The sudden, chaotic appearance of swimmers splashing at the surface drives a whale shark to alter his path or dive deeper. On our boat, soft entries without splash and loud voices were not possible. Photographers should have cameras ready, turning on video before jumping off the boat or using the camera's burst mode. Use of flash, strobes and lights is prohibited, so a wide lens and a red lens filter are useful. Be aware, images taken while bobbing at the surface may accidentally showcase your fellow divers' swim fins, so breaking away from the pack to snorkel with the animal may result in better image capture. Always take notice of other vessels queuing up to the boil.

A-ha #9: *There's no reason to be disappointed when whale sharks don't show.*

The reefs and walls around Utila are beautiful and well preserved. The local community covets its marine resources and enforces regulations to protect the reefs and support their recovery after years of overfishing. As a result, Utila's reefs are replete with a variety of life and color, animals and plants of all sizes and maturity, including an abundance of ecologically threatened black

coral even at shallow depths. In addition to common Caribbean marine life, the elusive toadfish, seahorses, squid, frogfish, lobsters, shrimp, and 3 species of turtle thrive in Utila waters.



A-ha #10: *Whale shark sightings are addicting.*

Maybe it's because even in "the whale shark capital of the world," sightings are neither guaranteed nor predictable. Maybe it's because the time spent with the sharks is so limited. Maybe it's that time on this planet for these animals is burning out. Whatever the case, my first encounter left me wanting many more.

Whale sharks are classified as "critically endangered". Because they feed on plankton at the water's surface, whale sharks fall prey to fishing nets, pollution and overzealous capitalists selling animal encounters. Whale shark fins sell in Asia for US\$400-500 apiece. Sharks are decreasing in numbers far faster than their newborn population can keep pace. Although the largest whale shark measures 60 feet, today a typical length is more like 20-40 feet.

If you're ever lucky enough to swim with a whale shark, count yourself among the blessed and above all, savor it!

Information on GLUG's trip to Utila in May, 2006 may be found on their website: <http://www.glug.co.uk/Events.php>

Inside Your Dive Club

by *Ralph Wolf*

Have you ever wondered how your dive club really works, or how it could be made to work better? Read on, and the secrets will be revealed...

NCRD is a California Non-Profit Corporation. We don't pay taxes, but every year we are required to elect a Board of Directors and file an annual report with the state. According to its by-laws, the club has six voting Board members, who are elected at the annual meeting. These six Board members then choose a President, Treasurer and Secretary from amongst themselves. The Board has the power to create and dissolve standing or ad-hoc committees, such as Newsletter, Programs, Membership, Dive Planning, Pride Festival, etc. Often, the chairs of these committees are also Board members, but this is not required.

The Board manages all routine expenditures and operations of the club. Only if the Board deems that a particular question is "significant" will it be put before all the members for a vote.

All regular club members have the right to run for the Board, vote to elect Board members, attend Board meetings, inspect the club's records, approve any changes to the by-laws and to petition for the recall of Board members. (If you want details on that stuff, email any Board member and we'll send you the complete by-laws.)

So much for by-laws and theory! But, I've been in the club for nine years now and I've been on the Board before. Let me tell you how it really works...

NCRD is kept running by a group of unpaid volunteers. Sometimes the group is big and active. Other times, just one or two key people are holding down the fort. Our motives are never simple. Often,

we're grateful for what we've learned from the club and wish to give something back. Sometimes we like to feel needed or want to see something "get done properly". Usually, though, we get involved simply because we like the club and don't want to see it wither away — and we all know that will happen if **somebody** doesn't do the work. It can be aggravating at times, but there are rewards too. You get to know good people and can make lasting friendships.

Let's grow our club in a healthy, sustainable way. That means more people pitching in to share the work, doing what they are naturally good at, rather than one or two people doing too much and getting burned out.

As our annual meeting comes around, think about what **you** could do to help the club. If you can commit to be on the Board for a year or organize a warm-water vacation for 20, that's fantastic! There are lots of other ways to help too: write an article for the newsletter, suggest a speaker for a club meeting or organize a class or social event. If something in the club isn't meeting your needs, help make it better! When you see something good or cool happening, let people know you appreciate it.

Attitude is everything. If you want to help but aren't sure how, just ask a Board member how the last meeting went — you'll find out right away what the issues of the day are. If anything sounds fun to tackle or needs your special talents to get resolved, then you've found yourself a project!

NCRD is a wonderful group of people. Everyone I've met here is some combination of smart, funny, adventurous, caring, successful, environmentally aware and

living a healthy lifestyle. I haven't found our unique mix of character traits in such abundance anywhere else in the GLBT community. Honestly, I joined the club for the diving, but I've stayed for the role models. That's why I'm running for the Board and volunteered to be Dive Planner for 2006. I want to do my part to keep the club strong.

How are you doing your part? There are lots of ideas that begin with "Wouldn't it be neat if ..." or "Somebody really ought to ..." but somehow they rarely make a difference. Ideas that start out "I've been thinking. I would like to ..." are the ones that benefit the club the most. Attitude is everything. Share your energy. Share your talents. The club needs you.

Lastly, we have two terrific women on the team as volunteers for 2006. Karen Doby will continue as Newsletter Editor, and Peg Stone will take over as Program Chair. However, they do not currently occupy Board positions. We need women's voices on the Board to keep the management of the club balanced and representative of all our members. If you would like to volunteer for the Board or nominate someone, please email diveplanner@rainbowdivers.org.

Diving the Channel Islands on the *Vision*

by David Zippin

What do F-16's, Boy Scouts, an aircraft carrier, teddy bears, sea lions, and kelp all have in common? These are all things that we saw on the club trip to the Channel Islands this past November 3-7! A group of 19 Rainbow Divers boarded the 80-foot California live-aboard, *Vision*, in Santa Barbara for a fun-filled 4-day adventure of great diving and camaraderie. The *Vision* can sleep 46 people, so the first thing everyone noticed was how much room everybody had!



The Channel Islands are a group of eight diverse and widely scattered islands west of southern California. Four islands make up the north Channel Islands, and four more comprise the southern Channel Islands. All of the north Channel Islands and one of the southern Channel Islands (Santa Barbara) are included in Channel Islands National Park and the 1,252-square-nautical-mile Channel Islands National Marine Sanctuary. The sanctuary extends from mean high tide of these five islands to six nautical miles offshore. Our trip took us to three of the eight Channel Islands: San Clemente and Santa Catalina in the south, and Anacapa in the north. Here's a recap of our adventures at each island.

After motoring all night, our group awoke to the sight of the southernmost Channel Island, San

Clemente Island, as we waited for a large naval convoy to pass in front of us. When the convoy of aircraft carrier, destroyers, and several support ships ordered us to stay put, the captain decided it would be smart to comply!

Located about 75 miles northwest of San Diego, San Clemente Island (36,000 acres) has been owned by the U.S. Navy since 1934. It is currently an active site for tactical training and the Navy's last live ship-to-shore firing range after Vieques, near Puerto Rico, closed in 2003. The island even has the distinction of housing a new simulated U.S. embassy compound to train troops in rescuing Americans. Needless to say, we saw and heard a lot of F-16s during our two days of diving around the island.

At San Clemente we dove many sites including The Garage, Castle Rock, Arch Reef, and Neptune's Wall. Diving highlights included beautiful, dense kelp forests filled with bright-orange garibaldi, aggressive sheephead, California scorpionfish, octopus, spent (and unspent!) 50-caliber ammo shells, and lobsters at every turn! The weather was perfect for diving—calm seas and sunny skies.

Santa Catalina Island is the only inhabited island in the Channel Islands (about 3,600 people). On day 3 we dove there on Farnsworth Bank, a state Ecological Reserve and popular deep-sea fishing spot. Despite arriving early in the morning, we had to share the site with almost a dozen fishing boats. Farnsworth Bank is an underwater pinnacle with a top at about 65 feet, covered in pink and purple hydrocoral, red and orange gorgonians, black-and-yellow striped treefish, copper rockfish, and the occasional sea lion. But watch out for that fishing line! Some rainbow divers even saw electric rays and an ocean sunfish (mola mola)!

Our next dives were at West End and in Emerald Bay, the site of a large Boy Scout camp. I wonder what they would have said if we had landed?! The shallow twilight/night dive was spectacular, with several sightings of California morays, large schools of blacksmiths, opaleyes, garibaldis, and señoritas (the fish, that is).

On our way home, we visited the narrow and rugged

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A happy NCRD crowd on the *Vision*

Photo courtesy of David Zippin

Squidly Deeds and Cuttlefish Quests

A Dialogue by Dean Bradley and Karen Doby

All Photos by Dean Bradley

KD: We got some good MPEG video of squid mating in Bonaire and Curacao this past September. Not only was it the first time I had seen squid underwater, the mating was in shallow water in broad daylight, replete with changing colors and fan-spread tentacles!

DB: Oooh, I'd love to see the video. Those squid are pretty incredible, and it's also pretty amazing to see their mating — so fast! If we're ever diving someplace where we see a few squid hanging out, I'll show you how to engage with them to the point where they'll let you touch them.

KD: What? You're kidding.

DB: I've done that a few times, and it's pretty amazing. Their skin feels so smooth. The film on their bodies is like that of a fish, but the firmness of their bodies is amazing. You can actually feel them sort of pressing against your hand or finger as you press back against them. I'll happily spend an entire dive with a group of squid. I'm hoping I'll get the same chance with cuttlefish in Wakatobi.

KD: OK, I have to hear this — details now, please!

DB: It is really remarkable. The first time I did this, a friend

and I were out in the lagoon because squid seemed to always be there, and we could have plenty of time to hang with them. Well, eventually, they let us get really close, like within a foot or so. Then we began stretching our hands out to them and they didn't bolt. Then we'd wiggle our fingers; I suppose thinking that since their tentacles are a way of communication, our fingers would be worth a try. Well finally, we were out there with them for maybe 45 minutes or so when one of them stretched out its tentacle and touched my friend's hand! It was so funny! Both of them jumped and retracted like lightning! But they



The squid and its reflection at the surface

kept being close to each other. So, we're both doing this, and finally, they stayed close enough for us to touch them! Or maybe for them to touch us, but it was never with their tentacles, or hasn't been since that first time. With this particular squid, my friend and I were both able to cup our hand under it, and it allowed us to lift it up to the surface of the water! I could feel its weight in my hand, what felt almost muscle-like, and I could feel its side fins fluttering against my hand, against my little finger and my thumb, which were just under its side fins. If the two of us hadn't been there witnessing it, I don't think anyone would have believed it. Also, I got some OK photos, one of her hand just under the squid at the surface of the water, but I don't think she was touching it at that moment. It was night, and I wasn't used to my camera, and the squid were startled every time the strobes went off.

Since then, my experiences have been that I hang with them for a while, flutter my fingers — not so sure this does anything except make me feel like I'm communicating — and just slowly, very slowly get closer. Eventu-



ally, I'm able to touch my finger — the length of it, not the pointy way — and hold it against their body just below the fin. It's so cool; I can feel the pressure of their body nudging against my finger as I nudge back against their body. I've had some really cool experiences in the water, but this thing with squid is the most blessed of them all.

According to my research, which includes contact with a Texas marine biologist whose specialty is cephalopods, cuttlefish are noted to have many of the same responses to people as squid do. In fact, there was a cuttlefish in the San Francisco aquarium at some point years ago who would swim over to the side of the pool, and people who worked there could pet it.



KD: Very cool! Although, I don't think it tops the charts as much as our interspecies sexual foreplay with giant mantas in Socorro! But certainly I'll never look at swimming squid as whale shark food again! The folks going to Wakatobi will have a treat to look forward to, watching you play with the cuttlefish. I think I just might try it, too!

DB: I don't think I went into much detail about the time I spend with them before they let me get that close — at least ten solid minutes, which feels like a long time when you're only under there for a short time and everyone



else is rushing to get someplace, not going off distracted by something else. I also didn't make clear just how slow and easy I had to move in the water. For example, blowing hard out the regulator would startle them, and they'd bolt; fast movements and they'd bolt. Once I was diving with someone who got between four baby squid and the five adults. If you notice, it's not uncommon for them often to be swimming in some kind of formation, especially if there are babies with them. The babies went berserk, and there was no way we were able to get close to any of them. Also, once someone went too fast, and the squid inked us, which by the way is really slippery, like mucous. So, it's a truly patient person who can do this—well, let's say a person who is patient in the water. That's a more accurate description of me for sure!

By the way, when they let us get closer and closer, their tentacles got all squiggly, and we could more easily identify the two claspers from the other tentacles. Generally their tentacles are out straight on the same plane as their body. Also, the ones in the Caribbean (the only ones I've 'communed' with) will do a little color changing, become maybe a little more brown. Lots of times, two bigger brown spots would show up on either side of their body just above their side fins, near the end of the body, opposite from the end where the eyes are.



It's always been difficult for me when I've wanted to stick around when the whole gang is feeling, "OK, cool, squid, now let's move on". Making a choice to dive alone is not really my idea of a good decision. But because the place I most enjoy diving in Little Cayman gave us 60 to 70 minutes of bottom time, I could still hang out and get some time with the squid.

KD: Well, not to worry, I'll be right there with you and the cuttlefish in Wakatobi.

DB: OK, you're on!

Northern California Rainbow Divers Wakatobi Dive Resort

July 28 – August 4, 2006

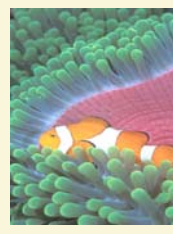
7-day Land Package
Divers US\$1,940--\$2,280

NCRD members receive a 5% discount

The Northern California Rainbow Divers present the ultimate destination in dive travel adventure, the incredible Wakatobi Dive Resort. The warm waters of this Indonesian paradise are known for pristine reefs and exotic biological diversity, home to countless numbers of beautiful, rare and unusual marine animals, many found only in Indonesian waters, including the amazingly tiny pygmy seahorse, leaf fish, and the blue-ringed octopus! With visibility up to 240' and water and air temperatures of 77-80°F, this trip is certain to hail amongst your most memorable diving experiences.



Lionfish



Clownfish



Mandarinfish

Our adventure begins when a private jet (included in trip price) whisks us from the magical land of Bali to the Tukang Besi archipelago of southern Sulawesi. Here, your bungalow sits only a few steps from the beach and the unbelievably diverse house reef. You'll enjoy three boat dives a day, up to 7 beach dives per day (virtually unlimited), dive guide services, three delicious meals prepared fresh daily by the resort's Balinese-trained chefs, as well as the unforgettable company of fun-loving, safety-minded lesbian and gay divers. In addition, you'll have the opportunity to savor local culture with a visit to a nearby traditional village.

The trip is filling fast, with 16 spaces already sold to a terrific bunch of NCRD'rs. Divers from other LGBT clubs will be joining us too! It's a rare opportunity to get a nearly all-gay week at such a beautiful place. Checks, credit cards, payment plan available.



Reservations: http://www.rainbowdivers.org/trips_wakatobi.html

All Photos © Wakatobi Resort. Used with permission.

A Fresh New Look! The New NCRD Logo

by Jack Johnson

Have you noticed the new NCRD logo? In the NCRD Board's renewed effort to bring fresh, new activities and ideas to the club, we decided that a facelift to our old logo was needed. We want a brand, a look, a feel that would represent who we are, what we do and where we are located. Thus, in the new logo, you'll find four basic elements displayed very prominently: a diver (what we do), blue water (where do it), a rainbow (who we are) and the San Francisco Golden Gate bridge (where we are from).



NCRD's new logo, introduced in June, 2005

This logo will be our primary graphic used to represent the club moving forward. We will likely have some additional versions for those applications where we need to print or display a single-color logo or one that is very small. Our plan now is to create some club T-shirts, sweatshirts, coffee cups, luggage tags, and the like that members may purchase.

Thanks, everyone, for your ideas. If you like the logo, let us know at membership@rainbowdivers.com.



NCRD's previous logo from the 1990s

(Continued from page 5)

Anacapa Island (699 acres), located 14 miles off the coast from Ventura. It is the only Channel Island to retain its American Indian name, from the Chumash word "Eneepah", meaning island of deception or mirage. One of the island's claim to fame is its support of the largest known breeding colony of the endangered California brown pelican.



Spanish Shawl Photo by Ralph Wolf

One of the best dives of the trip was our second-to-last at Coral Pinnacle. A small pinnacle with a top at about 60 feet, this site was covered in orange cup coral and spiny brittlestars. Every diver found the two large lingcod on the site and the many Spanish shawl nudibranchs. Two divers even saw what looked like a juvenile six-gill shark in a crevasse! The moderate current and deep depth caused several divers inadvertently to go into deco mode on their computers. Bad!



Electric Ray, as seen from above

Photo by Ralph Wolf

Overall, it was a relaxing 4-day trip with terrific diving, great conversation, good food, and lots of space on the comfortable *Vision*. Oh, what was the teddy bear connection?

Well, those were one diver's sleeping companions! At the end of the trip, everyone was already looking forward to next year's *Vision* trip—we can't wait!



Electric Ray, as seen from below

Photo by Ralph Wolf

New Column! Dear Dive Nerd



Ever had a dive-related question but didn't know whom to ask? One of our long-time, seasoned divers and divemasters extraordinaire is now available to help! No question is too silly or difficult for our dive nerd. Give it a try! All questions may be sent to DiveNerd@rainbowdivers.org

My underwater camera specifies use of rechargeable batteries. Does this mean I can't use regular alkaline batteries? My local store sells "digital camera batteries" which are dry alkaline and non-rechargeable. What difference does it make anyway?

You're talking about AA batteries, right? Most mini-cameras require custom lithium batteries, while larger "prosumer" digitals tend to use AA's. This is the first time I've heard of a manufacturer requiring rechargeable AA's, but good for them!

Anyway, when it comes to AA batteries, there are really only two kinds: Disposable alkalines and re-chargeable NiMH. (Zinc carbon and NiCad are obsolete). Those "Digital Alkalines" are mostly a marketing gimmick. They're just regular disposable alkalines, with maybe a tad lower internal resistance.

NiMH batteries will hold about the same charge as alkalines but at a slightly lower starting voltage (1.2v for NiMH vs. 1.5v for the alkalines). As it turns out, starting voltage is not really that important. What matters more is how the voltage drops when the batteries age and are subjected to loads. Alkalines will start dropping voltage right away and keep dropping as they discharge. NiMH will only drop a little bit until they are 80-90% discharged, and then they lose their voltage very rapidly. In practical terms, this means that a dive light using alkalines will keep getting dimmer and more yellow throughout the life of the battery, while one with NiMH batteries will stay bright and white until the batteries are nearly spent and then fade out rapidly at the end. (I always carry a spare dive light for this reason.)

Alkalines are great for clocks or TV remotes, where one battery should last for months or years. But for higher powered

electronics, I find the rechargeables are more convenient, cheaper, and more eco-friendly.

One big problem with alkalines is what to do when you know they're getting tired, yet they still work. You can't change batteries during a dive, and it really bites to have your strobe or camera shut down when you're only 10-15 minutes into a dive! On the other hand you'd hate to throw out batteries that are still useful. With NiMH batteries, I don't mind swapping out batteries that are still 1/3 full, to prevent losing power before the end of the next dive. I've developed a routine: memory card and camera



Alkaline batteries, digital alkalines, and rechargeables can be confusing to choose from. Our dive nerd tells you how!
Photo by Karen Doby

batteries are changed every second dive. Strobe batteries are changed every 4th or 5th dive. I start every night dive with fresh batteries in my lights, just for safety.

If I did that with alkaline batteries, I would have to buy 56 AA cells for a typical 20-dive liveaBoard trip! Considering that many tropical islands are not very sophisticated about waste disposal, it's much better for the environment if you leave those alkalines at home (or at least take them all home with you).

You do have to stay organized with rechargeables though. I use a plastic organizer box so they stay clean and dry. Button up means charged, button down is discharged. I mark the cells and keep them together in sets of four, since my toys and chargers all deal with four cells at once. That way they always charge and discharge as a set. Charging partially and fully discharged batteries together is a good way to shorten the life of your batteries.

Changing batteries on a schedule also means you can usually do it with clean dry hands in an air conditioned room. Cracking your camera case open during a surface interval is riskier, inviting corrosion and pinched or contaminated O-rings.

Nothing lasts forever, though. After 50-100 charge cycles, NiMH batteries do start holding less of a charge. Also since they're not disposable, you have to care for them more to minimize wear and tear. I've noticed that battery contacts can corrode from humid salt air, and you can dent the ends if you're not careful, just by dropping them into the battery compartment. Lower or slide them in instead.

Between trips, take the batteries out and store them separately. Clean the contacts, charge them and try everything out a day or two before the next trip. When they start looking ratty, or you ever flood your flashlight or strobe, then the batteries need to be retired. On long trips, I carry a pack of new ones, so I can retire a set if I ever have doubts about them. When they're through, just dispose of them as you would alkaline batteries.

Different brands of NiMH batteries compete on capacity. It's measured in "mAh," which stands for "milli-Ampere hours." The higher the number, the longer the battery will last, but it will take longer to recharge too. A few years ago, 1700mAh was a good battery; now they're up to 2500mAh. I stick to name brands like Panasonic or Energizer because I can't risk a cheap battery leaking and messing up my \$500 strobe.

Look for chargers that are rated for 100-240V, 50-60Hz input. You can take them anywhere in the world and just plug them in using an adapter plug.

NiMH batteries cost six to eight times what alkalines usually cost. Even if you only get 30-40 charges out of them before they're ready for retirement, they're still about five times cheaper than alkalines once the chargers are paid for.

In summary, for underwater photography, NiMH batteries are cheaper, more eco-friendly, and let you come up with a charging schedule where your batteries never die underwater, and you rarely have to change them in a hostile environment. The downside is a bigger up-front cost, and it requires a little more effort to keep your batteries organized.

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Club Policies

Board meetings are held once a month and are open to any member in good standing. If interested in attending, please contact any of the Board members listed above for location. Membership dues are \$35/year, \$55/year for domestic partners at the same address, and \$20/year for a newsletter-only subscription (available to addresses more than 150 miles from San Francisco Bay Area). Advertising is available. Rates are \$7/month to club members for a business card-size non-changing ad. It is \$10/month for non-club members to advertise. If you are interested in advertising, please contact the editor. NCRD does not warrant, recommend or guarantee the products or services contained in advertisements in this newsletter. Club policy re money paid for club-sponsored dives: unless otherwise noted, all monies are non-refundable.

Northern California Rainbow Divers, Inc. is a California non-profit mutual benefit corporation.



Northern California Rainbow Divers
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Calendar

- *December 8*
Annual Meeting and
Holiday Party at the
SF Asian Art Museum
- *December 10*
Diving at Pt. Lobos
- *May 6-13, 2006*
Diving with GLUG in
Utila, Honduras
- *July 28-Aug. 4, 2006*
NCRD Week at
Wakatobi, Indonesia