



February, 2006
<http://www.sacaim.org>

February meeting:
 Wednesday, the 22nd

Upcoming Events:

- February 22nd, 2006 General meeting
- March 12-22, AIM club trip to the Philippines
- March 22nd, 2006 General meeting
- July 15, 2006– AIM Film Festival on the Mountain
- Bonaire 2007, date TBD (see info at right)

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This Month at AIM

Discussion on the 2007 trip to Bonaire will be continued.. A date needs to be selected, as well as either a 7 or 10 day trip. Possible date suggestions are: Sat April 21-Tues May 1 or Sat May 5-Tues May 15th. Deposits will be due once we commit to a date and reservations are made.

We will also be discussing some future directions for AIM, including: organizing some regular group outings, some suggestions for those are: Winter trip: JAN/FEB/MAR dive to Monterey/Express or Point Lobos; Ano

Nuevo/Cambria; snow trip- how to photograph in bright white conditions (snow= frozen water... so water related, and the local water is cold anyhow...)

Summer Trip: Dive trip to Monterey. Monterey Express or Point Lobos, summer hiking to photography wild flowers, lake reflections, something aquatic

Fall Trip: Dive trip to Monterey: Monterey Express or Point Lobos

The first organizational meeting for the film festival will be set.

The February 5 minute

Our meetings are normally held at 7:00 PM (social hour at 6:30) the 4th Wednesday of the month at RoundTable Pizza, on Madison and Greenback. New Members and guests are always welcome. Call 989-1133 to order in advance. Don't forget to ask for the AIM discount.

member will be 'Tate Viehmann' a recent returning club member— be sure to come to the meeting to see what he's been up to lately!

Our guest speaker will (hopefully) be Peter Amendt, sharing information on time lapsed photography with us. He has just returned from Palau, and might not be able to make it.

Last Month at AIM

If you missed last month's meeting, here is where to catch up! Ken was our 5-minute man, and presented on his trip to Puerto Rico. Carol was the January winner of "who am I?" Look below for the answer, and this month's creature.

You also missed Carol's

first in a series of medical alerts, this one dealing with the eyes. Stay tuned for further installments. January was also membership renewal month, so if you haven't renewed yet— It's due!

There was also a great show and tell of underwater video equipment

by : Barbara Bloom, Karen Manly, Carol Herrlie, Tom & Kathy they also provided members with the pros and cons of each.

Whale Sharks- Encounters Close to Home... Not a secret anymore!

SEE WRITE UP IN :

February 2006 UNDER-CURRENT

Holbox Whale Sharks, Bonaire Wild Side.....destinations to keep in mind

By now, the USPS willing, you have received the 2006 *Chapbook*, and I trust you find it helpful. Diving destinations are not static, so from time to time we provide important updates so you won't have to wait for the next *Chapbook*. Here are several reports I hope you'll find useful for planning your next dive trip.

Holbox: In October 2004, we were the first publication to tell divers about the scores of whale sharks present every summer near the island of Holbox, north of Mexico's Yucatan peninsula, a 3 hour drive from Cancun. Our reviews returned last August to report: Have Holbox sharks grown so accustomed to seeing snorkelers that some of them no longer veer away? Entering the water in front of the shark, I was staring into the mouth of a 40-something

footer. If I didn't disobey the "no touch" policy, there was going to be a head-on collision. So I gently pushed myself away from the krill-sieving mouth and avoid the sweeping tail.

"The opportunity to snorkel with whale sharks in 35 feet of water has put the small fishing village on the map.....In 2004, it was possible to get along side whale sharks without being surrounded by other lanchas.

This year, I counted 26 coats in the area and an additional 15 boats from Isal Mujeres. Some carried as many as a dozen passengers, the adventurous jumping in the water. They have put additional rules in effect, but the increased numbers of snorkelers and boaters hampered encounters. Yet in 2005, Holbox was

better than ever."

....page 2 of article: continued with these sightings: giant manta rays swam with the whale sharks...you could get so close you could see lice on their backs! Other rays: golden, cow nosed, eagle, and the unsighted white or guano rays. The beaches have flamingos and 3 types of turtles...nesting in the summer months. There is diving but no advanced reservations are accepted...sites 1hr plus away.

If you are interested, there is a

Special trip to get there for the action this July 20-27

See Carol for details



Who Am I?



Last month's winner was Carol with the first (of MANY- keep up the good work) guess of Barnacle.

This month's creature (photo at right), can commonly be seen in our local waters, so this should be easy.

Send in your best (and complete) guess. First correct guess wins the prize!



Medical Updates by *Carol*

Eye Sea More Clearly Now:

Brief recap of ocular (eye) concerns for divers: The human eye normally exists in a world where it is exposed to an ambient pressure which is the result of the combined and equally distributed weight of all the gases in the earth's atmosphere. At sea level, this pressure is described as one atmosphere absolute (ATA). Exposure to increased ambient pressure entails a new set of potential ocular disorders and raises new issues and concerns.

A fluid-filled space or a solid organ will not change in size as pressure changes, since fluids are not compressible. A gas filled space with elastic walls, however, will change in size according to Boyle's Law. Hence the reasons our eyes

will not expand or blow up with diving. Other problems related to pressure and hazardous exposure do related specifically to divers. Brief recap. **Contact DAN for more details as they related to your personal eye problems or contact for personal health professional for issues unique to you. This review is not intended to be any professional advise.**

Contents based on: Survey of Ophthalmology Vol 39 No.5 March-April 1995 pg 347-364.

Red Eyes: Ocular Barotrauma: Eye is filled with compressible aqueous vitreous humors and solid tissues and is therefore protected from barotraumas. Once a mask is



placed over the face, all changes. The mask creates an air-filled space of which the eyes form part of one wall. With descending, if the diver does not expel gas through the nose into the face mask, a relative negative pressure develops. As the pressure differential increases the eye and their parts are drawn toward this space. Eye lid edema (swelling) and ecchymosis (bruises) as well as subconjunctival hemorrhage (blood shot eyes) occur: Prevention: Good fitting mask; clear with slow controlled descents. Treatment: Self limited. If blurred vision occurs stop diving and seek a medical evaluation.

Ocular Manifestations of DCS: May occur in 7-12% of DCS cases. Commonly observed signs/symptoms may be Nystagmus (shaking movement of the eyes/moving side/side), diplopia (double visions) visual field defects,

Pain, blindness, other more sublet signs.

Treatment: Seek medical attention



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Medical Updates Continued



contacts: contacts have slipped. Other common causes is chemical irritation from defog products. Many of these

Contact s for Diving: Soft NOT HARD contacts. Note some contact with sea water can cause soft contacts to become tightly adherent to the cornea. Remove contacts after a dive, clean, and/or use artifi-

products can cause ocular irritations. Solar trauma..."sunburn"..Wear Sun glasses when around water: direct or indirect damage can happen.

Glacoma filtering surgery: 2 risks: mask squeeze could result in subconjunctival hemorrhage (blood shot eye) and chemosis that could affect their filter system and fluid draining mechanism. Min: 2 month recovery.

Lasik surgery: healing occurs within 2 weeks in most cases. No specific data regarding diving effects post-operatively. Conservative recommendations: 1 month.

AT ALL TIMES CONSULT YOUR MEDICAL PROVIDER FOR ADVISE REGARDING YOUR OCULAR CONCERNS



Eye surgery and Diving:

Post operative risks: Infection due to unknown pathogens in the water; gas in the anterior chambers or vitreous cavity may be affected by changes in pressure and result in vision-threatening intraocular barotraumas, Face mask squeeze could theoretically cause rupture of incompletely healed corneal and scleral wounds.

cial tears. Disposable contacts strongly advised to avoid corneal irritation after use.

Blurred Vision: Most common cause for divers who wear

Corneal surgery: Wait 3-6 months

Cataract Surgery: type of surgery performed may vary return to diving time.Aver3 months.



Marine life treasure trove found

By Rebecca Morelle
BBC News science reporter

Re-Print of an article from the BBC



An underwater mountain with some of the richest diversity of marine life in the Caribbean has been found by scientists.

During a two-week dive researchers discovered scores more species of fish than previously known in the region and vast beds of "seaweed cities".

But the team says the biodiversity hotspot is in danger: oil tankers in the area threaten the fragile reefs.

The researchers are hoping to get the area protected by the International Maritime Organization (IMO).

The find was made in the Saba Bank Atoll, a coral-crowned seamount, 250km south-east of Puerto Rico in the Netherlands Antilles.



New species

It is ranked as the third largest atoll in the world and has an enormous active reef.

The dives took place during the first two

weeks of January, and involved a scientific team of 12 from Conservation International, the Netherlands Antilles government and the Smithsonian Institution's Museum of Natural History, as well as local fisherman.

Scientists chose to explore the area because although it was predicted to have high concentrations of marine life, only a small number of species had been reported.

During the dives, the researchers counted a total of 200 species of fish, over 150 more than previously known.

Among their find were two new species of fish, both gobies, which have the distinctive feature of fused pelvic fins on the underside of their body which forms a sucker.

"Many [gobies] live in the canals inside sponges, so we take samples out of sponges, and open the canals up to search for the small fish that can be in there," explained Dr Smith, a scientist on the expedition from Conservation International.

"When we did that, we found quite an extraordinary one. It's still known from a single specimen, and it is so very very distinctive that it is probably a new genus."

The sighting of vast and luxurious seaweed beds were also astonishing, with at least 12 new species of algae discovered.

Dr Mark Littler, a marine botanist at the Smithsonian Institution's Museum of Natural History and a diver on the expedition, declared the Saba Bank the richest area for seaweeds in the Caribbean.

Seaweeds form the base of the food chain in coral reefs, from which the rest of biodiversity depends.

"When we add everything together - the species of new fish, the dozen new species of algae - that means during the time we were there we discovered a new species every day. That's pretty exciting," said Dr Smith.

Under threat

However, the biodiversity hotspot could be under threat. A petroleum trans-shipment depot on the nearby island of St Eustatius causes a significant amount of marine traffic.

The big tankers, in order to avoid mooring fees at St Eustatius are said to anchor on the bank, causing significant damage to the reef.

"The anchor for a supertanker is as big as my office, and the links in the chain are as big as my desk. They sweep around and just crush all of the coral. They are enormously destructive," explained Dr Smith. To stop the damage and protect the

atoll, the researchers are attempting to get the Saba Bank designated a Particularly Sensitive Sea Area (PSSA) by the IMO.

The 1,500 strong community on Saba Island are responsible for the Bank, and derive about 10% of their economy from it, making the atoll a major source of their livelihood.

Leroy Peterson, a Saba fisherman, called the expedition crucial for protecting Saba Bank's unique marine life.

"Some of the scientists actually found new species not located anywhere else," Peterson said.

"There should be no-anchor zones. For things to survive there must be stricter controls."

Alison Shaw, a marine biologist from the Zoological Society London, added: "By gaining this greater understanding of what lives in the atoll, we can implement better management systems that will provide protection of this resource both for the local community and for the wildlife too."

Dr Smith said that Saba Bank's unique location makes it a prime candidate for conservation.

"It's in an interesting position because many of the Caribbean reefs are close to shore and have damage that is of a land based source," he said.

"But Saba is free of all of that, so potentially it can be the keystone for protecting biodiversity in the Caribbean."



Shark Bites Drop Due To Florida Hurricanes

**Release from: Jane Sutton
Reuters**

MIAMI - Sharks and humans both fled the coast as hurricanes battered Florida last year, causing a dramatic drop in shark attacks in the state that usually has a third of the world's annual total, scientists said Tuesday.

Shark attacks occur most often in North American waters, and Florida normally has more than any other state or country because its long coastlines, dense population and year-round swimming weather often bring sharks and people together.

But Florida had only 12 shark attacks last year, compared with 30 a year earlier and down from an average of 33.5 in the previous four years, according to the annual tally from the International Shark Attack File at the Florida Museum of Natural History.

With the drop in Florida attacks, the number of shark attacks in U.S. waters fell to 30 last year, down from 41 a year earlier. It was the lowest number in a decade that peaked with 52 U.S. attacks in 2000.

Researchers attributed the drop in Florida to the unusually vicious hurricane season. Four hurricanes and a tropical storm hit Florida last year. They crisscrossed the state, forcing evacuations and causing wide destruction that kept people away from both the Atlantic and Gulf of Mexico coasts for long periods.

"Even if the storm doesn't hit them, people are evacuating or certainly not going into the water," said George Burgess, the shark file's director.

The sharks also left the coast, he said. Like many fish, they can sense an approaching storm a day or two before its arrival, probably through pressure changes.

"They know they're coming and they boogie off shore in anticipation. They're quite good at it," Burgess said. "Fishermen have known for years that fishing goes to hell just before a storm comes in."

Elsewhere in the United States, California had six shark attacks last year, Texas four, Hawaii three and North Carolina two. Alabama, Oregon and South Carolina had one each.

Worldwide, 61 shark attacks were reported last year, slightly higher than the 57 counted in 2003, but lower than in the three previous years, when the total ranged from 63 to 78.

Australia had 12, Brazil and South Africa each had five and Reunion Island, a French isle in the Indian Ocean, had three. The Bahamas, Cuba, Egypt, Fiji, New Zealand, and Venezuela had one each.

SEVEN FATAL ATTACKS WORLDWIDE

The number of shark attacks rose

steadily over the past century as the human population grew and aquatic recreation became more popular, Burgess said. Swimmers and waders are attacked most often, followed by surfers.

Seven of last year's attacks were fatal -- two in Australia and one each in Brazil, California, Egypt, Hawaii, and South Africa. That was up from four fatalities in 2003, but in line with totals over the last decade, which ranged from three to 11.

Human fatalities from shark attacks have dropped steadily over the past century, with improved medical treatment of trauma victims and a rise in the number of lifeguards and safety measures on the beaches, Burgess said.

Scientists expect shark bites eventually will become less common because shark populations have declined due to overfishing and loss of habitat.

"There are less of these animals, particularly the big ones," Burgess said. "The real story as far as scientists are concerned, is the decline of sharks ... we're less concerned about shark bites man than man bites sharks."

The researchers, housed on the University of Florida campus in Gainesville, count only attacks they consider unprovoked. They exclude those that occur when people deliberately try to touch sharks in settings such as aquariums and fishing nets.

Equipment for sale

- AIM Calendars- Don't forget, AIM calendars are still available- See Sharon at the next meeting. Get them while you can- only 7 left...
- Do you have any equipment you would like to sell? If so, send in the details, and advertise it here!