

Shark Research Institute

Member Newsletter



Shark Research Institute Global Headquarters

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Tracking Sharks!



Marviva (Costa Rica), Equilibrio Azul and Parque Nacional Galapagos (Ecuador), Smithsonian Tropical Research Center (Panama) and University of California-Davis (USA).

Preliminary data indicates the sharks' routes between the islands, but movements between the islands and the mainland have yet to be confirmed. The results of this study are enabling development of regional management strategies to protect the species from over-exploitation.

Scalloped hammerhead sharks are a highly migratory species, making long journeys to feed, and reproduce and socialize. Their routes are not random; the sharks journey between and congregate in certain "hot spots". It has long been known that the sharks congregate in certain areas: Galapagos (Ecuador), Malpelo (Colombia) and Cocos (Costa Rica).

In 2001, SRI began tracking the sharks in the Galapagos to assist the Galapagos Marine Reserve with its management plan for resident and migratory sharks.

In 2004, SRI placed acoustic receiver stations in the Cocos Island National Park and began working with Pretoma, a Costa Rica-based conservation group.

Today, working with researchers from the Malpelo Foundation (Colombia) and the Charles Darwin Foundation (Ecuador), who are also using the same acoustic technology, an array of receiver stations is revealing the species' migratory routes, social dynamics and relationships between these shark populations in the southeastern tropical Pacific ocean.

This network, called Migramar, also includes

Saving Sharks

SRI member Barbara Beck presented SRI with a new conservation symbol.

She writes: "This symbol is born of a passion, a passion for a cause that

many may think insignificant in a world beset by so many other timely causes. Yet it is not insignificant to either the ecology of our seas, or as a commentary on our role as custodians of those seas, and indeed custodians of our planet. Awareness and Protection - a balance. 'Awareness', knowledge, and education on the one hand, and the inspiration and indeed empowerment to act, to 'Protect', on the other.

"There is power in a symbol and it is fitting that we should introduce this new symbol during 2009, the year of the shark. We encourage you to continually seek to learn about sharks, threats to their survival, and conservation efforts. Even more importantly, we encourage you share your knowledge with others and to act in ways large or small to make a difference to their survival."



News from the Revillagigedo Islands

The Revillagigedo archipelago, located in the Pacific off the coast of Mexico, is a group of four volcanic islands: Socorro, Clarión, San Benedicto and Roce Partida. Known as Mexico's "Little Galapagos", they are one of the few places where divers encounter manta rays, hammerheads, silky, silvertip, and whale sharks on a regular basis. In 1994, the Revillagigedo Islands were declared a Biosphere Reserve by the Mexican government and commercial fishing was banned within a six mile radius of the islands. Killing a manta ray was punishable by a \$10,000 fine.

A survey conducted by more than 130 divers suggests pelagic sharks continued to decline after establishment of the marine reserve, although manta abundance did not change significantly.

In the 1970s and 1980, divers normally saw more than 100 sharks of various species on a dive at Roce Partida. By 2008, divers saw approximately 13 sharks per dive at Roce Partida.

Some argue that the abundance of sharks 20 years ago could be due to the low numbers of divers visiting the area. Compared to the Galapagos Islands and Cocos Island, fewer divers visit the Revillagigedo Islands, although data gathered after 1994 suggests a significant decline in the numbers of sharks in the Revillagigedo Islands.

Commercial fishing vessels have been seen working illegally within the biosphere reserve. The Mexican government is now tracking all offshore fishing vessels with GPS and training its navy at Revillagigedo how to handle fisheries violations.

It is thought that poaching is not the only cause for the decline in sharks at Roce Partida because most of the sharks seen there are pelagic and spend part of their lives in the high seas where they are taken for their fins. The demand for shark fins is driving the global overfishing for sharks on the high seas.

Similar diver surveys can be created by dive operators who consistently visit an area containing pelagic megafauna. One-page survey sheets, collected at the end of each dive or posted online (freeonlinesurveys.com), are a great way to gather baseline data of shark abundance.

To learn more about the islands and the diver survey, go to:

http://cmbc.ucsd.edu/Research/student_research/Revillagigedos_capstone/

A World Record Zambezi

Fishermen's tales of huge Zambezi sharks, also known as bull sharks, in South Africa's Breede River were confirmed by a team of researchers who caught one of the sharks. The shark proved to be a world record at four metres [13.12 feet] and weighed more than half a ton. The shark also represented the most south-westerly distribution of bull sharks in Africa.



The researchers fitted the shark with three tracking devices and researchers are excited by some of its behavior that the tags uncovered. The shark spent much of the night going from fishing boat to fishing boat and at dawn turned its attention to lines of shore anglers.

"She's seemingly looking for soft prey, and appears to be attracted by sound and vibrations," said Meaghen McCord, managing director of the South African Shark Conservancy who was among researchers. Others taking part were Dr. Steve Lamberth and his team from the marine and coastal management branch of the Environment Department, Hennie Papenfuss from Big Fish Safari, members of the Lower Breede River Conservancy, and three researchers from the shark conservancy. They fished unsuccessfully for three days, but on the fourth day Papenfuss caught a bull shark from his boat about 5 km upriver from the mouth. "After 1.5-hour struggle during which the fish towed him further upstream, Hennie managed to tire her enough to bring her close to shore for landing," said McCord. "Our team brought her to the shore, where we were able to collect all the required data." The female shark tipped the scales between 550kg and 600kg - and was fitted with three tags. The shark was the largest known to science, with the largest previous maximum size thought to be about 3.5 m.

"We gathered genetic samples to determine whether bull sharks in the Breede River represent a distinct population from those found elsewhere in South Africa," said McCord. "We also suspect she was pregnant and may very well be using the Breede as a pupping ground."

The team tracked the shark continuously for 43 hours, and found that she remained most of this time in the estuary, spending only a few hours in the surf zone just outside the river mouth.

Thank You to Our Supporters!

We are very grateful for the support of:

- The Adikes Family Foundation
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- The Shark Finatics
- Greg Sparks
- Underwater Adventures Aquarium
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- The Wave Foundation
- World Wildlife Fund

The Smallest Whale Shark

Whale sharks (*Rhincodon typus*) are the largest fish in the sea. Thus it was a treat for the folks of Donsol, Philippines, to find and rescue what may be the smallest living whale shark on record.

Donsol, a sleepy village in southern Luzon hosts the largest-known annual congregation of whale sharks in the world, as SRI members who journeyed to Donsol last year will affirm. (You can read about their experience on the publications page of our website.)

On March 7, when Donsol's Tourism Officer heard that a whale shark had been caught the previous day in nearby San Antonio and was tied up and being sold, she immediately sent a response team there. On arrival, all they saw was a stick stuck in the sand with a small rope trailing into the water. Elson Aca, a Donsol WWF researcher, walked up to the stick and was amazed to find the smallest whale shark he had ever seen -- a mere 15 inches long!

...(continued on next page)

Expeditions

Spaces are available on the following expeditions. Please note: These are *not* dive vacations; they are research expeditions. All participants will be expected to assist SRI scientists to gather and record data. As result, some costs are partially deductible from your US Federal income taxes. *Spaces fill quickly.* To reserve a space or obtain more details, go to:

www.sharks.org/expeditions

Whale Sharks

Utila, Honduras: March 14-21, March 21-28, March 28-April 4, April 18-25, 2009. \$1,760 per diver.

Holbox, Mexico: June 23-27, 2009, \$1,500 per person.

Sandtiger Sharks

North Carolina: May 15-17, 2009. \$660 per diver.

White Sharks

False Bay, South Africa: July 25 — August 3, 2009. \$3,900 per person. Cage diving optional. These are the sharks of 'Air Jaws' fame, known for spectacular aerial displays. If you prefer a shorter stay or other dates contact HQ at 609.921.3522.

Blue Vision Summit

March 7-10, SRI members joined nearly 500 other ocean defenders at the Blue Vision Summit in Washington, DC. The objective — to encourage President Obama and Congress to take leadership on our endangered ocean and coasts. Attendees included Dr. Sylvia Earle, Representative Sam Farr and other members of the House Ocean Caucus, Philippe Cousteau, Ralph Nader, California Secretary of Resources Mike Chrisman, Senators Barbara Boxer and Sheldon Whitehouse, Sherman's Lagoon Cartoonist Jim Toomey, Wyland, and Ocean Rower Roz Savage.



Wyland, Shelia Dean, David Helvarg, (front row: Billy & Julia) visited senators in the Hart Bldg



Wendy Benchley presented the 2009 Peter Benchley Awards

House Passes Shark Conservation Act

On March 2, the USA House of Representatives passed the Shark Conservation Act of 2009 (H.R. 81). This bill, introduced by Madeleine Bordallo (D-Guam), requires sharks to be landed with their fins still attached, and will allow for better enforcement and data collection in stock assessments and quota monitoring. The bill recognizes the importance of sharks to the ocean ecosystem and will improve existing laws that were originally intended to prevent shark finning. The legislation will also allow the U.S. to take action against countries whose shark finning restrictions are not as stringent.



Congresswoman Bordallo

If the Senate also passes the Shark Conservation Act, it will be law, and shark finning will be ended in USA waters. SRI urges all its USA members to contact their Senators and ask them to vote in favor of Shark Conservation Act. You can do this online at:

http://www.senate.gov/general/contact_information/senators_cfm

Surfers Know How to Have Fun!

...But they also want a healthy ocean. Their concern about the devastating impact of shark finning on the ocean ecosystem was very apparent at Surf Expo, held in Orlando earlier this year. Hundreds of surfers signed our 'No-Finching' cards.



Cassie Clark, Sabrina Garcia and Dani Washington, marine biologists from our South Florida Chapter, staffed SRI's booth throughout the show and educated attendees about shark conservation. A very special thanks to Barbara Junge who coordinated the SRI team and our work at the show.

SRI had fun too!

SRC Now Accepting Members

Want the scoop on white sharks along the west coast of the USA? The Shark Research Committee (SRC) is now accepting members.

To join SRC (and receive a t-shirt with an Aidan Martin drawing and a superb quarterly newsletter) go to: www.sharkresearchcommittee.com/

Whale Shark Pup...continued

After checking to see that the whale shark pup was unhurt, documenting the discovery, and measuring the shark, they transferred it into



a large, water-filled plastic bag to allow it to swim freely while preparing for its release. Less than three hours after the report first reached Donsol, the response team was back on their boat, shark safely in hand. They took the pup out to deeper water, where it was less likely to get entangled in a fish net, and set it free.

In spite of all the whale shark research that is being done worldwide, to date no one knows where they mate or give birth. The size of the pup suggests that it was born in the immediate vicinity. Not only is this animal the smallest live whale shark on record ever to be captured and released in the Philippines (and arguably, anywhere in the world), it is also the first indication that the Philippines is probably one of the places where the giant sharks are born.

Not to be Missed!

March 28-29 - **Beneath the Sea**, the largest consumer dive show in the USA! The event, held at the Meadowlands Convention Center in Secaucus, New Jersey, features hundreds of booths, seminars, workshops, film festival and much more. SRI's booth is #117, and both Matt Potenski and Dean Fessler will be presenting seminars. www.beneaththesea.org

Take Shark Fin Soup Off the Menu

Any Chinese restaurant that agrees to remove Shark Fin Soup from its menu may display our No Finching decal at its entrance. We also provide the restaurant with cards explaining their decision which may be clipped to their menus. As more Chinese restaurants stop offering the dish, fewer sharks will be slaughtered. If your local Chinese restaurant is 'shark fin free', contact HQ and we will send them a decal and as many menu cards as they need.

