

Shark Research Institute Newsletter



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SECOND SATELLITE TAG DEPLOYED IN HONDURAS



Shark Research Institute successfully deploys a second satellite tag on a whale shark off the coast of Utila.

In 1998 and 1999, SRI-Africa placed satellite tracking tags on three whale sharks along the East African coast. To add to our growing knowledge about the lives of whale sharks, the tagging project was expanded to Caribbean waters. In February 1999, Alex Antoniou, Ph.D., Caribbean Field Director of the Shark Research Institute (SRI) and his team deployed a satellite tag on a 25-foot male whale shark off Honduras – the first whale shark to wear a satellite tag in the Caribbean. On December 27th, Alex returned to Utila to deploy a second satellite tag on a whale shark in Honduran waters. Three previous attempts were unsuccessful due to weather and sea conditions, but by late December the sea was flat calm and many sharks were seen on aerial survey.

On December 28, a 15-foot juvenile shark was spotted; considered too small to wear the satellite tag, it was tagged with a visual ID tag.

Next morning a 25-foot male whale shark was encountered just moments after leaving the dock. The photograph at left shows the shark with Jim Engel, SRI Field Station Director at Utila Lodge, preparing to deploy the satellite tag. The tag remained attached to the shark for 10 days; collecting and transmitting data to SRI via the Argos Satellite System. The shark's locations, maximum diving depths, time at surface, and its diurnal/nocturnal depth preferences were revealed.

To create value for sharks as living resources, SRI encourages shark-based dive tourism. Sport divers who want to actively participate in data collection (and have an opportunity to dive with a whale shark) may join our field researchers on any of the following dates in 2000:

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Honduras continued from page 1...

Utila, Bay Islands, Honduras -

May 27 - June 2 | July 1 - 8 | September 2 - 9

La Paz, Baja, Mexico -

September 23 - 30



SRI NOTES

From the Philippines

The Whale Shark Museum in the former whale shark hunting village of Talisayan, Misamis Oriental opens to the public on March 28, 2000. Its mission is to increase public understanding and appreciation of the marine environment with special emphasis on whale sharks. "The museum encourages responsible stewardship of our marine wildlife and the marine ecosystem," writes Marilyn Baldo, Project Coordinator. In addition to biological research and photo displays, the museum features hunting gear donated by the former whale shark fishermen, now working in the local whale shark-based ecotourism industry.



National Geographic Magazine

See the April 2000 issue - Inside the Great White, by Peter Benchley with photographs by David Doubilet. Benchley dives in South Africa with the population of sharks that SRI's Marie Levine worked with in the late 1980s and where Dr. Compagno continues to work. During the 26 years since the publication of JAWS, Benchley has become an advocate for shark conservation; he writes "[Great white sharks] are as highly evolved, as perfectly in tune with their environment as any living thing on the planet. For them to be driven to extinction by man would be more than an ecological tragedy; it would be a moral travesty."

Cancer agent found in "Health" capsules

Shark liver oil capsules, used by people seeking to improve their health and beauty, contain a substance that may lead to cancer, the Consumer Council (Hong Kong) found. At least five of the 20 shark product brands tested by the council were

found to contain polychlorinated biphenyls (PCBs), and one exceeded the safe limit set by the World Health Organization (WHO). The council said SQ2 exceed the WHO safety limit by 1.3-times and should not be consumed.

The council also found claims by some shark product manufacturers, that their products could improve health and beauty, were groundless. It said no reliable scientific evidence could substantiate such claims and the Department of Health had been notified to follow up on the cases. *From the January 18, 2000 edition of the South China Morning Post*

GLOBAL SHARK ATTACK FILE

SRI maintains the GSAF to provide accurate data to medical personnel & the media about such incidents

On January 5, 2000 Stephan Kahl, (35), from Hamburg, Germany was killed by a shark while diving off the island resort of Pha-ngang, in southern Thailand. Kahl and his buddy were diving about 150 metres (160 yards offshore) when he was bitten on his right calf and hand. The diver suffered severe blood loss and died enroute to the hospital. The species of shark involved in the attack was not known.

BTS DIVE SYMPOSIUM

Beneath The Sea Dive Symposium, March 24-26, 2000 at Meadowlands Exposition Center in Secaucus, New Jersey. With more than 300 exhibitors (including SRI at Booth "O"), 15 in-depth Workshops, 55 Seminars, Photo Contest, Silent Auction, Ocean Pals, Women Divers Hall of Fame and Saturday Evening Film Festival, BTS is the biggest event of its kind on the east coast. At seminars on Saturday and Sunday SRI's Alex Antoniou will show footage of satellite tagging whale sharks. For more information see www.BeneathTheSea.org.

NOTES cont...**HAWAII TAGGING SYMPOSIUM**

SRI attended the Symposium on Tagging and Tracking Marine Fish with Electronic Devices held in Honolulu, Hawaii, February 2000. The symposium was hosted by the University of Hawaii and attracted scientists from around the world. A paper describing results obtained in SRI's satellite tracking study of whale sharks was presented. The paper, authored by Dr. Leonard Compagno, SRI's Director of Research, Andrew Gifford, Marie Levine and Dr. Antoniou, was presented by Dr. Antoniou.

The Whale Shark Hunt In India cont...

seasonal, incidental surplus income."

A high official in the Gujarat Fisheries Department, pleading anonymity, says: "The whale shark is not protected by the Wildlife Protection Act of '72. If fishermen can make around a lakh from one whale shark, why not? We haven't done any work on this and we don't know the population size. But I suppose it's high."

By contrast, Dr. Jayprakash, senior scientist at the Central Marine Fisheries Research Institute (CMFRI) cautions, "Earlier deaths of whale sharks were accidental but this hunting of the giant fish is disturbing; whale sharks have a very slow regeneration cycle and at this rate the population will die out. This animal should be on the endangered species list."

Shibani Chaudhury, who witnessed hunts on the high seas, draws attention to the dangers. "Even if you were to set aside ecological concerns, harpooning whale sharks is so fraught with risk, is it worth the extra rupees the fishermen make?" Especially when that extra Rs 20,000 or so earned has to be divided between a crew of five or more people?

The battle between a 12.18-metre whale shark and its captors off Cuffe Parade serves as example. In November 1983, the *Maya Prasad*, a mechanized fishing boat, caught the shark in its midwater gill nets. As the fish began to tow the boat, two other boats moved in to help but it still took the 15 crew members of the three boats two-and-

a-half hours to secure the fish and another eight hours to land it at Cuffe Parade. The shark remained alive for 14 hours on the beach. It took eight people 10 hours to butcher the shark. Its liver, which accounted for roughly 10% of the shark's total weight, was cut into strips, placed in metal barrels and left in the sun until it 'melted' into oil. The entire animal was sold for Rs 4,000 (\$95) to a local merchant; it took 2,400 kg of salt to cure its flesh which in turn was sold for Rs 6,250 (\$148.80) to exporters in Andhra. The profit margins have increased since 1983, but the threat to life and property has not lessened.

Countries such as Australia, Honduras, the Maldives, the Philippines, South Africa, and the United States were quick to understand the enormous potential value of whale sharks to their tourism industries and enacted legislation to protect the giant fish. For example, thousands of divers journey each year to Ningaloo Reef, Western Australia (and spend up to \$3,000 each, excluding airfare) for the opportunity to swim with a whale shark. Will the Indian government, marine officials and the fisherfolk of Gujarat be canny enough to turn the Saurashtra coast from killing fields to a whale shark sanctuary? Though officials unperturbed by the killing of whale sharks would seem to belie it, perhaps in time Veraval will become a marine park where tourists from around the world can come to dive and swim with the gentle giants of the Arabian Sea.



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Ed. note: SRI has established contacts in India and plans to establish a field station there within the next year. Corporations and individuals interested in sponsoring this project are asked to contact SRI Headquarters.



WE'RE ON THE WEB

WWW.SHARKS.ORG

THE WHALE SHARK HUNT IN INDIA — AN UPDATE

For generations, whale sharks - whose presence heralded the arrival of shoals of tuna and sardines - were revered as good omens among the fishermen of western India. Until the early 1990s, the whale shark was rarely hunted anywhere in the world, except Southeast Asia where its meat was eaten. In India, fishing for whale sharks was neither common nor lucrative. In 1980, a report on six whale sharks caught along the Dakshina Kannada coast tells us that the sharks were sold for Rs 300 each (\$7), an astoundingly low price considering that the cost incurred in processing the fish was Rs 200, not to mention the danger inherent in harpooning leviathans of that size from small mechanized boats! The Bidiya community in Gujarat killed a few sharks every season; they used the sharks' liver oil to waterproof their boats, and sometimes sold the oil to shoe polish manufacturers for as little as Rs 20 (.48) for 16 litres. The soft white meat was considered unfit for consumption and the carcasses were invariably dumped in the sea.

In the early 1990s, as the markets for fin soup and shark meat in Southeast Asia grew, shark populations throughout the world started to dwindle. Fish exporters in India were quick to spot the opportunity. An exporter in Veraval, who'd rather not be named, admits he was instrumental in



creating the whale shark 'boom'. "I saw thousands of kilos of meat being wasted, all the carcasses lying rotting. So I thought why not treat, can, and export this to Southeast Asia? I offered the fishermen Rs 1 to 2 a keg." Still the going rate, this was enough to trigger the killings. A single whale shark catch is said to be worth a lakh and thirty to the exporter - around Rs 20,000 (\$476) to the fishermen. And though the fishermen still use the liver oil to waterproof their boats, the price is now around Rs 7,500 (\$178) for a 250-litre barrel.

Banatwalla, a fish exporter who has seen the Veraval harbor grow over the years, insists there are better, less ecologically destructive substitutes for waterproofing boats. "Using whale shark oil is sheer profligacy," he says. "The fishermen of Veraval, Okha and Muthdwaraka admit that their actual source of income is through pomfret and other catch; whale sharks are

Once harpooned, a whale shark dives with great speed to the depths...Barrels attached to the shark prevents it from staying down.

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