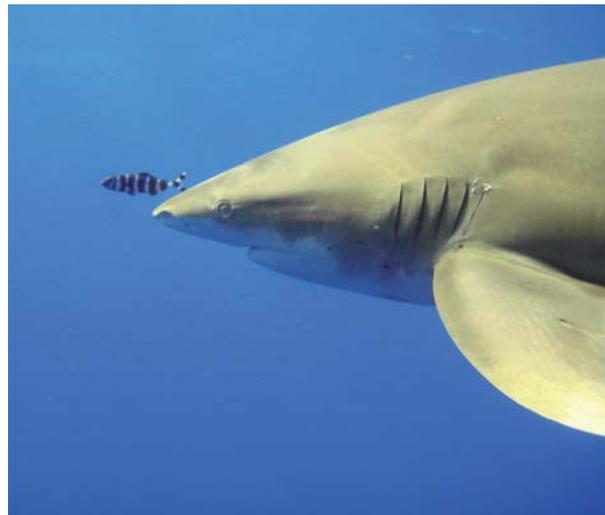


Keeping track of sharks: SPC kicks off two new shark projects

SPC's Oceanic Fisheries Programme (OFP) is working to improve the understanding of the biology and movement of the oceans' top predators through tagging studies. These studies provide essential information on movement, habitat area, growth and natural mortality for use in shark species stock assessments. To complement ongoing work under the new Shark Research Plan (described in SPC Fisheries Newsletter #132), OFP tagging results from releases in Tongan waters will provide greater insights to the behaviour of oceanic whitetip sharks, and a new OFP database aims to capture information from all shark tagging research in the Pacific.

During a tagging cruise off Tonga in June 2010, SPC scientists attached pop-up satellite archival tags to two 2-m-long oceanic whitetip sharks, one of the 13 key shark species designated by the Western and Central Pacific Fisheries Commission (WCPFC). The first tag successfully "popped" off the shark after two months and downloaded its data to a satellite exactly as it was designed to do. The second tag's year-long tracking capability was curtailed when its host was captured by a longline vessel off Fiji in September. Upon capture, the tag was recovered by a member of the longline vessel's crew, who received a USD 250 reward for returning the tag to SPC. Although nine additional months of potential tracking was foregone, the return of the tag itself allows for more detailed data to be retrieved than would otherwise be available from the tag's satellite transmissions alone. Analysis of tag data has revealed that the first shark travelled 640 km into far northern Tongan waters in two months, and the second shark travelled 350 km northwest into Fijian waters in three months. These movements indicate that oceanic whitetip sharks are capable of moving large distances in a relatively short time, thus confirming their highly migratory nature.

OFP is about to begin work on a new database that will serve as a clearinghouse for Pacific shark tagging information under the WCPFC's Shark Research Plan. Because sources of tagging data for Pacific sharks appear to be scattered among government and academic research institutes around the Pacific Rim, the existence of some studies can be confirmed, but the details of each cannot. The goal of the new SPC project is to collect metadata (data about data) such as species, tag type, number tagged, recovery rate and availability of published results, as a basis for assessing the extent and usefulness of existing data and the need for further work. Once compiled, the database will be made freely



Close up shot of an oceanic whitetip shark (Carcharhinus longimanus). Image: Julien Stein/Marine Photobank.

available online via the SPC website. The project is not designed to analyze tagging data, but it may assist in pulling together new sources of information. This can lead to a better understanding of the connectivity of the resource in waters of various WCPFC member countries and support identification of critical habitats for sharks of different species, sexes and life stages. Readers with shark tag information to share are encouraged to contact OFP immediately to learn more about the project.

For more information, please contact:

*Shelley Clarke
Shark Assessment Scientist
Shark stock assessment, shark data and research
coordination (WCPFC)
(ShelleyC@spc.int)*