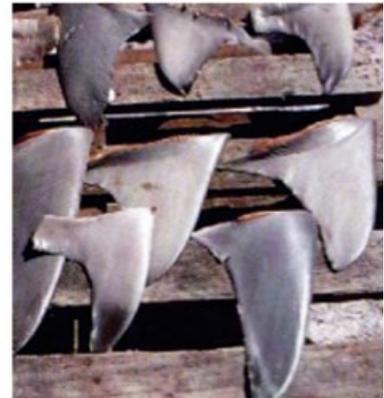


Sharks and humans: How to reinforce the partnership

Regional workshop, CRIOBE, Moorea, French Polynesia, 13–17 October 2014

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A sole priority: Take action!

If the conclusions of the Pacific Coral Reef Institute (IRCP) workshop held on Moorea (French Polynesia) from 13 to 17 October 2014 had to be summed up in just a few words, the above statement, as simple as it is incisive, would probably be the best description. This symposium dealt with the overall topic of the sustainable development of shark populations in the South Pacific, particularly in response to pressures from humans. The meeting was funded at the initiative of the Pacific Fund for Scientific and Cultural Cooperation (French Pacific Fund), a French funding mechanism that promotes exchanges between French and English speaking territories in the Pacific, to work together on shared problems. Funding was also provided by the French Polynesia Shark Observatory (ORP), the IRCP and the French Ministry of Ecology, Sustainable Development and Energy. Sharks are a topic of concern and in order to better understand the priorities for ensuring sharks' protection while maintaining their contributions to island economies, about 30 specialists from various countries and territories (Australia, Colombia, Fiji, France, French Polynesia, New Caledonia, the United Kingdom, the United States of America, and Samoa), divided equally between members of research

agencies³, non-governmental organisations⁴, regional organisations⁵, governmental bodies⁶, and the private sector (commercial divers, veterinarians, journalists) met to determine the wording of a message to Pacific Island decision-makers and managers.

Sharks, pillars of aquatic ecosystem processes

Specialists at the meeting first agreed on two key points for their discussions: 1) the disquieting disappearance of sharks and rays in the Pacific, even if this region of the world may appear to have been spared more than others, and 2) the need to look at the decrease in stocks from the perspective of the major role these animals play in marine ecosystems, both coastal and offshore. Not only do sharks contribute to the good health of ecosystems — by promoting biodiversity — but also to ecosystem productivity, a crucial point that could be translated by the statement, “The greater the number of sharks, the more fish there will be to catch!”. The main factor in the decline of shark and ray populations is overfishing. Immediate action must be taken to reduce fishing mortality for sharks by all possible means.

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⁴ Malpelo Foundation; Islands First; Pew Charitable Trusts; World Wildlife Fund.

⁵ Western and Central Pacific Fisheries Commission; Secretariat of the Pacific Community; Secretariat of the Pacific Regional Environment Programme.

⁶ Department of Environment, French Polynesia.



Some of the 30+ workshop participants.

Overfishing is enemy #1

In spite of efforts over the past few years, particularly to reduce the shark fin trade, it is important to realise that the overall demand for shark and ray products is rising. In that regard, rays seem to be paying the price for the efforts made to spare sharks, which is a major risk for certain species of these flat, cartilaginous fish. The problem of the ongoing demand has simply modified supply, which adapts itself to new prohibitions and controls. In the specific case of the Pacific, for example, artisanal coastal fisheries have developed, which are completely

outside any existing measures, whether for the purposes of statistics or control. Given that, the recent progress made in regards to including shark species on the Convention on International Trade in Endangered Species of Wild Fauna and Flora endangered list (Appendix II) will likely prove to be inadequate because the list only regulates the international trade of the species involved and not fishing. Effective long-term solutions should be based on introducing strict quotas and fishing limits for sharks, subject to the development and more widespread use of new technologies such as video surveillance to efficiently control fisheries.

Inset 1: The Institute for Pacific Coral Reefs



The Institute for Pacific Coral Reefs (IRCP) is part of the École Pratique des Hautes Études (an applied higher studies institution), one of the leading scientific agencies of the French Centre for Insular Research and Observatory for the Environment (CRIOBE), based in Moorea, French Polynesia. This institute is designed to support regional dynamics in the area of transferring technical and scientific knowledge and skills to those involved in managing reef and coral ecosystems, with non-governmental organisations, associations or technical departments as the main beneficiaries. Among its activities, IRCP holds an average of two regional workshops on different topics each year, either in French Polynesia or in a Pacific Island country (e.g. recently Fiji and the Solomon Islands). IRCP benefits from recurring support from the French Pacific Fund, which makes it possible to hold these workshops, which are so valuable because of their very “applied” nature.

See: www.ircp.pf

Sanctuaries: Effective tools, as long as...

Among the major topics at the workshop, specialists gave close consideration to the current process based on setting up large zones where sharks are protected. French Polynesia banned shark fishing in 2006 (except for the mako fishery, which was only banned in 2012) inside its exclusive economic zone. Palau and New Caledonia have recently set up the same type of shark protection zone. But above and beyond these decisions, which are widely covered by the media, how effective are they in protecting sharks? This question is all the more relevant when we consider that tuna fishing continues to take place within those zones, with its bycatch that includes sharks. Even though bycatch sharks may not be kept onboard, catch-related mortality rates are high. Workshop participants agreed that although sanctuaries are not a miracle solution, they are effective, particularly if they include an efficient fisheries control system and shark population monitoring.

Ecotourism⁷: An interesting economic lead

“A live shark is worth far more than a dead one!” This is now a well-known statement, although specialists have rightly noted that ecotourism is based on coastal shark species, whereas pelagic species, which are rarely used

for tourism purposes, are disappearing. There is still a strong feeling, however, that this non-destructive alternative use of sharks and rays can generate significant economic benefits. To ensure sustainable management, those benefits must be shared by all those who use the sea and who contribute to keeping sharks alive, especially fishers, whose income is affected. Ecotourism can also raise safety issues for professionals and spectators, which is why rules of proper conduct need to be developed and enforced. Such standards also have to respond to the need to ensure that the animals remain in good health to avoid any impacts on the ecosystem's equilibrium. If all of these conditions are met, then the advantages of ecotourism will surpass its potential disadvantages and this activity will contribute to the sustainable development of Pacific Island states.

Sharks: The very heart of Pacific Island cultures

All Pacific Island peoples accord a special place in their culture to sharks and rays. A totem animal that may be worshipped as a god, a vehicle between the land of the dead and that of the living, or a cosmogonical guide for intrepid sailors, the shark is feared but, more especially, respected. While it is difficult to place a price on such cultural values (existence, hedonic, or heritage values), they are, nevertheless, very significant in the Pacific Islands region. The fact is, that all that ancestral knowledge



The Beqa shark feeding site, Fiji (image: Éric Clua).

⁷ In the context of this article, ecotourism means a tourism activity based on watching sharks and rays in their natural habitat, with or without feeding to attract them.

Inset 2: Oceania Chondrichthyan Society

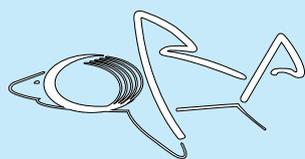


The Oceania Chondrichthyan Society was founded in 2005 as a joint initiative by Australia, New Zealand and Papua New Guinea, to work in the areas of education and scientific studies to support the protection of chondrichthyan fish species (i.e. sharks, rays and other shark-like species). More specifically, it brings together scientists working in those areas in the Pacific. The society supports projects and offers grants on a regular basis

to students for research projects and to take part in international meetings where they can promote their work. OCS supports the development of “participatory science”, as long as it is carried out with precise objectives and in a form accessible to those involved so that it remains acceptable at a scientific level. OCS meets on a regular basis and the next meeting is a joint meeting with the New Zealand Marine Sciences Society from 6–9 July 2015 in Auckland, New Zealand.

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Inset 3: French Polynesia Shark Observatory



The French Polynesia Shark Observatory (ORP) was set up in 2010 at the urging of its main proponent, Nicolas Buray, who holds a master degree from the École Pratique des Hautes Études in the ecology of lemon sharks in Moorea. The goal of this observatory is to collect and compile all available information

on the various shark and ray species found in French Polynesia in order to estimate their stocks, map their distribution and monitor changes in various island populations over the long term. More specifically, it contributes to: 1) the protection of endangered species and strategic habitats, and the management of sites with many tourism activities; 2) strengthening and developing of scientific knowledge (population structure, monitoring the movements of certain migratory species through photo-identification); 3) carrying out research programmes (biopsies, deploying buoys); and 4) promoting the image of French Polynesia’s sharks outside the territory, and to developing educational projects and raising awareness among decision-makers and the general public.

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Inset 4: “Sharks, Restoring the Balance” Initiative



This initiative, designed to be international in scope, is being carried out jointly by the World Wildlife Fund and TRAFFIC (a wildlife-trade surveillance network). Its goal is to promote responsible fisheries that minimise the impact on shark populations around the world, improve regulations on the trade in shark products, and decrease consumer demand because this is the cause of overfishing of sharks and rays. In the Pacific, the first

direction the initiative is taking is to promote sharks’ cultural value so as to gain strong support from Pacific Island indigenous communities. A small collection of legends from several Pacific Island countries will be published for that purpose in 2014. The initiative also plans group work on developing a code of good conduct to create sustainable shark-based ecotourism in the Pacific, with the scientific support of James Cook University in Australia.

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related to oral traditions and so rarely put into writing, is increasingly being lost to the collective memory. Workshop specialists unanimously agreed on the need for this ancestral knowledge to be regained in general with the full collaboration and contribution of indigenous communities who hold such knowledge. They also concluded that traditional culture does not necessarily include the concept of resource conservation. Science also needs to contribute to discussions by indigenous communities.

Addressing sharks’ negative image

In the belief systems of modern societies, which have growing influence in the Pacific Islands region, sharks have inherited the undeserved image of “maneaters”. This false idea on the part of the general public needs to be corrected because their opinions have a determining effect on political decision-makers and can affect decisions to ensure the protection of these animals. Developing tools such as the participatory science that the Oceania Chondrichthyan Society (see inset 2) and the French Polynesia Shark Observatory (see inset 3) promote can also play a significant role in this process, which has now led to the “social licence” concept, which carries significant weight in public life. The most recent example is in Western Australia, where public pressure following several fatal attacks put an end to public preventive shark capture campaigns, which, in any case, had not proven to be effective in managing the problem.

This workshop proved to be an important stage in regional dynamics to protect sharks, dynamics which will continue particularly through the initiative “Sharks, Restoring the Balance” (see inset 4).

For more information:

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