Pacific region capacity building for CITES sharks and rays

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*Sharks are a significant by-product of Pacific fisheries, especially for tuna and billfish. Five shark and two manta ray species were listed on the Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES) Appendix II on 14 September 2014: oceanic whitetip shark (*Carcharhinus longimanus*), porbeagle (*Lamna nasus*), scalloped hammerhead (*Sphyrna lewini*), great hammerhead (*S. mokarran*), smooth hammerhead (*S. zygaena*), giant manta ray (*Manta birostris*) and reef Manta Ray (*M. alfredi*). An Appendix II listing is for species in which trade must be controlled to avoid utilisation that is not compatible with the survival of the species.*

Background

The CITES listing requires member countries to develop non-detriment findings (NDFs) if exports are to occur. Countries that are not CITES members that wish to trade in CITES-listed shark species with CITES members must provide documentation comparable to NDFs. The NDFs are intended to ensure that the export of the species (or parts of the species, such as fins) will not be detrimental to the survival of the species. In the Pacific region there are six countries that are CITES members: Fiji, Palau, Papua New Guinea, Samoa, Solomon Islands and Vanuatu. Two workshops have previously been held to assist CITES Parties in the Pacific region to understand their obligations and requirements associated with the implementations of the listings. These workshops were held in Wollongong, Australia on 9–11 December 2013 and in Nadi, Fiji on 11–12 February 2014. The outcomes of the second meeting in Nadi 2014 led to the implementation of this Pacific CITES Shark project. This project aimed to build capacity in the Pacific region to assist countries to implement the NDF processes if they wish to trade in the CITES Appendix II shark and ray species. This project was funded by CITES through the European Union-CITES capacity building project and led by James Cook University.

This project focused on the three hammerhead and two manta ray species mentioned above, and not the oceanic whitetip shark as it has a Western Central and Pacific Fisheries Commission (WCPFC) ban on their retention, transhipping, storing or landing; and not the porbeagle shark as it is a temperate species that rarely occurs in the tropical Pacific waters. There is no defined process for how an NDF is undertaken, thus to assist the NDF process for the shark and ray Appendix II listings, in 2014 the *CITES Non-Detriment Findings Guidance for Shark Species* was produced (Mundy-Taylor et al. 2014). The CITES shark guide outlines a six-step process to carrying out an NDF for sharks and rays, illustrated by a flow chart (Figure 1). For each of the six steps, there are worksheets in the guide that clearly set out the information needed for an NDF. These worksheets were proposed to form the basis of a common regional NDF template, which could be used by the Pacific Island countries to assist with the production of NDFs. The Pacific countries share stocks of the CITES Appendix II shark and ray species that need to be considered in NDF development and a regional NDF approach can address this issue. A common NDF template provides a consistent format, language and terminology, and is well supported by the CITES shark guide with detailed explanations on the required information.

The suitability of such an approach to NDFs in the Pacific was informally discussed with representatives from Pacific management organisations – that is, Pacific Community (SPC), Forum Fisheries Agency (FFA) and Western Central Pacific Fisheries Commission (WCPFC); NGOs active in shark conservation and CITES efforts in the Pacific – that is, TRAFFIC, World Wildlife Fund (WWF) and Secretariat of the Pacific Regional Environment Programme (SPREP); and people that had completed shark NDFs for Australia and New Zealand from the Australian Department of the Environment and New Zealand Department of Conservation.

Workshop

A workshop for this Pacific CITES Shark project was held in Nadi, Fiji on 11–13 April 2016 to discuss the proposed regional NDF template, the information needed for an NDF, and the need to develop a regionally co-ordinated approach to sustainable management of shared stocks of CITES listed sharks and rays. To achieve these outcomes, the workshop was designed to be relatively informal to encourage participation by all delegates in round-table discussions. Each country was invited to nominate two persons to attend – ideally one each from the designated CITES Management Authority and CITES Scientific Authority, respectively – who would be most closely involved with the development of NDFs within the country. Representatives

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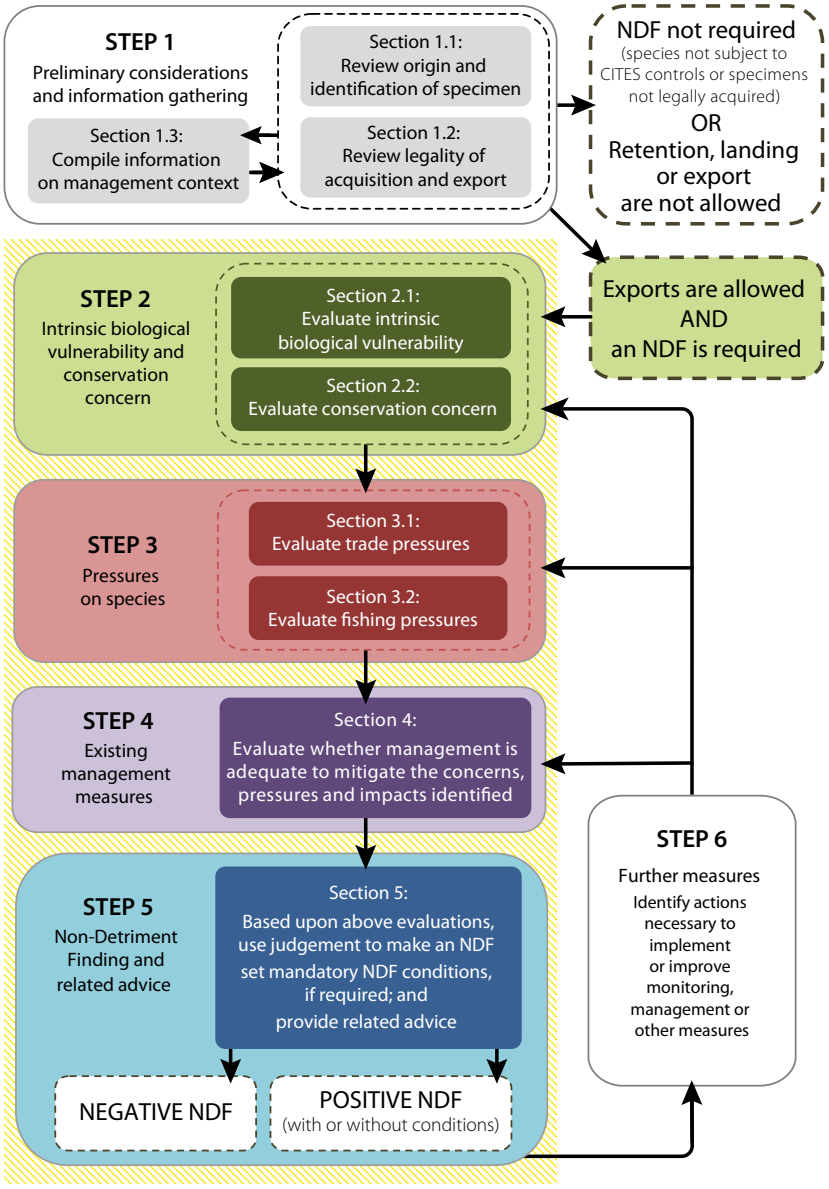

Figure 1. Flow chart showing non-detriment finding (NDF) process.
Source: Mundy-Taylor et al. 2014.

attended from Fiji (2), Palau (1), Papua New Guinea (1), Samoa (2) and Solomon Islands (2). A delegate from each of FFA, Pew Charitable Trust (PEW), SPREP and WWF also attended (Figure 2).

Project outcomes

All delegates at the Fiji 2016 workshop agreed on the format and content of the regional NDF template and that templates pre-populated with common information for each of the three hammerhead and two manta ray species would be very beneficial in starting the shark and ray NDF process in the Pacific region. This was undertaken and the common information was provided for the NDF templates; that is, global catches, conservation status, biological vulnerability and regional management measures. A summary document that presented the detailed background information for the NDF templates was also compiled. This included a review of existing pelagic and coastal catch data for the three hammerheads and two manta rays in the Pacific region that was available from the literature, WCPFC reports, and the summary of WCPFC observer data provided by SPC. A potential framework for regional co-operation to produce NDFs

Figure 2. Participants of the Fiji 2016 workshop from governments of Fiji, Palau, Papua New Guinea, Samoa and Solomon Islands, along with representatives from the Forum Fisheries Agency (FFA), Secretariat of the Pacific Regional Environment Programme (SPREP), Pew Charitable Trust (PEW), World Wildlife Fund (WWF), and James Cook University (JCU) (image: Cassandra Rigby).

on shared hammerhead and manta ray stocks, was also outlined (Figure 3). The development of a regional NDF in the long-term would be useful because of the shared stocks and limited capacity within in-country agencies; however, in the short-term individual countries need to consider NDF production.

There are two major challenges to the NDF process: the lack of species-specific catch data that hinders the ability to do stock assessments for the hammerheads and manta rays, and communication issues among in-country agencies that can slow down the flow of data and other information that is required to undertake an NDF. Fiji has a CITES Scientific Council that provides a good model for implementing CITES procedures as it aids communication among agencies and supports an efficient whole of government approach to NDFs. There are some existing and commencing projects that have synergies with the information needs of NDFs and this may assist in collecting better data on hammerheads and manta rays, and improve communication among tuna Regional Fisheries Management Organisations and the understanding of the stocks of hammerheads in the Pacific region; that is: Rapid Assessment Toolkit (http://wwf.panda.org/wwf_news/); Global Shark and Ray Initiative (http://wwf.panda.org/sharks/global_shark_and_ray_initiative/); Areas Beyond National Jurisdiction (http://www.commonoceans.org/home/en/); WCPFC Research Plan (Brouwer and Harley 2015); NESP Hammerheads Project (Australia) (http://www.nespmarine.edu.au/project/hammerhead-sharks); and Sustainable management of the shark resources of Papua New Guinea (ACIAR project) (http://aciar.gov.au/project/fis/2012/102).

Recommendations

Participants at the workshop identified that the most critical step required for moving the shark NDF process forward is one-on-one in-country assistance. It would be regionally beneficial if this assistance is one person or a small group of people, as this will provide a more regionally consistent set of NDFs that could eventually transform into a single regional NDF. There is the need for an entity to drive and co-ordinate the shark NDF process among the Pacific countries. Without this, progress is likely to be very slow due to capacity and resource restraints. One of the Pacific management organisations may be best placed to do this in the longer term. A number of organisations are committed to providing assistance; that is, SPREP, FFA, PEW and WWF. Detailed distribution maps of each of the CITES listed shark and ray species on the CITES shark website would be helpful to enable countries to determine whether the species occur in their waters (a small project to provide these maps has commenced through James Cook University). A continuous improvement approach should be applied to NDFs; the recommendations associated with the NDF can be used to drive improvements in data collection, assessment and management. Capacity building in

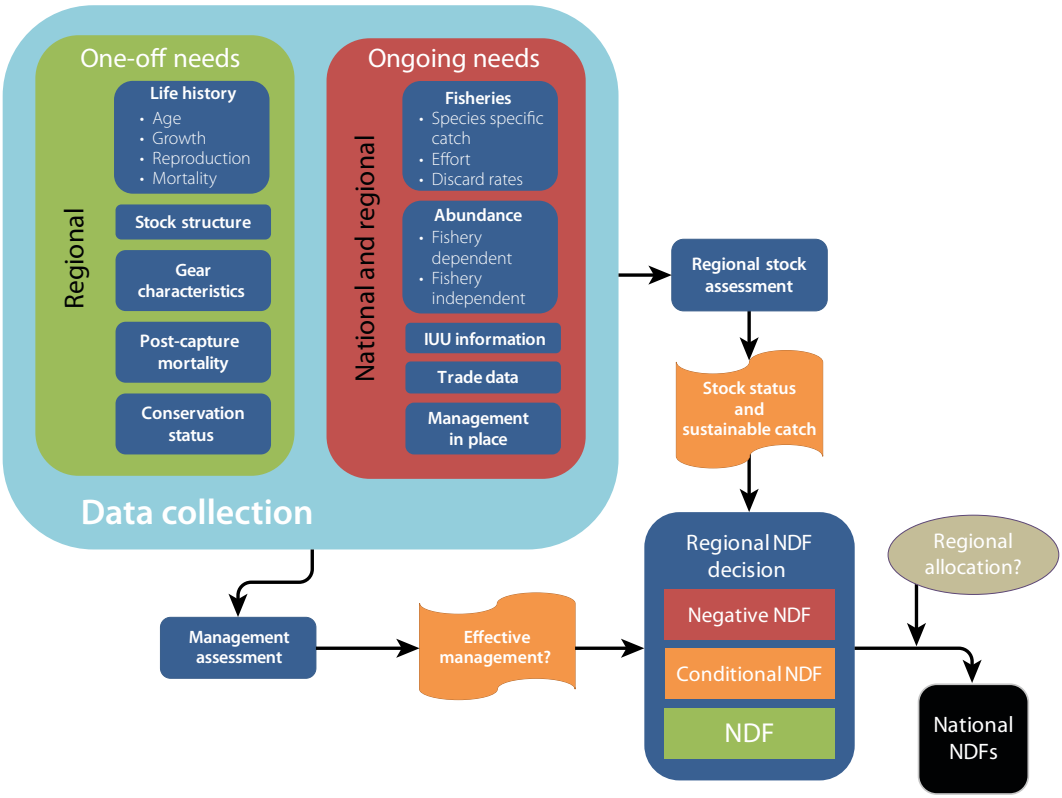

Figure 3. Model for the development and ongoing maintenance of NDFs in the Pacific region. Source: Simpfendorfer 2014.

identification of shark fins for customs, quarantine and fisheries officers would be beneficial for enforcement efforts, and capacity building with legislation will better enable countries to link their fisheries and environment legislation to CITES requirements.

The CITES shark and ray website (https://cites.org/eng/prog/shark/index.php) provides information resources for NDFs and the latest news, meetings and highlights relevant to CITES listings of sharks and rays. More detailed information on this Pacific CITES Shark project will be available on this website; that is, the NDF templates for each of the hammerhead and manta ray species, the summary of information document and the Fiji 2016 workshop report, which includes the presentations given at the workshop.

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