CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES
OF WILD FAUNA AND FLORA

Sixty-sixth meeting of the Standing Committee
Geneva (Switzerland), 11-15 January 2016

Interpretations and implementation of the Convention

Species trade and conservation

Sharks and rays

REPORT OF THE WORKING GROUP

1. This document has been submitted by Colombia, as chair of the CITES Shark Group.*

2. Colombia, as chair of the CITES Shark Group, has constructed a report on the progress regarding commitments in the conservation and management of this group of species.

GENERAL INFORMATION

Group members: **Countries:** Australia, China, Colombia, Cote d'Ivoire, Germany, Japan, Mexico, New Zealand, Portugal, USA, United Arab Emirates, United Kingdom, European Union. **NGO's:** CMS, UNEP-WCMC, IUCN, Humane Society International, IFAW, Species Survival Network, TRAFFIC, The Pew Charitable Trusts, WWF, Wildlife Conservation Society, Defenders of Wildlife.

Members who sent the requested information for the construction of the report: Six Countries (Australia, China, European Union, México, United States of America, and Colombia)

ACTIVITIES REPORTED

The main activities of the group concerning the conservation and management of sharks are displayed as followed:

AUSTRALIA

Identifying levels of internal consumption within different countries to strengthen the control and monitoring of species of interest.

CITES listed shark species are taken under regulated commercial fisheries, which are assessed by the Australian Government to ensure the management of these fisheries is ecologically sustainable. These assessments take into account all sources of mortality, including recreational take for domestic consumption or sport. Harvest levels of CITES listed shark species are monitored annually by the CITES Scientific Authority of Australia through CITES permit acquittals and catch data. Australia also monitors and reports on imports of CITES listed shark species through CITES Annual Reports. This approach provides an effective level of control and monitoring to support the Australian non-detriment finding for these species.

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* *The geographical designations employed in this document do not imply the expression of any opinion whatsoever on the part of the CITES Secretariat (or the United Nations Environment Programme) concerning the legal status of any country, territory, or area, or concerning the delimitation of its frontiers or boundaries. The responsibility for the contents of the document rests exclusively with its author.*

Identifying levels of internal consumption may be an effective mechanism to strengthen the control and monitoring of species of interest in some countries. While Australia strongly supports improved data collection on CITES listed shark species, the most useful methodology for data collection to support control and monitoring of these species may vary depending on the specific circumstances of the country.

Continuing the creation and implementation of national, regional, and international strategies for the management and conservation of sharks, including action lines and serving as the main tool for the creation of Non-Detriment Findings.

Australia held two Oceania regional workshops in late 2013 and early 2014 to support the implementation of the new shark listings. These workshops focussed on, inter alia, the principles of making scientifically robust NDFs, including data collection requirements. Based on the outcomes of these workshops and the scientific analysis supporting a NDF in Australia, the Australian CITES Scientific Authority and the James Cook University have developed a methodology for regional data collection and a framework for undertaking a non-detriment finding. The James Cook University is now in the process of further developing the regional approach through an Oceania project to the making of NDFs using this developed methodology and framework, including hosting a regional workshop in early 2016. The outcomes of this work will be shared with CITES Parties through the CITES shark and ray portal at.

Continue promoting the exchange of experiences and information on NDF creation processes and training on species and sub-product (meat and fins) recognition for the species listed, which allows the quality and precision of data to be improved, as well as traceability mechanisms for trade.

Australia has supported the exchange of information on the NDF creation process by making the Australian NDF for the harvest and export of hammerhead sharks available through the CITES shark and ray portal at https://cites.org/prog/shark . Australia encourages CITES Parties to likewise share their national NDFs for the harvest and export of CITES appendix II listed shark and ray species. The Oceania regional project by James Cook University mentioned above will also continue to build on the sharing of information and experiences.

CHINA

As the fisheries authority and CITES authority, the Bureau of Fisheries and Fisheries Law Enforcement, Ministry of Agriculture, and The Endangered Species Import and Export Management Office, State Forestry Administration has jointly issued 2 Notifications on Sharks And Manta Ray Species Implementation Management in Aug.2014 and Mar.2015 respectively. The Notifications indicated the implementation requirements on CITES Annex II Shark and Manta Rays. The relevant matters, which should be considered that mentioned in the report of the secretariat has been included in the Notifications.

The Notification indicated the sharks and manta ray listed in the CITES Appendix II on CoP16, should apply the regulation of the aquatic wild animals under state protection (category ii) , the relevant fishing, processing and trade behavior should be applying for Management and Utilization Permit in accordance with the law, the import & export, re-export should apply for CITES certificates.

The Notification indicated Chinese fishing vessels should record the information while first boarding the suspected listing species. The quality of shark fins should be no more than 5% of the fish body, and all parts of the fish body should maintain integrity except heads and organs. After identified to be the listing species, fisheries authority would issue By-Catch Certification for the batch of capture, and then could be sold or for processing by the factory, which owned Management and Utilization Permit.

The fishing and boarding were the key chain to identify the species. After being divided and processed, the fish products were hard to be identified unless by DNA technologies. Therefore, to discriminate the listing species among enormous species, vessels and ports was a mission impossible. Meanwhile the listing shark species accounted a tiny percentage among the great variety of shark products in domestic market, which brought a huge regulatory difficulty in monitoring. China fisheries and CITES authorities widely performed the promotions and publicities on listing shark implementation, but the shortage on shark species identification and limited enforcement forces were retarding the effective implementation in China.

The Notification also indicated the Chinese pelagic fishing vessel should strictly abbey the regulations of the RMFOs in the fishing area and national fisheries law. The capture of listing species should apply the CITES certificate under the item of introduction from the sea. Actually, the fishing, maintaining, boarding and sale of the listing species were already prohibited by the main RMFOs at an earlier time.

According to The EU-IUU regulation, which entered into force since 2010, requires flag states to certify the origin and legality of the fish, thereby ensuring the full traceability of all marine fishery products traded from and into the EU. China fisheries authority has been issuing Catch Certificates for Chinese flag vessel fishing products and issuing Processing Plants Statements (CC and PPS were documents required under the EU-IUU regulation system) for the imported wild caught fisheries products processed in China for re-exporting to the EU since 2010. Most of the fisheries countries were running the system, such as Russia, U.S. and Norway etc. This system could be considered to be adopted by the global shark industry chain, and the shark products would be required to attach the catch certificates during circulation between countries.

China had participated in almost all the important Regional Fisheries Management Organizations (RFMOs) since 1996. As a member of the ICCAT, IOTC, WCPFC, CCAMLR, IATTC, SPRFMO and NPFC, Chinese vessels obey the reservation and management measures of these organizations in pelagic fisheries activities. While the reasonable and effective control on fishing was the precondition for implementation in downstream industry, obviously RMFOs played a key role in the whole chain management. In addition, management measures formulated under the regional fisheries resources assessment were scientific and rational utilization on fisheries resources.

EUROPEAN UNION

After consulting with colleagues from the WG from Germany, UK and Portugal, we wanted to indicate that the main activities from our side relating to the implementation of the sharks listing are the following:

– Germany developed NDF guidance for sharks, which were tested by many Parties for their shark stocks and presented at the Animals Committee;

– Many projects have been carried out by CITES and the FAO on capacity building for implementation of the sharks listing, under a program financed by the EU. More details can be provided by the CITES Secretariat;

– Germany most likely will fund a small pilot project in Costa Rica to facilitate traceability. The project "Implementation of the OSPESCA Catch Documentation System and a Traceability System for CITES-listed shark species in Costa Rica " is tailored to address the expressed need for assistance of the Costa Rican CITES authorities, including INCOPESCA, in implementing the new shark listings under CITES, in particular through the joint implementation of a catch documentation scheme and a traceability pilot project. It will be based on work already done and funded by the Union.

We are not sure that there is a need to present any of these projects to the virtual meeting on November 5, but we remain at your disposal if you want to receive additional information.

UNITED STATES OF AMERICA

Below are U.S. actions undertaken in fulfillment of the priority topics identified by the Government of Colombia:

The need to standardize customs shipments at the regional level to facilitate and contribute to the traceability of CITES species.

The World Customs Organization's (WCO) Harmonized System Review Subcommittee considered a Food and Agriculture Organization (FAO) proposal – supported by the United States and Colombia – that would assist countries in tracking international trade in shark fins of several commercially important species, including porbeagle shark, oceanic whitetip shark, hammerhead sharks, and blue shark. The FAO proposal would have established a global harmonized system of tariff codes to permit the monitoring of trade in shark fins for these commercially significant shark species. The proposal for species-specific codes did not receive sufficient support among WCO members to advance during the current 2017 review cycle. Although the proposed species-specific codes were not adopted, aspects of the FAO proposal that were successful at the WCO will help improve the monitoring of shark products in trade by establishing separate codes for fresh, frozen, prepared, and preserved forms of shark fins, among other changes.

NOAA's National Marine Fisheries Service (NMFS) and the U.S. Fish and Wildlife Service (USFWS) have also been seeking to obtain domestic statistical classification breakouts for the fins of porbeagle shark, hammerhead sharks, and oceanic whitetip sharks, amongst other products in trade.

Identifying levels of internal consumption within different countries to strengthen the control and monitoring of species of interest.

The United States monitors and annually reports on the amount of shark fins in domestic and international trade. For the most recent data, see Chapter 2, "Imports and Exports of Shark Fins" in the Appendix to the 2014 U.S. Shark Finning Report to Congress, published by NMFS, at http://www.nmfs.noaa.gov/sfa/laws_policies/sca/documents/2014_combined_appendix.pdf.

Continuing the creation and implementation of national, regional, and international strategies for the management and conservation of sharks, including serving as the main tool for the creation of Non-Detriment Findings.

The United States has recently reported on its progress in implementing its National Plan of Action for Sharks (see: http://www.nmfs.noaa.gov/ia/resources/publications/ccrf/npoa_sharks_2014.pdf).

Continue promoting the exchange of experiences and information on NDF creation processes and training on species and sub-product (meat and fins) recognition for the species listed, which allows the quality and precision of data to be improved, as well as traceability mechanisms for trade.

U.S. Non-Detriment Findings for CITES-Listed Sharks:

In August 2014, the U.S. CITES Scientific Authority made a positive non-detriment finding for the export of porbeagle shark (*Lamna nasus*) legally harvested in the commercial fishery by U.S. fishermen in the 2014 harvest season. The finding was based on a species management plan produced by NMFS in 2006, which was developed to rebuild the porbeagle stock. The yearly harvest is based on a quota and all harvest is suspended when 80% of the quota is reported; all harvest must be reported within seven days of landing. The fishery was closed to harvest in 2015.

In June 2015, the U.S. CITES Scientific Authority made a positive non-detriment finding for the export of wild scalloped hammerhead shark (*Sphyrna lewini*), great hammerhead shark (*Sphyrna mokarran*), and smooth hammerhead shark (*Sphyrna zygaena*) harvested in the commercial fisheries of the Atlantic and Gulf of Mexico by U.S. fisherman in the 2015 harvest season. The positive finding was based on a management plan, produced by NMFS in 2013, which was developed to rebuild the hammerhead stocks. There are two separate management groups, one in the Atlantic and one in the Gulf of Mexico; each group has a separate harvest quota. Each group is regulated separately and all harvest in the group is suspended when 80% of its quota is reported; all harvest must be reported within seven days of landing.

These documents are publicly available for other CITES Parties on the CITES website at the shark and ray portal (https://cites.org/eng/prog/shark/Information_resources_from_Parties_and_other_stakeholder).

Public Outreach:

The U.S. Fish and Wildlife Service launched a new webpage to educate and inform U.S. fishermen, exporters, and dealers about implementation of the shark and ray listings adopted at CoP16. This webpage can be viewed at http://www.fws.gov/international/permits/by-species/sharks-and-rays.html.

Capacity Building:

Regional Workshop on Sharks Listed in Appendix II of CITES - Preparing for Implementation: This workshop was held in Recife, Brazil, during 3-4 December 2013. The United States helped with preparations for this workshop, hosted by Brazil, to prepare for implementation of CITES provisions for the five species of sharks added to CITES Appendix II at CoP16 (with an effective date of September 2014). The United States actively supported adoption of the proposals to list these sharks under CITES and considers effective implementation of the listings to be a priority for shark conservation. Representatives from both USFWS and NMFS participated in the workshop in Recife, which was attended by more than 70 representatives from 28 CITES Parties in Latin America and the Caribbean.

September 2013, San Salvador, El Salvador: The U.S. Department of Interior's International Technical Assistance Program (DOI-ITAP) supported a 4-day intensive workshop to provide training on numerous aspects of CITES NDFs, such as risk assessment, methodology, information and data needed, and other considerations and guidelines in formulating an NDF. Participating countries: Colombia, Costa Rica, Dominican

Republic, Ecuador, El Salvador, Guatemala, Honduras, Panama, and Peru. Technical experts included representatives from USFWS, CITES Secretariat, UNEP-WCMC, OSPESCA, and TRAFFIC.

Third Workshop on Non-Detriment Findings (NDF), Guatemala City, Guatemala (March 2014). The objectives of the workshop, which was attended by 32 participants including several representatives from the United States, were to share the progress made by countries on the implementation of the new CITES marine species listings, including three species of hammerhead sharks in Appendix II; to share efforts in preparing NDFs considering the agreements and recommendations of the workshop in September 2013 (El Salvador); and to establish collaborative mechanisms both regionally and nationally among CITES Authorities, fisheries, and organizations to contribute to sustainable and responsible management of shark species in Appendix II.

CITES Authorities from the United States, the U.S. Fish and Wildlife Service Office of Law Enforcement, and NMFS participated in the International CITES Workshop: Articulating Experiences and Strategies for the Implementation of Shark Species Included in Appendix II, in Santa Marta, Colombia, 25-27 November, 2014. More than 60 participants, representing over 20 countries, participated in the workshop. Topics discussed included: the making NDFs to ensure sustainable use of shark species in international trade; species identification; and traceability of products (fins and meat). The presentation of the identification software iSharkfin (an application to aid the identification of shark's fins through photographs) was an outcome of the workshop. The participants also identified current needs and recommendations for effectively implementing the shark listings. This workshop was hosted by the government of Colombia, with support from the CITES Secretariat, NMFS, and USFWS.

January 2015, Guatemala City, Guatemala: DOI-ITAP, in conjunction with OSPESCA and USFWS supported a Regional Expert Consensus Workshop for the Procedures for Making Non-detriment Findings for Species of Sharks and Rays in Central American Integration System (SICA) member countries. Participating countries: Belize, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Nicaragua, and Panama. A regional protocol on guidelines for the development of marine species NDFs was agreed upon by the CITES scientific authorities and was presented to the board of OSPESCA for their review and implementation.

Pilot Project to Enhance the Capacity of Ecuador to Use Genetic Identification Techniques to Assist in Implementation of the CITES Shark Listings: A collaborative pilot project is underway between NMFS and the Government of Ecuador to equip and train Ecuadorian officials in standard genetic techniques used to process and identify shark products in trade. This hands-on training has been provided to the Government of Ecuador through a series of workshops, which were organized by World Wildlife Fund-Ecuador, with a grant from NMFS Office of International Affairs and Seafood Inspection to help increase the country's capacity to monitor shark products in trade and to ensure compliance with CITES. Collectively, 30 government officials have received training on species-specific genetic identification techniques over the course of the two workshops. These trainings have laid the groundwork for the development of outreach materials, including scientific reports, to help explain the use and effectiveness of these techniques under this pilot project.

Regional workshop on the implementation of the CITES shark and ray listings, Dakar, 12-14 August 2014: NMFS provided support for a regional workshop in Dakar, Senegal on 12 to 14 August 2014, which brought together thirteen West African countries to share information and to receive identification training and tools that will facilitate implementation of the shark and ray listings under Appendix II of CITES adopted in 2013. The workshop participants also adopted an action plan (also available in French) identifying recommendations to address the priority needs of the region for the implementation and enforcement of the commercially- exploited shark and ray species listed in CITES (oceanic whitetip; scalloped, great, and smooth hammerhead; porbeagle sharks and manta rays).

COLOMBIA

The need to standardize customs shipments at the regional level to facilitate and contribute to the traceability of CITES species.

INTERNATIONAL CITES SHARK CONFERENCE: "ARTICULATION OF EXPERIENCES AND STRATEGIES FOR IMPLEMENTING THE INCLUSION OF SPECIES LISTED IN APPENDIX II":

The conference was held Santa Marta between the 25 y 27th of November 2014. In attendance, there were 72 representatives of CITES, fishing and customs authorities, and other experts of 26 countries: Germany, Spain, China, Indonesia, United States of America, México, Guatemala, El Salvador, Antigua and Barbuda, Granada,

Dominican Republic, Cuba, Belize, Honduras, Costa Rica, Panama, Venezuela, Surinam, Brazil, Ecuador, Peru, Chile, Uruguay, Argentina and Colombia.

In three days of workshop, different countries presented their experiences in terms of conservation, trade and Non-detriment extraction findings for shark species listed in Appendix II. There was also an species identifications exercise using shark fins and experience analysis and / or case studies on procedures of Non-detriment extraction findings

– First phase: CITES II Shark identification using fins campaigns, directed to control and monitoring institutions (AUNAP, Customs, ICA, CARs) in the most important cities (marine and airports) with a high marketing, trading and movement. For this training, we developed an identification guide.

– Workshops for the construction of a proposal for modification of tariff shipment codes associated with marine and coastal resources in Colombia, with an emphasis on Appendix I and II listed species: This aspect is developing a proposal to break Down tariff code for shark products (meat and fins), because these are very general.

Identifying levels of internal consumption within different countries to strengthen the control and monitoring of species of interest.

Through the Colombian Fishery Authority (AUNAP) we have increased efforts to improve specific statistical information collection on sharks, through the creation of information protocol application Known as the Fisheries Statistical Service Colombia (SEPEC) and the Colombian Fisheries Observer Program (POPC), with the purpose of generating and strengthening digital databases that can generate scientific information in assessing shark populations.

Through the AUNAP, in 2015 there has been work being carried out in the second stage of the identification and prioritization project of essential and potential habitats for sharks and rays in San Andrés and Old Providence Archipelago.

Continuing the creation and implementation of national, regional, and international strategies for the management and conservation of sharks, including action lines and 38 serving as the main tool for the creation of Non-Detriment Findings.

Establishment of the Colombian chondrichthyan research Network (led by the Squalus Foundation). This aims to become a space of socialization of all issues related to cartilaginous fish investigation (researchers, projects, publications etc.) and make available to all users information generated in our country, serving as a starting point and context for those who wish to advance in any investigation (http://www.squalus.org/redcondrictios/), additionally creating a virtual documentation centre for sharks and rays (http://www.squalus.org/biblioteca.html/).

The "Let's Stay Legal" 2014-2015 campaign (led by the Fishery Department Archipelago of San Andres, Old Providence and Santa Catalina), has designed a series of educational materials alluding to not catch and / or consume sharks and other threatened species in the Archipelago. This has been presented to hotels, restaurants, fisheries (industrial and artisanal), residents, tourists, schools and others.

Colombia´s Chondrichthyans Meeting (biannual event, led by the Squalus foundation)

The purpose of this meeting is to provide scientific and technical knowledge on fish species with emphasis on sharks and rays, through the development of research projects and the strengthening of inter-institutional relations in order to provide necessary basis for the conservation of these resources. Also Develop environmental education programs on sharks and rays toward to the conservation and technical support processes through the formulation, implementation and evaluation of research projects and utilization of fishery resources.

National Shark Red list actualization workshop: Held in Santa Marta in November 2015.

Continue promoting the exchange of experiences and information on NDF creation processes and training on species and sub-product (meat and fins) recognition for the species listed, which allows the quality and precision of data to be improved, as well as traceability mechanisms for trade.

– Workshops for the construction of an proposal for modification of tariff codes associated with marine and coastal resources in Colombia, with an emphasis on Appendix I and II listed species: This aspect is developing a proposal to break Down tariff code for shark products (meat and fins), because these are very general.

– Training Workshop on using the iSharkfin tool, developed by FAO for shark identification through its Fins.

Virtual Shark Group Workshop

Colombia hosted a virtual workshop on November 5th, with the purpose of having a space with all members to share findings and experiences relating to the work done in the shark workshop held in Colombia in November 2014. For this exercise, Colombia requested the members to send any information they had regarding their work and initiatives that are being carried out on a national level with sharks and their conservation and protection, in order to construct this Shark Group report. Only six countries responded with information, three of which were asked to make a small presentation during the virtual workshop so we could have some discussion within the group, and give other members the opportunity to ask questions or give feedback. Unfortunately, none of the countries asked made their presentation, even though they had accepted to from the beginning. Regardless, we were able to send their presentations to the other group members with information as to where direct questions if they had any.

All the group members were asked to send their information and invited to participate in the virtual workshop from October 14th, but unfortunately only a few participated:

Country	Organization
United Arab Emirates	Ministry of Environment and Water
United States	Wildlife Conservation Society
United States	Defenders of Wildlife
United Kingdom	UNEP WCMC
Germany	Federal Conservation Agency Germany
United States	U.S. Fish and Wildlife Service
Ireland	WWF International
United States	Humane Society International
United States	USFWS
United States	National Marine Fisheries Service
__	Convention on Migratory Species
United States	Pew Charitable Trusts
United States	NOAA Fisheries
United States	U.S. Fish & Wildlife Service
United States	U.S. Fish and Wildlife Service
Australia	TRAFFIC
Japan	
__	European Commission

MEXICO

The following is a summary of the most up-to-date information (based on replies to Notification 2015/027) on the implementation of the listings of shark and manta ray species in CITES Appendix II that were adopted at CoP16 (Bangkok 2013), as from the date on which such listings became effective until the present date. The information is based on input from:

– The *General Directorate of Wildlife* (DGVS) at the *Secretariat of the Environment and Natural Resources* (SEMARNAT), Management Authority

– The *National Commission for Knowledge and Use of Biodiversity* (CONABIO), Scientific Authority

– The *Federal Attorney's Office for Environmental Protection* (PROFEPA, SEMARNAT), Compliance and Enforcement Authority

– The *National Commission of Aquaculture and Fishing* (CONAPESCA) at the *Secretariat of Agriculture, Livestock, Rural Development, Fisheries and Food* (SAGARPA)

– The *National Institute of Fisheries* (INAPESCA, SAGARPA)

1. **Available scientific data such as stock assessment results**

1.1 The scientific data available at INAPESCA is obtained from different research projects to assess shark populations, and support management and protection measures. The projects were implemented at the Fisheries Regional Research Centres (CRIP) in Ensenada, Mazatlán, Bahía Banderas, Manzanillo, Pátzcuaro, Salinas Cruz, Tampico, Veracruz, and Campeche, and also at Central Offices. INAPESCA also supports the *National Shark Scientific Observers Programme* that has been running since 2006, and in 2014, 18 scientific observers, accredited under the Pacific Ocean shark fishery observer programme, and also by INAPESCA, supervised mid-water fishing vessels to assess compliance with the Official Mexican Standard NOM-029-PESC-2006 on responsible fishing of sharks and rays.

1.2 The data generated by INAPESCA (with the exception of data currently in the process of analysis) has been published in different chapters on sharks in the book "Sustainability and Responsible Fishing in Mexico" in the editions from 1998 to 2006 (SAGARPA, 2006).

2. Methodologies providing guidance for the making of non-detriment findings (NDF):

2.1 In the framework of the international workshop on Shark NDFs held on 20th-22nd August (2014) in Bonn, Germany, Mexico presented a case study on shark fisheries of *Sphyrna lewini* in southeast Mexico (Chiapas) (Tovar-Ávila and Castillo- Géniz, 2014). The main outcome of the workshop was a general guide on making NDFs for CITES-listed shark species (https://www.bfn.de/fileadmin/MDB/documents/service/skript358.pdf).

In March 2015, Mexico's Scientific Authority (CONABIO) met with experts and national fishing authorities (INAPESCA, CICESE-Ensenada, CICIMAR-BCS, and ECOSUR-Campeche) in Baja California to adapt the Productivity and Susceptibility Assessment (PSA) methods proposed by Patrick et al. (2010), and management measures described by Lack et al., (2014). PSA and Management Risk methodologies are semi-quantitative, and provide a rapid assessment of the vulnerability of species to harvesting pressures, based on their productivity (species biology), susceptibility (harvesting pressure) and management (species management at a national level).

2.2 The method adopted during the aforementioned meeting was applied during the **"Workshop on Assessment of Productivity, Susceptibility, and Management of Mexican sharks listed in CITES Appendix II"** (8 – 10 July 2015; Federal District, Mexico). The workshop was organized by the Mexican CITES Scientific Authority, CONABIO, and was attended by more than 30 experts from academic institutions, authorities, and civic associations involved in shark conservation and management.

During the workshop, Productivity and Susceptibility Assessment (PSA) methods and the management risk (MRisk) assessment method were applied to the four shark species listed in CITES Appendix II that are caught and internationally traded in Mexico: three species of hammerhead sharks – *Sphyrna lewini, Sphyrna mokarran* and *Sphyrna zygaena*, and the oceanic whitetip shark – *Carcharhinus longimanus*.

The two methods are semi-quantitative, and were adapted to the Mexican context to enable a rapid assessment of species' vulnerability to harvesting and management pressures in fishing grounds on the Atlantic and Pacific coasts, and by type of fishing vessel – small or coastal, and larger vessels. A total of 31 attributes were evaluated, relating to biology, harvesting pressures, and species management, based on the information provided by participants prior to and during the workshop.

A full report of the main outcomes of the workshop is available at the following link: http://www.biodiversidad.gob.mx/CITES/taller/PsaMrisk2015/.

One of the conclusions of the workshop was that *S. lewini* and *C. longimanus* reported medium vulnerability for all evaluated zones and vessels, and likewise, *S. zygaena* except in one zone. *S. lewini* showed the lowest values for vulnerability to fishing in three of the six zones evaluated, and *S. mokarran* reported the highest values for vulnerability in all evaluated zones. Further, management risk was high, but lower in the case of smaller vessels. These results will be useful for making Non-detriment findings in Mexico given that they provide information about species vulnerability and management risk at source, depending on fishing grounds, coast, and type of vessel.

2.3 Similar methodologies have been implemented by INAPESCA in the chapter on "Ecological Risk for Mexican Sharks" in the book on Commercially important CITES-listed shark species (Tovar-Ávila *et al.*, in print). These methodologies were also used to assess populations of other shark species in the Gulf of California (Furlong-Estrada *et al.*, 2014)

3. <u>Challenges faced by Mexico in implementing the new shark listings adopted at CoP16 (Bangkok, 2013):</u>

3.1 A greater commitment is required from the production sector to submit more reliable reports describing the species of shark catches in order to improve traceability of trade.

3.2 The production sector needs to be encouraged to respect the reproduction periods of the different shark and ray species

3.3 The need to strengthen and increase the capacities of the CITES Enforcement Authority to verify international trade in shark fins of CITES-listed species.

3.4 The need for interinstitutional coordination to facilitate the flow of information between fishery authorities (CONAPESCA and INAPESCA) and CITES Authorities.

3.5 To provide up-to-date information on shark population sizes and trends.

4. <u>Progress made to address such challenges:</u>

4.1 Since 2013, Mexico has established the following closed periods in order to protect all shark species on both Mexican coasts during the main breeding seasons:

ZONE	COASTS	PERIOD
I.	Tamaulipas, Veracruz, and Quintana Roo	From 15th May till 30th June 2014; in subsequent years, from 1st May till 30th June.
II.	Tabasco, Yucatán, and Campeche	From 15th May till 15th June 2014; in subsequent years, from 1st through 29th August.
III.	Pacific Ocean	From 1st May till 31st July.

4.2 In June 2013, the CITES Authorities, in collaboration with the Intersecretarial Committee for CITES Monitoring in Mexico, developed a critical path for implementation of Appendix II relative to Mexican sharks listed in the CITES Appendices, the main aspects of which are as follows:

- Basic scientific data for CITES-listed species
- Population monitoring
- Support materials and capacity building for target groups to enable identification of specimens, parts, and derivatives
- Monitoring of supply chain, and dissemination of procedures for sustainable international trade
- Inspection and supervision

4.3 PROFEPA forms part of the Barcode of Wildlife project, coordinated by the Mexican Barcode of Wildlife Network (Mexbol), which encompasses several higher education and research institutions. The purpose is

to provide a further tool for implementation of the law in order to identify species in international trade using genetic methods, and to provide scientific and technical evidence to be used in administrative and criminal procedures. To date, significant progress has been made, and a genetic reference library now exists (the goal is to include 200 priority species, and 800 look-alike species); training courses are provided for law enforcement officers; pilot tests have been run to identify samples of marine species such as sharks in order to adapt the timeline and ensure that procedures and findings are completed within the legally established periods. Funding is provided by the Google Foundation, and is administered by the International Consortium for the Barcode of Wildlife.

4.4 In 2014, 18 scientific observers, accredited under the Pacific Ocean shark fishery observer programme, and also by INAPESCA, supervised mid-water fishing trips, starting at the end of the 2014 closed period, in order to assess compliance with the Official Mexican Standard NOM-029-PESC-2006 on responsible fishing of sharks and rays.

4.5 Between December 2014 and April 2015, CONAPESCA held 8 capacity-building courses on the regulations applying to the capture of shark species and their correct identification using visual guides. The courses were held in eight of the Republic's states: Sinaloa, Sonora, Oaxaca, Campeche, Colima, Veracruz, Tamaulipas, and Baja California, and were implemented in cooperation with the National Institute for Capacity-building in the Rural Sector, A. C. (INCA Rural). More than 270 fishermen attended the courses, the purpose of which was to improve specific reporting of catches for each species of hammerhead shark by means of visual signs, and thus, improve traceability.

4.6 Mexico took part in a workshop on Shark NDFs held in Santa Marta, Colombia, from 24th to 28th November 2014, the purpose of which was to follow up on the work from previous workshops (such as the Bonn workshop, see paragraph 2.1). The main outcomes included the presentation of “iSharkFin” – a software developed by FAO for the identification of shark species (the application allows identification of shark fins from photographs). The CITES Enforcement Authority (PROFEPA) is routinely using the iSharkFin software to verify shipments of shark fins covered by CITES export permits at major Mexican sea and inland ports, international airports, and borders.

4.7 As a result of the coordination and sharing of information among the staff at the *National Oceanic and Atmospheric Agency* (NOAA), the *U.S Fish & Wild Life Service* (USFWS), and the National Commission of Aquaculture and Fishing (CONAPESCA), in June 2015, in San Diego, California, US Authorities inspected a shipment of 432 kg of dried shark fins, which had arrived in the United States from Mexico for forwarding to Hong Kong, China. CONAPESCA determined that the documents submitted to prove the legal origin of the shipment were of doubtful authenticity. Based on this information, the US authorities carried out a genetic analysis and found that the species in question was the Smooth hammerhead shark (*Sphyrna zygaena*), recently listed in CITES Appendix II. As a result of this process, it was determined that the shipment required a CITES export certificate to enter the United States, and accordingly, the US authorities declared the shipment illegal, and proceeded to confiscate it.

5. Progress made toward the adoption and implementation of National Plans of Action for Sharks, or other new information on shark trade and related matters

5.1 In October and November 2014, outreach workshops were held on the Shark and Ray Fisheries Management Programme in the Gulf of Mexico and Caribbean Sea. The workshops, which were attended by 115 users of shark and ray fisheries in the states of Tamaulipas, Veracruz, and Campeche, focussed on raising awareness about compliance with applicable regulations, and the importance of keeping reliable records of catches by species in vessel logbooks. Participants were also informed about specifications for trade of the species in accordance with CITES provisions.

6. New legislation concerning the conservation and management of sharks and rays

6.1 CONAPESCA is coordinating a process to modify NOM-029- PESC-2006 – the Official Mexican Standard that establishes the rules for sustainable use of elasmobranchs in Mexican jurisdictional waters. The project to modify the Official Mexican Standard is now preparing the response to the input received following public consultation, for subsequent approval by the Technical Work Group, the Subcommittee for Responsible Fisheries, and the SAGARPA National Advisory Committee for Agro-Food Standardization, and publication in the Federal Gazette prior to eventual publication of the Modified Standard.

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