Canada's response to Notification to the Parties No. 2011/049

1a) Sharks.

Canada provides this information in Annex 1.

1b) Sturgeons. Canada is not a Caspian range state.

1c) Orchids: annotation for species included in Appendix II.
Please refer to Canada's response to Notification 2010/027.

1d) *Aniba rosaeodora* and *Bulnesia sarmientoi*
Please refer to Canada's response to Notification 2010/027.

1e) *Cedrela odorata*, *Dalbergia retusa*, *D. granadillo* and *D. stevensonii*
Please refer to Canada's response to Notification 2010/027.

1f iB) Non-detriment Findings, report on workshops.
Please refer to Canada's response to Notification 2010/027.

1fii) Non-detriment Findings, formulation of Non-detriment Findings
Please refer to Canada's response to Notifications 2010/027 and 2009/023.

1g) *Aloe* and *Euphorbia*

We are unaware of any particular issues regarding accuracy or incompleteness of data for Canadian trade in *Aloe* and *Euphorbia*. Additionally, trade in these species is, for the most part, in artificially propagated specimens and therefore the trade is not of conservation concern.

We note that we are developing an electronic permitting system that, when finished, will be compatible with the CITES e-permitting toolkit and the work of the e-permitting working group. Our electronic permitting system will increase efficiency and accuracy of permit issuance, tracking and reporting.

1g) Application of the definition of "artificial propagation" to cultivated material in plant nurseries.

The definition of artificially propagated requires that the specimen be grown under controlled conditions and that the specimen either be exempted from the provisions of the Convention (e.g., seeds in certain situations) or that the specimen be derived from cultivated stock.

In Canada, our nursery material is primarily from cultivated material that meets the definition of "cultivated parental stock," and that therefore meets the definition of artificially propagated. In the rare situations when the specimens in nurseries originate from another country, then we have the appropriate CITES permits to certify that they were either artificially propagated or that the harvest was non-detrimental to the survival of the species in the wild.

Annex 1. Canadian Response to CITES Notification 2011/049 with respect to Sharks

The information below is provided by Canada in response to CITES Notification 2011/049, specifically section a) which requests further details on domestic shark management and conservation measures. The information provided is organised based on the related questionnaire developed at the 25th Animals Committee.

1. Ensure that shark catches from directed and non-directed fisheries are sustainable.

a) Do you have national measures directed towards this goal? If so, please summarize these measures and the status of implementation.

Since March 2007, Canada has had a *National Plan of Action (NPOA) for Sharks* that contains management measures by species. Canada intends to provide a progress report for its 2007 NPOA-Sharks at the 2012 *Food and Agriculture Organisation* (FAO) *Committee on Fisheries* (COFI) meeting.

In addition, Canada has a number of legislative measures that are relevant to managing and maintaining the long-term sustainability of shark populations and fisheries. These legislative instruments include:
• Department of Fisheries and Oceans Act;
• Oceans Act;
• Fisheries Act;
• Coastal Fisheries Protection Act; and
• Species at Risk Act.

Canada's NPOA-Sharks and legislative measures incorporate ecological considerations, integrated fisheries management, and the precautionary approach to ensure the long-term sustainability of sharks within Canadian directed and non-directed fisheries.

b) Are you a member of any Regional Fishery Management Organizations (RFMOs) that have adopted measures for the conservation and management of sharks? If so, please summarize your implementation of or any difficulties with these measures.

Canada has been a Contracting Party to the *International Commission for the Conservation of Atlantic Tunas* (ICCAT) since 1968. In this respect, Canada complies with the following ICCAT Resolutions concerning sharks:

- Resolution 03-10 on the shark fishery;
- Recommendation 04-10 concerning the conservation of sharks caught in association with fisheries managed by ICCAT;
- Recommendation 07-06 Supplemental Recommendation concerning Sharks;
- Resolution 08-08 on Porbeagle Shark (*Lamna nasus*);
- Recommendation 09-07 on the conservation of Thresher Sharks caught in association with fisheries in the ICCAT Convention Area;
- Recommendation 10-07 on the conservation of Oceanic White-tip Sharks caught in association with fisheries in the ICCAT Convention Area;

- Recommendation 10-08 on Hammerhead Sharks (Family Sphyrnidae) caught in association with fisheries managed by ICCAT; and
- Recommendation 2010-06 concerning Atlantic Shortfin Mako Sharks caught in association with ICCAT fisheries.

As a Member of the *North Atlantic Fisheries Organisation* (NAFO), Canada complies with Article 12.3 'Bycatch Requirements', Article 13 'Gear Requirements', and Article 17 'Conservation and Management of Sharks' of NAFO Conservation and Enforcement Measures.

As a Member of the *Western and Central Pacific Fisheries Commission* (WCPFC), Canada complies with Conservation and Management Measure 2010-07. Regarding the implementation of WCPFC CMM 2010-07, Canada has no directed fishery for sharks in the WCPFC Convention Area and is not aware of any interactions with sharks in that area.

In terms of the *Inter-American-Tropical-Tuna-Commission* (IATTC), Canada complies with Resolution C-05-03 (Conservation of Sharks Caught in Association with Fisheries in the Eastern Pacific Ocean) and Resolution C-11-10 (Conservation of Oceanic White-tip Sharks). Canada has no directed fishery for sharks nor is it aware of any interactions with sharks in the Eastern Pacific Ocean.

c) Have you signed or ratified the Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported, and Unregulated Fishing? What is the status of implementation of the agreement?

Canada signed the Agreement on Port State Measures to Prevent, Deter, and Eliminate Illegal, Unreported, and Unregulated Fishing on 19 November 2010 and is working towards its ratification.

d) With regard to fisheries enforcement activities, describe the problems that you are observing.

The directed Shark fisheries in Canadian waters are significantly small in comparison to other nations and the instances of non-compliance and bycatch of sharks are minimal. It should be noted that there is a lack of species-specific reporting in the *North Atlantic Fisheries Organization* (NAFO) - vessels will report that they caught "shark" but they do not identify what type; species-specific reporting of landed sharks is preferable.

2. Assess threats to shark populations, determine and protect critical habitats and implement harvesting strategies consistent with the principles of biological sustainability and rational long-term economic use.

a) What data collection and research measures have you undertaken towards this goal? Have conservation measures been put in place? Have critical habitats been identified?

Canada has undertaken research measures and data collection in its Atlantic, Pacific, and Arctic waters for pelagic sharks and spiny dogfish, as well as skates and chimaeras. In this respect, Canada has promoted research of particular importance that includes:

- Recovery potential assessment for Porbeagle Shark with implications for the future of the directed shark fishery and identification of pupping grounds for possible management measures.
- Population dynamics of Blue sharks, including assessment of mortality due to commercial discarding and shark derbies.
- Recovery potential assessments for Shortfin Mako and Basking Sharks, with implications for new management measures.
- Completion of a five-year study on the shared population of Spiny Dogfish in the Atlantic waters of Canada and the United States, production of the first joint, Canada-US stock assessment for this shared and highly migratory population, and proposal of possible management measures for this population.
- Assessment of a potential pupping ground for Black Dogfish in the Laurentian Channel.
- Assessment of Pacific dogfish was completed in 2010. The report can be found at: http://www.dfo-mpo.gc.ca/CSAS/Csas/publications/sar-as/2010/2010_057_e.pdf.

- Ongoing research on the skate complex (14 species) off Newfoundland and Labrador (including detailed information on age and growth, reproduction, morphometrics and meristics, food and feeding).
- Growth and reproductive potential of Winter, Little, and Thorny Skates on the Scotian Shelf.
- Completion of tagging research on Big Skate (Pacific), which will quantify seasonal migration patterns and provide information on species growth and age composition.
- Smooth Skate and Thorny Skate are currently under review by the *Committee on the Status of Endangered Wildlife in Canada* (COSEWIC) and these data are being used in their assessments.

3. Identify and provide special attention, in particular to vulnerable or threatened shark stocks.

a) What measures do you have in place to reduce or eliminate take, mortality and/or trade of vulnerable or threatened shark species?

The federal *Species at Risk Act* (SARA) was created to prevent wildlife species from being extirpated or becoming extinct, to provide for the recovery of wildlife species that are extirpated, endangered or threatened as a result of human activity and to manage species of special concern to prevent them from becoming endangered or threatened. This Act protects species at risk, their residence and their critical habitats. The Act's General Prohibition section states that "No person shall kill, harm, harass, capture or take an individual of a wildlife species that is listed as an extirpated species, an endangered species or a threatened species. In addition, the Act prohibits the possession, purchase, sale, or trade of SARA-listed species.

Under SARA, Canada has currently listed the following shark species:
- Basking Shark (*Cetorhinus maximus*); Pacific population (Endangered);
- Bluntnose Sixgill Shark (*Hexanchus griseus*) (Special Concern); and
- White Shark (*Carcharodon carcharias*) (Endangered).

In addition, Canada will continue to move ahead with the following activities related to the take, mortality, and/or trade of vulnerable or threatened shark species:

- Minimize the unutilized incidental catches of sharks;
- Minimize waste and discards from shark catches, in accordance with Article VII.2.2(g) of the Code of Conduct for Responsible Fisheries (for example, requiring the retention of sharks from which fins are removed);
- A program to determine the contribution of blue shark discard mortality to stock status is ongoing;
- Propose an ICCAT assessment to reconcile this issue; and
- Encourages the full use of dead sharks.

4. Improve and develop frameworks for establishing and coordinating effective consultation involving all stakeholders in research, management and educational initiatives within and between States.

Canada has implemented various research, management, and educational consultation mechanisms to engage relevant stakeholders in initiatives related to sharks which are described in detail below.

Regional Advisory Processes conducted through the Canadian Science Advisory Secretariat peer-review scientific reports related to the status of sharks within Canadian waters. These peer-review processes engage industry, stakeholders, and experts from within Canada and also other States/organisations that have scientific or other relevant knowledge/expertise (e.g. policy, fisheries management, etc.). Such technical reviews are fully documented and are made publicly available at: www.dfo-mpo.gc.ca/csas-sccs/index-eng.htm. To date, peer-review processes as described above have been completed for Porbeagle, Shortfin Mako, Blue Shark, Spiny Dogfish, Thorny Skate, and Winter Skate.

The Committee on the Status of Endangered Wildlife in Canada (COSEWIC) was established as an advisory body in 1977 to meet the need for a single, official and national classification of wildlife species at risk and operates under the auspices of the federal *Species at Risk Act.* COSEWIC uses the best available scientific and Aboriginal knowledge to assess species that might be at risk in Canada and indicates a designation to that species (e.g. endangered, threatened, not at risk, etc.). COSEWIC reports the findings of their assessments to the Canadian Endangered Species Conservation Council and to the Canadian public via http://www.cosewic.gc.ca. The Canadian federal Minister of Environment, in close consultation with the federal Minister of Fisheries and Oceans, then considers the assessment and may or may not recommend that the species be added to the federal List of Wildlife Species at Risk. To date, COSEWIC has assessed the following Canadian shark and skate/ray species, with varying designations: Porbeagle, Basking Shark, White Shark, Winter Skate, Shortfin Mako, North Pacific Spiny Dogfish, Spiny Dogfish, Blue Shark, Bluntnose Sixgill Shark, Barndoor Skate, Big Skate, Longnose Skate, Sandpaper Skate, and Brown Cat Shark.

In addition, the actions of the Canadian NPOA-Shark refer, *inter alia*, to standardised reporting and the management plan process in which consultations with shark industry representatives in advisory forums provide for a review of, and planning for, the policy and procedural basis for management of these fisheries. These forums are generally open to the interested public and aim to enhance outreach and education efforts.

Canada will continue to move ahead with measures to:

- Increase public awareness in Canada about shark species, risks to their survival, their importance within the ecosystem, and the fact that they are often a global resource requiring international research and conservation efforts;
- Encourage commercial and recreational fishers, and other industries to be more aware of the shark species present in Canadian fisheries waters, their biology, risks these species face, and catch-and-release practices through the advisory committee processes; and
- Enhance efforts to classify and record rarer species of sharks and skates by promoting better identification in existing observer programs and through enhanced reporting by fishers.

5. Minimize the unutilized incidental catches of sharks

a) Have you taken any measures and regulations towards this goal? If so, please summarize.

One of the actions of the NPOA-Shark refers to bycatch reduction and reporting of discard mortality. In this respect, Canada will move ahead with measures to:

- Improve the reporting of discarded bycatch and the associated mortality rates in domestic fisheries through better data collection and species identification by at-sea fisheries observers, as well as through mandatory reporting of all bycatch for the commercial and recreational fishing industry;

- Canada plans to incorporate discard estimates into existing Porbeagle population models and use these models to calculate new sustainable catch quotas so discards can be incorporated into the next stock assessment;

- Canada also plans to determine new sustainable catch quotas which allow for discards for Porbeagle and discard mortality reference for Blue Shark;

- Continue awareness-raising efforts among commercial and recreational fishers and other resource users about the risks facing certain shark and shark-like species (e.g. Spiny Dogfish caught in the Pacific salmon sport fishery) and promote conservation-based release practices to reduce discard mortality; and

- Encourage the strengthening of regulations of relevant RFMOs with regard to both the handling and release of shark bycatch species and to improve the identification and reporting of bycatch and associated mortality.

6. Contribute to the protection of biodiversity and ecosystem structure and function

Canada has undertaken research measures and data collection on the Atlantic, Pacific and Arctic coasts for pelagic sharks, Spiny Dogfish, skates and chimaeras. In this respect, Canada has promoted research of particular importance that includes:

- Recovery potential assessment for Porbeagle with implications for the future of the directed shark fishery and identification of pupping grounds for possible management measures;
- Population dynamics of Blue Sharks, including assessment of mortality due to commercial discarding and shark derbies;
- Recovery potential assessments for Shortfin Mako and Basking Shark, with implications for new management measures;
- Completion of a five-year study on the shared population of Spiny Dogfish in the Atlantic waters of Canada and the United States, production of the first joint, Canada-US stock assessment for this shared and highly migratory population, and proposal of possible management measures for this population;
- Assessment of a potential pupping ground for Black Dogfish in the Laurentian Channel;
- Assessment of Pacific dogfish was completed in 2010. The report can be found at:

  http://www.dfo-mpo.gc.ca/CSAS/Csas/publications/sar-as/2010/2010_057_e.pdf
- Ongoing research on the skate complex (14 species) off Newfoundland and Labrador (including detailed information on age and growth, reproduction, morphometrics and meristics, food and feeding, for the first time for many of the species);
- Growth and reproductive potential of winter, little and thorny skates on the Scotian Shelf; and
- Completion of tagging research on Big Skate (Pacific), which will quantify seasonal migration patterns and provide information on species growth and age composition.
- Smooth Skate and Thorny Skate are under review for COSEWIC and these data are being used in their assessments.

7. Minimize waste and discards from shark catches, in accordance with Article VII.2.2(g) of the Code of Conduct for Responsible Fisheries (for example, requiring the retention of sharks from which fins are removed).

a) Do you regulate shark finning (i.e., the removal and retention of fins from the shark and the discard at sea of the remainder of the carcass, live or dead)? If so, how?

Shark finning has been prohibited in Canada since 1994 by regulation under the federal *Fisheries Act* through fishing license conditions and as part of the Integrated Fisheries Management Plan for Atlantic sharks. Shark fisheries in Canada, both directed and bycatch, may be monitored at-sea by observers, enforcement officers, and/or at-sea video surveillance and 100% of all shark landings in Canada are monitored and weighted out at dockside by an independent third party contractor.
Shark fins cannot comprise more than 5% of the overall weight of shark onboard any Canadian fishing vessel (i.e. referred to as the 5% rule). Canadian regulations allow the onboard removal of fins and carcasses, but stipulate a specific weight ratio between the separated fins and the carcasses.

8. Encourage full use of dead sharks

a) Have you taken any measures towards this goal? If so, please summarize (please cross-reference question #5). What is the status of implementation?

In addition to the information provided above in response to questions 5) and 7), the primary shark species harvested in Canadian commercial fisheries are done so for meat and other products, in addition to fins.

9. Facilitate improved species-specific catch and landings data and monitoring of shark catches

Through its NPOA-Sharks, Canada will continue to improve reporting of discarded bycatch and the associated mortality rates in domestic fisheries through better data collection and species identification by at-sea fisheries observers, as well as through mandatory reporting of all bycatch for the commercial and recreational fishing industry. Canada is continuing to improve discard estimates and mortality rates for its commercial shark fisheries in order to calculate sustainable catch quotas for use in stock assessments.

Canada encourages the strengthening of regulations of relevant RFMOs with regard to both the handling and release of shark bycatch species and to improve the identification and reporting of bycatch and associated mortality.

Canada has reported species-specific landings since 2001; further details are provided in the response to Question 10.

10. Facilitate the identification and reporting of species-specific biological and trade data

a) To what extent do you report species-specific data and monitoring of catches, landings, and trade of sharks? Please specify which taxa (family, genus, or species) of sharks are reported.

Canada has listed species-specific landings reported from 2001 to 2005 as follows:

<u>Atlantic coast landings</u>:

SHARKS
- Porbeagle shark (Lamna nasus): directed fishery
- Blue shark (Prionace glauca): bycatch fishery
- Spiny Dogfish (Squalus acanthias): directed fishery
- Shortfin Mako Shark (Isurus oxyrinchus): bycatch

SKATES
- All (Rajidae): directed and bycatch

Pacific coast landings:

SHARKS
- Spiny Dogfish (Squalus acanthias): directed fishery
- Brown Cat Shark (Apistururs brunneus): bycatch
- Pacific Sleeper Shark (Somniosus pacificus): bycatch

SKATES
- All (Rajidae): directed and bycatch
- Bigskate (Raja binoculata): directed fishery
- Longnose (Raja rhina): directed fishery
- Deepsea skate (Bathyraja abyssicola): bycatch
- Sandpaper skate (Bathyraja interrupta): bycatch
- Roughtail Skate (Bathyraja trachura): bycatch
- Alaska skate (Bathyraja parmifera): bycatch

CHIMAERAS
Spotted Ratfish (Hydrolagus colliei): bycatch

b) Please specify which product codes are used for the trade of sharks.
Current Harmonized System Codes Current Canadian Customs Tariff 2012 Harmonized System Codes:

0302.65 – Dogfish and other sharks (fresh)
0302.65.00.10 – dogfish (fresh) 0302.81 – Dogfish and other sharks (fresh)
0302.65.00.90 – sharks other than dogfish (fresh)
0303.75 – Dogfish and other sharks (frozen)
0303.75.00.10 – shark fin (frozen) 0303.81 – Dogfish and other sharks (frozen)
0303.75.00.90 – shark other than shark fin (frozen)
03037520- Dogfish of the species (Squalus acanthias)
03037550 - Dogfish of the species (Scyliorhinus spp)
03037560 – Poreagle Shark (Lamna nasus)