# Response to CITES Notification 2011/049 by the European Union and its Member States

# Information to be submitted for the consideration of the next meeting of the Animals and Plants Committees

# a) Sharks

Parties are invited to

i) report on trade in specimens of these species and to provide information on the implementation of national or regional plans of action for sharks and other available relevant data and information on the species;

[see Resolution Conf. 12.6 (Rev. CoP15)]

## Response:

- Report on trade in shark species:

EU27's IMPORT of DOGFISH and OTHER SHARKS	
from EXTRA EU	
Period : 2008 - 2010	

Statistical Regime = 1

CN codes :	PRODUCT DESCRIPTION	Quantity in tons		PRODUCT DESCRIPTION Quantity in tons		Va	alue in .000	€
2008 - 2010 2008 till 2009 since 2010		2008	2009	2010	2008	2009	2010	
0302 65 20	Dogfish of the species Squalus acanthias, fresh/chilled	1.629,2	1.386,5	1.312,3	4.655,00	4.024,74	3.961,60	
0302 65 50	Dogfish of the species Scyliorhinus spp., fresh/chilled	10,4	1,8	0,5	28,73	2,14	0,98	

0302 65 60	Porbeagle shark (Lamna nasus), fresh/chilled			16,7			54,08
0302 65 90	Other sharks, fresh /chilled	227,7	510,5		378,17	843,99	
0302 65 95	Other sharks, fresh /chilled			492,4			1.144,50
0303 75 20	Dogfish of the species Squalus acanthias, frozen	2.324,8	2.121,6	2.532,4	5.149,89	5.283,65	6.661,60
0303 75 50	Dogfish of the species Scyliorhinus spp., frozen	0,0	0,0	0,0	0,00	0,00	0,01
0303 75 60	Porbeagle shark (Lamna nasus), frozen			3,4			7,95
0303 75 90	Other sharks, frozen	10.613,0	10.539,1		14.191,24	14.131,57	
0303 75 95	Other sharks, frozen			9.211,5			15.278,02
0304 29 61 0304 29 65	Dogfish ( <i>Squalus acanthias</i> and <i>Scyliorhinus</i> spp.), frozen fillets Porbeagle shark ( <i>Lamna nasus</i> ), frozen fillets	144,9	134,8	125,4	458,54	393,84	341,65
0304 29 68	Other sharks, frozen fillets			681,2			1.686,96
0304 29 69	Other sharks, frozen fillets	555,7	880,4		1.306,13	2.059,75	
	Grandtotal	15.505,7	15.574,7	14.375,8	26.167,70	26.739,68	29.137,35

Tab. Ref. : DOGFISHimpexp04 ( sheet " Import " )

Source : EUROSTAT COMEXT 01.12.2011

# EU27's EXPORT of DOGFISH and OTHER SHARKS to EXTRA EU

Period : 2008 - 2010

Statistical Regime = 1

CN codes :	PRODUCT DESCRIPTION	PRODUCT DESCRIPTION Quantity in tons		Value in .000 €			
2008 - 2010 2008 till 2009 since 2010		2008	2009	2010	2008	2009	2010
0302 65 20	Dogfish of the species Squalus acanthias, fresh/chilled	0,0	0,1	0,1	1,14	0,14	1,93
0302 65 50	Dogfish of the species Scyliorhinus spp., fresh/chilled	0,0	0,0	1,1	0,00	0,00	5,48
0302 65 60	Porbeagle shark (Lamna nasus), fresh/chilled			0,2			0,60
0302 65 90	Other sharks, fresh /chilled	10,0	9,9		58,47	52,31	
0302 65 95	Other sharks, fresh /chilled			103,3			175,79
0303 75 20	Dogfish of the species Squalus acanthias, frozen	17,1	42,2	4,2	49,61	67,41	4,00
0303 75 50	Dogfish of the species Scyliorhinus spp., frozen	0,0	0,0	0,0	0,00	0,00	0,00
0303 75 60	Porbeagle shark (Lamna nasus), frozen			68,0			47,07
0303 75 90	Other sharks, frozen	2.330,1	3.563,4		2.828,18	4.950,37	
0303 75 95	Other sharks, frozen			4.140,1			6.135,09

0304 29 61 0304 29 65 0304 29 68 0304 29 69	Dogfish ( <i>Squalus acanthias</i> and <i>Scyliorhinus</i> spp.), frozen fillets Porbeagle shark ( <i>Lamna nasus</i> ), frozen fillets Other sharks, frozen fillets	3,6	8,4 2 859 1	16,1 0,0 3.056,9	6,04	69,37 27 556 76	40,43 0,00 41.290,97
0304 29 09	Grand total	5.527,4	<b>6.483,1</b>	7.390,0	<b>32.804,98</b>	32.696,36	47.701,36
		,					

Tab. Ref. : DOGFISHimpexp04 ( sheet " Export " )

Source : EUROSTAT COMEXT 01.12.2011

## INCLUDE TABLES HERE.

- Information on the implementation of national or regional plans of action for sharks and other available relevant data and information on the species

The conservation of sharks and rays is addressed within the framework of the EU Plan of Action (EUPOA) adopted by the European Commission in February 2009<sup>1</sup> and endorsed by the EU Council of Ministers in March 2009. This Plan identifies the measures deemed necessary both at EU level (TACs, technical measures, effort and capacity limits, data collection) and under international management regimes (measures taken in the framework of RFMOs, CITES, CMS and the Barcelona Convention). A wide range of measures for shark management were in place in the EU before the adoption of the EUPOA and implementation of the EUPOA is progressing well.

Following the adoption of the EUPOA, the EU has actively participated in the negotiation of an instrument on the conservation of migratory sharks under the aegis of the Convention on the Conservation of Migratory Species (CMS), which led to the adoption in February 2010 of a Memorandum of Understanding on the conservation of migratory sharks. The EU signed the Sharks MoU in November 2011. The EU has also presented a proposal at CITES CoP 15 to list spiny dogfish and porbeagle in Appendix II of CITES.

In the EUPOA, the EU emphasizes the need to support the work of the RFMOs, strengthen the RFMOs that are in place and work for the establishment of RFMOs in areas not yet covered. This commitment is confirmed by the Commission Communication on the External Dimension of the Common Fisheries Policy<sup>2</sup>.Currently there is an increasing number of binding management recommendations adopted by RFMOs to which the European Union is a party. The EU presented several proposals in different RFMOs' annual meetings, to protect a number of shark species most of them having been adopted, such as thresher sharks, hammerhead sharks and silky shark.

<sup>&</sup>lt;sup>1</sup> COM (2009) 40 final. 05.02.2009.

<sup>&</sup>lt;sup>2</sup> COM (2011) 424 final. 13.07.2011.

In line with the EUPOA, the EU has either adopted unilateral measures or has instigated proposals for fisheries management measures to be taken at RFMOs level that have direct or indirect effects on the improvement of the conservation of sharks (e.g. management measures for the Mediterranean swordfish ICCAT **11-03**.).

Under the Data Collection Framework<sup>3</sup>, the multi-annual Union programme for the period 2011-2013 provides for the collection, management and use of data on sharks, which have been included within the mandatory sampling schemes for data collection. National programmes for data collection include catch, length sampling, sex ratio and maturity information from a list of key species.

At the EU level, it is prohibited for EU vessels to fish for, retain on board, to tranship or to land several shark, skates and rays, both in EU and in international waters. The species shall be promptly released unharmed to the extent of possible. In addition, a zero TAC has been set for 2011 in certain areas for some sharks (spurdog, porbeagle). The EU will keep these measures in place as long as they are deemed appropriate by scientists to protect these species.

Deep sea sharks are protected by various measures. Fishing opportunities in most EU Atlantic waters and international waters are fixed for 2011 and 2012 by Council Regulation 1225/2010. For 2012 a zero TAC is fixed for all deep-sea sharks. The regime for fishing deep-sea stocks (deep-sea sharks included) in the NE Atlantic (EU and NEAFC waters) is under revision. The Mediterranean Regulation contains various measures that protect various shark and ray species. These include the prohibition to use driftnets, the prohibition to use bottom set nets to catch several groups of sharks, the protection of the coastal zone from trawling, as well as gear requirements such as maximum net dimension and low twine thickness for bottom-set nets that further help to reduce unwanted by-catches of sharks.

In the Skagerrak and North Sea, TACs for demersal elasmobranchs have been agreed since 1999. Since 2009 the TAC has been gradually reduced.

In 2011 TACs were set at zero for common skate and porbeagle in the Skaggerak and the North Sea. Both are prohibited species, requiring that if caught they be promptly released unharmed to the extent practicable.

The Commission is working with FAO on a project for the preparation of a regional catalogue of sharks and rays of the North Atlantic and two Shark and Rays pocket guides.

ii) submit a list of shark species (Class Chondrichthyes) that they believe require additional action to enhance their conservation and management, including if possible any concrete measures which they believe to be needed. The list should include a summary of additional supporting information;

## Response:

For consideration by the Animals Committee we would like to suggest the species listed on page 14 in CoP15 Doc 53 which has been developed by the international recognized specialists of the IUCN/SSC Specialist Group and approved by AC24. Additional supporting information for some of these species is listed below:

- Shortfin (Isurus oxyrinchus) and longfin Mako (Isurus paucus) as a lookalike species see Annex 1 to this document
- Porbeagle (*Lamna nasus*) see CoP15 Prop.17, together with the first updated draft of the listing proposal just submitted to the Secretariat for first comments by the Shark Working Group of the Animals Committee at its 26th meeting (see document AC26 Doc. 26.2)
- Bigeye thresher (*Alopias superciliosus*) see Annex 3 to this document

<sup>&</sup>lt;sup>3</sup> COMMISSION DECISION (2010/93/EU) of 18 December 2009 adopting a multiannual Community programme for the collection, management and use of data in the fisheries sector for the period 2011-2013 (notified under document C(2009) 10121).

- Silky shark (*Carcharhinus falciformes*) see Annex 4 to this document
- Scalloped hammerhead (Sphyrna lewini) and great and smooth hammerhead as lookalike species see Annex 5 to this document
- Spiny dogfish (*Squalus acanthias*) see COP15 Prop.18

In addition, The European Union and its Member States wish to inform the Animals Committee about a study undertaken by TRAFFIC on behalf of the Scientific Authority (Fauna) of the United Kingdom (JNCC). This study sought to identify, by a process of risk assessment, those commercially exploited aquatic organisms at high risk which might be subject to further scrutiny to determine if they would benefit from measures under CITES or the Convention on Migratory Species (CMS). The method, which considered risks under three broad headings, namely the vulnerability of the species (biological risk), its value (economic risk) and 'violability' (compliance risk), was applied to 1600 commercially exploited aquatic organisms. A 2 day peer-review workshop took place in Aberdeen (UK) from 26-27 September 2011 with external experts from the UK, United States and Australia to discuss the original report. The original report of the study and of the peer review workshop will be published in early 2012 and will be provided to the Secretariat to be made available to the Animals Committee as an Information Document.

This workshop provided a number of recommendations for further work and suggested modifications to the method. As a result, JNCC has commissioned TRAFFIC to continue the study and to apply a revised method to a single taxonomic group, namely sharks. As a result, by the time of the Animals Committee meeting, we will be able to provide a list of shark species which are identified, by this method, as being of greatest risk and thus to warrant consideration for measures to reduce those risks, which might include action by CITES. Again we will provide this further report for consideration by the Animals Committee.

iii) advise whether they have domestic measures (e.g. laws or regulations) regulating the fishing, retention or landing of shark or ray species in their waters, and whether those measures apply to certain species only or to all species;

iv) advise whether they have domestic measures (e.g. laws or regulations) regulating the import or export of shark parts and products (fins, meat, skin, organs, etc.) and, if so, what those measures are.

Species for which retention or directed fisheries is prohibited, in accordance with conservation measures adopted in RFMOs. Vessels flying the flag of any EU Member State, or any other CPC (Contracting Party, Cooperating non-Party, Entity, or Fishing Entity) for that RFMO are subject to these prohibitions, when engaging in fisheries under the remit of the respective RFMO below. Since retention, landing, transshipment, and sale are prohibited, all international trade of the species from a CPC of the respective RFMO is therefore also prohibited. We would appreciate if the CITES Secretariat could inform CITES Parties about the following:

- ICCAT: Silky shark (*Carcharhinus falciformes*)<sup>i</sup>, hammerhead sharks (Family *Sphyrnidae*)<sup>ii</sup>, oceanic whitetip shark (*Carcharhinus longimanus*)<sup>iii</sup> and thresher sharks (*Alopiidae*)<sup>iv</sup>.
- IATTC: Oceanic whitetip shark (*Carcharhinus longimanus*)<sup>v</sup>
- NEAFC: Basking shark (*Cetorhinus maximus*)<sup>vi</sup>, spurdog (*Squalus acanthias*)<sup>vii</sup>, porbeagle (*Lamna nasus*)<sup>viii</sup> and 17 deep sea shark species (prohibitions on directed fisheries).

The deep sea shark species for which directed fishing is prohibited for 2012 (and may be renewed subsequently) are:

- Gulper shark (Centrophorus granulosus),
- Leafscale gulper shark (Centrophorus squamosus)
- Black dogfish (Centroscyllium fabricii)
- Portuguese dogfish (Centroscymnus coelolepis)
- Longnose velvet dogfish (Centroscymnus crepidater)
- Kitefin shark (Dalatias licha)
- Greater lanternshark (Etmopterus princeps)
- Iceland catchark (Apristuris spp)
- Frilled shark (Chlamydoselachus anguineus)
- Birdbeak dogfish (Deania calcea)
- Blackmouth dogfish (Galeus melastomus)
- Mouse catshark (Galeus murinus)
- Bluntnose six-gilled shark (Hexanchus griseus)
- Velvet belly (Etmopterus spinax)
- Sailfin roughshark or Sharpback shark (Oxynotus paradoxus)
- Knifetooth dogfish (Scymnodon ringens)
- Greenland shark (Somniosus microcephalus)
- IOTC: Thresher sharks (*Alopiidae*)<sup>ix</sup>
- CCAMLR: All shark species<sup>x</sup>

In addition, regulatory measures are included in the Council Regulation (EU) No 57/2011 of 18 January 2011 fixing the fishing opportunities for certain fish stocks and groups of fish stocks for 2011, applicable in EU waters and, for EU vessels, in certain non-EU waters:

- A zero Total Allowable Catch in 2011 for spurdog (Squalus acanthias)
- A zero Total Allowable Catch in 2011 for porbeagle (*Lamna nasus*)
- A prohibition for EU vessels to fish for, to retain on board, to tranship or to land the following species:
  - Basking shark (Cetorhinus maximus) and white shark (Carcharodon carcharias) in all EU and non-EU waters;
  - Angel shark (Squatina squatina) in all EU waters;
  - Common skate (Dipturus batis) in EU waters of ICES division IIa and ICES subareas III, IV, VI, VII, VIII, IX and X;
  - Undulate ray (Raja undulata) and white skate (Rostroraja alba) in EU waters of ICES subareas VI, VII, VIII, IX and X;
  - Porbeagle (Lamna nasus) in international waters; and
  - Guitarfishes (*Rhinobatidae*) in EU waters of ICES subareas I, II, III, IV, V, VI, VII, VIII, IX, X and XII.

In addition, the EU is considering the inclusion of porbeagle into CITES Appendix III.

#### Annex 1

## Shortfin (Isurus oxyrinchus) and longfin Mako (Isurus paucus) as a lookalike species

Additional supporting information

#### Distribution

The shortfin mako is a coastal and open ocean species. It is widespread in temperate and tropical waters of all the world's oceans. These sharks can also be found inshore where the continental shelf narrows, for example off the coasts of Southern Africa. Shortfin makos have also been sighted between 20-50° S between Australia and Chile, and to almost 60° southeast of New Zealand.

Shortfin makes are highly migratory sharks. For example, one study found that 36 percent of recaptured sharks were found further than 420 kilometers (260.97 miles) from their tagging sites.

#### **General characteristics**

Age of maturity:	9 years (males), 21 years (females)
Gestation period:	15-18 months
Litter size:	4-25 pups
Life span:	29-32 years

#### **Conservation status**

Globally, the shortfin mako (*Isurus osyrinchus*) is assessed as Vulnerable by the IUCN Red List of Threatened Species. In 2009, the International Commission for the Conservation of Atlantic Tunas (ICCAT) ecological risk assessment of pelagic sharks caught in Atlantic longline fisheries, found shortfin makos, along with bigeye threshers and silky sharks, to be among the most vulnerable to overexploitation. Historically, targeted commercial fisheries for shortfin makos took place in the eastern Atlantic, Mediterranean Sea, Gulf of Mexico, Caribbean, western and central Pacific, and off of Cuba and southern California.

Between 1986 and 2000, catch analysis of U.S. pelagic longline fishery logbooks report that make sharks may have declined by 40 percent in the Northwest Atlantic. Since 1998, there have been few records of make sharks in the central and eastern Mediterranean, an area where the species was previously considered common.

Of the pelagic sharks caught by Spanish longline fleets (targeting sharks and swordfish) in the Atlantic and Pacific Oceans between 2000 and 2004, 10 percent were shortfin makos.

#### Threats

Shortfin makes are regularly taken as bycatch in tuna and swordfish longline fisheries worldwide. As one of the only known predators of swordfish, they are particularly vulnerable to capture in the targeted swordfish fisheries in the Atlantic and Pacific. In addition, gillnet (drift and set) and hook-and-line fisheries throughout their range post direct threats to this species.

Despite the increasing importance of shortfin makes to pelagic fisheries worldwide, catches have been poorly reported, and catch data are incomplete. In addition, the extent to which finning of shortfin makes occurs in high seas fisheries remains unclear.

Shortfin makos are highly valued for their meat (commonly prepared for human consumption), skin, and fins, and their jaws and teeth are often sold and traded as ornaments. In addition, shortfin makos are prized by big-game sport fishers for their curiosity, speed, and their habit of leaping out of the water when hooked or in pursuit of prey. Recreational angling for mako sharks is particularly popular in New Zealand and South Africa, and recreational mako fishing has been reported in the Mediterranean.

## Bigeye thresher (Alopias superciliosus)

Additional supporting information

#### Distribution

Thresher sharks are highly migratory sharks distinguished by long, scythe-like tails. The bigeye thresher, one of three species in the family Alopiidae, is found nearly worldwide in warm, temperate and tropical oceanic and coastal waters to depths of 150 meters.

## **General characteristics**

Age of maturity:	9-10 years (males), 12-14 years (females
Gestation period:	12 months
Litter size:	2 pups
Life span:	20 - 21 years

#### **Conservation status**

All members of genus *Alopias*, the thresher sharks, are listed as Vulnerable globally on the IUCN Red List of Threatened Species because of their declining populations. *Alopias superciliosus* has the lowest annual rate of population increase of all thresher sharks and is therefore particularly at risk from depletion in fisheries. Bigeye thresher sharks are particularly slow to reproduce, even when compared to other sharks. Their life history characteristics make bigeye threshers highly susceptible to overfishing and depletion.

In 2008, the ICCAT Standing Committee on Research and Statistics (SCRS) found bigeye threshers to have exceptionally high vulnerability to pelagic fishing pressure and exceptionally low biological productivity (substantially lower than the other species examined).

## Threats

Members of the genus *Alopias*, thresher sharks, are threatened from a combination of slow life history characteristics, hence low capacity to recover from moderate levels of exploitation, and high levels of largely unmanaged and unreported mortality in target (for fins and their valuable meat) and bycatch fisheries. The Bigeye Thresher Shark has the lowest intrinsic rebound potential and least resistance to fisheries of the genus.

Thresher shark species (including *A. superciliosus*) were found to represent at least 2-3% of the fins auctioned in Hong Kong. It is estimated that between 350,000 and 3.9 million thresher sharks are represented in the shark fin trade each year or, in biomass, 12,000 to 85,000 mt.

Its epipelagic habitat occurs within the range of commercial longline fisheries in which it is readily caught. Especially important areas for these fisheries are the northwestern Indian Ocean, western and Central Pacific, eastern North Pacific, and North Atlantic. The Bigeye Thresher was formerly a very important component of the Cuban longline fishery, and more recently has been taken in considerable numbers by longliners off the northeastern USA and by gill net vessels off southern California and the eastern Atlantic, and by longliners off Taiwan. This species is also taken as incidental bycatch in fixed bottom and pelagic gill nets, in trawls, and as a rare catch of anti-shark nets.

Annex 2

Annex 3

## Silky shark (Carcharhinus falciformes)

Additional supporting information

#### Distribution

Silky sharks are found in all tropical waters around the globe. They are pelagic (open ocean) sharks and are most commonly found near the edge of continental and insular shelves at depths of 200 meters (656 feet) or more, but have been known to occur to depths of at least 500 meters (1,640 feet) further offshore. Young silky sharks are often found in coastal nurseries. As sub-adults these sharks move further offshore over deeper waters, frequently joining schools of tuna they seem to feed upon. Silky sharks feed on sea catfish, mullets, mackerel, yellowfin tuna, albacore, porcupine fish, as well as one a variety of other fish species and cephalopods.

#### **General characteristics**

Age of maturity:	5-10 years (males), 6-12 years (females)
Gestation period:	12 months
Litter size:	2-15 pups
Life span:	22 years

#### **Conservation status**

According to the IUCN Red List of Threatened Species, the silky shark (*Carcharhinus falciformis*) is Near Threatened globally. In 2008 and 2010 ecological risk assessments, the International Commission for the Conservation of Atlantic Tunas (ICCAT) placed silky sharks at the highest risk levels of overexploitation from pelagic longline fisheries. Total global catch of this species reported to the FAO has decreased steadily since 2000; from 11,680 tons reported in 2000 to 4,358 in 2004. A 2005 study estimated that the silky shark population in the tropical central Pacific has declined in abundance by about 90 percent between the 1950s and 1990s. In the Maldives, it is estimated that this species represented close to 85 percent of oceanic shark catch.

Due to their high rate of capture, silky shark populations appear to be declining across their range in the eastern and western Pacific, the northwest and western Atlantic, and the Indian Ocean. In the eastern Pacific Ocean, silky sharks are the species most commonly caught as bycatch in oceanic purse seine fisheries, which often use drifting fish aggregating devices (FADs) to target tuna, swordfish, and other billfish.

#### Threats

In 2002, longline vessels operating in the eastern central Pacific landed and exported over 8,000 tons of shark carcasses and 900 tons of shark fins from Costa Rica alone. A majority of these exports were recorded as silky sharks, though these figures most likely underestimate the true catch rates, as many landings occur at private docks where enforcement and monitoring is difficult. Additionally, fishermen often refer to silky sharks by the common Spanish name "punta negra," which has led to the common misclassification of silky sharks as blacktips.

A 2006 study found that silky shark fins were the third most commonly sold fin species in Hong Kong, the world's largest shark fin trading center, following blue sharks (*Prionace glauca*) and scalloped hammerheads (*Sphyrna lewini*). Between half a million and one and a half million silky sharks are traded annually for their fins. In addition to the value of their fins, silky sharks are valued for their which can be prepared for human consumption, their skin for leather, and their livers for oil.

#### Annex 4

#### Scalloped hammerhead (Sphyrna lewini) and great and smooth hammerhead as lookalike species

Additional supporting information

#### Distribution

The Scalloped Hammerhead (*Sphyrna lewini*) is a coastal and semioceanic hammerhead shark that is circumglobal in coastal warm temperate and tropical seas, from the surface and intertidal to at least 275 m depth.

#### **General characteristics**

Age of maturity:	5-10 years (males), 6-12 years (females)
Gestation period:	8 -12 months
Litter size:	14-26 pups
Life span:	30 years

#### **Conservation status**

Where catch data are available, significant declines have been documented: both species-specific estimates for *S. lewini* and grouped estimates for *Sphyrna* spp combined suggest declines in abundance of 50-90% over periods of up to 32 years in several areas of its range, including South Africa, the northwest and western central Atlantic and Brazil. Interviews with fishermen also suggest declining trends. Similar declines are also inferred in areas of the species range from which specific data are not available, but fishing pressure is known to be high. Although *S. lewini* is relatively fecund compared to other large sharks (with litters of 12-38 pups) the generation period is greater than 15 years in the Gulf of Mexico and its life-history characteristics mean that it resilience to exploitation is relatively low. Given the major declines reported in many areas of this species range, increased targeting for its high value fins, low resilience to exploitation and largely unregulated, continuing fishing pressure from both inshore and offshore fisheries, this species is assessed as Endangered globally according to the IUCN Red List of Threatened Species

#### Threats

S. *lewini* is taken as catch and bycatch in domestic fisheries within Exclusive Economic Zones, as well as in multinational fisheries on the high seas. Unlike other species of sharks, hammerheads frequently aggregate in large numbers, which makes them more vulnerable to fishing efforts. Furthermore, according to a 2008 assessment of illegal, unreported and unregulated fishing, hammerheads are among the most frequently taken shark species in illegal fishing.

This species is highly desired for the shark fin trade because of the fin size and high fin-ray count. Hammerhead shark meat is generally not consumed. Speciesspecific trade data are limited, but marketbased scientific inquiries have yielded important trade information. Traders have stated that hammerhead fins are some of the most valuable in the market. The three hammerhead species (*Sphyrna lewini, S. mokarran, S. zygaena*) combined make up approximately 6 percent of the identified fins entering the Hong Kong market. From this information, scientists have estimated that 1.3 million to 2.7 million scalloped and smooth hammerheads are exploited for the fin trade every year.

Hammerheads are one of the few shark species that school, making them easier to target. According to the catch data that is available, the catch of hammerheads in the Pacific has gone down drastically in recent years-- this is most likely attributed to decreases in population size due to fishing pressure. Reports have also shown hammerhead juveniles are increasingly being targeted.

#### Footnotes

<sup>i</sup> It is prohibited to retain onboard, transship, land, store, sell, or offer for sale any part or whole carcass of the silky shark. There is an exception for developing coastal countries for local consumption, but in that case international trade is prohibited. This will enter into force in 2012.

http://iccat.org/Documents%5CRecs%5Ccompendiopdf-e%5C2010-08-e.pdf. It is prohibited to retain onboard, transship, land, store, sell, or offer for sale any part or whole carcass of hammerhead sharks of the family Sphyrnidae (except for Sphyrna tiburo). There is an exception for developing coastal countries for local consumption, but in that case international trade is prohibited.

http://iccat.org/Documents%5CRecs%5Ccompendiopdf-e%5C2010-07-e.pdf. It is prohibited to retain onboard, transship, land, store, sell, or offer for sale any part or whole carcass of oceanic whitetip sharks in any ICCAT fishery.

<sup>iv</sup> <u>http://iccat.org/Documents%5CRecs%5Ccompendiopdf-e%5C2009-07-e.pdf</u>. It is prohibited to retain onboard, transship, land, store, sell, or offer for sale any part or whole carcass of bigeye thresher sharks, or to undertake a directed fishery for any species of thresher sharks of the genus *Alopias spp*.

<sup>v</sup> http://www.iattc.org/PDFFiles2/Resolutions/C-11-10-Conservation-of-oceanic-whitetip-sharks.pdf. It is prohibited to retain onboard, transship, land, store, sell, or offer for sale any part or whole carcass of oceanic whitetip sharks. This enters into force 1 January 2012.

<sup>vi</sup> <u>http://www.neafc.org/system/files/rec-6\_2011\_baskingshark.pdf</u>. Directed fishing is prohibited.

vii http://www.neafc.org/system/files/rec-7 2011 spurdog.pdf. Directed fishing of spurdog is prohibited, and incidental catches are to be released unharmed.

viii http://www.neafc.org/system/files/rec-8 2011 porbeagle rev1.pdf. Directed fishing is prohibited.

<sup>ix</sup> <u>http://www.iotc.org/files/proceedings/misc/ComReportsTexts/resolutions\_E.pdf</u>. Resolution 10/12 (p. 209). It is prohibited to retain on board, transship, land, store, sell, or offer for sale any part or whole carcass of threhser sharks of all the species of the family Alopiidae.

\* <u>http://www.ccamlr.org/pu/e/e\_pubs/cm/10-11/32-18.pdf</u>. All directed fishing of any shark species is prohibited, and any bycatch should be released alive.