



**Oceana's contribution to the
ICCAT shark assessment**

Madrid, September 2008





Chairman of the SCRS Shark Species Group:

Mr. Andrés Domingo
Dirección Nacional de Recursos Acuáticos - DINARA
Sección y Recursos Pelágicos de Altura
Constituyente 1497
11200 Montevideo

25 August 2008

Dear Mr. Domingo,

As you may know, Oceana is an international organisation dedicated to the study and protection of the world's oceans. Since 2006, we have been engaged in a major European programme to investigate shark fisheries with the objective of restoring and conserving shark populations through improved European Union (EU) fisheries policy. The data and photos Oceana gathered during its investigative activities reveal the scope of European Union fishing fleets operating worldwide and especially in the Atlantic Ocean.

European fisheries have traditionally exploited many small bottom-living coastal sharks and rays, and have recently increased their exploitation of pelagic and deep-water sharks. The largest European shark fisheries, undertaken by the Spanish and Portuguese surface longline fleet on the high seas of the Atlantic, Pacific and Indian Oceans, are very poorly documented. Though these fisheries historically targeted tuna and swordfish, this has changed in the last few years and pelagic sharks are now the targeted catch of these fleets.

For stock assessments that rely on catch data, it is essential to quantify the total removals of the stocks of concern. The comparison of various catch data for sharks in the Atlantic indicates a massive underreporting. Sharks are highly valuable species, especially due to high economic value of their fins, which are consumed in the Asian market, and their liver oil, used as an ingredient in cosmetics. The demand for both products is rising on the world market.

Oceana's contribution to the 2007 Data Preparatory Meeting of the Shark Species Group, especially our presentation of EUROSTAT shark catch data by species and country, was officially recognized and well received by the working group during the June meeting in Uruguay. Given the consideration of our contribution last year, Oceana would like to take this opportunity to provide an update on catch information we have gathered from different catch databases.

In Annex II to this letter you find an overview of Atlantic shark catches by European Union member states, reported to FAO 2006 for the complete overview of recent shark catches.

See Annex II : Overview of Atlantic shark catches by European Union member states, reported to FAO 2006

In the link below you find information on catches for sharks divided by European Union country and catch area in the Atlantic. The data has been separated according to the 11 pelagic shark species¹ that are of particular concern to the ICCAT shark species group, divided by EU Member State and area, and can be freely manipulated for further analysis.

2006_EUROSTAT_SHARK_CATCHES_ATLANTIC_BY_REGIONS_PREPARED_by_OCEANA.xls

http://www.oceana.org/fileadmin/oceana/uploads/europe/downloads/2006_EUROSTAT_SHARK_CATCHES_ATLANTIC_BY_REGIONS_PREPARED_by_OCEANA.xls

Further, Oceana has prepared an overview of catch data for blueshark, mako shark and other relevant species as a time series since 1950 as requested by the species group in the data preparatory meeting for the shark assessment. The data is also gathered from the EUROSTAT database. Please find the overview tables below.²

2006_EUROSTAT_MAKO_AND_BLUE_SHARK_CATCHES_IN_TIME_BY_OCEANA.xls

http://www.oceana.org/fileadmin/oceana/uploads/europe/downloads/2006_EUROSTAT_MAKO_AND_BLUE_SHARK_CATCHES_IN_TIME_BY_OCEANA.xls

Furthermore, we would also like to present:

- I. A description of European Union surface longline fleet in the Atlantic
- II. A comparison of EU member state shark catches in the Atlantic, and
- III. An overview of sharks landing places in the Atlantic to draw your attention to the relevant harbours.

We hope this information will be of use and that it will aid in the implementation of shark catch limits in ICCAT waters.

Best regards,



Xavier Pastor
Executive Director of Oceana in Europe

CC:

Mr. Fabio Hazin, Chairman of ICCAT

Mr. John Edward Spencer, EC Head Delegate to the ICCAT Shark Species Group

¹ Including Thresher - *Alopias vulpinus*; Blue shark - *Prionace glauca*; Bigeye thresher - *Alopias superciliosus*; Silky shark - *Carcharhinus falciformis*; Longfin mako - *Isurus paucus*; Mako sharks - *Isurus* spp; Mackerel sharks, Porbeagles, nei - *Lamnidae* Porbeagle - *Lamna nasus*; Requiem sharks nei - *Carcharhinidae*; Shortfin mako - *Isurus oxyrinchus*; Scalloped hammerhead - *Sphyrna lewini*; Hammerhead sharks nei - *Sphyrna* spp; Hammerhead sharks etc, nei - *Sphyrnidae* Smooth hammerhead - *Sphyrna zygaena*; Stingrays, Butterfly rays, nei; Tresher sharks nei - *Alopias* spp

² For future reference, the EUROSTAT database can be freely accessed at:

http://epp.eurostat.ec.europa.eu/portal/page?_pageid=0,1136206,0_45570467&_dad=portal&_schema=PORTAL

I. Description of European Union surface longline fleet and fisheries in the Atlantic Ocean

According to ICCAT catch data, most sharks in the Atlantic Ocean are caught with longline fishing gear. This section thus describes the European Union surface longline fleet and fisheries. While the EU fleet lands both shark fins and carcasses, the hunt is economically driven by the growing demand for fins in China and this fleet has moved to directly targeting sharks in the last few years.

As of July 2008, there is a fleet of 194 European Union flagged surface longliners longer than 24 metres and operating in the world oceans. 158 of the longliners are registered with ICCAT for fishing operations for tuna, tuna-like species and billfishes. Of those 158 vessels, 138 are Spanish flagged, 16 are Portuguese flagged, one is Cyprus flagged, one is Malta flagged and two are flagged to the United Kingdom.

A. Spanish longline fisheries in the Atlantic

Spain is one of the most important players in the world market for shark fins. This country possesses, by far, the largest European longline fleet. The Spanish longliners' catch in the Atlantic Ocean consists of more than 67% sharks. Swordfish makes up around 27% and tuna is only a small portion of the catch in the Spanish Atlantic surface longline fishery (ICCAT task 1 catch data, Spain 2007).

The Spanish surface longline fishery in the Atlantic targeting sharks is comprised of large freezer vessels. The gear used is the standard Spanish surface longline for swordfish (using a mean number of 1100–1500 hooks per set), although some technological improvements have been documented over time (e.g. the introduction of light sticks and changing from a multifilament to a monofilament line). As a result of this change, blue shark (*Prionace glauca*) has become a target species in recent years. This change in fishing strategy is related to the development of new markets for shark meat and shark fins and a recent increase in its value on the international market and the ability of modern vessels to freeze their catch and therefore retain caught sharks without deterioration of the meat or cross-contamination with teleosts in the hold of the vessel.

During the 1990s, a reduction in the Spanish fleet size was observed in the North Atlantic as a result of the introduction of the total allowable catch (TAC) system for swordfish in 1995. At the same time, fishing strategy began to change and sharks became the main targeted species. Since then, Elasmobranch catch consists mainly of pelagic sharks, particularly blue shark and shortfin mako (*Isurus oxyrinchus*). Other species such as the common thresher (*Alopias vulpinus*), bigeye thresher (*A. superciliosus*), smooth hammerhead (*Sphyrna zygaena*), tope (*Galeorhinus galeus*), porbeagle (*Lamna nasus*), Galapagos shark (*Carcharhinus galapagensis*) and other requiem sharks (*Carcharhinus* spp.) are also regularly taken. Once caught, the sharks are immediately processed on-board and frozen. In 2006, Special Fishing Permits to remove shark fins on board were issued to 164 Spanish surface longliners.

Some of the sharks from the last gear sets may be landed fresh. Most are landed at the ports of Walvis Bay, Namibia and St. Vincent, Cape Verde. Other landing places include Vigo (mainly for fresh sharks) and Las Palmas, Spain. Blue shark is the predominant species caught (representing about 80% of the total catch) and landings averaged 28,600 t/year for the period 2000–2004. Shortfin mako was the second most important species, representing about 9.5% of total “by-catch”, with other shark species representing about 1.7%.

B. Portuguese longline fisheries in the Atlantic

Pelagic shark catches from Portugal in the Atlantic were predominantly associated with the swordfish fishery that began around 1987. The fishery is made up of large freezer vessels operating in the North Atlantic and waters of Cape Verde. Like the Spanish fleet, Portuguese longliners progressively moved to a targeted shark fishery. The mainland Portuguese fleet operating in Azorean waters is composed solely of large longliners that land catch mostly in Cape Verde and in the Azores. The elasmobranch catch of the Portuguese swordfish fishery consists mainly of pelagic sharks, particularly blue shark, shortfin mako and deep-sea sharks.

Other species, such as thresher sharks (*Alopias* spp.), smooth hammerhead, tope and Galapagos shark (*Carcharhinus galapagensis*) are also regularly taken. Once caught, the sharks are immediately processed on-board and frozen. In 2007, thirty-four Portuguese longliners had Special Fishing Permits to remove shark fins on board (Portuguese communication to Oceana, 2007). Most of the trunks are directly transported to mainland Portugal in large freezer containers, then immediately shipped to Spanish exporting intermediaries and markets.

Portuguese Atlantic longline fleets reported 14,806 tons of fish catches to ICCAT in 2005, 11,767 tons of which (almost 80% of the entire catches) was shark.

C. United Kingdom longline shark fisheries in the Atlantic

In 2006, two industrial surface longliners from the United Kingdom fished in the Southeast and Southwest Atlantic. These longliners mainly target swordfish and sharks. The vessels have Special Fishing Permits to process sharks on board and land significant quantities of blue and mako shark trunks and fins. According to the UK government, charter arrangements with Namibian authorities provide for full observer coverage and compliance with ICCAT regulations for the two vessels that operated in FAO area 47 and landed in Walvis Bay, Namibia and Durban, South Africa.

D. European Union surface longline fleet between 20 and 24 metres

That the number of fishing vessels between 20 and 24 metres has grown has been a cause of concern to ICCAT and other RFMO's. Many of these vessels have powerful motors and are able to fish on the high seas. These vessels are not included in the ICCAT list of authorized vessels and therefore catches are likely not reported to ICCAT. This year, 47 European Union surface longliners between 20 and 24 metres are active. Oceana documented at least one of these vessels, the Spanish "El Tuly", landing sharks and shark fins in the harbour of Las Palmas, Spain. See Annex II for the complete list of EU surface longline vessels between 20 and 24 metres.

E. Summary

In 2006, Spain reported 40,495 tons of total Atlantic catch (tuna, swordfish and sharks) for their 138 ICCAT-licensed longliners. Of that, 27,801 tons, or 69%, were sharks. At the same time, Portugal reported a total catch (tuna, swordfish, sharks) 14,773 tons (divided by species) for their 16 ICCAT-licensed longliners. Of that, 10,586 tons, or 72%, were sharks (mainly blue and mako sharks). Also for 2006, the United Kingdom operated two surface longliners in the Atlantic and reported a total catch of 1,344 tons. The fleets from all three countries are comprised of vessels between 24 and 47 metres with freezing capacity on board. The Spanish, Portuguese and UK surface longliners have been widely modernized

during the last few years and as the vessels operate all year round and all species caught have to be reported to ICCAT. Average annual catches per surface longline vessel over the year should be the same for the vessels from Spain, Portugal and the United Kingdom. But that is not the case.

In the table below, Oceana calculated average catches (sharks and swordfish plus bycatch) per European Union surface longline vessel in the Atlantic in 2006 as reported to ICCAT. The Portuguese total annual catch per vessel is around 923 tons. It is surprising that the United Kingdom average annual catch per vessel is only 667 tons and the Spanish average annual catch per vessel is only around 293 tons. It should be taken into account, however, that not all Spanish longliners licensed in ICCAT in 2006 were active in the Atlantic all year round. But harbour records from the Spanish surface longline fleet indicate that at least 60% of the vessels were catching and landing sharks in the Atlantic in 2006.

The table below indicates that Spanish shark catches in the Atlantic are underreported. Oceana proposes that reported catches should be assessed and estimates for Atlantic sharks should be carried out by ICCAT on the basis of the number of active vessels in the Atlantic and fishing capacity.

Table 1: Comparison of average catches of Surface longliners, targeting sharks in the Atlantic from different EU countries

EU Country	Number of surface longline vessels licensed in ICCAT 2006	Total reported longline catch in the Atlantic, 2006³	Average total catch/longliner in the Atlantic, 2006 (Oceana calculation)
Spain	138	40,495 tons	293 tons
Portugal	16 ⁴	14,773 tons	923 tons
United Kingdom	2	1,334 tons	667 tons
EU countries	156⁵		

³ Mediterranean shark catches are not included

⁴ Including 6 longliners with surface longlines as second gear.

⁵ Malta and Cyprus have one surface longliner registered with ICCAT but the vessels are active in the Mediterranean

II. Comparison of European Union member state shark catches in the Atlantic, 2006

Catches of sharks in the Atlantic Oceana are supposed to be reported to various official bodies. In addition to ICCAT, they must be reported to the fisheries ministries of each European Union member state and to EUROSTAT, the statistical body of the European Union. As indicated earlier, EUROSTAT catch data for the Atlantic are more complete than ICCAT data, as 19 EU member states report Atlantic shark catch data divided by species to EUROSTAT.

Total Atlantic shark catches in 2006 as reported to EUROSTAT are 52,019 tons, compared to a total catch reported to ICCAT of 42,361 tons. This difference is due to the fact that France, Ireland, Belgium, Greece, the Netherlands, Estonia, Lithuania, Denmark, Sweden, Romania, Bulgaria, Germany and Slovenia only report their shark catches to EUROSTAT and not to ICCAT. The table in Annex II shows an overview of 2006 Atlantic shark catches as reported to EUROSTAT, divided by country and species and a comparison to ICCAT figures.

Table2. Comparison of reported shark catches by European Union countries to Eurostat and ICCAT 2006

Country	EUROSTAT Atlantic 2006	ICCAT 2006
Spain	22,233	27,801
France	11,476	Not reported
Portugal	10,840	11,069
United Kingdom	3,966	3,324
Ireland	1,132	Not reported
Belgium	1,016	Not reported
Italy	532	96
Greece	347	Not reported
Netherlands	161	Not reported
Estonia	133	Not reported
Lithuania	78	Not reported
Denmark	27	Not reported
Sweden	25	Not reported
Malta	18	27
Germany	11	Not reported
Cyprus	8	44
Romania	8	Not reported
Bulgaria	6	Not reported
Slovenia	2	Not reported
Total	52,019	42,361

III. An overview of shark landing places of the European Union longline fleet in the Atlantic.

To receive better catch estimates for sharks and/or to introduce port state control measures for accurate reporting of shark catches, it is important to know in which harbours principle shark landings occur.

In 2006, Spanish, Portuguese and UK longliners landed the great majority of their Atlantic shark catches in the following harbours:

- St. Vincente, Cape Verde
- Mindelo, Cape Verde
- Walvis Bay, Namibia
- Vigo, Spain (mainly fresh sharks)
- Las Palmas, Canary islands

Other harbours where the EU surface longline fleet landed sharks and shark fins in 2006 were:

- Natal, Brazil
- Durban, South Africa
- Cape Town, South Africa.⁶

⁶ Lloyds Marine Intelligence Unit, Seasearcher; Annual Report on the implementation of Council Regulation(EC) No 1185/2003 United Kingdom, Spain and Portugal.

Annex I: List of European Union surface longliners between 20 and 24 metres⁷

Country	CFR	Ext. Marking	Vessel Name	Port Name	Gt Tonnage	LOA	Main Power	Ircs
ESP	ESP000024067	3-CT-13-98	NUEVO TACONEO	CARBONERAS	107.92	23.62	136.87	EA3840
ESP	ESP000024043	3-TE-14-98	MARANSA	STA CRUZ TENERIFE	128.00	23.50	300.22	EA3571
ESP	ESP000024524	3-VI-71-00	LUCES DE BOHEMIA	LA GUARDIA	160.00	23.50	202.35	EA4431
ESP	ESP000025344	3-AM-29-01	EL VITORINO	CARBONERAS	122.40	23.30	323.77	ECAF
GRC	GRC000035302	NK112	(nc)	KALUMNOS	81.00	23.22	308.74	SW4817
ESP	ESP000023653	3-AL-29-97	NUEVO ISLA CHICA	ALGECIRAS	120.36	23.00	268.58	EA3123
ESP	ESP000023654	3-AL-27-97	LOAMAR SEGUNDO	VIGO	108.53	23.00	154.53	EA3118
ESP	ESP000024069	3-HU-12-98	HERMANOS CASADO HERNANDEZ	AYAMONTE	127.01	23.00	235.47	EA3500
ESP	ESP000024167	3-AL-212-97	NUEVO ISLA GRANDE	ALGECIRAS	120.36	23.00	268.58	EA3136
ESP	ESP000025365	3-AL-21-02	NUEVO TORREBLANQUILLA	ALGECIRAS	133.85	23.00	151.58	EADA
ESP	ESP000025408	3-CT-13-02	LOS MORRINAS	CARBONERAS	82.42	23.00	268.58	EA6069
ESP	ESP000024446	3-CT-14-99	FLORMAR	CARBONERAS	75.96	22.88	88.30	EA4198
ESP	ESP000024086	3-CT-44-97	PEPA ALONSO	CARTAGENA	96.00	22.70	294.33	EA3164
ESP	ESP000015520	3-GI-42144	RAMON ESTEFANIA	CARBONERAS	122.86	22.65	270.05	EA6859
ESP	ESP000026112	3-VI-52-04	VICMAR UN	LA GUARDIA	142.00	22.60	198.68	EAYM
ESP	ESP000022612	3-VI-54-93	ENTERPRACE	VIGO	116.10	22.50	295.81	EA8979
ESP	ESP000021976	3-AM-22179	NICOLAS E ISABEL	CARBONERAS	90.96	22.43	161.88	EA2268
ESP	ESP000023491	3-AL-21-97	COSTERO SEGUNDO	ALGECIRAS	111.16	22.00	220.75	EA3029
ESP	ESP000023704	3-HU-12-97	NUEVO PUNTA NEGRA	AYAMONTE	104.58	22.00	309.05	EA3173
ESP	ESP000023861	3-VI-712-98	TULY	LA GUARDIA	94.10	22.00	117.73	EA3418
ESP	ESP000023862	3-VI-711-98	MARDANI	LA GUARDIA	126.20	22.00	175.86	EA3417
ESP	ESP000024130	3-CT-15-98	GURE LEIRE	CARBONERAS	108.60	22.00	161.88	EA3817
ESP	ESP000026273	3-CT-18-04	ISLA SANANDRES	CARBONERAS	92.74	21.84	80.94	EA7915
GRC	GRC000002262	NK337	(nc)	KABALA	46.00	21.65	279.34	SV6340
ESP	ESP000026845	3-CT-11-06	NICOLAS Y ANA	CARBONERAS	59.72	21.55	153.79	EA7757
MLT	MLT000000212	MFA7006	SAN GORG III	MARSAXLOKK (IL-MAGHLUQ)	48.69	21.50	238.72	9H8834
ESP	ESP000015990	3-VI-510027	BALCAGIA	VIGO	176.00	21.49	441.50	EHUF
CYP	CYP000000778	711082	MARIANTHI	LIMASSOL	96.00	21.40	320.00	P3YX8
ESP	ESP000000639	3-VI-73333	MONXO	VIGO	94.20	21.20	268.58	EA6359
ESP	ESP000026355	3-VI-721-04	BONITO DOS	LA GUARDIA	125.60	21.00	262.69	ECIM
CYP	CYP000000821	710997	T.A.E.S ANDREAS	LARNACA	37.00	20.97	283.00	P3ET8
ESP	ESP000023358	3-CT-13-96	PEDRO Y BEATRIZ	CARBONERAS	81.64	20.90	103.02	EA2705
ESP	ESP000024536	3-CT-13-00	ISABEL Y FRANCISCA	GARRUCHA	58.28	20.90	99.34	(nc)
ESP	ESP000024347	3-CT-13-99	VICENTE AGUADO	CARBONERAS	91.52	20.70	94.19	EA4112
ESP	ESP000024544	3-CT-11-00	HERMANOS CAPARROS HERNANDEZ	CARBONERAS	90.45	20.60	103.02	EA4509
ESP	ESP000024848	3-AL-22-00	LAGO DE OSO	ALGECIRAS	86.14	20.60	88.30	EA5097
ESP	ESP000024906	3-CT-14-00	IVAN DIEGO	CARBONERAS	65.62	20.60	161.88	EA5098
ESP	ESP000026190	3-AL-23-04	ARCANGEL SAN RAFAEL	ALGECIRAS	52.02	20.50	110.38	EA8176
ESP	ESP000026704	3-BA-43-05	VICTOR AMOR	BLANES	50.66	20.45	203.09	EA2955
CYP	CYP000000774	708903	MICHAELA 1	LIMASSOL	39.00	20.25	205.94	P3JC3
ESP	ESP000023470	3-VI-78-97	GHANDHI	VIGO	99.60	20.25	106.70	EA3023
ESP	ESP000023471	3-VI-77-97	PINILLOS PRIMERO	LA GUARDIA	97.88	20.25	106.70	EA3022
ESP	ESP000025849	3-CT-15-03	FRANCES	CARBONERAS	81.90	20.00	97.13	EA3858
MLT	MLT000000554	MFA7014	NILE	MARSAXLOKK (IL-MAGHLUQ)	45.00	20.00	447.00	9H8776

⁷ European Union fleet register; <http://ec.europa.eu/fisheries/fleet/index.cfm>

MLT	MLT00000555	MFA7015	GIUSEPPE-PAOLO	MARSAXLOKK (IL-MAGHLUQ)	45.00	20.00	372.50	9H8777
MLT	MLT00MFA0134	MFA134	LORENZA MADRE	MARSAXLOKK (IX-XATT)	70.21	20.00	164.12	9H6812
PRT	PRT000020140	VR-481-C	FILIPE MIGUEL	VILA REAL S. ANTÓNIO	70.17	20.00	252.00	CURM2

Annex II : Overview of Atlantic shark catches by European Union member states, reported to FAO 2006

Countries	Total	Spain	Portugal	France	UK	Ireland	Italy	Belgium	Greece	Sweden	Denmark	Netherl	Malta	Other
Blue shark	23372	15604	7115	134	518						1			0
Small-spotted catshark	5779	112		5486	141	40								0
Smooth-hounds nei	3513	62	60	2416			728		245					2
Sharks, rays, skates, etc. nei	3196	2242	324		443		131			13			7	36
Shortfin mako	2645	1195	1450											0
Picked dogfish	2522	104	10	850	1206			17		148	122	24	20	21
Dogfish sharks nei	2214	327		601	52	968	157		102					7
Portuguese dogfish	1286	231	482	187	274	104								8
Tope shark	1157	592	133	333	93						6			0
Dogfishes and hounds nei	1071		259		309			503						0
Leafscale gulper shark	853	18	640	43	152									0
Nursehound	578		420	158										0
Catsharks, nursehounds nei	512	408		104										0
Porbeagle	494	257	6	213	11	3					4			0
Longnose velvet dogfish	421		8	3	410									0
Sandy ray	301		80	221										0
Blackmouth catshark	283	244	31	1		7								0
Gulper shark	261	2	126		133									0
Various sharks nei	216	170			33	1		12						0
Thresher	211	70	108	33										0
Smooth-hound	162	32			130									0
Hammerhead sharks, etc. nei	160	160												0
Smooth hammerhead	156	117	39											0
Birdbeak dogfish	132	30	80		22									0
Knifetooth dogfish	124	124												0
Kitefin shark	63		16	3	35	9								0
Tiger shark	59	5										54		0
Angular roughshark	54		54											0
Longnosed skate	52		2	50										0
Lanternsharks nei	44	44												0
Scalloped hammerhead	31	31												0
Silky shark	24	24												0
Bluntnose sixgill shark	16		15	1										0
Greenland shark	9		9											0
Requiem sharks nei	8		8											0
Basking shark	8	7		1										0
Black dogfish	6			2										4
Mouse catshark	5	5												0
Bigeye thresher	5	5												0

Other	16	11	1	0	4	0	0	0	0	0	0	0	0	
Total	52019	22233	11476	10840	3966	1132	1016	532	347	161	133	78	27	78

