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**COMMONLY CAPTURED SHARKS AND RAYS FOR CONSIDERATION OF THE  
ECOSYSTEM AND BYCATCH SWG AT SC3**

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**WCPFC-SC3-EB SWG/IP-19**

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### Commonly captured sharks and rays for consideration of the Ecosystem and Bycatch SWG at SC-3

Observer data and results presented in SC-3 ST IP-2 and SC-1 EB WP-1 were reviewed to identify commonly captured species of sharks<sup>2</sup> captured by longline (including targeted shark longline fisheries) and purse-seine fisheries in the WCP-CA. Data were unavailable for fisheries of Indonesia and the Philippines. Data were also unavailable for shark catches by other fleets, including artisanal and sportfishing fleets operating in the WCP-CA.

At least 49 species and higher taxa (e.g. Family) of sharks have been reported by observers, included ‘unidentified’ categories. The most commonly reported species are listed for each method fishery in descending order of the number of records. In addition, thresher, mako and hammerhead sharks are each represented by multiple species in the WCP-CA but are also commonly reported by observers at the genus level. These groups were pooled for longline and purse-seine method fisheries.

It is important to note that the spatial coverage of observer data are not necessarily representative of the spatial distribution of fishing effort for each method fishery. Therefore the proportions of species reported by observers may not be representative of the entire WCP-CA.

Secondly, not all species identified below are necessarily reported from all areas of the WCP-CA. Some species, such as porbeagle, are only common in southern areas (e.g. south of approximately 30°S).

#### **Longline** (based on more than 292,000 observer records of individual sharks)

Sharks represent approximately 25% of longline catches by weight in the WCP-CA (SC-3 ST IP-2). The commonly reported species and proportions are listed below.

Common name	Species	%
Blue shark	<i>Prionace glauca</i>	67.12
Silky shark	<i>Carcharhinus falciformis</i>	9.25
Pelagic stingray	<i>Dasyatis violacea</i>	5.55
Porbeagle shark	<i>Lamna nasus</i>	5.55
Oceanic whitetip shark	<i>Carcharhinus longimanus</i>	3.12
Shortfin mako shark	<i>Isurus oxyrinchus</i>	1.82
Bigeye thresher shark	<i>Alopias superciliosus</i>	0.82
School shark	<i>Galeorhinus galeus</i>	0.82
Grey reef shark	<i>Carcharhinus amblyrhynchos</i>	0.68

<sup>2</sup> Throughout this document, the term ‘shark’ is used to include all species sharks, rays and other chondrichthyans

Common name	Species	%
Crocodile shark	<i>Pseudocarcharias kamoharai</i>	0.62
Blacktip shark	<i>Carcharhinus limbatus</i>	0.48
Silvertip shark	<i>Carcharhinus albimarginatus</i>	0.38
Thresher shark	<i>Alopias vulpinus</i>	0.38
Blacktip reef shark	<i>Carcharhinus melanopterus</i>	0.16
Tiger shark	<i>Galeocerdo cuvier</i>	0.12
Bullhead sharks	<i>Heterodontiformes</i>	0.04
Thresher sharks		1.81
Bigeye	<i>Alopias superciliosus</i>	
Pelagic	<i>Alopias pelagicus</i>	
Thresher	<i>Alopias vulpinus</i>	
Unidentified	<i>Alopias</i> spp.	
Mako Sharks		3.06
Longfin	<i>Isurus paucus</i>	
Shortfin	<i>Isurus oxyrinchus</i>	
Unidentified	<i>Isurus</i> spp.	
Hammerhead sharks		0.49
Great	<i>Sphyrna mokarran</i>	
Scalloped	<i>Sphyrna lewini</i>	
Smooth	<i>Sphyrna zygaena</i>	
Unidentified	<i>Sphyrna</i> spp.	

**Purse-seine** (based on more than 44,000 observer records of individual sharks)

Sharks represent approximately 0.2% of purse-seine catches by weight in the WCP-CA (SC-3 ST IP-2). The commonly reported species and proportions are listed below.

Common name	Species	%
Silky shark	<i>Carcharhinus falciformis</i>	48.87
Oceanic whitetip shark	<i>Carcharhinus longimanus</i>	10.86
Manta rays	Mobulidae	2.49
Shorfin mako shark	<i>Isurus oxyrinchus</i>	0.90
Silvertip shark	<i>Carcharhinus albimarginatus</i>	0.90
Whale shark	<i>Rhincodon typus</i>	0.28
Thresher sharks		
Bigeye	<i>Alopias superciliosus</i>	
Pelagic	<i>Alopias pelagicus</i>	
Thresher	<i>Alopias vulpinus</i>	
Unidentified	<i>Alopias</i> spp.	0.22
Mako Sharks		1.70
Longfin	<i>Isurus paucus</i>	

Common name	Species	%
Shortfin Unidentified	<i>Isurus oxyrinchus</i> <i>Isurus</i> spp.	
Hammerhead sharks Great Scalloped Smooth Unidentified	<i>Sphyrna mokarran</i> <i>Sphyrna lewini</i> <i>Sphyrna zygaena</i> <i>Sphyrna</i> spp.	0.03

### Other species to consider.

Annex 1 of UNCLOS lists the highly migratory species of sharks;

#### 16. Oceanic sharks:

- Hexanchus griseus* (Not reported from the WCP-CA)
- Cetorhinus maximus* (Basking shark)
- Family *Alopiidae* (Thresher sharks)
- Rhincodon typus* (Whale shark)
- Family *Carcharhinidae*
- Family *Sphyrnidae* (Hammerhead sharks)
- Family *Isurida* (Mako sharks)

In addition, three species of sharks that have been reported by observers in the WCP-CA are listed by the IUCN as 'Vulnerable';

- Basking Shark - *Cetorhinus maximus* (Vulnerable, IUCN, northern stock only)
- Great white shark - *Carcharodon carcharias* (Vulnerable, IUCN)
- Whale shark - *Rhincodon typus* - (Vulnerable, IUCN)

### Other considerations

The information provided above represents the proportion that each species and taxa contributes to the overall catches of sharks as reported by observers in the WCP-CA. It is likely that the most commonly reported species are also the most productive. Thus, rarely encountered species are likely to have a relatively low productivity and lower catches may have impose a significant risk of impacts by fisheries.

All species and families identified above are already collected by observer programmes in FFA member countries and other regional observer programmes. It would appear to be relatively straightforward for CCMs to annually report observer catches of all species of sharks.