

# Species regulations

Species	CITES	CMS	ICCAT	IATTC	IOTC	WCPFC	GFCM / BarCon Annex II
<b>White shark</b>	App II	App I & II + MoU	-	-	-	-	Ban on retention, transshipment, landing, storage, sale
<b>Makos (2 species)</b>	-	App II + MoU	Shortfin: Reduce F, no implementation; Fishing limits proposed by US & EU; rejected	-	-	Designated as "key species"	Shortfin: Ban on retention, transshipment, landing, storage, sale

# **Domestic/International policy linkages and challenges**

- **International action often “lowest common denominator”**
- **Compliance/domestic interpretation differs across nations**
- **Conflicting mandates of fisheries and environment departments**
- **Developing country priorities**

# The management challenge

- Life history characteristics
- **Relatively low economic value**
- **Low fisheries volume**
- **Low priority for fisheries management**
- High proportion of threatened species
- High priority for biodiversity management

# Lines of defence

- Avoid capture (closures, banning whale shark sets, monofilament leaders, raised bottom longlines, ecological FADs, effort restrictions)
- Release in the water: grids, mesh size, back down, de-hooking/circle hooks (survival studies?)
- Release from deck (handling guidelines) (survival studies?)
- Utilise all parts (finning prohibitions/mandatory whole landings)
- Protect nursery grounds (hammerheads)?
- Improve species-specific catch and mortality recording

A photograph of a shark swimming through a large school of fish in clear blue water. The shark is positioned in the center-right of the frame, moving towards the left. The fish are densely packed around the shark, creating a sense of movement and activity in the ocean.

**Thank you**

**Acknowledgements**

Sonja Fordham, CI, CMS, Defra,  
Pew Lenfest Oceans Program

Pew Fellows Program in Marine Conservation

Save Our Seas Foundation


Shark Specialist Group staff & volunteers

[www.iucnssg.org](http://www.iucnssg.org)

many other sponsors & many photographers

# Manta rays (Mobulidae)





Reproduction every 1 – 3 years  
Pregnancy 12 months  
Sexual maturity 3 – 6 years  
Size at maturity 2m – 4 m wide  
Longevity > 14 – 27 years  
Mortalidad annual 1.500-6.500  
individuos

All years (1993-2012)

**Size class 6 only**

Estimated total bycatch in the EPO

Species	Dolphin sets	School sets	Log sets	All Sets
Giant manta	16	78	4	98
Spinetail manta	71	83	9	162
Chilean devil ray	32	26	4	61
Smoothtail manta	58	244	11	313
Munk's devil ray	11	22	2	36
Unid Manta/devil rays	425	1,498	81	2,003
<b>Total Mobulids</b>	<b>614</b>	<b>1,951</b>	<b>110</b>	<b>2,674</b>
Pelagic stingray	225	736	110	1,070

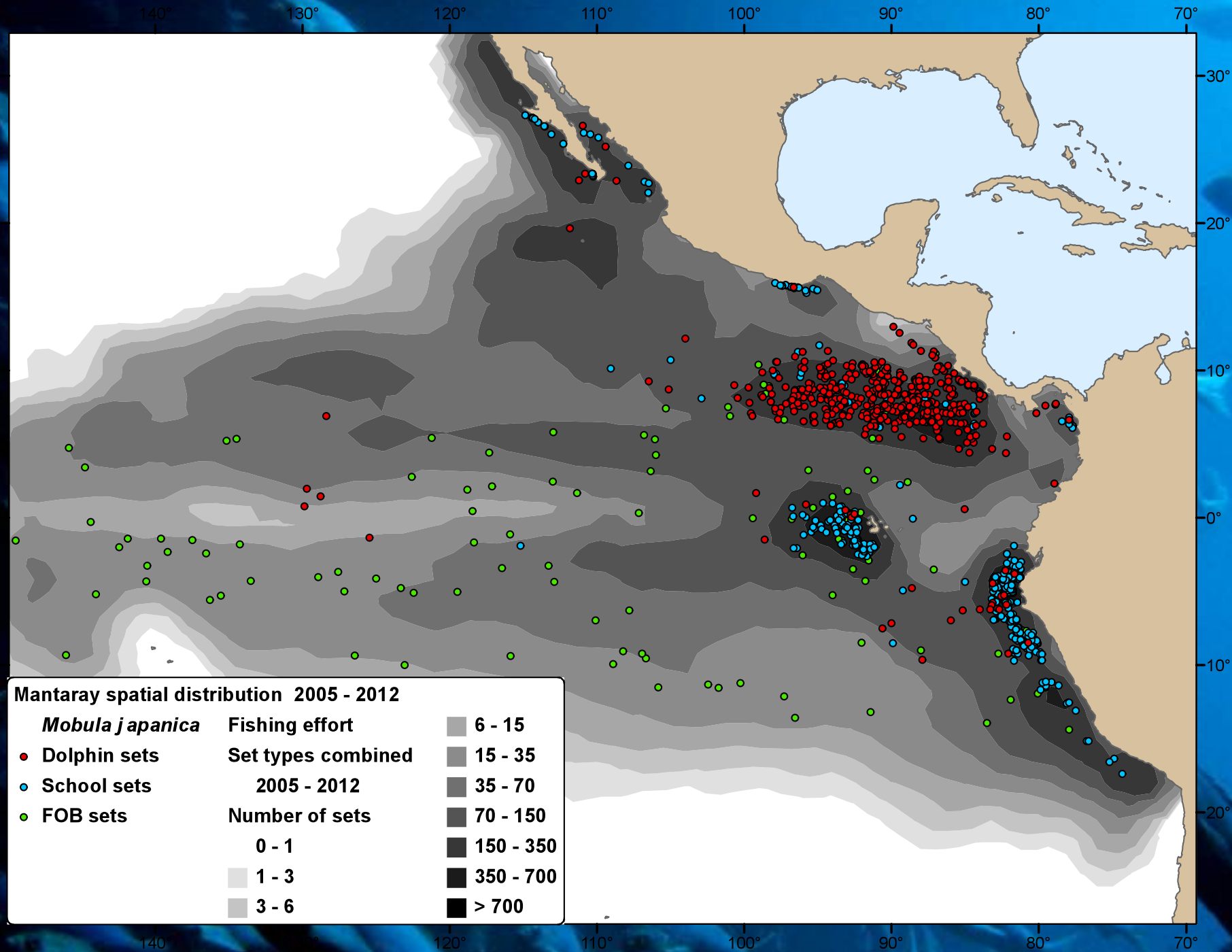
Year: 2012

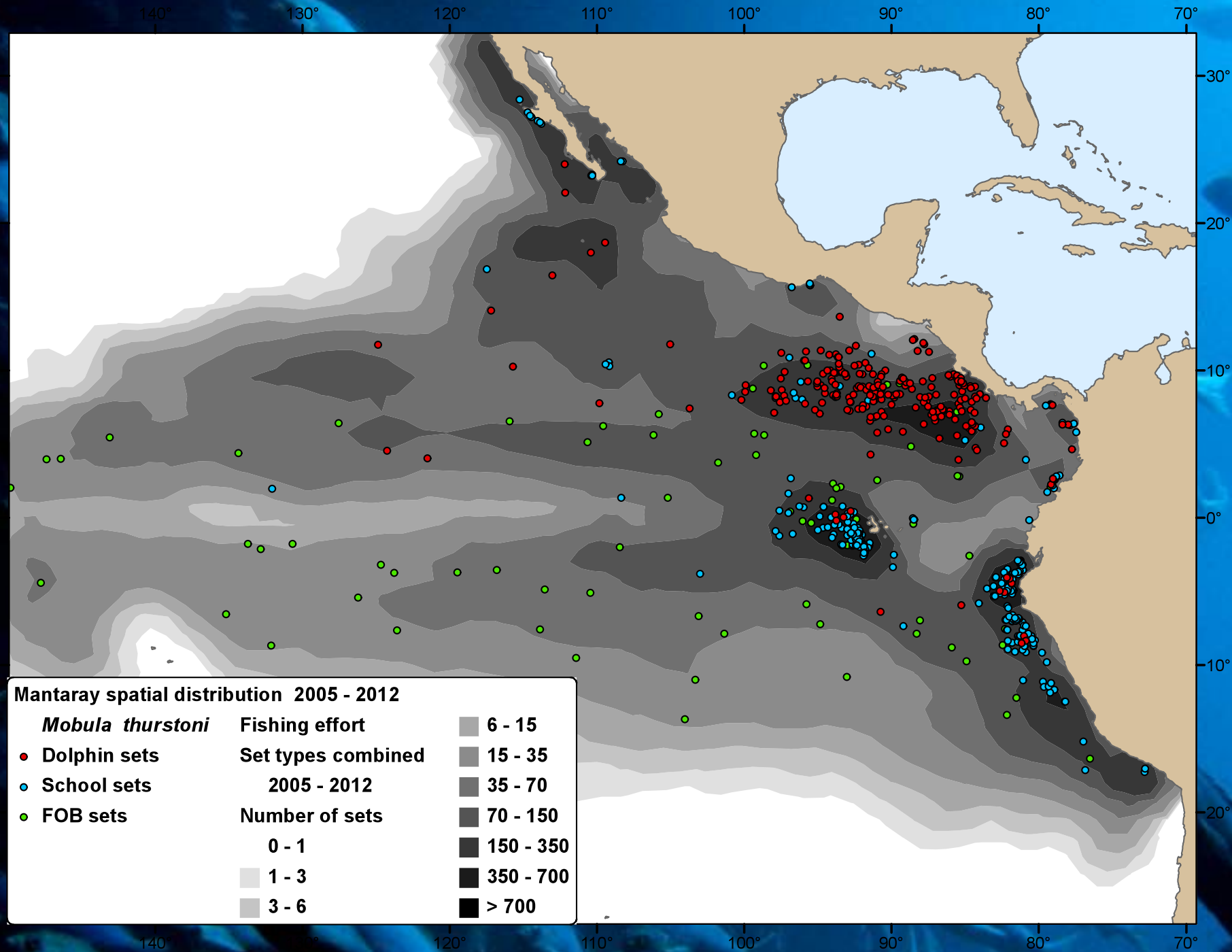
**Size class 6 only**

Estimated total bycatch in the EPO

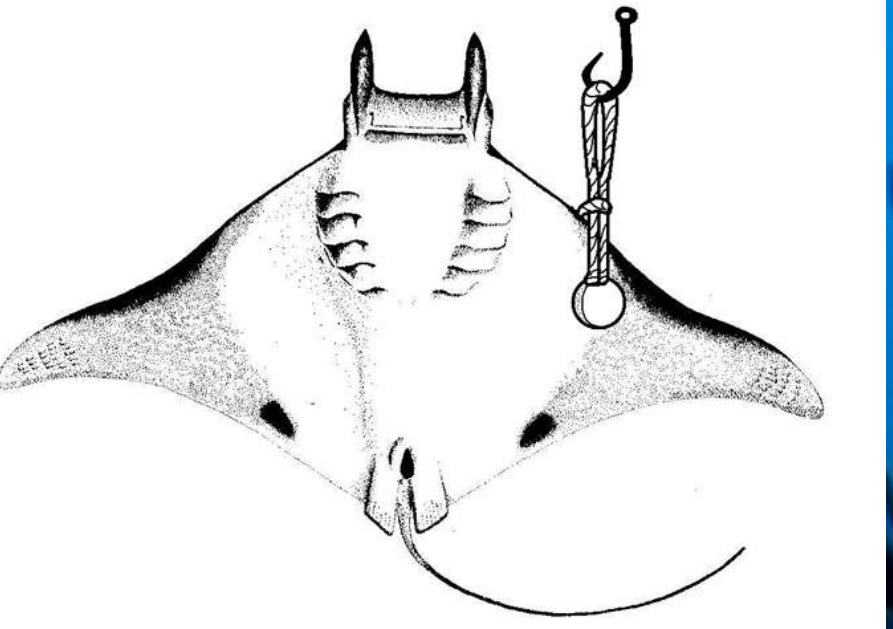
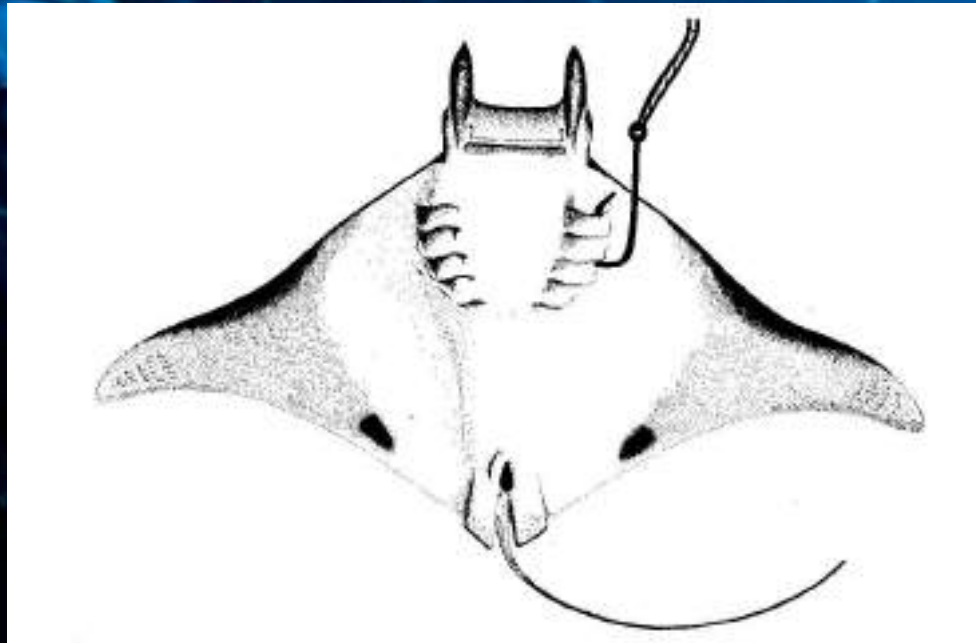
Species	Dolphin sets	School sets	Log sets	All Sets
Giant manta	13	949	6	968
Spinetail manta	34	243	48	325
Chilean devil ray	21	94	7	122
Smoothtail manta	67	1,435	15	1,517
Munk's devil ray	6	63	3	72
Unid Manta/devil rays	51	215	27	293
<b>Total Mobulids</b>	<b>192</b>	<b>2,999</b>	<b>106</b>	<b>3,298</b>
Pelagic stingray	100	30	126	256







# Métodos de liberación



# Better techniques ??

