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**SCIENTIFIC COMMITTEE
FOURTH REGULAR SESSION**

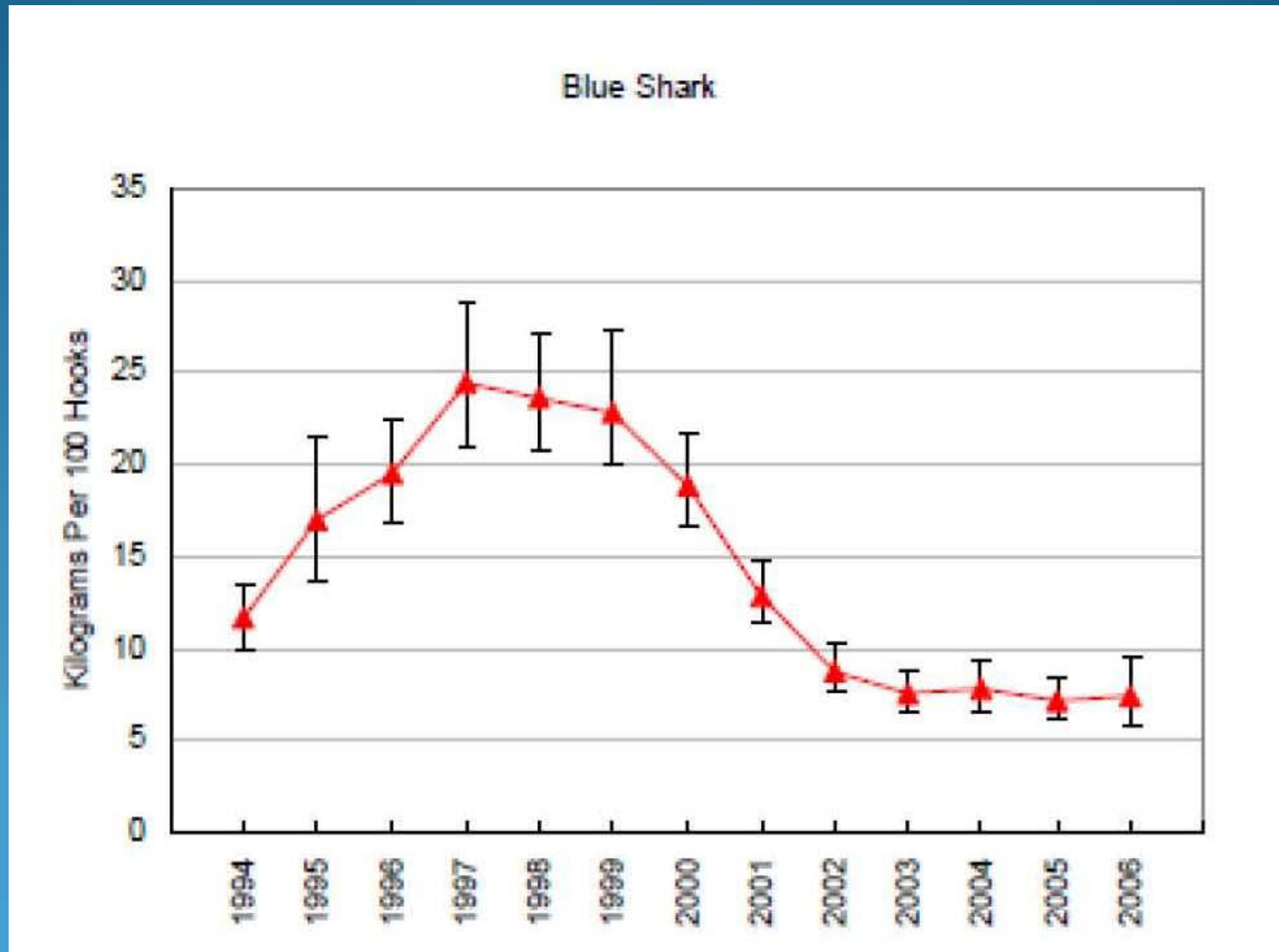
11-22 August 2008
Port Moresby, Papua New Guinea

ESTIMATES OF ANNUAL CATCHES IN THE WCPFC STATISTICAL AREA

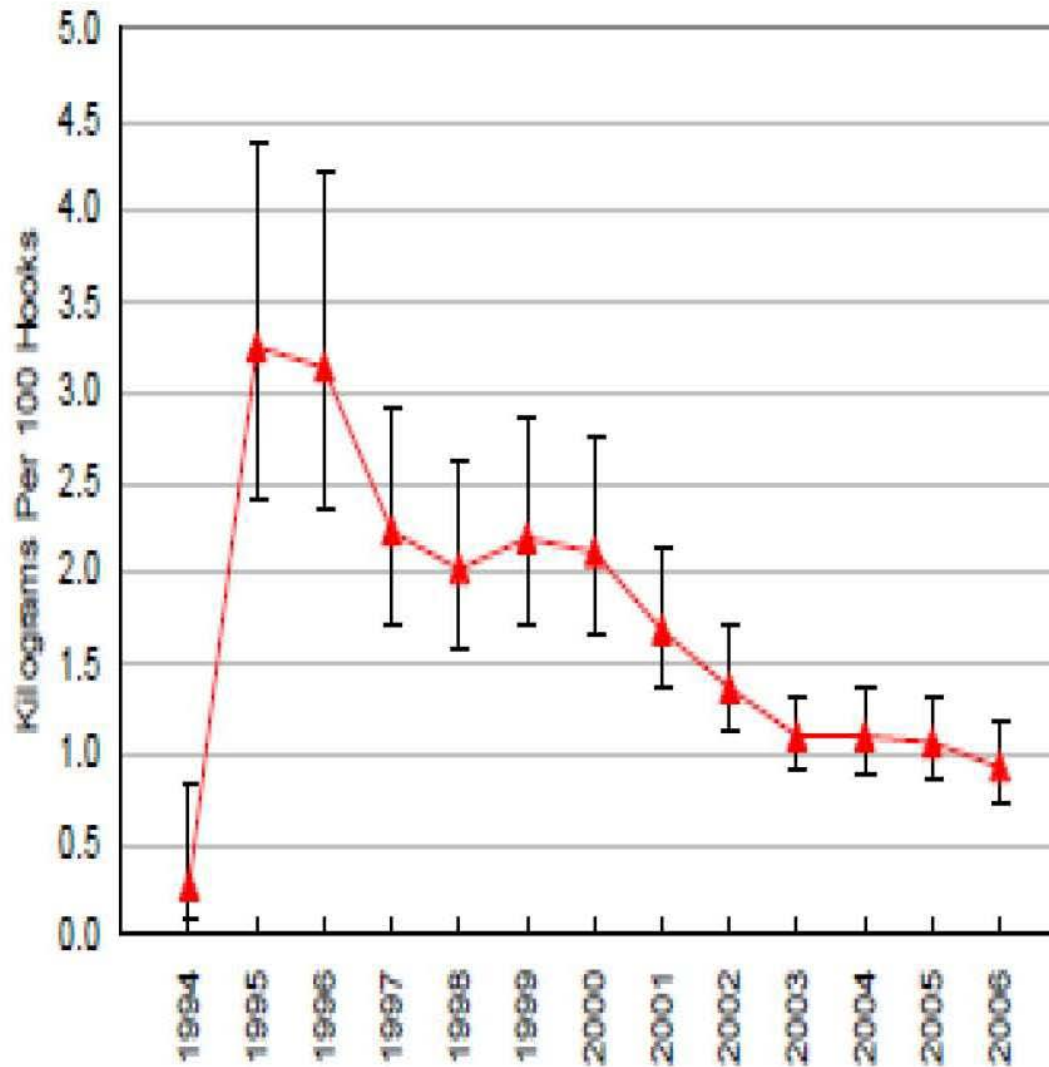
WCPFC-SC4-2008/ST-IP-1

**Oceanic Fisheries Programme
Secretariat of the Pacific Community
Noumea, New Caledonia**

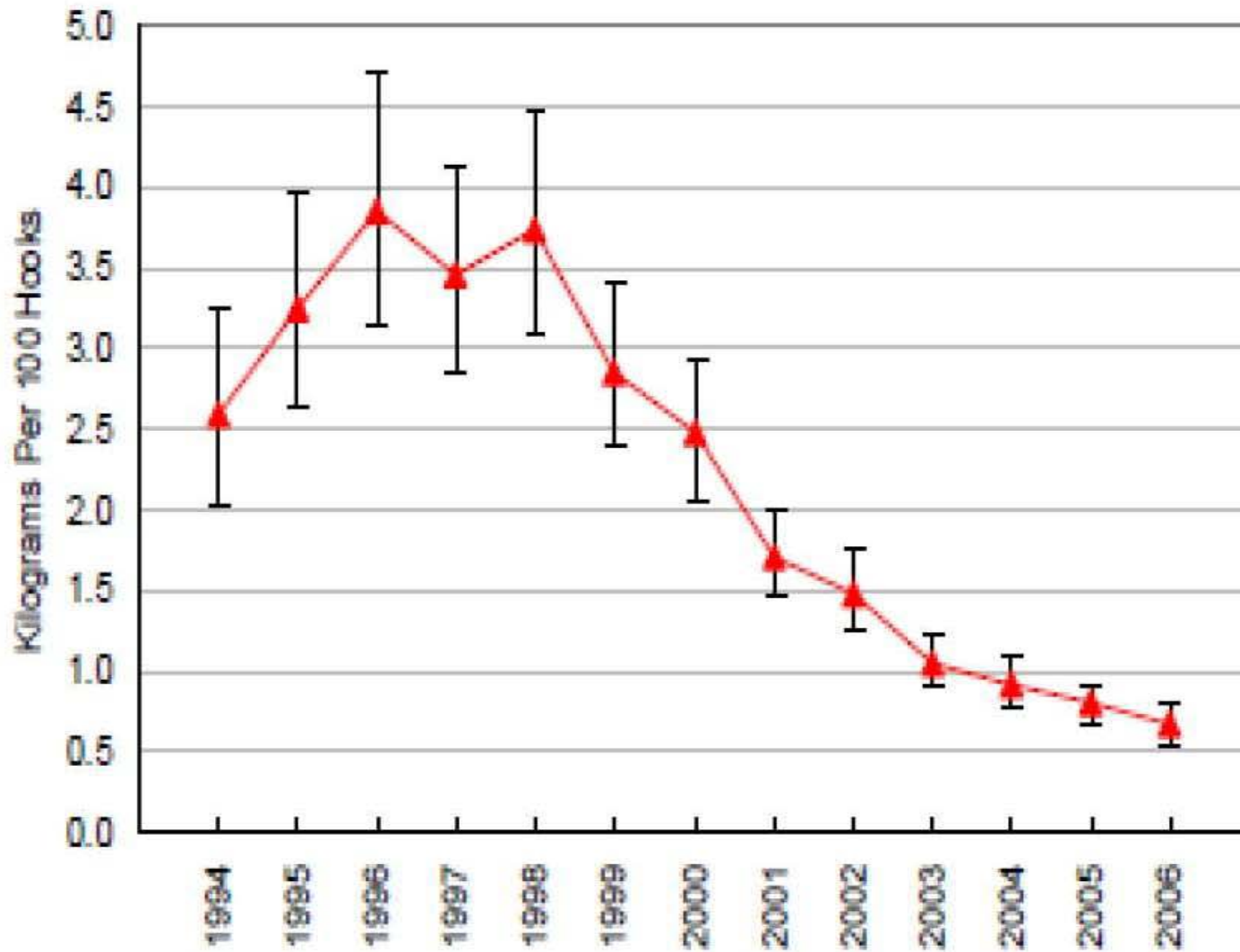
Figure 7. Catches and catch rates of non-target species by longliners in the WCPFC Statistical Area (excluding the domestic fleets of Indonesia, the Philippines and Chinese Taipei)



Silky Shark



Oceanic Whitetip Shark



Mako Sharks

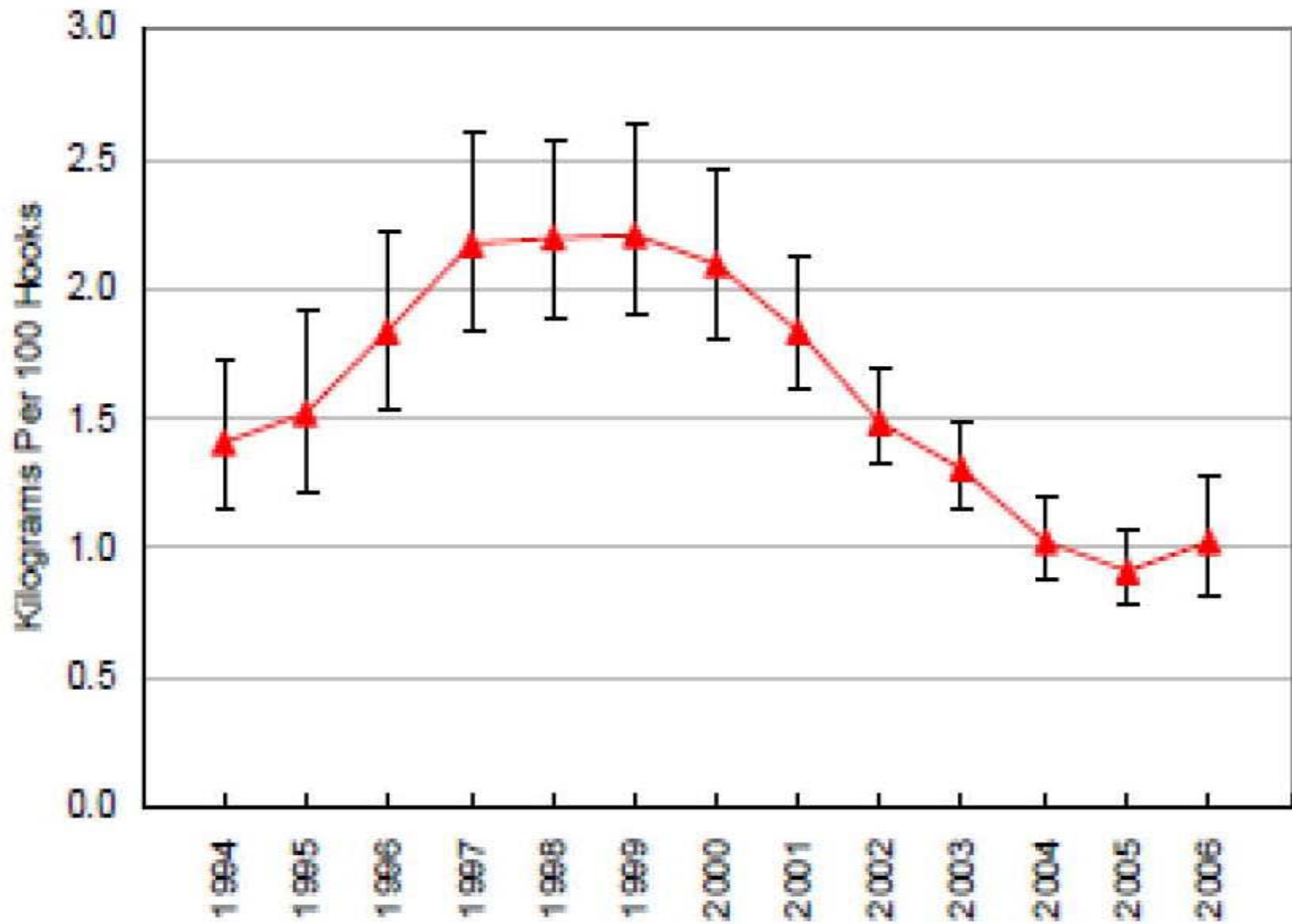


Figure 8. Catches and catch rates of non-target species by purse seiners in the WCPFC Statistical Area (excluding the domestic fleets of Indonesia and the Philippines)

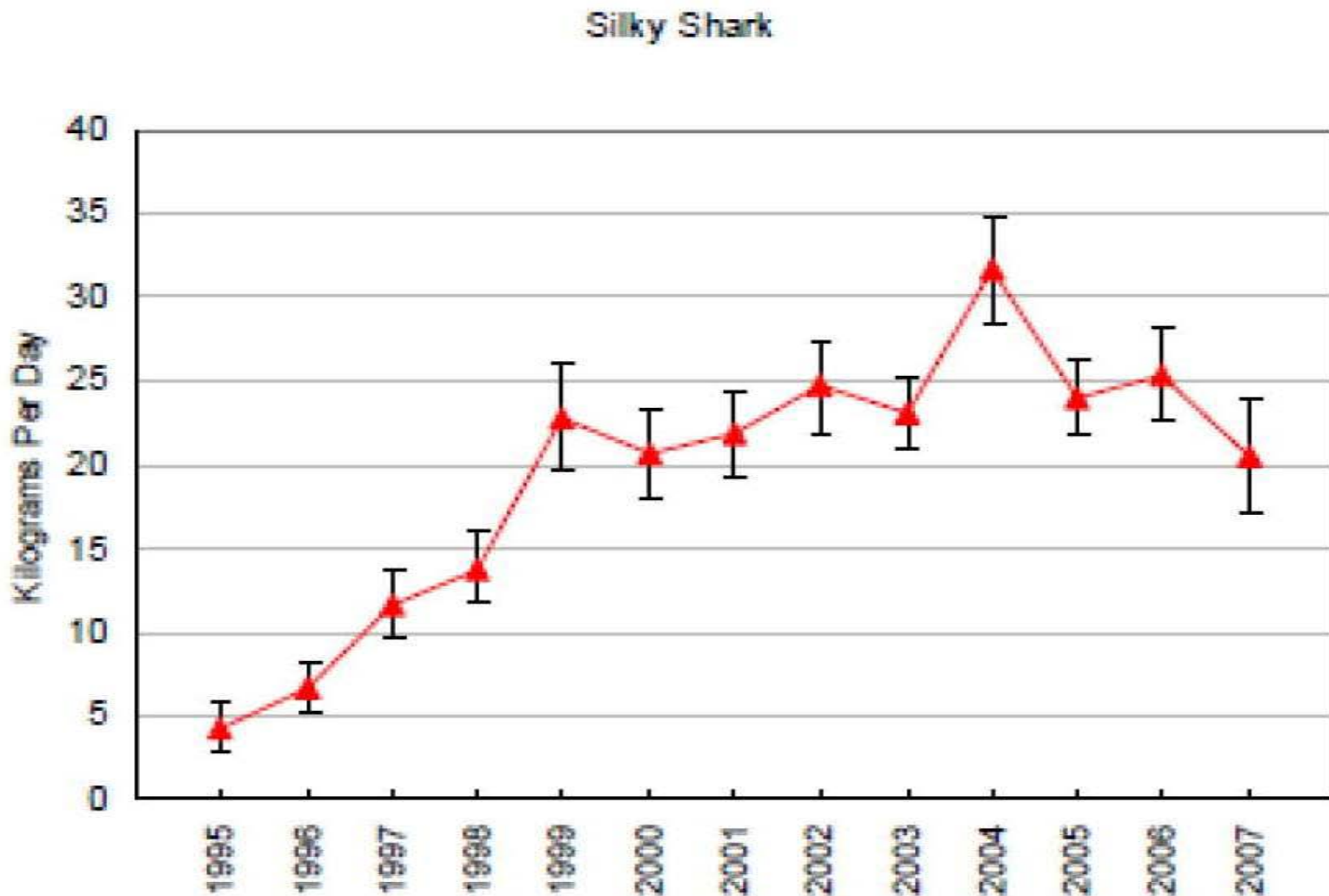


Table 4. Shark catches estimated based on observer data by the Secretariat of the Pacific Community on behalf of the Western and Central Pacific Fisheries Commission, 1994-2007 (SPC 2008). These figures do not account for shark catches by the domestic fleets of Indonesia, the Philippines and Chinese Taipei. na=not estimated; *=total based on longline only; **=total based on purse seine only

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Longline														
Blue	46,854	73,096	69,325	83,112	96,438	110,459	93,076	67,975	53,903	47,346	51,920	41,336	39,556	na
Makos	5,640	6,505	6,493	7,391	8,951	10,664	10,374	9,706	9,081	8,106	6,773	5,257	5,454	na
Oceanic Whitetip	10,364	13,999	13,651	11,776	15,338	13,860	12,268	9,054	9,035	6,551	6,124	4,627	3,586	na
Silky	1,080	13,940	11,111	7,603	8,266	10,579	10,487	8,887	8,352	6,863	7,268	6,062	4,993	na
Other	12,654	12,839	8,341	6,120	8,583	10,689	10,633	9,350	8,370	5,929	5,579	7,218	7,308	na
SUBTOTAL	76,592	120,379	108,921	116,002	137,576	156,251	136,838	104,972	88,741	74,795	77,664	64,500	60,897	na
Purse Seine														
Silky	na	145	236	427	455	786	685	753	941	944	1366	1087	1060	889
Whale	na	166	157	252	285	248	214	272	411	510	636	694	694	781
Other	na	1,361	1,361	1,901	1,115	1,114	734	589	561	404	467	383	274	192
SUBTOTAL	na	1,672	1,754	2,580	1,855	2,148	1,633	1,614	1,913	1,858	2,469	2,164	2,028	1,862
TOTAL	76,592*	122,051	110,675	118,582	139,431	158,399	138,471	106,586	90,654	76,653	80,133	66,664	62,925	1,862**

Pacific wide impacts

SILKY SHARK

[There are alternative estimates]

Longline WPO 322,000 /year

PS WPO 40,000 /year

Domestic fleets

Indonesia, Philippines, Taiwan ??

PS EPO 34,000 /year

Longline EPO ??

Artisanal fleets EPO partial data

Pacific wide impacts

OCEANIC WHITETIP SHARK

Longline WPO 334,000 /year

PS WPO No ?

Domestic fleets

Indonesia, Philippines, Taiwan ??

PS EPO 3,400 /year

Longline EPO ??

Artisanal fleets EPO partial data



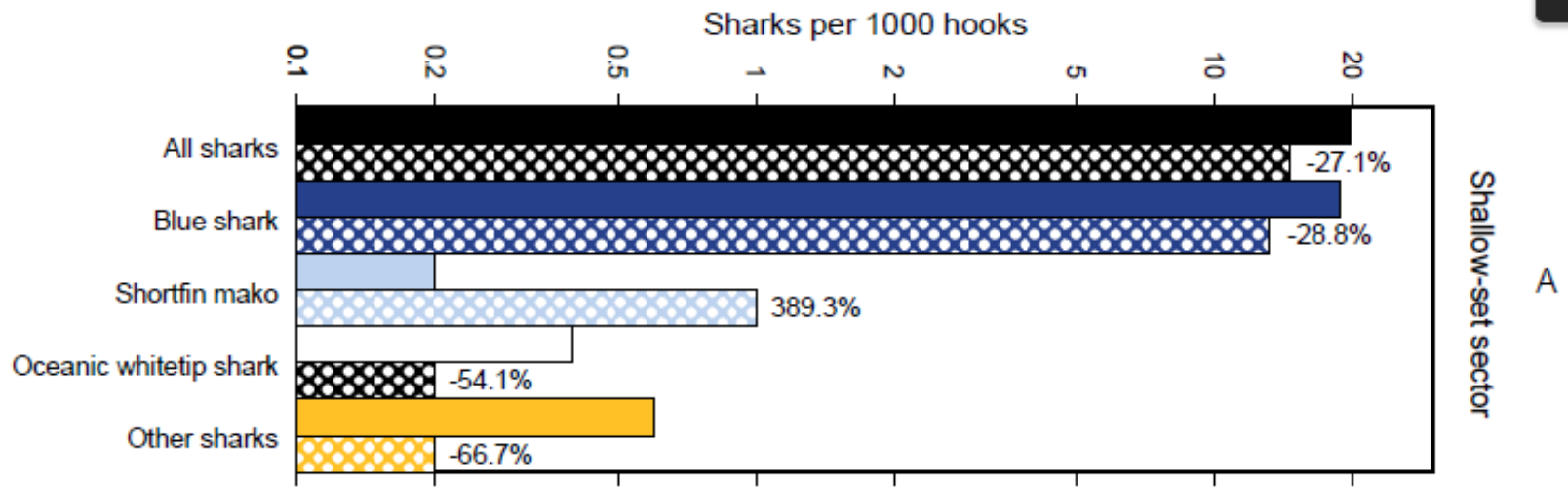
**SCIENTIFIC COMMITTEE
FIFTH REGULAR SESSION**

10-21 August 2009
Port Vila, Vanuatu

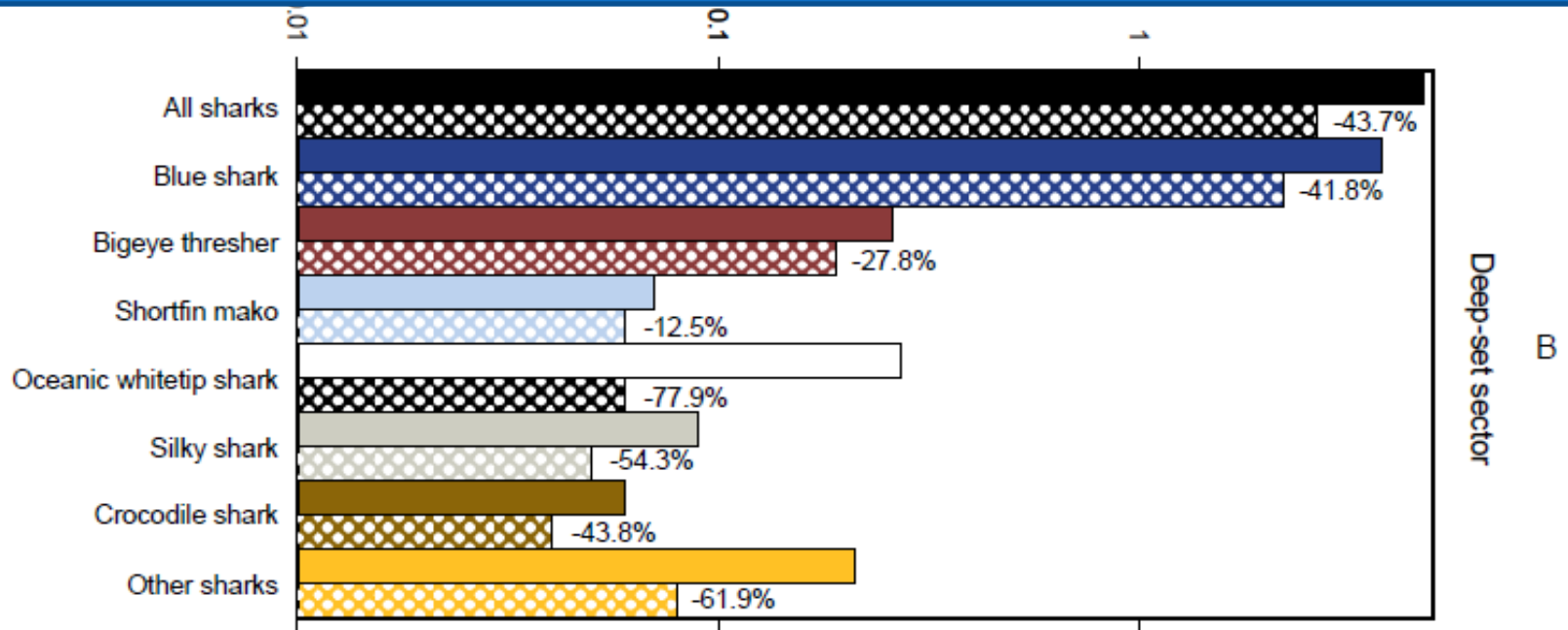
**Decreases in Shark Catches and Mortality in the Hawaii-based
Longline Fishery as Documented by Fishery Observers**

WCPFC-SC5-2009/EB- IP-8

William Walsh¹, Keith Bigelow² & Karen Sender³



Logarithmic scale 1995-2000 (solid) and 2004-2006 (hatched)





**SCIENTIFIC COMMITTEE
SIXTH REGULAR SESSION**

Nuku'alofa, Tonga
10-19 August 2010

**Non-Target Species Interactions with the Tuna Fisheries of the Western and
Central Pacific Ocean**

WCPFC-SC6-2010/EB-IP-8

Oceanic Fisheries Programme¹

Figure A1 (continued) — Oceanic Whitetip Sharks

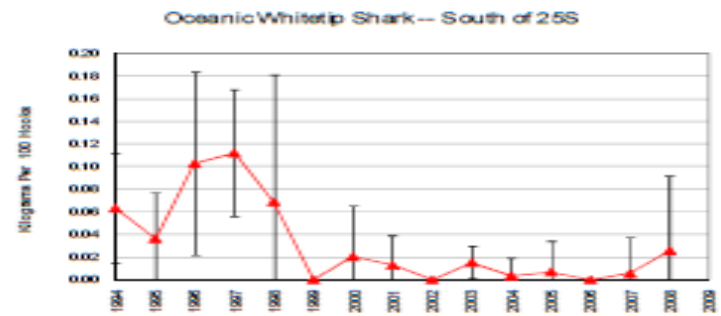
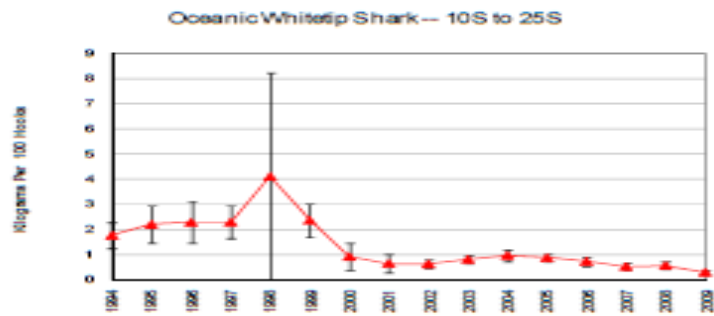
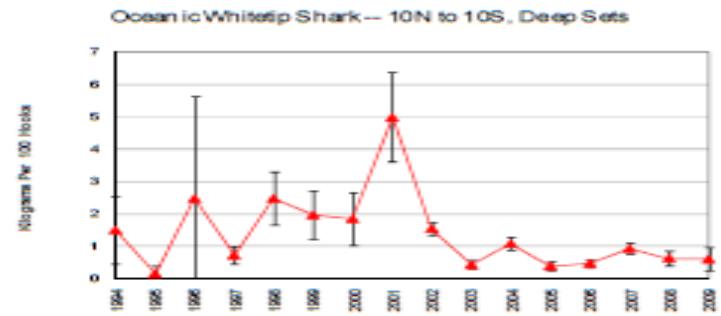
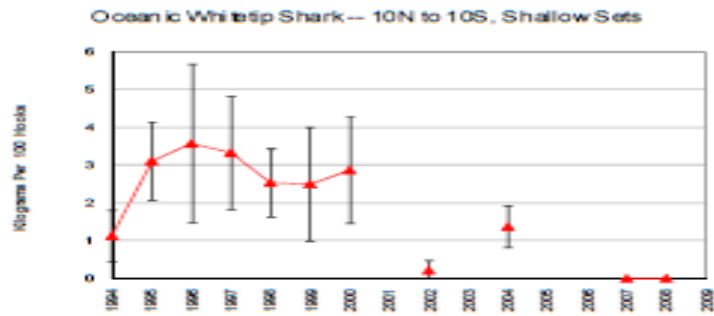
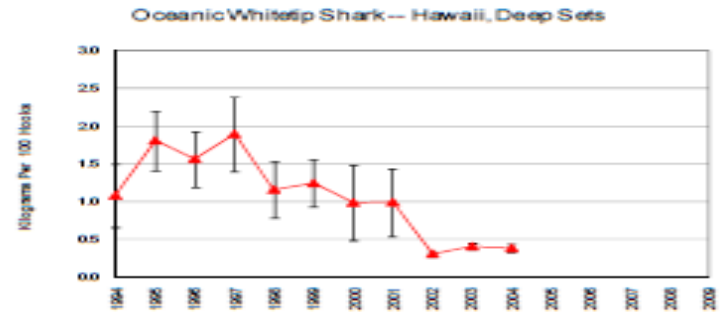
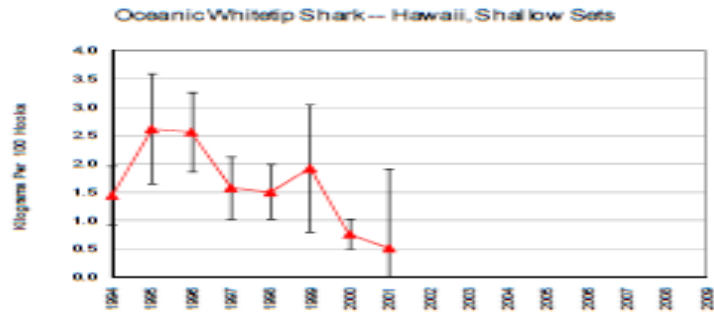
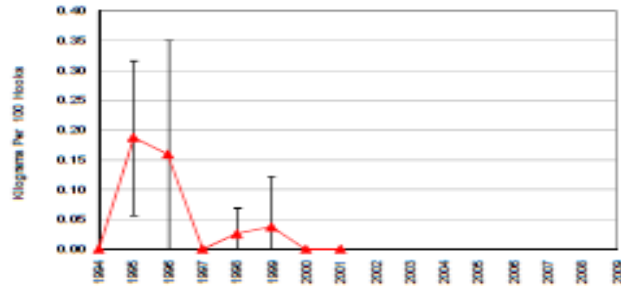
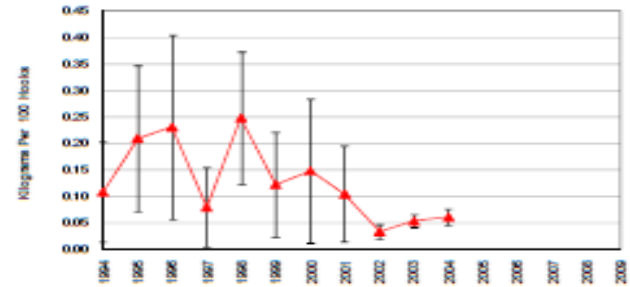


Figure A1 (continued) — Silky Shark

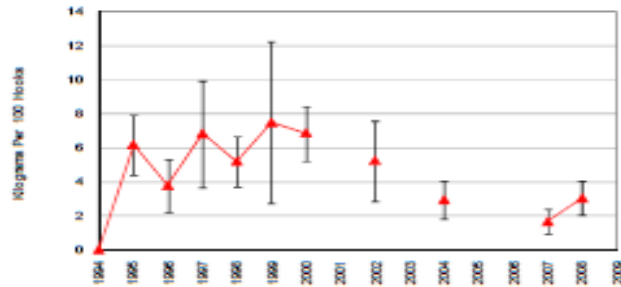
Silky Shark – Hawaii, Shallow Sets



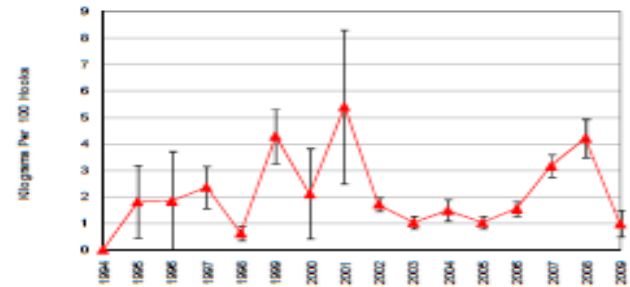
Silky Shark – Hawaii, Deep Sets



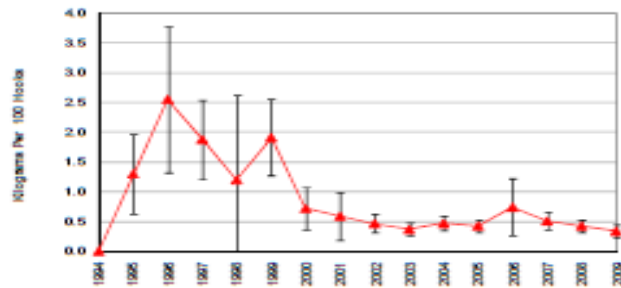
Silky Shark – 10N to 10S, Shallow Sets



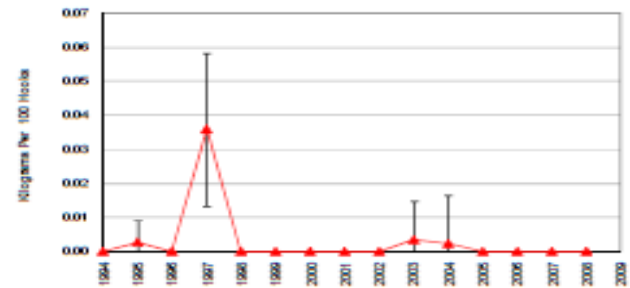
Silky Shark – 10N to 10S, Deep Sets



Silky Shark – 10S to 25S



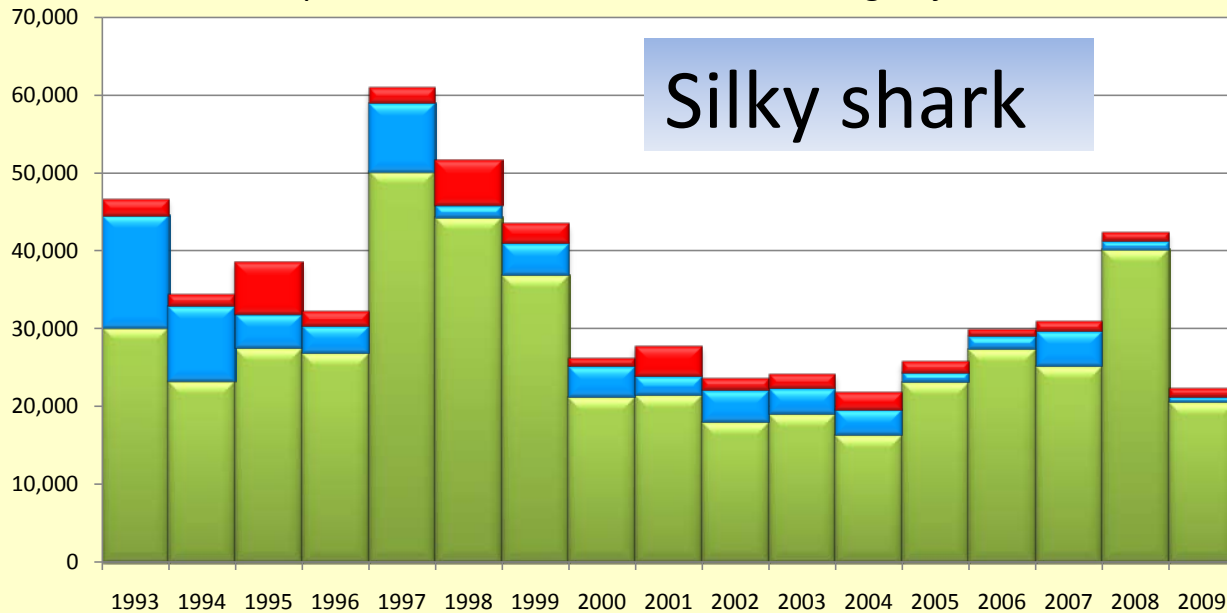
Silky Shark – South of 25S





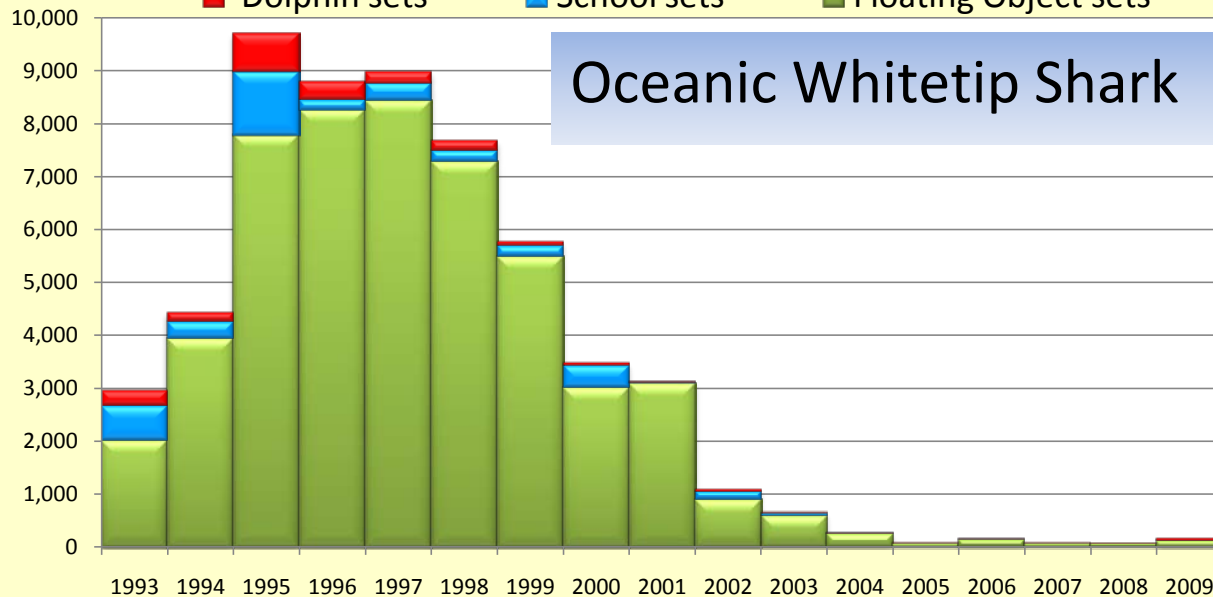
IATTC data on trends

■ Dolphin sets ■ School sets ■ Floating Object sets



Annual
shark
captures
in numbers

■ Dolphin sets ■ School sets ■ Floating Object sets



*Notice
different scales*

**INTER-AMERICAN TROPICAL TUNA COMMISSION
COMISIÓN INTERAMERICANA DEL ATÚN TROPICAL**

Bulletin—Boletín

Vol. 24, No. 1

**A REVIEW OF THE JAPANESE LONGLINE FISHERY FOR TUNAS AND
BILLFISHES IN THE EASTERN PACIFIC OCEAN, 1998-2003**

**ANÁLISIS DE LA PESCA PALANGRERA JAPONESA DE ATUNES Y
PECES PICUDOS EN EL OCÉANO PACÍFICO ORIENTAL, 1998-2003**

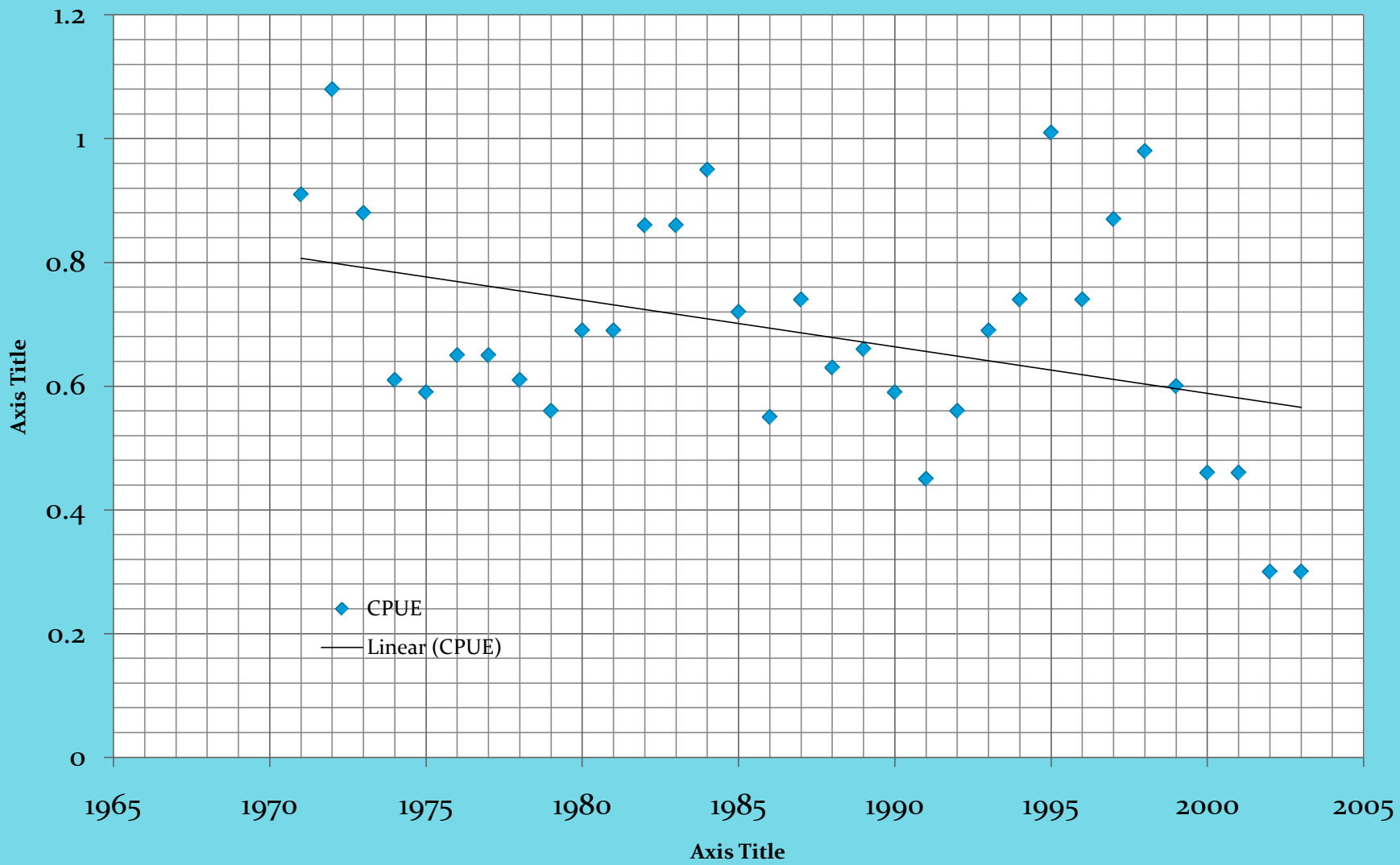
by—por

Takayuki Matsumoto and—y William H. Bayliff

TABLE 10. Fishing effort by the Japanese longline fishery, in millions of hooks, retained catches of sharks, in thousands of fish, and catch per unit of effort (CPUE), in fish per 1000 hooks in the EPO.

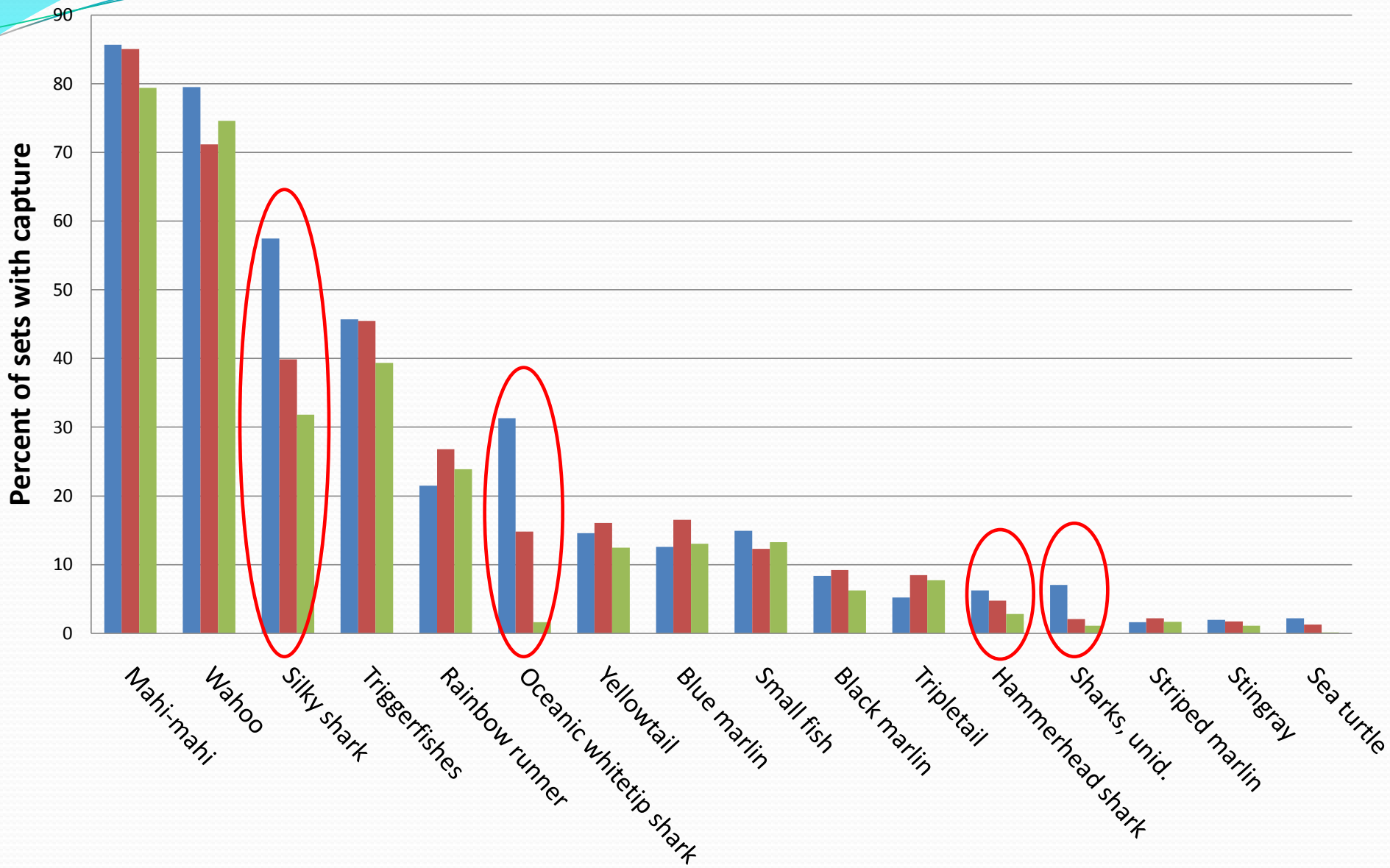
TABLA 10. Esfuerzo de pesca por palangreos japoneses, en millones de anzuelos, capturas retenidas, en miles de peces, y capturas por unidad de esfuerzo (CPUE), en peces por 1000 anzuelos, en el OPO.

Year— Año	Hooks— Anzuelos	Fish—Peces					CPUE
		Quarter—Trimestre					
		1	2	3	4	Total	
1971	67	17.3	11.1	16.5	16.1	61.0	0.91
1972	78	20.0	18.1	25.6	20.5	84.2	1.08
1973	107	29.3	20.5	25.3	19.1	94.2	0.88
1974	89	11.9	10.1	16.1	16.7	54.8	0.61
1975	86	11.8	13.8	13.2	11.9	50.8	0.59
1976	117	13.3	18.4	24.3	20.2	76.2	0.65
1977	133	16.7	25.0	26.5	18.6	86.8	0.65
1978	140	15.3	20.6	30.7	18.2	84.8	0.61
1979	138	18.0	21.8	22.2	14.5	76.5	0.56
1980	138	17.3	26.1	32.7	18.5	94.7	0.69
1981	131	16.7	28.4	31.2	14.3	90.7	0.69
1982	116	14.7	28.4	31.8	24.7	99.6	0.86
1983	127	27.8	29.5	35.8	16.6	109.6	0.86
1984	120	19.8	26.9	41.0	25.9	113.5	0.95
1985	107	16.9	21.3	22.3	16.3	76.9	0.72
1986	161	17.6	23.3	27.5	19.3	87.7	0.55
1987	188	25.6	49.0	42.1	23.0	139.8	0.74
1988	183	26.8	32.4	39.0	17.5	115.7	0.63
1989	170	22.6	19.4	37.1	32.8	111.8	0.66
1990	178	20.3	23.4	33.8	27.2	104.7	0.59
1991	200	20.1	22.7	24.1	23.6	90.6	0.45
1992	191	27.4	34.2	25.9	19.0	106.5	0.56
1993	160	20.6	24.7	36.7	28.5	110.4	0.69
1994	162	28.2	27.9	39.4	24.0	119.5	0.74
1995	130	28.2	28.2	39.5	34.5	130.3	1.01
1996	104	20.2	17.7	22.7	16.3	76.9	0.74
1997	96	12.8	16.6	27.9	26.4	83.7	0.87
1998	107	34.6	32.2	23.6	14.0	104.3	0.98
1999	81	11.3	15.0	12.5	9.8	48.6	0.60
2000	79	6.3	11.1	10.5	8.7	36.7	0.46
2001	102	9.3	14.1	16.2	7.8	47.4	0.46
2002	104	6.7	10.2	9.3	5.2	31.4	0.30
2003	101	5.5	10.8	8.4	6.0	30.7	0.30

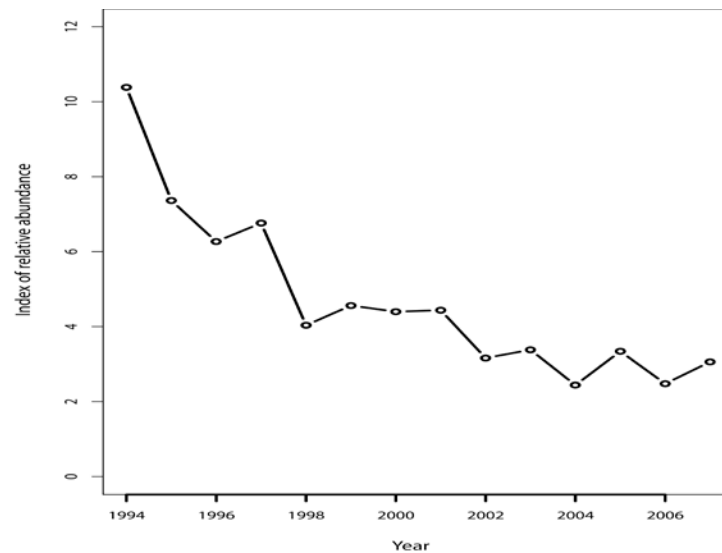
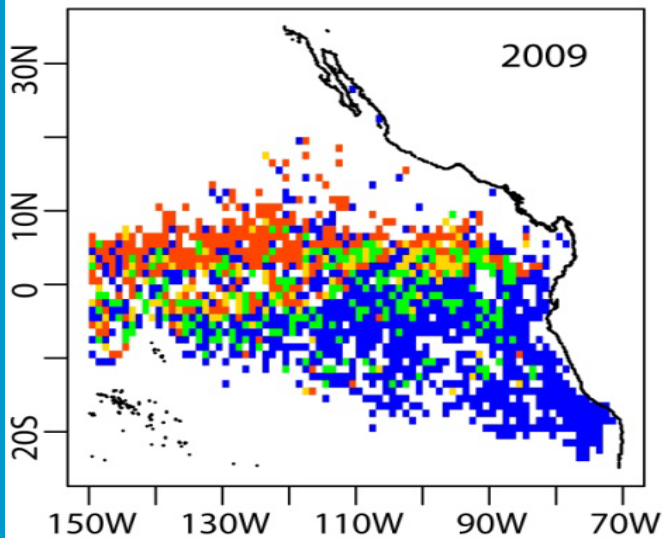
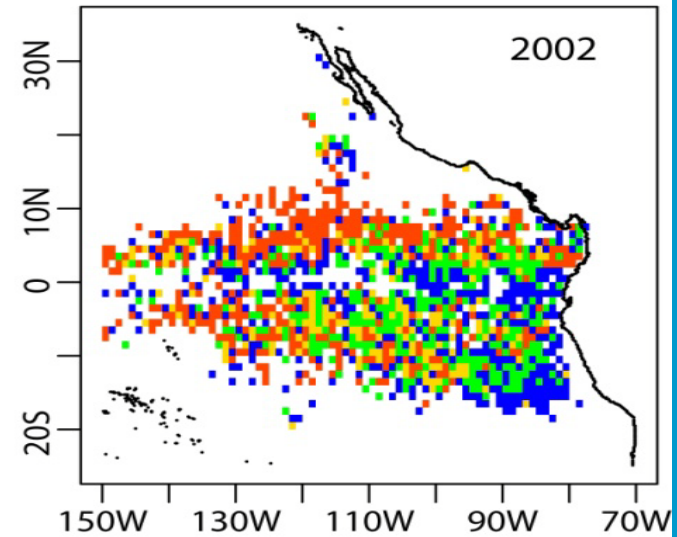
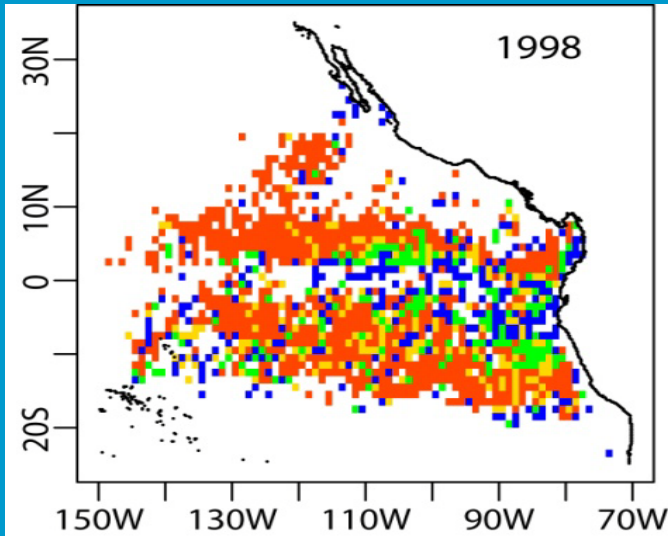


Capture probability: FAD sets

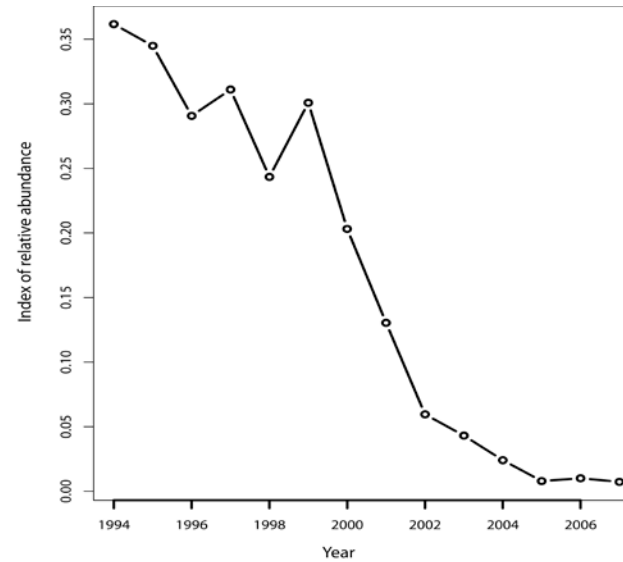
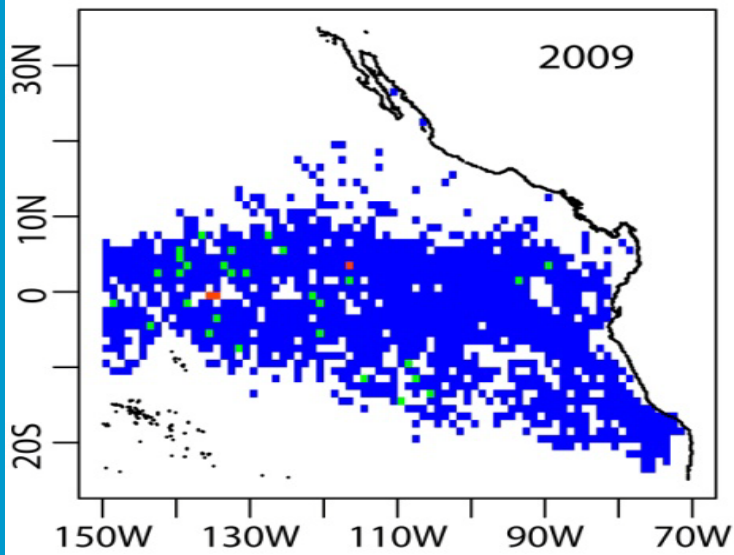
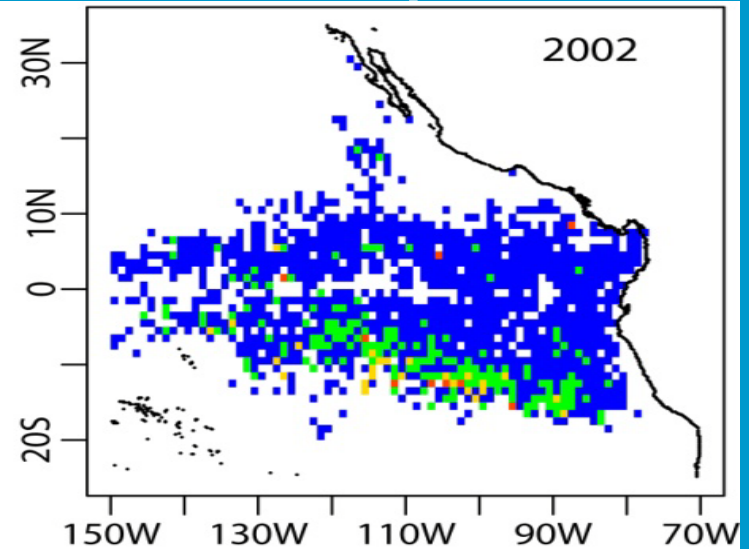
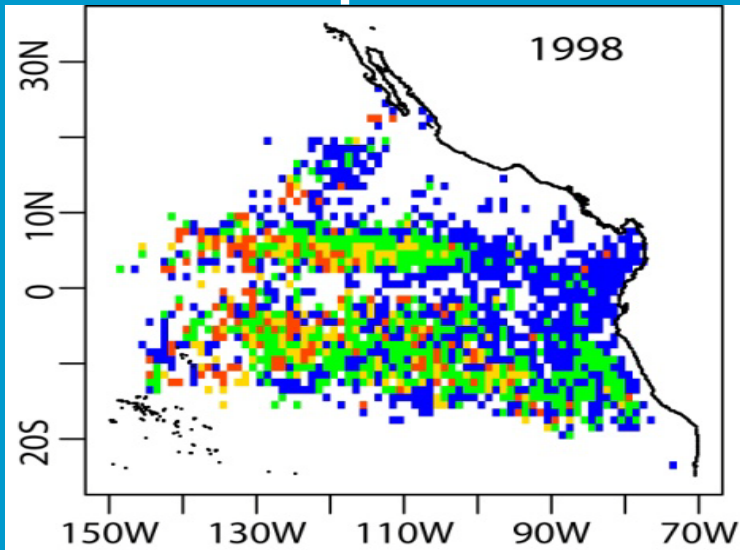
■ 1994-1998 ■ 1999-2003 ■ 2004-2008



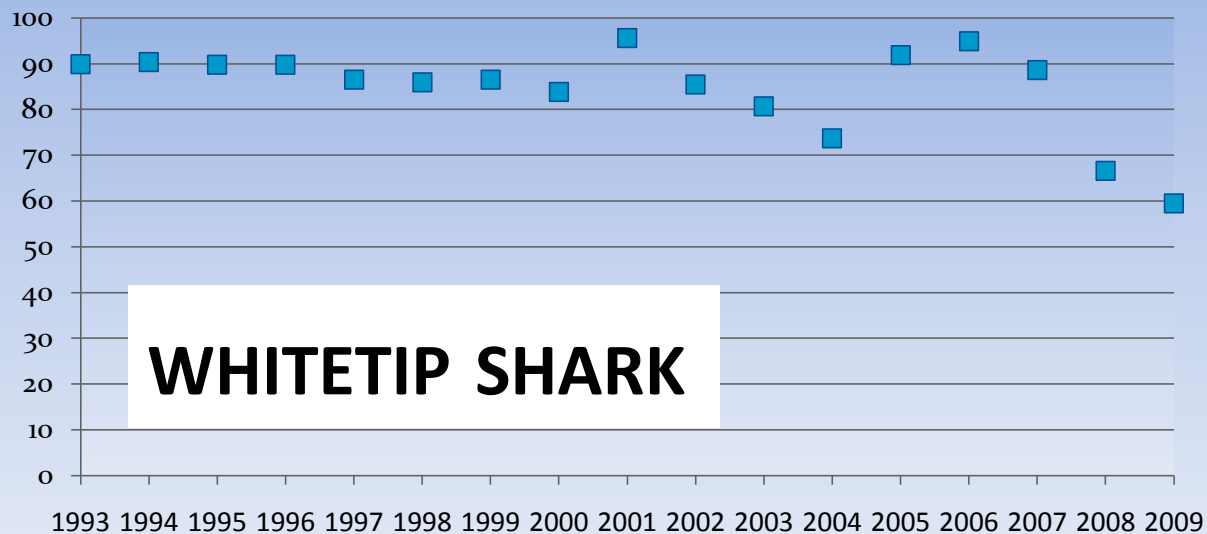
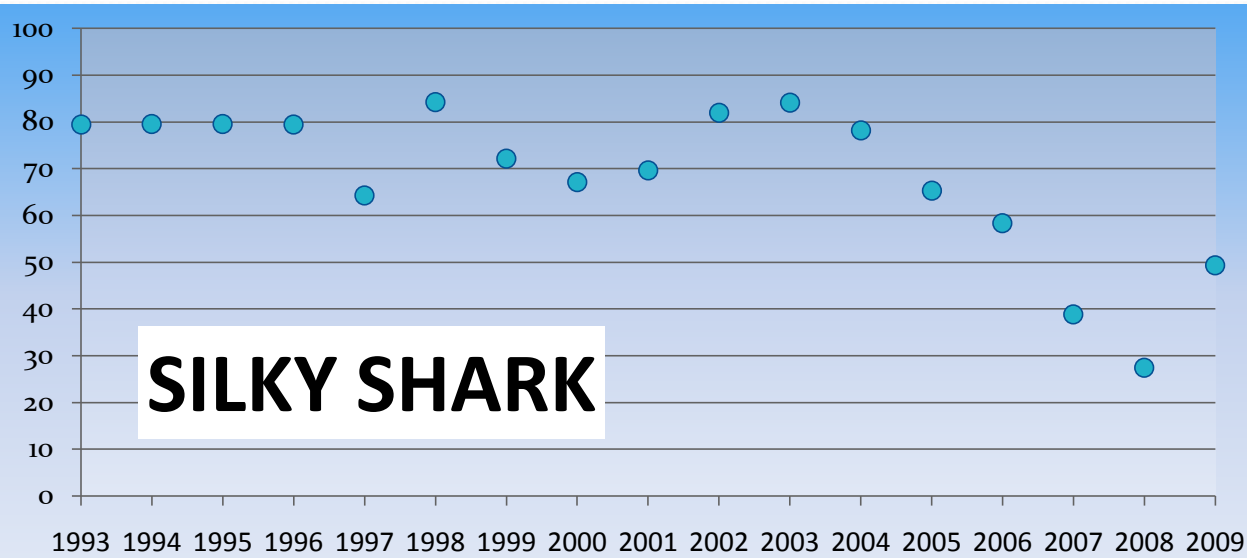
Catch per set Silky shark



Catch per set Oceanic whitetip shark



% discarded (Bycatch)



% discarded (Bycatch)

