Commission for the Conservation of Southern Bluefin Tuna



みなみまぐろ保存委員会

### CCSBT-ESC/0409/06

# 4. Review of SBT Fisheries

## Purpose

To provide an overview of the most recent SBT fishing season and to review trends and changes in SBT Fisheries from national and global perspectives.

### Background

Members of the Extended Scientific Committee have prepared national reports for their SBT fisheries. The national reports are provided in papers of the classification "CCSBT-ESC/0409/SBT Fisheries" and will be presented by members at the meeting.

The Secretariat has prepared four versions of the global catch table from information provided by members. These tables are required for the report of the Extended Scientific Committee, or for related reports as described below:

(1) Global catch by country

- This is the global catch table that has appeared in each Scientific Committee report since 2001. This table is at **Attachment A**.
- The main change from the global catch table presented in the SC8 report is that the 2002 Indonesian catch estimate has reduced from 1930t to 1691t. This is due to a number of corrections to the data and estimation procedures by the IOTC.
- An update of this table was sent to members on 11 June 2004. The changes since that update are the separation of the Philippines catch from the Misc category and some minor updates of less than 0.5 tonnes to the Indonesian catch estimates from 1993 to 1999.

(2) Global catch by gear

• The Eighth Meeting of the Extended Scientific Committee requested that a global catch by gear table (without country) be prepared for inclusion in future reports of the Scientific Committee. This table is at **Attachment B.** 

(3) Global catch by country and ocean (Indian, Pacific, Atlantic)

- This table is at **Attachment C**.
- CCSBT 10 agreed that Extended Scientific Committee should take over the responsibility of preparing the annual SBT report to ICCAT. The report to ICCAT requires information on catch by country in the Atlantic Ocean.
- The IOTC has contacted the Secretariat requesting a similar report for the Indian Ocean. This report requires information on catch by country in the Indian Ocean.

- (4) Global catch by gear and ocean (Indian, Pacific, Atlantic)
  - The reports mentioned in point "3" above also require information on catch by gear in the Indian and Atlantic Oceans. This table is at **Attachment D**.

It should be noted that the figures produced by the Secretariat for catches in the Atlantic Ocean do not match the figures in Japan's last SBT report to ICCAT. The method used by the Secretariat to calculate catches for the new tables (items "2" to "4" above) is described at Attachment E.

# **Prepared by the Secretariat**

#### **Global Catch by Country**

Catches are presented as whole weights in tonnes. Numbers in **bold** font differ from those in Attachment D of the SC8 Report. All 2003 figures are to be considered preliminary.

		о кероп.	All 2003	ngures a		onsidered p	ennina	ary.		
									Total	
Calendar			New						(excludes	
Year	Australia	Japan		Korea*	Taiwan	Philippines	Indo.	Misc	'other')	Other
1952	264	565	0	0	0				829	Outor
1953	509	3,890		0	0				4,399	
1954	424	2,447	0	0	0				2,871	
1955	322	1,964	0	0	0			0	2,286	
1956	964	9,603	0 0	0	0		0	0	10,567	
1957	1,264	22,908	0	0	0		0		24,172	
1958	2,322	12,462	0	0	0	0	0		14,784	
1959	2,486	61,892	0 0	0	0	0 0	0	0 0	64,378	
1960	3,545	75,826	0	0	0			0	79,371	
1961	3,678	77,927	0	0	0	0	0	0	81,605	
1962	4,636	40,397	0	0	0	0 0	0	0 0	45,033	
1963	6,199	59,724	0	0	0	0	0	0	65,923	
1964	6,832	42,838	0	0	0		0	0	49,670	
1965	6,876	40,689	0	0	0	0	0	0	47,565	]
1966	8,008	39,644	0	0	0	0	0	0	47,652	
1967	6,357	59,281	0	0	0	0	0		65,638	
1968	8,737	49,657	0	0	0	0	0	0	58,394	
1969	8,679		0 0	0	80	0	0	0	58,528	
1970	7,097	40,929		0	130		0		48,156	
1971	6,969		0	0	30				45,148	
1972	12,397	39,458	0	0	70		0	0	51,925	
1973	9,890		0	0	90		0		41,205	
1974	12,672	34,005	0	0	100		0		46,777	
1975	8,833		0 0	0	15		0		32,982	
1976	8,383		0	0	15	0	12	0	42,509	
1977	12,569		0	0	5		4		42,178	
1978	12,190		0 0	0	80		6	0 4	35,908	
1979	10,783			0	53		5		38,673	
1980	11,195		130	0	64	0			45,054	
1981	16,843		173	0	92		1	14	45,104	
1982	21,501		305	0	182	0	2	9	42,788	
1983 1984	17,695 13,411	24,881 23,328	132 93	0	161 244			/	42,881 37,090	
1985	12,589		93 94	0 0	244 241			3	33,325	
1986 1987	12,531 10,821	15,182 13,964	82 59	0 0	514 710		7 14	3 7	28,319 25,575	
1988	10,621	11,422		0	856			י ז	23,145	
1989	6,118		437	0	1,395			<u>~</u> 103	17,843	
1909	4,586	7,056	529	0	1,333	0 0		105	13,870	
1991	4,489	6,477	164	246	1,460				13,691	
1992	5,248			41	1,222				14,217	
1993	5,373	6,318	210	92	958	0		17	14,344	
1994	4,700		277	137	1,020		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	54	13,154	
1995	4,508	5,867	436	365	1,431	0		201	13,637	
1996	5,128	6,392		1,320	1,467	0	1,614	295	16,356	
1997	5,316		334	1,424	872	0		333	16,076	
1998	4,897	7,500	337	1,796	1,446				17,776	
1999	5,552	7,554	461	1,462	1,513		1,324 2,504	403	19,529	
2000	5,257	6,000	380	1,135	1,448				15,472	
2001	4,853	6,674	358	845	1,580		1,632	41	16,026	4
2002	4,711	6,192	450	746	1,137		1,691	203	15,212	17
2003	5,822	5,762	389	254	1,128	68	555		14,024	17
	-									

Philippines: The Philippines became a cooperating non member of CCSBT during 2004, so its catch is now specifically identified (in previous years this was incorporated in the "Misc" category). In addition, catch figures provided by the Philippines are now used for the Philippines catch from 2000 instead of Japanese import statistics. This has resulted in an increase in overall catch of approximately 24, 19 and 16 tonnes for 2001, 2002 and 2003 respectively over previously used figures.

Misc: SBT catch other than those listed (obtained from Japanese import statistics). For 2003, this comprises China (~40t) and South Africa (~5t).

Other: Mortality of SBT from other sources that have not been included in country figures. This includes mortality that occurred during research programs including the CCSBT Scientific Research Program. This information has yet to be compiled for years prior to 2001.

\*: Japanese Import Statistics for 1993, 1994, and 1998 are higher than these official statistics and are: 117, 147, and 1897 respectively. Assessments would normaly used the higher of these values.

### **Global Catch by Gear**

# Catches are presented as whole weights in tonnes. All 2003 figures are to be *considered preliminary.*

Catches from Indonesia and the "Misc" category of countries were assigned to the longline fishery. Catches from other line fisheries not listed below (such as "minor line") were also assigned to the longline fishery.

		ionery.	Pole		Unspecified		
Calendar		Purse	and		Surface		Gill
Year	Longline	Seine	Line	Trol	Fisheries	Handline	Net
1952	565	0	0	0	264	0	0
1953	3,890	0	0	0	509	0	0
1954	2,447	0	0	0	424	0	0
1955	1,964	0	0	0	322	0	0
1956	9,603	0	0	0	964	0	0
1957	22,908	0	0	0	1,264	0	0
1958	12,462	0	0	0	2,322	0	0
1959	61,892	0	0	0	2,486	0	0
1960	75,826	0	0	0	3,545	0	0
1961 1962	77,927	0	0	0	3,678	0	0
1962	40,397 59,724	0	0	0	4,636 6,199	0	0
1963		0	0	0	6,832	0	0
1965	42,838 40,689	0	0	0	6,876	0	0
1965	39,644	0	0	0	8,008	0	0
1967	59,281	0	0	0	6,357	0	0
1968	49,657	0	0	0	8,737	0	0
1969	49,849	0	0	0	8,679	0	0
1970	41,059	0	0	0	7,097	0	0
1971	38,179	0	0	0	6,969	0	0
1972	39,528	0	0	0	12,397	0	0
1973	31,315	0	0	0	9,890	0	0
1974	34,105	0	0	0	12,672	0	0
1975	24,149	8,833	0	0	0	0	0
1976	34,126	3,155	5,228	0	0	0	0
1977	29,609	1,550	11,019	0	0	0	0
1978	23,718	3,577	8,613	0	0	0	0
1979	27,890	2,097	8,686	0	0	0	0
1980	33,729	2,036	9,159	0	0	130	0
1981	28,088	6,752	10,091	0	0	173	0
1982	20,971	6,831	14,670	0	0	305	11
1983	25,042	5,872	11,823	0	0	132	12
1984	23,586	4,444	8,967	0	0	93	0
1985	20,575	5,179	7,410	0	0	94	67
1986	15,625	6,376	6,155	0	0	82	81
1987	14,609	5,411	5,409	0	0	59	87
1988	12,227	2,820	7,770	0		94	234
1989	11,950	1,626 2,511	3,807	<u>31</u> 21	0	109	319 305
1990 1991	8,968 10,692	2,511	1,803 1,823	1	0	263 35	305 107
1991	12,467	1,034	1,673	4	0	48	3
1992	12,407	536	1,018		0	20	0
1993	11,036	1,269	844	0	0	<u></u>	0
1994	10,979	1,209	795	8	0	15	0
1995	11,564	3,121	1,659	3	0	8	0
1997	11,200	2,998	1,843	31	0	5	0
1998	13,537	3,584	640	13	0	2	0
1999	14,177	5,325	22	3	0	2	0
2000	10,339	5,132	0	1	0	0	0
2000	11,259	4,767	0	0	0	0	0
2002	10,528	4,683	0	1	0	0	0
2003	8,237	5,787	0	0	0	0	0

### **Global Catch by Country and Ocean**

# Catches are presented as whole weights in tonnes. All 2003 figures are to be considered preliminary.

This includes catches from Indonesia, Misc, the Philippines (pre-2000 only), Taiwan (pre-1981 only).									
	Calendar			New					
Ocean	Year	Australia	Japan	Zealand	Korea	Taiwan	Philippines	Indonesia	Misc
Atlantic	1965	0	15	0	0	0	0	0	0
Atlantic	1968	0	411	0	0	0	0	0	0
Atlantic	1969	0	1,869	0	0	0	0	0	0
Atlantic	1970	0	7,575	0	0	0	0	0	0
Atlantic	1971	0	2,126	0	0	0	0	0	0
Atlantic	1972	0	3,928	0	0	0	0	0	0
Atlantic	1973	0	2,235	0	0	0	0	0	0
Atlantic	1974	0	2,266	0	0	0	0	0	0
Atlantic	1975	0	1,051	0	0	0	0	0	0
Atlantic	1976	0	1,009	0	0	0	0	0	0
Atlantic	1977	0	4,463	0	0	0	0	0	0
Atlantic	1978	0	6,528	0	0	0	0	0	0
Atlantic	1979	0	8,231	0	0	0	0	0	0
Atlantic	1980	0	3,086	0	0	0	0	0	0
Atlantic	1981	0	2,365	0	0	35	0	0	0
Atlantic	1982	0	1,104	0	0	9 30	0	0	0
Atlantic	1983 1984	0	573 2,082	0	0	30	0	0	0
Atlantic Atlantic	1984	0	2,082	0	0	95	0	0	0
	1985	0	434	0	0	216	0	0	0
Atlantic Atlantic	1986	0	434	0	0	102	0	0	0
Atlantic	1988	0	573	0	0	28	0	0	0
Atlantic	1989	0	493	0	0	19	0	0	0
Atlantic	1990	0	987	0	0	17	0	0	0
Atlantic	1991	0	1,080	0	0	233	0	0	0
Atlantic	1992	0	253	0	0	46	0	0	0
Atlantic	1993	0	1,425	0	80	108	0	0	0
Atlantic	1994	0	420	0	7	56	0	0	0
Atlantic	1995	0	1,237	0	24	584	0	0	0
Atlantic	1996	0	1,015	0	0	24	0	0	0
Atlantic	1997	0	189	0	0	89	0	0	0
Atlantic	1998	0	649	0	47	42	0	0	0
Atlantic	1999	0	689	0	100	30	0	0	0
Atlantic	2000	0	1,203	0	242	24	0	0	0
Atlantic	2001	0	327	0	90	223	0	0	0
Atlantic	2002	0	909	0	116	16	0	0	0
Atlantic	2003	0	1,992	0	0	86	0	0	0
Indian	1965		28,095	0	0	0	0	0	0
Indian	1966		,	0	0	0	0	0	0
Indian	1967		50,475	0	0	0	0	0	0
Indian	1968		41,426	0	0	0	0	0	0
Indian	1969		39,680	0	0	80	0	0	0
Indian	1970		26,551	0	0	130	0	0	0
Indian	1971		23,138	0	0	30	0	0	0
Indian	1972	5,838	23,064	0	0	70	0	0	0
Indian	1973	7,244	21,282	0	0	90	0	0	0
Indian	1974		24,196	0	0	100	0	0	0
Indian	1975		17,644	0	0	15	0	0 12	0
Indian	1976	7,440	24,395	0	0	15 5	0		0
Indian	1977 1978	9,914	20,212	0	0	5 80	0	4	0 0
Indian	1978		13,550	0	0	80 53	0	5	4
Indian Indian	1979	7,557 7,860	13,587 20,526	0	0	53 64	0	ວ 5	4
Indian	1980		17,284	0	0	56	0	5 1	14
Indian	1981		14,966	0	0	173	0	2	9
Indian	1982		21,391	0	0	173	0	5	9 7
maian	1000	10,701	21,001	0	U	101	0	5	1

Catches have been assigned to the Indian Ocean where catch location information was not available. This includes catches from Indonesia, Misc, the Philippines (pre-2000 only), Taiwan (pre-1981 only).

# Attachment C

Indian	1984	13,299	18,935	0	0	243	0	11	3
Indian	1985	12,589	16,780	0	0	146	0	3	2
Indian	1986	12,489	12,938	0	0	298	0	7	3
Indian	1987	10,805	10,946	0	0	608	0	14	7
Indian	1988	10,590	9,754	0	0	828	0	180	2
Indian	1989	5,438	7,536	0	0	1,376	0	568	103
Indian	1990	4,335	4,383	0	0	1,160	0	517	4
Indian	1991	3,876	4,137	0	15	1,227	0	759	97
Indian	1992	4,568	4,238	0	41	1,176	0	1,232	73
Indian	1993	4,513	2,869	0	12	850	0	1,370	17
Indian	1994	4,246	4,132	0	130	963	0	904	54
Indian	1995	3,362	3,684	0	341	848	0	829	201
Indian	1996	4,893	4,248	0	1,320	1,442	0	1,614	295
Indian	1997	4,910	4,500	0	1,424	783	0	2,210	333
Indian	1998	4,353	5,838	0	1,749	1,397	5	1,324	471
Indian	1999	5,448	5,126	0	1,361	1,483	80	2,504	403
Indian	2000	5,147	3,370	0	893	1,424	17	1,203	31
Indian	2001	4,792	4,453	0	754	1,357	43	1,632	41
Indian	2002	4,693	3,153	0	630	1,121	79	1,691	203
Indian	2003	5,808	1,949	0	254	1,041	65	555	45
Pacific	1965	2,201	12,579	0	0	0	0	0	0
Pacific	1966	2,126	13,286	0	0	0	0	0	0
Pacific	1967	2,829	8,806	0	0	0	0	0	0
Pacific	1968	5,597	7,820	0	0	0	0	0	0
Pacific	1969	5,134	8,220	0	0	0	0	0	0
Pacific	1970	4,289	6,803	0	0	0	0	0	0
Pacific	1971	3,558	12,886	0	0	0	0	0	0
Pacific	1972	6,559	12,466	0	0	0	0	0	0
Pacific	1973	2,646	7,708	0	0	0	0	0	0
Pacific	1974	5,109	7,542	0	0	0	0	0	0
Pacific	1975	6,166	5,439	0	0	0	0	0	0
Pacific	1976	943	8,695	0	0	0	0	0	0
Pacific	1977	2,655	4,925	0	0	0	0	0	0
Pacific	1978	3,681	3,554	0	0	0	0	0	0
Pacific	1979	3,226	6,010	0	0	0	0	0	0
Pacific	1980	3,335	10,041	130	0	0	0	0	0
Pacific	1981	8,899	8,332	173	0	0	0	0	0
Pacific	1982	2,303	4,719	305	0	0	0	0	0
Pacific	1983	914	2,916	132	0	0	0	0	0
Pacific	1984	112	2,312	93	0	0	0	0	0
Pacific	1985	0	1,883	94	0	0	0	0	0
Pacific	1986	42	1,810	82	0	0	0	0	0
Pacific	1987	16	1,791	59	0	0	0	0	0
Pacific	1988	1	1,095	94	0	0	0	0	0
Pacific	1989	680	1,193	437	0	0	0	0	0
Pacific	1990	251	1,686	529	0	0	0	0	0
Pacific	1991	613	1,260	164	232	0	0	0	0
Pacific	1992	680	1,630	279	0	0	0	0	0
Pacific	1993	860	2,024	217	0	0	0	0	0
Pacific	1994	454	1,510	277	0	0	0	0	0
Pacific	1995	1,145	946	436	0	0	0	0	0
Pacific	1996	236	1,129	139	0	0	0	0	0
Pacific	1997	406	898	334	0	0	0	0	0
Pacific	1998	543	1,013	337	0		0	0	0
Pacific	1999	104	1,740	461	0	0	0	0	0
Pacific	2000	110	1,427	380 358	0	0	0	0	0 0
Pacific	2001	61	1,894				2		
Pacific Pacific	2002	19	2,130	450	0	0	2	0	0
Pacific	2003	14	1,821	389	0	2	3	0	0

### **Global Catch by Gear and Ocean**

# Catches are presented as whole weights in tonnes. All 2003 figures are to be considered preliminary.

Catches have been assigned to the Indian Ocean where catch location information was not available. This includes catches from Indonesia, Misc, the Philippines (pre-2000 only), Taiwan (pre-1981 only).

Catches from Indonesia and the "Misc" category of countries were assigned to the longline fishery. Catches from other line fisheries not listed below (such as "minor line") were also assigned to the longline fishery.

	o the longlin	e nanery.		Pole		Unspecified		
	Colondor		Purse			-		Cill
0	Calendar			and	Tral	Surface	L le re ellire e	Gill
Ocean	Year	Longline	Seine	Line	Trol	-	Handline	Net
Atlantic	1965	15	0	0	0	0	0	0
Atlantic	1968	411	0	0	0	0	0	0
Atlantic	1969	1,869	0	0	0	0	0	0
Atlantic	1970	7,575	0	0	0	0	0	0
Atlantic	1971	2,126	0	0	0	0	0	0
Atlantic	1972	3,928	0	0	0	0	0	0
Atlantic	1973	2,235	0	0	0	0	0	0
Atlantic	1974	2,266	0	0	0	0	0	0
Atlantic	1975	1,051	0	0	0	0	0	0
Atlantic	1976	1,009	0	0	0	0	0	0
Atlantic	1977	4,463	0	0	0	0	0	0
Atlantic	1978	6,528	0	0	0	0	0	0
Atlantic	1979	8,231	0	0	0	0	0	0
Atlantic	1980	3,086	0	0	0	0	0	0
Atlantic	1981	2,400	0	0	0	0	0	0
Atlantic	1982	1,114	0	0	0	0	0	0
Atlantic	1983	604	0	0	0	0	0	0
Atlantic	1984	2,082	0	0	0	0	0	0
Atlantic	1985	1,828	0	0	0	0	0	0
Atlantic	1986	650	0	0	0	0	0	0
Atlantic	1987	1,330	0	0	0	0	0	0
Atlantic	1988	602	0	0	0	0	0	0
Atlantic	1989	513	0	0	0	0	0	0
Atlantic	1990	1,004	0	0	0	0	0	0
Atlantic	1991	1,313	0	0	0	0	0	0
Atlantic	1992	300	0	0	0	0	0	0
Atlantic	1993	1,612	0	0	0	0	0	0
Atlantic	1994	483	0	0	0	0	0	0
Atlantic	1995	1,845	0	0	0	0	0	0
Atlantic	1996	1,040	0	0	0	0	0	0
Atlantic	1997	278	0	0	0	0	0	0
Atlantic	1998	738	0	0	0	0	0	0
Atlantic	1990	819	0	0	0	0	0	0
Atlantic	2000	1,470	0	0	0	0	0	0
Atlantic	2000	640	0	0	0	0	0	0
	2001		0	0	0	0	0	0
Atlantic		1,041	0	0			0	0
Atlantic	2003	2,078 28,095	_		0	0		-
Indian	1965		0	0	0	4,675	0	0
Indian	1966	26,358	0	0	0	5,882	0	0
Indian	1967	50,475	0	0	0	3,528	0	0
Indian	1968	41,426	0	0	0	3,140	0	0
Indian	1969	39,760	0	0	0	3,545	0	0
Indian	1970	26,681	0	0	0	2,808	0	0
Indian	1971	23,168	0	0	0	3,411	0	0
Indian	1972	23,134	0	0	0	5,838	0	0
Indian	1973	21,372	0	0	0	7,244	0	0
Indian	1974	24,296	0	0	0	7,563	0	0
Indian	1975	17,659	2,667	0	0	0	0	0
Indian	1976	24,422	3,037	4,403	0	0	0	0
Indian	1977	20,221	932	8,982	0	0	0	0
Indian	1978	13,636	1,562	6,947	0	0	0	0

# Attachment D

Indian	1979	13,649	111	7,446	0	0	0	0
Indian	1980	20,602	107	7,754	0	0	0	0
Indian	1980	17,355	420	7,524	0	0	0	0
Indian	1982	15,139	5,489	13,708	0	0	0	11
Indian	1982	21,522	5,083	11,698	0	0	0	12
							-	
Indian	1984	19,192	4,339	8,960	0	0	0	0
Indian	1985	16,864	5,179	7,410	0	0	0	67
Indian	1986	13,165	6,342	6,147	0	0	0	81
Indian	1987	11,489	5,411	5,393	0	0	0	87
Indian	1988	10,530	2,820	7,770	0	0	0	234
Indian	1989	9,281	1,626	3,794	0	0	0	319
Indian	1990	5,781	2,511	1,803	0	0	0	305
Indian	1991	7,146	1,034	1,823	0	0	0	107
Indian	1992	9,664	22	1,639	0	0	0	3
Indian	1993	8,077	536	1,018	0	0	0	0
Indian	1994	8,319	1,269	841	0	0	0	0
Indian	1995	6,629	1,840	795	0	0	0	0
Indian	1996	9,064	3,099	1,649	0	0	0	0
Indian	1997	9,343	2,991	1,826	0	0	0	0
Indian	1998	10,942	3,555	640	0	0	0	0
Indian	1999	11,059	5,325	22	0	0	0	0
Indian	2000	6,953	5,132	0	0	0	0	0
Indian	2000	8,304	4,767	0	0	0	0	0
Indian	2001	6,887	4,683	0	0	0	0	0
Indian	2002	3,931	5,787	0	0	0	0	0
Pacific	1965	12,579	0	0	0	2,201	0	0
Pacific	1965	13,286	0	0	0	2,201	0	0
Pacific			0	0	0		0	
	1967	8,806	_		-	2,829		0
Pacific	1968	7,820	0	0	0	5,597	0	0
Pacific	1969	8,220	0	0	0	5,134	0	0
Pacific	1970	6,803	0	0	0	4,289	0	0
Pacific	1971	12,886	0	0	0	3,558	0	0
Pacific	1972	12,466	0	0	0	6,559	0	0
Pacific	1973	7,708	0	0	0	2,646	0	0
Pacific	1974	7,542	0	0	0	5,109	0	0
Pacific	1975	5,439	6,166	0	0	0	0	0
Pacific	1976	8,695	118	825	0	0	0	0
Pacific	1977	4,925	617	2,037	0	0	0	0
Pacific	1978	3,554	2,015	1,666	0	0	0	0
Pacific	1979	6,010	1,986	1,240	0	0	0	0
Pacific	1980	10,041	1,929	1,405	0	0	130	0
Pacific	1981	8,333	6,332	2,567	0	0	173	0
Pacific	1982	4,719	1,342	961	0	0	305	0
Pacific	1983	2,916	790	125	0	0	132	0
Pacific	1984	2,312	105	6	0	0	93	0
Pacific	1985	1,883	0	0	0	0	94	0
Pacific	1986	1,810	34	8	0	0	82	0
Pacific	1987	1,791	0	16	0	0	59	0
Pacific	1988	1,095	0	0	0	0	94	0
Pacific	1989	2,157	0	13	31	0	109	0
Pacific	1905	2,187	0	0	21	0	263	0
Pacific	1990	2,103	0	0	21	0	203	0
Pacific	1991	2,233	0	33	4	0	48	0
Pacific	1993	3,082	0	0	0	0	20	0
Pacific	1994	2,234	0	3	0	0	4	0
Pacific	1995	2,505	0	0	8	0	15	0
Pacific	1996	1,460	22	10	3	0	8	0
Pacific	1997	1,579	7	16	31	0	5	0
	1998	1,857	29	0	13	0	2	0
Pacific					~		2	0
Pacific Pacific	1999	2,300	0	0	3	0		0
Pacific		2,300 1,917	0	0	3 1	0	0	0
Pacific Pacific	1999							
Pacific Pacific Pacific	1999 2000	1,917	0	0	1	0	0	0

## Method Used by the Secretariat to Produce the New Global Catch Tables

The Secretariat has only one complete dataset with total catch weights by country and calendar year. This is the catch by fleet data supplied by members, from which the global catch table (by country) is produced. Unfortunately, this data contains no spatial subdivision and for many years, does not contain complete gear subdivision. As a consequence, to produce the three new catch tables (by gear, by ocean and country, and by gear and country), it has been necessary to conduct a variety of manipulations on different datasets to produce the necessary information. The manipulations and datasets used are described briefly below on a country by country basis. The map in Attachment F shows the boundaries that were used to divide the Indian, Pacific and Atlantic Oceans. The boundaries are drawn along lines of 5 degree units as this is the resolution of most of the data.

All data manipulations were conducted in such a manner that resulted in the same total catches as the annual catch by fleet totals for each country.

### Australia

Three datasets were used for Australia:

(1) Catch at size data

This data was used for the period from 1952 to 1974 inclusive. Numbers caught were converted to weights using agreed formulae. These weights were then scaled against the catch by fleet totals in each year. In this dataset, the surface fishery is not subdivided by gear and location information is only by State (domestic fleet) or Statistical area (joint venture fleet).

(2) Catch and Effort data

This data was used for the period from 1975 to 2001 inclusive. This data provided better gear and location subdivision than the catch at size data. Catch weights provided in the catch effort data were scaled against the catch by fleet totals in each year and gear group (surface group and line group).

(3) Raised catch data

In the 2004 data exchange, Australia provided raised catch data for 2002 and 2003. This data was used and it required no further manipulation.

#### <u>Japan</u>

From 1952 to 1964, it has been assumed that Japan's catch was by longline. The Secretariat has no information on its database concerning the location of pre-1965 catches for Japan, so catches by oceans have not been produced for years prior to 1965.

For 1965 to 2003, Japan's catch and effort data was used (L5M data to 1994 and CCSBT data from 1995). Catches were converted from numbers to weights using the same method as used for the Management Procedure data. These weights were then scaled against the catch by fleet totals in each year.

#### New Zealand

The New Zealand raised catch data as calculated by the Secretariat was used without further modification. This calculation method was described on the CCSBT data CD and has been previously agreed with New Zealand.

# <u>Korea</u>

The Korea's catch and effort data was used, with scaling (which in this case, is raising) against the catch by fleet totals in each year.

### <u>Taiwan</u>

From 1969 to 1980, the Secretariat has no information on its database concerning the location of Taiwan's catch. All of Taiwan's catch in this period has been assigned to the Indian Ocean.

Taiwan's raised catch and effort data was used from 1981. Scaling against the catch by fleet totals were conducted in each year, but this was not really necessary because of the raised nature of Taiwan's data.

### Philippines

From 1996 to 1999 inclusive, totals are from the Japanese import statistics with no further information. These catches were assumed to be longline catches in the Indian Ocean.

From 2000, catch reports have been provided by the Philippines with enough detail to work out the ocean and gear details. These data have been used.

### Indonesia and Miscellaneous

All catches for Indonesia and "Misc" are assumed to be caught from the Indian Ocean via longlines.

Attachment F

