

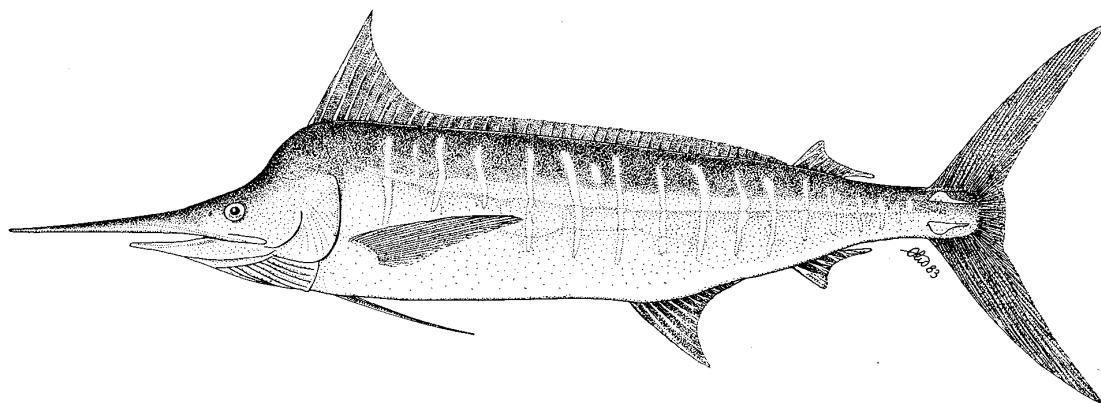


SCTB16 Working Paper

SWG-3

Estimates of annual catches for billfish species taken in commercial fisheries of the western and central Pacific Ocean

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July 2003

Table 1. Sources of commercial longline catch estimates for billfish by fleet.

American Samoa	<u>Blue marlin, black marlin, striped marlin, swordfish:</u> Estimates for 1988–2002 catches provided by Bob Skillman, pers. comm. July 4th 2003). Note that these estimates <u>do not include</u> the commercial troll/handline fishery.
Australia	<u>Blue marlin, black marlin, striped marlin, swordfish:</u> Estimates for years up to and including 2000 were provided by the Bureau of Resource Sciences (Carolyn Robins, personal communication, August 2001). The following notes accompanied the provision of earlier estimates: "(1) The estimates provided represent retained catches reported in logbooks. This is particularly important for black marlin and blue marlin where voluntary release and, since 1998, mandatory release has existed for commercial fishers..... (2) The billfish data do not yet include joint venture catches. Similarly, for the domestic billfish data we may need to go back to the foreign longline database and extract any charter data that might be held there." Estimates for 2001 were provided by James Findlay, Australian Agriculture, Fisheries and Forestry (AFFA), pers. comm. June 2002). The 2001 estimates include discards of billfish. The catch estimate for these releases were determined by applying an estimate of average weight for each species obtained from observers active in the adjacent waters of New Caledonia. Estimates for 2002 were provided by Don Bromhead, Australian Agriculture, Fisheries and Forestry (AFFA), pers. comm. 21 May 2003). The 2002 estimates include the compulsory releases of blue and black marlin. The catch estimate for these releases were determined by applying an estimate of average weight for each species obtained from observers active in the adjacent waters of New Caledonia.
China	<u>Blue marlin, black marlin, striped marlin, swordfish:</u> All estimates were determined by applying the species composition (by weight) of billfish species to total target tuna, obtained from observer data held at SPC, to annual catch estimates of target tuna (Lawson, 2003).
Cook Islands	<u>Blue marlin, black marlin, striped marlin, swordfish:</u> Estimates determined by applying the species composition (by weight) of billfish species to total target tuna from logbooks to annual target tuna catch estimates (Lawson, 2003).
Fed. States of Micronesia	<u>Blue marlin, black marlin, striped marlin, swordfish:</u> Estimates were determined by applying the species composition (by weight) of billfish species to total target tuna from logbooks (for 1991–1998) and observer data (for 1999–2002) to annual target tuna catch estimates (Lawson, 2003).
Fiji	<u>Blue marlin, black marlin, striped marlin, swordfish:</u> Estimates for 1994–1998 are provided in SCTB12 Working Paper NFR-6 Tuna and Billfish fisheries of Fiji's Fishing Zone (Illiapi Tuwai, 1999). Estimates for 1989–1993 were determined by applying the species composition (by weight) of billfish species to total target tuna for the period 1994–1998, to annual catch estimates of target tuna (Lawson, 2001). Estimates for 1999–2002 are provided in SCTB16 Working Paper NFR Fiji Tuna and Billfish fisheries (Jone Amoe, 2003).
French Polynesia	<u>Blue marlin, black marlin, striped marlin, swordfish:</u> Catch estimates were provided by Arsene Stein in his email message of 10 April 2003. Estimates <u>do not</u> include trolling and handline billfish catch from the small-scale bonitier and poti marara fisheries, which totalled 112 t for 2002 (including 110t blue marlin).
Indonesia	<u>Blue marlin, black marlin, striped marlin, swordfish:</u> Estimates were derived by applying the species composition of billfish species to total target tuna (Carrara and Uktolseja, 1997), to annual catch estimates of target tuna (Lawson, 2003).
Japan, coastal	<u>Blue marlin, black marlin, striped marlin, swordfish:</u> No estimates for this fleet are currently available.
Japan, offshore/distant water	<u>Blue marlin, black marlin, striped marlin, swordfish:</u> Estimates for 1962–1969 were

obtained by applying estimates of average weight to aggregate catch data (in numbers of fish) provided to SPC by the Japan National Research Institute of Far Seas Fisheries (NRIFSF). Estimates for 1970–2001 were provided in SCTB16 WP NFR–11 *National Tuna Fisheries Report of Japan as of 2003* (Miyabe et al., 2003). Estimates for 2001 have been carried over to 2002.

- Kiribati [Blue marlin, black marlin, striped marlin, swordfish](#): Estimates determined by applying the proportion of logbook-reported target tuna catch to annual target tuna catch estimates (Lawson, 2003), to the logbook-reported billfish catches.
- Korea [Blue marlin, black marlin, striped marlin, swordfish](#): Estimates for 1975–1997 were obtained from raised aggregate catch data provided to SPC by the Korean National Fisheries Research and Development Institute (NFRDI) for the WCPO. Estimates for 1998–2000 were provided by Dr Koh (NFRDI), pers. comm. July 20th 2001. Estimates for 2001 were provided by Dr Koh (NFRDI), pers. comm. July 9th 2002. Estimates for 2001 have been carried over to 2002.
- Marshall Islands [Blue marlin, black marlin, striped marlin, swordfish](#): Estimates determined by applying the species composition (by weight) of billfish species to total target tuna from logbooks to annual target tuna catch estimates (Lawson, 2003).
- New Caledonia [Blue marlin, black marlin, striped marlin, swordfish](#): Estimates determined by applying the proportion of logbook-reported target tuna catch to annual target tuna catch estimates (Lawson, 2003), to the logbook-reported billfish catches.
- New Zealand [Blue marlin, black marlin, striped marlin, swordfish](#): Estimates of swordfish catches provided from landings data for years prior to 1990 provided by Talbot Murray (pers. comm. 6th August 2001). Estimates of swordfish catches provided from landings data for years since 1990 taken from SCTB16 Working Paper NFR 17 New Zealand Domestic Tuna Fisheries in 2001 (Murray and Smith, 2003). Estimates since 1990 include very minor catches from the troll and 'unclassified' fisheries. Regulations in place under a billfish moratorium (since 1988) restrict the landing of marlin species, hence retained catches of billfish since 1988 are essentially zero.
- Papua New Guinea [Blue marlin, black marlin, striped marlin, swordfish](#): Estimates were determined by applying the species composition of billfish, from logbook data (for years 1995–2001) and observer data (2002) to annual target tuna catch estimates (Lawson, 2003).
- Philippines [Blue marlin, black marlin, striped marlin, swordfish](#): Estimates were derived by applying the species composition of billfish species to total target tuna in the adjacent Indonesian longline fishery (Carrara and Uktolseja, 1997), to annual catch estimates of target tuna for the Philippine longline fishery (Lawson, 2003). Note that this does not include billfish taken in the Handline fishery at this stage.
- Samoa [Blue marlin, black marlin, striped marlin, swordfish](#): Estimates were determined by applying species composition of billfish catch (from port sampling) to annual tuna catch estimates. Species composition data for years prior to 2000 were provided by Toni Mulipola in his email message of 14 April, 2000. The estimate for 2000 was determined by applying species composition of billfish for 1999 to target tuna catch estimate for 2000 (Lawson, 2002). The estimate for 2001 and 2002 was determined by applying species composition of billfish (according to port sampling data for respective years), to the target tuna catch estimate for 2001 and 2002, respectively (Lawson, 2003).
- Solomon Islands [Blue marlin, black marlin, striped marlin, swordfish](#): Estimates were determined by applying the species composition of billfish to target tuna catch, provided for 1999 by Edwin Orehaka, to annual catch estimates of target tuna (Lawson, 2003).
- Taiwan, distant-water [Blue marlin, black marlin, striped marlin, swordfish](#): Estimates for 1967–1995 were obtained from aggregate catch data provided to SPC by the Taiwanese Overseas Fisheries Development Council (OFDC). Estimates for 1996–2002 were provided by Feng-Chen Chang (OFDC) in his email message of 26 May 2003.

Taiwan, offshore, Micronesia	<u>Blue marlin, black marlin, striped marlin, swordfish:</u> All estimates were determined by applying the species composition (by weight) of billfish species to total target tuna, obtained from observer data held at SPC, to annual catch estimates of target tuna (Lawson, 2003).
Taiwan, offshore, Taiwan	<u>Blue marlin, black marlin, striped marlin, swordfish:</u> All estimates obtained from the Taiwan Fisheries Bureau (2001). Estimates for 2000 have been carried over to 2001 and 2002.
Tonga	<u>Blue marlin, black marlin, striped marlin, swordfish:</u> All estimates were determined by applying the species composition (by weight) of billfish species to total target tuna, obtained from observer data held at SPC, to annual catch estimates of target tuna (Lawson, 2003).
United States of America, (Hawaii)	<u>Blue marlin, black marlin, striped marlin, swordfish:</u> Estimates of catches prior to 1997 for the Hawaiian longline fishery were obtained from Curran et al. (1996), Curran (pers. comm.) and WPRFMC (1999). Note that the reported black marlin catch is accepted as a misidentification problem and is understood to be negligible (Curran et al. 1996), hence it is not reported here. Estimates for 1997–2002 were provided by Bob Skillman (pers. comm. July 4 th 2003). Note that these estimates <u>include</u> the commercial troll/handline fishery catches of blue marlin and striped marlin.
United States of America, (FSM and Marshall Islands)	<u>Blue marlin, black marlin, striped marlin, swordfish:</u> All estimates were determined by applying the species composition (by weight) of billfish species from logbooks to annual catch estimates of target tuna (Lawson, 2003).
Vanuatu	<u>Blue marlin, black marlin, striped marlin, swordfish:</u> Estimates were determined by applying the proportion of logbook-reported target tuna catch to annual target tuna catch estimates (Lawson, 2003), to the logbook-reported billfish catches.

Table 2. Longline catches (metric tonnes) of blue marlin in the WCPO

Legend : '-' no catch; '...' catches not available; '()' provisional estimates only.

YEAR	AMERICAN SAMOA	AUSTRALIA DOMESTIC	AUSTRALIA-JAPAN JV	CHINA	COOK ISLANDS	FEDERATED STATES OF MICRONESIA	FIJI	FRENCH POLYNESIA	INDONESIA	JAPAN COASTAL
1950	-	-	-	-	-	-	-	-	...	...
1951	-	-	-	-	-	-	-	-	...	...
1952	-	-	-	-	-	-	-	-	...	...
1953	-	-	-	-	-	-	-	-	...	...
1954	-	-	-	-	-	-	-	-	...	...
1955	-	-	-	-	-	-	-	-	...	...
1956	-	-	-	-	-	-	-	-	...	...
1957	-	-	-	-	-	-	-	-	...	...
1958	-	-	-	-	-	-	-	-	...	...
1959	-	-	-	-	-	-	-	-	...	...
1960	-	-	-	-	-	-	-	-	...	...
1961	-	-	-	-	-	-	-	-	...	...
1962	-	-	-	-	-	-	-	-	...	...
1963	-	-	-	-	-	-	-	-	...	...
1964	-	-	-	-	-	-	-	-	...	...
1965	-	-	-	-	-	-	-	-	...	...
1966	-	-	-	-	-	-	-	-	...	...
1967	-	-	-	-	-	-	-	-	...	...
1968	-	-	-	-	-	-	-	-	...	...
1969	-	-	-	-	-	-	-	-	...	...
1970	-	-	-	-	-	-	-	-	...	...
1971	-	-	-	-	-	-	-	-	...	...
1972	-	-	-	-	-	-	-	-	...	...
1973	-	-	-	-	-	-	-	-	...	...
1974	-	-	-	-	-	-	-	-	...	...
1975	-	-	-	-	-	-	-	-	...	...
1976	-	-	-	-	-	-	-	-	...	...
1977	-	-	-	-	-	-	-	-	...	...
1978	-	-	-	-	-	-	-	-	111	...
1979	-	-	-	-	-	-	-	-	116	...
1980	-	-	-	-	-	-	-	-	135	...
1981	-	-	-	-	-	-	-	-	165	...
1982	-	-	-	-	-	-	-	-	329	...
1983	-	-	-	-	-	-	-	-	96	...
1984	-	-	-	-	-	-	-	-	153	...
1985	-	0	-	-	-	-	-	-	225	...
1986	-	0	-	-	-	-	-	-	223	...
1987	-	51	-	-	-	-	-	-	846	...
1988	-	36	-	4	-	-	-	-	888	...
1989	-	0	...	15	-	-	1	-	468	...
1990	-	18	...	46	-	-	4	36	503	...
1991	-	1	...	103	-	2	14	71	554	...
1992	-	2	...	277	-	10	21	124	571	...
1993	-	0	...	655	-	11	33	246	570	...
1994	-	4	...	1,293	2	27	118	388	420	...
1995	2	4	...	1,080	16	18	224	462	635	...
1996	10	9	-	615	4	7	161	464	727	...
1997	14	0	-	374	-	13	209	378	717	...
1998	21	0	-	334	-	25	198	368	997	...
1999	16	0	-	767	-	90	324	440	865	...
2000	22	0	-	637	-	130	340	367	1,036	...
2001	16	72	-	699	-	84	186	343	1,049	...
2002	34	90	-	(699)	-	83	361	364	1,118	...

Table 2. Longline catches (metric tonnes) of blue marlin in the WCPO (continued)

YEAR	JAPAN OFFSHORE AND DW	KIRIBATI	KOREA	MARSHALL ISLANDS	NEW CALEDONIA	NEW ZEALAND	PAPUA NEW GUINEA	PHILIPPINES	SAMOA	SOLOMON ISLANDS
1950	...	-	-	-	-	-	-	...	-	-
1951	...	-	-	-	-	-	-	...	-	-
1952	...	-	-	-	-	-	-	...	-	-
1953	...	-	-	-	-	-	-	...	-	-
1954	...	-	-	-	-	-	-	...	-	-
1955	...	-	-	-	-	-	-	...	-	-
1956	...	-	-	-	-	-	-	...	-	-
1957	...	-	-	-	-	-	-	...	-	-
1958	...	-	...	-	-	-	-	...	-	-
1959	...	-	...	-	-	-	-	...	-	-
1960	...	-	...	-	-	-	-	...	-	-
1961	...	-	...	-	-	-	-	...	-	-
1962	13,569	-	...	-	-	-	-	...	-	-
1963	10,892	-	...	-	-	-	-	...	-	-
1964	9,287	-	...	-	-	-	-	...	-	-
1965	7,247	-	...	-	-	-	-	...	-	-
1966	7,676	-	...	-	-	-	-	...	-	-
1967	6,290	-	...	-	-	-	-	...	-	-
1968	5,041	-	...	-	-	-	-	...	-	-
1969	5,585	-	...	-	-	-	-	...	-	-
1970	8,225	-	...	-	-	-	-	54	-	-
1971	4,709	-	...	-	-	-	-	60	-	-
1972	6,177	-	...	-	-	-	-	63	-	-
1973	5,106	-	...	-	-	-	-	75	-	0
1974	5,193	-	...	-	-	-	-	87	-	-
1975	3,409	-	29	-	-	-	-	89	-	-
1976	3,707	-	712	-	-	-	-	75	-	1
1977	4,206	-	546	-	-	-	-	106	-	1
1978	5,045	-	592	-	-	-	-	63	-	1
1979	4,500	-	1,188	-	-	-	-	83	-	2
1980	6,071	-	826	-	-	-	-	108	-	2
1981	5,382	-	953	-	-	-	-	148	-	1
1982	5,440	-	890	-	-	-	-	173	-	1
1983	4,238	-	420	-	8	-	-	258	-	2
1984	6,006	-	848	-	10	-	-	117	-	1
1985	5,185	-	893	-	19	-	-	166	-	1
1986	5,422	-	791	-	11	-	-	220	-	-
1987	3,903	-	1,453	-	30	-	-	345	-	-
1988	5,063	-	1,277	-	15	-	-	290	-	-
1989	4,078	-	1,176	-	24	0	-	316	-	-
1990	3,056	-	1,103	-	18	0	-	202	-	-
1991	3,024	-	632	-	9	0	-	238	-	-
1992	3,053	-	1,060	0	15	0	-	111	-	-
1993	3,555	-	1,104	14	15	0	0	95	3	-
1994	3,847	-	637	0	22	0	1	129	8	-
1995	3,578	1	1,212	1	14	0	1	121	23	5
1996	2,173	0	456	...	11	0	0	122	23	-
1997	1,847	...	654	-	8	0	2	134	53	-
1998	1,970	...	1,623	-	9	0	5	158	56	8
1999	2,169	...	2,760	-	15	0	17	180	47	11
2000	2,005	...	1,990	-	40	0	50	180	57	11
2001	1,707	...	2,934	-	24	0	54	166	55	26
2002	(1,707)	...	2,934	-	27	0	247	199	39	30

Table 2. Longline catches (metric tonnes) of blue marlin in the WCPO (continued)

YEAR	TAIWAN DISTANT- WATER	TAIWAN OFFSHORE MICRONESIA	TAIWAN OFFSHORE TAIWAN	TONGA	UNITED STATES	VANUATU	TOTAL
1950	-	-	...	-	-	-	...
1951	-	-	...	-	-	-	...
1952	-	-	...	-	-	-	...
1953	-	-	...	-	-	-	...
1954	...	-	...	-	-	-	...
1955	...	-	...	-	-	-	...
1956	...	-	...	-	-	-	...
1957	...	-	...	-	-	-	...
1958	...	-	887	-	-	-	...
1959	...	-	781	-	-	-	...
1960	...	-	948	-	-	-	...
1961	...	-	703	-	-	-	...
1962	...	-	628	-	-	-	14,197
1963	...	-	691	-	-	-	11,583
1964	...	-	934	-	-	-	10,221
1965	...	-	1,016	-	-	-	8,263
1966	...	-	1,035	-	-	-	8,711
1967	293	-	898	-	-	-	7,481
1968	502	-	1,443	-	-	-	6,986
1969	590	-	1,230	-	-	-	7,405
1970	760	-	1,385	-	-	-	10,424
1971	590	-	1,331	-	-	-	6,690
1972	532	-	1,205	-	-	-	7,977
1973	503	-	1,650	-	-	-	7,335
1974	428	-	1,312	-	-	-	7,020
1975	301	-	2,628	-	-	-	6,455
1976	382	-	1,291	-	-	-	6,167
1977	453	-	1,175	-	-	-	6,486
1978	342	-	1,633	-	-	-	7,787
1979	333	-	1,626	-	-	-	7,849
1980	271	-	1,134	-	32	-	8,579
1981	271	-	1,812	-	42	-	8,773
1982	173	-	2,129	4	136	-	9,277
1983	146	-	2,121	4	72	-	7,364
1984	210	-	1,789	5	23	-	9,162
1985	135	-	1,187	5	26	-	7,842
1986	122	-	1,723	5	38	-	8,556
1987	142	...	4,617	6	45	-	11,438
1988	196	...	2,822	6	90	-	10,687
1989	173	...	2,644	5	364	-	9,265
1990	336	845	1,730	4	318	-	8,219
1991	357	636	2,152	4	704	-	8,501
1992	107	840	3,769	5	353	-	10,318
1993	230	1,546	3,876	7	373	-	12,334
1994	738	1,499	3,007	8	378	-	12,528
1995	274	2,371	3,820	10	693	11	14,574
1996	159	2,200	4,336	12	932	19	12,440
1997	81	1,030	4,850	14	868	13	11,260
1998	119	2,202	4,755	17	638	3	13,507
1999	108	1,396	3,827	22	656	(0)	13,709
2000	49	1,524	3,980	24	517	(0)	12,960
2001	228	1,740	(3,980)	36	679	(0)	14,078
2002	245	1,812	(3,980)	34	452	22	14,477

Table 3. Longline catches (metric tonnes) of black marlin in the WCPO

Legend : '-' no catch; '...' catches not available; '()' provisional estimates only.

YEAR	AMERICAN SAMOA	AUSTRALIA DOMESTIC	AUSTRALIA-JAPAN JV	CHINA	COOK ISLANDS	FEDERATED STATES OF MICRONESIA	FIJI	FRENCH POLYNESIA	INDONESIA	JAPAN COASTAL
1950	-	-	-	-	-	-	-	-	...	...
1951	-	-	-	-	-	-	-	-	...	...
1952	-	-	-	-	-	-	-	-	...	...
1953	-	-	-	-	-	-	-	-	...	...
1954	-	-	-	-	-	-	-	-	...	...
1955	-	-	-	-	-	-	-	-	...	...
1956	-	-	-	-	-	-	-	-	...	...
1957	-	-	-	-	-	-	-	-	...	...
1958	-	-	-	-	-	-	-	-	...	...
1959	-	-	-	-	-	-	-	-	...	...
1960	-	-	-	-	-	-	-	-	...	...
1961	-	-	-	-	-	-	-	-	...	...
1962	-	-	-	-	-	-	-	-	...	...
1963	-	-	-	-	-	-	-	-	...	...
1964	-	-	-	-	-	-	-	-	...	...
1965	-	-	-	-	-	-	-	-	...	...
1966	-	-	-	-	-	-	-	-	...	...
1967	-	-	-	-	-	-	-	-	...	...
1968	-	-	-	-	-	-	-	-	...	...
1969	-	-	-	-	-	-	-	-	...	...
1970	-	-	-	-	-	-	-	-	...	...
1971	-	-	-	-	-	-	-	-	...	...
1972	-	-	-	-	-	-	-	-	...	...
1973	-	-	-	-	-	-	-	-	...	...
1974	-	-	-	-	-	-	-	-	...	...
1975	-	-	-	-	-	-	-	-	...	...
1976	-	-	-	-	-	-	-	-	...	...
1977	-	-	-	-	-	-	-	-	...	...
1978	-	-	-	-	-	-	-	-	33	...
1979	-	-	-	-	-	-	-	-	35	...
1980	-	-	-	-	-	-	-	-	40	...
1981	-	-	-	-	-	-	-	-	49	...
1982	-	-	-	-	-	-	-	-	99	...
1983	-	-	-	-	-	-	-	-	29	...
1984	-	-	-	-	-	-	-	-	46	...
1985	-	0	-	-	-	-	-	-	68	...
1986	-	0	-	-	-	-	-	-	67	...
1987	-	17	-	-	-	-	-	-	254	...
1988	-	13	-	1	-	-	-	-	266	...
1989	-	1	...	4	-	-	1	-	140	...
1990	-	13	...	12	-	-	4	1	151	...
1991	-	15	...	26	-	0	16	1	166	...
1992	-	8	...	71	-	0	23	1	171	...
1993	-	0	...	167	-	1	36	3	171	...
1994	-	3	...	330	6	6	107	3	126	...
1995	0	2	...	275	4	1	6	3	190	...
1996	0	5	-	157	2	0	10	3	218	...
1997	1	0	-	95	-	4	40	3	215	...
1998	0	1	-	85	-	13	38	3	299	...
1999	3	0	-	195	-	10	44	3	259	...
2000	2	0	-	162	-	14	34	2	311	...
2001	1	46	-	178	-	9	46	2	314	...
2002	1	72	-	(178)	-	(9)	402	3	335	...

Table 3. Longline catches (metric tonnes) of black marlin in the WCPO (continued)

YEAR	JAPAN OFFSHORE AND DW	KIRIBATI	KOREA	MARSHALL ISLANDS	NEW CALEDONIA	NEW ZEALAND	PAPUA NEW GUINEA	PHILIPPINES	SAMOA	SOLOMON ISLANDS
1950	...	-	-	-	-	-	-	...	-	-
1951	...	-	-	-	-	-	-	...	-	-
1952	...	-	-	-	-	-	-	...	-	-
1953	...	-	-	-	-	-	-	...	-	-
1954	...	-	-	-	-	-	-	...	-	-
1955	...	-	-	-	-	-	-	...	-	-
1956	...	-	-	-	-	-	-	...	-	-
1957	...	-	-	-	-	-	-	...	-	-
1958	...	-	...	-	-	-	-	...	-	-
1959	...	-	...	-	-	-	-	...	-	-
1960	...	-	...	-	-	-	-	...	-	-
1961	...	-	...	-	-	-	-	...	-	-
1962	978	-	...	-	-	-	-	...	-	-
1963	838	-	...	-	-	-	-	...	-	-
1964	717	-	...	-	-	-	-	...	-	-
1965	1,123	-	...	-	-	-	-	...	-	-
1966	1,024	-	...	-	-	-	-	...	-	-
1967	587	-	...	-	-	-	-	...	-	-
1968	424	-	...	-	-	-	-	...	-	-
1969	579	-	...	-	-	-	-	...	-	-
1970	1,223	-	...	-	-	-	-	16	-	-
1971	1,271	-	...	-	-	-	-	18	-	-
1972	980	-	...	-	-	-	-	19	-	-
1973	904	-	...	-	-	-	-	22	-	0
1974	824	-	...	-	-	-	-	26	-	-
1975	657	-	...	-	-	-	-	27	-	-
1976	413	-	...	-	-	-	-	22	-	1
1977	552	-	...	-	-	-	-	32	-	1
1978	814	-	...	-	-	-	-	19	-	1
1979	763	-	...	-	-	-	-	25	-	2
1980	758	-	...	-	-	-	-	32	-	2
1981	707	-	...	-	-	-	-	44	-	1
1982	689	-	...	-	-	-	-	52	-	1
1983	568	-	...	-	3	-	-	77	-	2
1984	561	-	...	-	2	-	-	35	-	1
1985	537	-	...	-	24	-	-	50	-	1
1986	306	-	...	-	39	-	-	66	-	-
1987	317	-	103	-	95	-	-	103	-	-
1988	556	-	162	-	76	-	-	87	-	-
1989	215	-	129	-	82	0	-	95	-	-
1990	138	-	148	-	88	0	-	60	-	-
1991	129	-	47	-	91	0	-	71	-	-
1992	149	-	122	0	43	0	-	33	-	-
1993	181	-	98	0	48	0	0	29	1	-
1994	242	-	53	0	52	0	1	39	3	-
1995	152	0	33	0	31	0	1	36	10	0
1996	89	0	15	...	25	0	2	37	10	-
1997	71	...	48	-	23	0	1	40	23	-
1998	97	...	0	-	33	0	2	47	22	1
1999	50	...	0	-	37	0	9	54	23	1
2000	64	...	0	-	40	0	20	54	25	1
2001	32	...	0	-	40	0	45	50	27	2
2002	(32)	...	0	-	44	0	39	60	25	2

Table 3. Longline catches (metric tonnes) of black marlin in the WCPO (continued)

YEAR	TAIWAN DISTANT- WATER	TAIWAN OFFSHORE MICRONESIA	TAIWAN OFFSHORE TAIWAN	TONGA	UNITED STATES	VANUATU	TOTAL
1950	-	-	...	-	-	-	...
1951	-	-	...	-	-	-	...
1952	-	-	...	-	-	-	...
1953	-	-	...	-	-	-	...
1954	...	-	...	-	-	-	...
1955	...	-	...	-	-	-	...
1956	...	-	...	-	-	-	...
1957	...	-	...	-	-	-	...
1958	...	-	1,869	-	-	-	...
1959	...	-	1,244	-	-	-	...
1960	...	-	1,332	-	-	-	...
1961	...	-	1,175	-	-	-	...
1962	...	-	1,113	-	-	-	2,091
1963	...	-	1,262	-	-	-	2,100
1964	...	-	978	-	-	-	1,695
1965	...	-	1,090	-	-	-	2,213
1966	...	-	981	-	-	-	2,005
1967	15	-	1,052	-	-	-	1,654
1968	27	-	1,266	-	-	-	1,717
1969	34	-	1,293	-	-	-	1,906
1970	44	-	925	-	-	-	2,209
1971	72	-	1,383	-	-	-	2,744
1972	61	-	1,208	-	-	-	2,268
1973	56	-	1,251	-	-	-	2,234
1974	50	-	1,089	-	-	-	1,989
1975	19	-	1,452	-	-	-	2,155
1976	18	-	735	-	-	-	1,189
1977	23	-	548	-	-	-	1,155
1978	34	-	1,151	-	-	-	2,052
1979	111	-	1,363	-	-	-	2,299
1980	32	-	530	-	0	-	1,395
1981	28	-	1,087	-	0	-	1,917
1982	14	-	1,107	5	0	-	1,966
1983	7	-	1,019	5	0	-	1,709
1984	12	-	597	5	0	-	1,259
1985	8	-	298	5	0	-	991
1986	4	-	525	6	0	-	1,013
1987	2	...	470	7	...	-	1,368
1988	11	...	856	6	...	-	2,033
1989	1	...	306	5	...	-	978
1990	9	105	286	4	...	-	1,019
1991	6	79	651	4	0	-	1,303
1992	10	104	684	5	1	-	1,425
1993	65	223	248	7	1	-	1,279
1994	13	186	443	9	0	-	1,621
1995	18	237	209	10	5	1	1,226
1996	1	85	193	13	1	4	870
1997	5	142	247	15	0	3	977
1998	10	477	214	19	4	1	1,364
1999	18	818	256	24	1	0	1,805
2000	14	584	157	26	1	0	1,511
2001	24	667	(157)	39	0	0	1,680
2002	13	694	(157)	37	0	2	2,106

Table 4. Longline catches (metric tonnes) of striped marlin in the WCPO

Legend : '-' no catch; '...' catches not available; '()' provisional estimates only.

YEAR	AMERICAN SAMOA	AUSTRALIA-DOMESTIC	AUSTRALIA-JAPAN JV	CHINA	COOK ISLANDS	FEDERATED STATES OF MICRONESIA	FIJI	FRENCH POLYNESIA	INDONESIA	JAPAN COASTAL
1950	-	-	-	-	-	-	-	-	...	...
1951	-	-	-	-	-	-	-	-	...	...
1952	-	-	-	-	-	-	-	-	...	...
1953	-	-	-	-	-	-	-	-	...	...
1954	-	-	-	-	-	-	-	-	...	...
1955	-	-	-	-	-	-	-	-	...	...
1956	-	-	-	-	-	-	-	-	...	...
1957	-	-	-	-	-	-	-	-	...	...
1958	-	-	-	-	-	-	-	-	...	...
1959	-	-	-	-	-	-	-	-	...	...
1960	-	-	-	-	-	-	-	-	...	...
1961	-	-	-	-	-	-	-	-	...	...
1962	-	-	-	-	-	-	-	-	...	...
1963	-	-	-	-	-	-	-	-	...	...
1964	-	-	-	-	-	-	-	-	...	...
1965	-	-	-	-	-	-	-	-	...	...
1966	-	-	-	-	-	-	-	-	...	...
1967	-	-	-	-	-	-	-	-	...	...
1968	-	-	-	-	-	-	-	-	...	...
1969	-	-	-	-	-	-	-	-	...	...
1970	-	-	-	-	-	-	-	-	...	...
1971	-	-	-	-	-	-	-	-	...	...
1972	-	-	-	-	-	-	-	-	...	...
1973	-	-	-	-	-	-	-	-	...	...
1974	-	-	-	-	-	-	-	-	...	...
1975	-	-	-	-	-	-	-	-	...	...
1976	-	-	-	-	-	-	-	-	...	...
1977	-	-	-	-	-	-	-	-	...	...
1978	-	-	-	-	-	-	-	-	22	...
1979	-	-	-	-	-	-	-	-	23	...
1980	-	-	-	-	-	-	-	-	27	...
1981	-	-	-	-	-	-	-	-	33	...
1982	-	-	-	-	-	-	-	-	66	...
1983	-	-	-	-	-	-	-	-	19	...
1984	-	-	-	-	-	-	-	-	31	...
1985	-	0	-	-	-	-	-	-	45	...
1986	-	0	-	-	-	-	-	-	45	...
1987	-	65	-	-	-	-	-	-	169	...
1988	-	76	-	1	-	-	-	-	178	...
1989	-	6	...	4	-	-	0	-	94	...
1990	-	66	...	12	-	-	1	3	101	...
1991	-	32	...	26	-	0	3	8	111	...
1992	-	22	...	71	-	0	4	26	114	...
1993	-	27	...	167	-	1	7	69	114	...
1994	-	54	...	330	7	1	35	104	84	...
1995	0	87	...	275	11	5	67	72	127	...
1996	0	138	-	157	5	2	75	110	146	...
1997	0	198	-	95	-	1	89	149	144	...
1998	1	447	-	85	-	5	203	102	200	...
1999	2	490	-	195	-	30	218	162	173	...
2000	0	506	-	162	-	43	141	88	207	...
2001	5	539	-	178	-	28	88	96	210	...
2002	2	637	-	(178)	-	28	76	92	224	...

Table 4. Longline catches of striped marlin in the WCPO (continued)

YEAR	JAPAN OFFSHORE AND DW	KIRIBATTI	KOREA	MARSHALL ISLANDS	NEW CALEDONIA	NEW ZEALAND	PAPUA NEW GUINEA	PHILIPPINES	SAMOA	SOLOMON ISLANDS
1950	...	-	-	-	-	-	-	...	-	-
1951	...	-	-	-	-	-	-	...	-	-
1952	...	-	-	-	-	-	-	...	-	-
1953	...	-	-	-	-	-	-	...	-	-
1954	...	-	-	-	-	-	-	...	-	-
1955	...	-	-	-	-	-	-	...	-	-
1956	...	-	-	-	-	-	-	...	-	-
1957	...	-	-	-	-	-	-	...	-	-
1958	...	-	...	-	-	-	-	...	-	-
1959	...	-	...	-	-	-	-	...	-	-
1960	...	-	...	-	-	-	-	...	-	-
1961	...	-	...	-	-	-	-	...	-	-
1962	14,875	-	...	-	-	-	-	-	-	-
1963	11,824	-	...	-	-	-	-	...	-	-
1964	16,628	-	...	-	-	-	-	...	-	-
1965	12,939	-	...	-	-	-	-	...	-	-
1966	9,222	-	...	-	-	-	-	...	-	-
1967	10,913	-	...	-	-	-	-	...	-	-
1968	11,216	-	...	-	-	-	-	...	-	-
1969	7,221	-	...	-	-	-	-	...	-	-
1970	6,135	-	...	-	-	-	-	11	-	-
1971	4,816	-	...	-	-	-	-	12	-	-
1972	3,455	-	...	-	-	-	-	13	-	-
1973	3,766	-	...	-	-	-	-	15	-	0
1974	3,475	-	...	-	-	-	-	17	-	-
1975	2,233	-	27	-	-	-	-	18	-	-
1976	2,112	-	248	-	-	-	-	15	-	0
1977	1,505	-	115	-	-	-	-	21	-	0
1978	2,033	-	480	-	-	-	-	13	-	0
1979	3,574	-	291	-	-	-	-	17	-	0
1980	3,393	-	51	-	-	-	-	22	-	1
1981	3,081	-	489	-	-	-	-	30	-	0
1982	3,093	-	333	-	-	-	-	35	-	0
1983	2,094	-	150	-	21	-	-	52	-	0
1984	2,787	-	253	-	23	-	-	23	-	0
1985	3,653	-	283	-	71	-	-	33	-	0
1986	4,397	-	199	-	85	-	-	44	-	-
1987	2,809	-	189	-	100	-	-	69	-	-
1988	4,763	-	222	-	63	-	-	58	-	-
1989	3,836	-	152	-	123	0	-	63	-	-
1990	2,234	-	100	-	168	5	-	40	-	-
1991	2,532	-	39	-	75	0	-	48	-	-
1992	2,331	-	100	0	71	0	-	22	-	-
1993	3,228	-	111	0	40	0	0	19	3	-
1994	2,937	-	102	0	193	0	1	26	7	-
1995	3,058	0	118	0	89	0	2	24	21	0
1996	2,078	0	51	...	101	0	1	24	21	-
1997	1,668	...	103	-	60	0	0	27	49	-
1998	2,169	...	429	-	159	0	3	32	41	0
1999	1,471	...	582	-	91	0	(1)	36	59	0
2000	962	...	262	-	103	0	(54)	36	53	0
2001	1,005	...	190	-	72	0	(5)	33	22	0
2002	(1,005)	...	190	-	81	0	(75)	40	69	1

Table 4. Longline catches (metric tonnes) of striped marlin in the WCPO (continued)

YEAR	TAIWAN DISTANT- WATER	TAIWAN OFFSHORE MICRONESIA	TAIWAN OFFSHORE TAIWAN	TONGA	UNITED STATES	VANUATU	TOTAL
1950	-	-	...	-	-	-	...
1951	-	-	...	-	-	-	...
1952	-	-	...	-	-	-	...
1953	-	-	...	-	-	-	...
1954	...	-	...	-	-	-	...
1955	...	-	...	-	-	-	...
1956	...	-	...	-	-	-	...
1957	...	-	...	-	-	-	...
1958	...	-	543	-	-	-	...
1959	...	-	391	-	-	-	...
1960	...	-	398	-	-	-	...
1961	...	-	306	-	-	-	...
1962	...	-	332	-	-	-	15,207
1963	...	-	560	-	-	-	12,384
1964	...	-	392	-	-	-	17,020
1965	...	-	355	-	-	-	13,294
1966	...	-	340	-	-	-	9,562
1967	68	-	385	-	-	-	11,366
1968	81	-	332	-	-	-	11,629
1969	77	-	571	-	-	-	7,869
1970	209	-	495	-	-	-	6,850
1971	123	-	449	-	-	-	5,400
1972	248	-	380	-	-	-	4,095
1973	145	-	568	-	-	-	4,494
1974	88	-	487	-	-	-	4,068
1975	171	-	732	-	-	-	3,181
1976	144	-	347	-	-	-	2,866
1977	183	-	524	-	-	-	2,348
1978	180	-	618	-	-	-	3,346
1979	233	-	432	-	-	-	4,570
1980	178	-	223	-	105	-	3,999
1981	167	-	491	-	94	-	4,384
1982	107	-	397	10	140	-	4,180
1983	56	-	555	10	114	-	3,072
1984	115	-	965	10	91	-	4,298
1985	58	-	513	11	75	-	4,743
1986	23	-	179	12	191	-	5,175
1987	45	...	383	14	273	-	4,116
1988	58	...	457	13	500	-	6,389
1989	160	...	184	11	591	-	5,224
1990	113	64	137	9	500	-	3,552
1991	101	48	254	9	524	-	3,811
1992	101	64	219	11	545	-	3,702
1993	88	117	221	16	632	-	4,860
1994	438	114	137	19	384	-	4,973
1995	223	308	83	22	727	2	5,321
1996	140	232	136	28	579	5	4,028
1997	123	88	267	31	391	1	3,485
1998	288	175	183	39	405	0	4,966
1999	209	241	106	51	393	0	4,510
2000	123	301	141	55	214	0	3,453
2001	211	344	(141)	82	395	0	3,645
2002	518	358	(141)	78	253	4	4,049

Table 5. Longline catches (metric tonnes) of swordfish in the WCPO

Legend : '-' no catch; '...' catches not available; ')' provisional estimates only.

YEAR	AMERICAN SAMOA	AUSTRALIA DOMESTIC	AUSTRALIA-JAPAN JV	CHINA	COOK ISLANDS	FEDERATED STATES OF MICRONESIA	FIJI	FRENCH POLYNESIA	INDONESIA	JAPAN COASTAL
1950	-	-	-	-	-	-	-	-	...	...
1951	-	-	-	-	-	-	-	-	...	...
1952	-	-	-	-	-	-	-	-	...	...
1953	-	-	-	-	-	-	-	-	...	...
1954	-	-	-	-	-	-	-	-	...	...
1955	-	-	-	-	-	-	-	-	...	...
1956	-	-	-	-	-	-	-	-	...	...
1957	-	-	-	-	-	-	-	-	...	...
1958	-	-	-	-	-	-	-	-	...	...
1959	-	-	-	-	-	-	-	-	...	...
1960	-	-	-	-	-	-	-	-	...	...
1961	-	-	-	-	-	-	-	-	...	...
1962	-	-	-	-	-	-	-	-	...	...
1963	-	-	-	-	-	-	-	-	...	...
1964	-	-	-	-	-	-	-	-	...	...
1965	-	-	-	-	-	-	-	-	...	...
1966	-	-	-	-	-	-	-	-	...	...
1967	-	-	-	-	-	-	-	-	...	...
1968	-	-	-	-	-	-	-	-	...	...
1969	-	-	-	-	-	-	-	-	...	...
1970	-	-	-	-	-	-	-	-	...	...
1971	-	-	-	-	-	-	-	-	...	...
1972	-	-	-	-	-	-	-	-	...	...
1973	-	-	-	-	-	-	-	-	...	...
1974	-	-	-	-	-	-	-	-	...	...
1975	-	-	-	-	-	-	-	-	...	...
1976	-	-	-	-	-	-	-	-	...	...
1977	-	-	-	-	-	-	-	-	...	...
1978	-	-	-	-	-	-	-	-	61	...
1979	-	-	-	-	-	-	-	-	64	...
1980	-	-	-	-	-	-	-	-	74	...
1981	-	-	-	-	-	-	-	-	91	...
1982	-	-	-	-	-	-	-	-	181	...
1983	-	-	-	-	-	-	-	-	53	...
1984	-	-	-	-	-	-	-	-	84	...
1985	-	0	-	-	-	-	-	-	124	...
1986	-	0	-	-	-	-	-	-	123	...
1987	-	21	-	-	-	-	-	-	465	...
1988	-	19	-	3	-	-	-	-	489	...
1989	-	13	...	11	-	-	2	-	258	...
1990	-	19	...	35	-	-	8	1	277	...
1991	-	50	...	78	-	0	29	7	305	...
1992	-	40	...	209	-	2	42	24	314	...
1993	-	26	...	494	-	3	65	64	314	...
1994	-	34	...	976	22	4	0	72	231	...
1995	0	52	...	815	28	2	211	61	349	...
1996	1	458	-	464	9	1	167	84	400	...
1997	2	1,405	-	282	-	4	78	56	395	...
1998	2	1,770	-	252	-	6	92	58	549	...
1999	0	1,884	-	579	-	32	104	66	476	...
2000	1	1,699	-	481	-	46	118	47	570	...
2001	2	1,433	-	528	-	30	115	79	577	...
2002	6	2,160	-	(528)	-	29	717	70	615	...

Table 5. Longline catches (metric tonnes) of swordfish in the WCPO (continued)

YEAR	JAPAN OFFSHORE AND DW	KIRIBATTI	KOREA	MARSHALL ISLANDS	NEW CALEDONIA	NEW ZEALAND	PAPUA NEW GUINEA	PHILIPPINES	SAMOA	SOLOMON ISLANDS
1950	...	-	-	-	-	-	-	...	-	-
1951	...	-	-	-	-	-	-	...	-	-
1952	...	-	-	-	-	-	-	...	-	-
1953	...	-	-	-	-	-	-	...	-	-
1954	...	-	-	-	-	-	-	...	-	-
1955	...	-	-	-	-	-	-	...	-	-
1956	...	-	-	-	-	-	-	...	-	-
1957	...	-	-	-	-	-	-	...	-	-
1958	...	-	...	-	-	-	-	...	-	-
1959	...	-	...	-	-	-	-	...	-	-
1960	...	-	...	-	-	-	-	...	-	-
1961	...	-	...	-	-	-	-	...	-	-
1962	9,860	-	...	-	-	-	-	...	-	-
1963	9,398	-	...	-	-	-	-	...	-	-
1964	5,581	-	...	-	-	-	-	...	-	-
1965	7,842	-	...	-	-	-	-	...	-	-
1966	9,198	-	...	-	-	-	-	...	-	-
1967	9,942	-	...	-	-	-	-	...	-	-
1968	8,632	-	...	-	-	-	-	...	-	-
1969	7,784	-	...	-	-	-	-	...	-	-
1970	6,213	-	...	-	-	-	-	30	-	-
1971	7,131	-	...	-	-	-	-	33	-	-
1972	6,555	-	...	-	-	-	-	34	-	-
1973	5,792	-	...	-	-	-	-	41	-	0
1974	6,339	-	...	-	-	-	-	48	-	-
1975	6,682	-	23	-	-	-	-	49	-	-
1976	7,859	-	422	-	-	-	-	41	-	1
1977	7,752	-	166	-	-	-	-	58	-	1
1978	7,937	-	127	-	-	-	-	35	-	1
1979	8,803	-	211	-	-	-	-	46	-	2
1980	6,573	-	227	-	-	-	-	59	-	3
1981	7,956	-	317	-	-	-	-	81	-	1
1982	6,894	-	183	-	-	-	-	95	-	1
1983	7,942	-	80	-	2	-	-	142	-	2
1984	7,583	-	144	-	6	-	-	65	-	1
1985	10,223	-	219	-	6	-	-	91	-	1
1986	9,414	-	180	-	14	-	-	121	-	-
1987	9,493	-	292	-	17	-	-	190	-	-
1988	9,641	-	225	-	5	-	-	159	-	-
1989	6,897	-	330	-	7	12	-	174	-	-
1990	6,404	-	361	-	13	80	-	111	-	-
1991	5,315	-	161	-	15	42	-	131	-	-
1992	8,821	-	288	0	9	29	-	61	-	-
1993	9,194	-	300	2	9	93	0	53	7	-
1994	8,319	-	280	0	8	94	1	71	17	-
1995	6,974	0	291	2	10	108	0	67	49	0
1996	7,470	0	200	...	10	182	0	67	49	-
1997	7,616	...	167	-	9	282	2	74	114	-
1998	6,730	...	430	-	26	564	4	87	95	1
1999	5,954	...	1,294	-	17	1,004	6	99	124	1
2000	5,985	...	1,505	-	17	975	57	99	123	1
2001	5,775	...	1,956	-	15	1,029	26	92	27	2
2002	(5,775)	...	1,956	-	17	929	125	109	64	3

Table 5. Longline catches (metric tonnes) of swordfish in the WCPO (continued)

YEAR	TAIWAN DISTANT- WATER	TAIWAN OFFSHORE MICRONESIA	TAIWAN OFFSHORE TAIWAN	TONGA	UNITED STATES	VANUATU	TOTAL
1950	-	-	...	-	-	-	...
1951	-	-	...	-	-	-	...
1952	-	-	...	-	-	-	...
1953	-	-	...	-	-	-	...
1954	...	-	...	-	-	-	...
1955	...	-	...	-	-	-	...
1956	...	-	...	-	-	-	...
1957	...	-	...	-	-	-	...
1958	...	-	367	-	-	-	...
1959	...	-	427	-	-	-	...
1960	...	-	520	-	-	-	...
1961	...	-	318	-	-	-	...
1962	...	-	494	-	-	-	10,354
1963	...	-	343	-	-	-	9,741
1964	...	-	358	-	-	-	5,939
1965	...	-	331	-	-	-	8,173
1966	...	-	588	-	-	-	9,786
1967	16	-	646	-	-	-	10,603
1968	46	-	763	-	-	-	9,440
1969	110	-	843	-	-	-	8,737
1970	79	-	904	-	-	-	7,226
1971	95	-	992	-	-	-	8,251
1972	96	-	862	-	-	-	7,548
1973	115	-	860	-	-	-	6,809
1974	109	-	816	-	-	-	7,312
1975	121	-	899	-	-	-	7,773
1976	98	-	613	-	-	-	9,034
1977	64	-	542	-	-	-	8,583
1978	92	-	546	-	-	-	8,799
1979	201	-	661	-	-	-	9,988
1980	137	-	603	-	0	-	7,676
1981	102	-	656	-	0	-	9,204
1982	56	-	855	5	0	-	8,272
1983	44	-	783	5	0	-	9,053
1984	82	-	733	6	0	-	8,703
1985	52	-	566	6	0	-	11,288
1986	31	-	456	6	0	-	10,345
1987	30	...	1,328	8	0	-	11,844
1988	41	...	777	7	0	-	11,367
1989	31	...	1,390	6	273	-	9,404
1990	107	551	462	5	1,909	-	10,343
1991	65	415	366	5	4,500	-	11,482
1992	117	548	666	6	5,276	-	16,452
1993	78	635	568	8	5,911	-	17,823
1994	217	978	559	10	3,137	-	15,030
1995	215	1,098	657	12	2,660	2	13,663
1996	118	911	662	15	1,969	3	13,241
1997	144	252	1,428	17	3,532	1	15,858
1998	167	931	1,158	21	3,682	0	16,624
1999	196	884	1,477	27	4,420	0	18,642
2000	182	796	1,685	29	4,827	0	19,242
2001	1,123	909	(1,685)	44	1,969	0	17,416
2002	1,878	946	(1,685)	42	1,506	4	19,165

Table 6. Purse-seine catches (metric tonnes) of blue marlin in the WCPO

Legend : '-' no catch; '...' catches not available; '()' provisional estimates only.

Refer to methodology described in Williams and Whitelaw (2000) for source of estimates

Year	AU	FM	ID	JP	KI	KR	MH	MX	NZ	PG	PH	SB	ES	TW	US	VU	TOTAL
1967	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1968	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1969	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1970	0	0	0	1	0	0	0	0	0	0	16	0	0	0	0	0	17
1971	0	0	0	1	0	0	0	0	0	0	13	0	0	0	0	0	15
1972	0	0	0	1	0	0	0	0	0	0	23	0	0	0	0	0	24
1973	0	0	0	2	0	0	0	0	0	0	27	0	0	0	0	0	28
1974	0	0	0	3	0	0	0	0	0	0	16	0	0	0	0	0	18
1975	0	0	0	4	0	0	0	0	0	0	14	0	0	0	0	0	17
1976	0	0	0	5	0	0	0	0	0	0	12	0	0	0	0	0	17
1977	0	0	0	5	0	0	0	0	0	0	16	0	0	0	0	0	22
1978	0	0	0	9	0	0	0	0	0	0	11	0	0	0	0	0	19
1979	0	0	0	10	0	0	0	0	0	0	16	0	0	0	0	0	26
1980	0	0	9	9	0	0	0	0	0	0	11	0	0	0	0	0	29
1981	0	0	10	16	0	2	0	0	0	0	16	0	0	0	13	0	57
1982	0	0	9	23	0	5	0	0	0	0	19	0	0	0	24	0	80
1983	0	0	10	26	0	3	0	0	0	0	30	0	0	3	40	0	113
1984	0	0	9	33	0	5	0	2	0	0	22	1	0	8	51	0	132
1985	0	0	9	33	0	5	0	0	0	0	25	1	0	12	29	0	113
1986	0	0	12	28	0	7	0	0	0	0	26	1	0	15	15	0	104
1987	0	0	14	27	0	13	0	0	0	0	45	1	0	28	17	0	144
1988	0	0	11	32	0	12	0	0	0	0	25	2	0	34	17	0	133
1989	0	0	12	31	0	13	0	0	0	0	38	2	0	63	31	0	190
1990	2	0	11	28	0	25	0	0	0	0	62	2	0	106	30	0	265
1991	2	0	9	25	0	39	0	0	0	0	53	1	0	104	40	0	273
1992	0	3	9	24	0	39	0	0	0	0	39	2	0	59	36	0	212
1993	0	5	8	27	0	29	0	0	0	0	27	2	0	28	39	0	166
1994	0	6	7	22	0	32	0	0	0	0	23	2	0	28	39	0	159
1995	0	2	8	24	1	26	0	0	0	2	29	2	0	28	32	1	155
1996	0	2	10	27	2	28	0	0	0	1	40	3	0	38	29	4	185
1997	0	3	14	22	2	29	0	0	0	9	55	4	0	37	31	7	214
1998	0	3	19	18	2	33	0	0	0	8	60	3	1	35	27	7	217
1999	0	2	14	18	1	29	0	0	0	7	44	4	1	33	17	7	177
2000	0	5	12	20	2	34	1	0	0	11	41	1	1	27	18	4	177
2001	0	5	37	17	1	38	4	0	1	16	56	2	0	24	19	0	221
2002	(0)	(5)	(37)	(16)	(1)	(34)	(4)	(0)	(1)	(18)	(56)	(1)	(0)	(33)	(19)	(0)	(226)

Table 7. Purse-seine catches (metric tonnes) of black marlin in the WCPO

Legend : '-' no catch; '...' catches not available; '()' provisional estimates only.

Refer to methodology described in Williams and Whitelaw (2000) for source of estimates

Year	AU	FM	ID	JP	KI	KR	MH	MX	NZ	PG	PH	SB	ES	TW	US	VU	TOTAL
1967	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1968	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1969	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1970	0	0	0	2	0	0	0	0	0	0	21	0	0	0	0	0	22
1971	0	0	0	2	0	0	0	0	0	0	17	0	0	0	0	0	20
1972	0	0	0	2	0	0	0	0	0	0	29	0	0	0	0	0	32
1973	0	0	0	3	0	0	0	0	0	0	34	0	0	0	0	0	37
1974	0	0	0	6	0	0	0	0	0	0	20	0	0	0	0	0	25
1975	0	0	0	8	0	0	0	0	0	0	18	0	0	0	0	0	25
1976	0	0	0	11	0	0	0	0	0	0	15	0	0	0	0	0	27
1977	0	0	0	13	0	0	0	0	0	0	21	0	0	0	0	0	33
1978	0	0	0	20	0	0	0	0	0	0	13	0	0	0	0	0	34
1979	0	0	0	23	0	0	0	0	0	0	20	0	0	0	0	0	44
1980	0	0	11	21	0	0	0	0	0	0	14	0	0	0	0	0	45
1981	0	0	12	38	0	1	0	0	0	0	21	0	0	0	18	0	90
1982	0	0	11	53	0	2	0	0	0	0	24	0	0	0	33	0	123
1983	0	0	13	54	0	1	0	0	0	0	39	0	0	4	53	0	165
1984	0	0	11	70	0	2	0	3	0	0	29	2	0	10	69	0	196
1985	0	0	11	70	0	2	0	0	0	0	35	2	0	14	37	0	171
1986	0	0	15	60	0	3	0	0	0	0	34	2	0	19	20	0	152
1987	0	0	18	60	0	6	0	0	0	0	60	2	0	34	22	0	200
1988	0	0	14	70	0	5	0	0	0	0	34	3	0	42	20	0	189
1989	0	0	16	65	0	6	0	0	0	0	56	3	0	78	36	0	260
1990	2	0	15	57	0	13	0	0	0	0	96	3	0	131	34	0	352
1991	3	1	12	48	0	21	0	0	0	0	81	2	0	130	43	0	340
1992	1	4	11	48	0	19	0	0	0	0	58	3	0	86	42	0	272
1993	1	6	10	54	0	14	0	0	0	0	41	3	0	45	46	0	220
1994	0	8	9	45	0	15	0	0	0	0	34	3	0	42	43	0	199
1995	0	3	10	48	1	12	0	0	0	3	43	3	0	45	37	1	207
1996	0	3	13	56	1	13	0	0	0	1	58	4	0	58	40	5	252
1997	0	3	19	47	2	14	0	0	0	14	82	7	0	56	43	7	292
1998	0	4	22	35	2	17	0	0	0	14	87	6	1	61	37	8	293
1999	0	3	19	35	1	18	0	0	0	11	63	7	1	47	31	9	245
2000	0	5	15	36	2	22	1	0	0	17	56	2	3	47	28	6	240
2001	0	5	41	30	1	24	5	0	1	23	85	3	0	46	27	0	292
2002	(0)	(5)	(41)	(31)	(1)	(22)	(5)	(0)	(2)	(27)	(85)	(1)	(0)	(53)	(25)	(0)	(298)

Table 8. Total WCPO commercial fishery catches (metric tonnes) of billfish by species

YEAR	LONGLINE						PURSE SEINE		
	Blue Marlin	Black Marlin	Striped Marlin	Sword-fish	Total		Blue Marlin	Black Marlin	Total
1950	...	...	...	...	...	-	-	0
1951	...	...	...	...	...	-	-	0
1952	...	...	...	...	...	-	-	0
1953	...	...	...	...	...	-	-	0
1954	...	...	...	...	...	-	-	0
1955	...	...	...	...	...	-	-	0
1956	...	...	...	...	...	-	-	0
1957	...	...	...	...	...	-	-	0
1958	...	...	...	...	...	-	-	0
1959	...	...	...	...	...	-	-	0
1960	...	...	...	...	...	-	-	0
1961	...	...	...	...	...	-	-	0
1962	14,197	2,091	15,207	10,354	41,849	-	-	0	
1963	11,583	2,100	12,384	9,741	35,808	-	-	0	
1964	10,221	1,695	17,020	5,939	34,875	-	-	0	
1965	8,263	2,213	13,294	8,173	31,942	-	-	0	
1966	8,711	2,005	9,562	9,786	30,064	-	-	0	
1967	7,481	1,654	11,366	10,603	31,104	0	0	0	
1968	6,986	1,717	11,629	9,440	29,773	1	1	2	
1969	7,405	1,906	7,869	8,737	25,918	1	0	2	
1970	10,424	2,209	6,850	7,226	26,708	22	17	39	
1971	6,690	2,744	5,400	8,251	23,086	20	15	34	
1972	7,977	2,268	4,095	7,548	21,888	32	24	56	
1973	7,335	2,234	4,494	6,809	20,872	37	28	65	
1974	7,020	1,989	4,068	7,312	20,389	25	18	43	
1975	6,455	2,155	3,181	7,773	19,565	25	17	43	
1976	6,167	1,189	2,866	9,034	19,256	27	17	43	
1977	6,486	1,155	2,348	8,583	18,573	33	22	55	
1978	7,787	2,052	3,346	8,799	21,984	34	19	53	
1979	7,849	2,299	4,570	9,988	24,707	44	26	70	
1980	8,579	1,395	3,999	7,676	21,650	45	29	74	
1981	8,773	1,917	4,384	9,204	24,278	90	57	147	
1982	9,277	1,966	4,180	8,272	23,695	123	80	202	
1983	7,364	1,709	3,072	9,053	21,198	165	113	277	
1984	9,162	1,259	4,298	8,703	23,422	196	132	328	
1985	7,842	991	4,743	11,288	24,864	171	113	285	
1986	8,556	1,013	5,175	10,345	25,090	152	104	256	
1987	11,438	1,368	4,116	11,844	28,766	200	144	344	
1988	10,687	2,033	6,389	11,367	30,476	189	133	322	
1989	9,265	978	5,224	9,404	24,870	260	190	450	
1990	8,219	1,019	3,552	10,343	23,133	352	265	616	
1991	8,501	1,303	3,811	11,482	25,097	340	273	613	
1992	10,318	1,425	3,702	16,452	31,897	272	212	484	
1993	12,334	1,279	4,860	17,823	36,296	220	166	386	
1994	12,528	1,621	4,973	15,030	34,152	199	159	358	
1995	14,574	1,226	5,321	13,663	34,784	207	155	362	
1996	12,440	870	4,028	13,241	30,579	252	185	437	
1997	11,260	977	3,485	15,858	31,581	292	214	506	
1998	13,507	1,364	4,966	16,624	36,461	293	217	509	
1999	13,709	1,805	4,510	18,642	38,666	245	177	422	
2000	12,960	1,511	3,453	19,242	37,167	240	177	417	
2001	14,078	1,680	3,645	17,416	36,819	292	221	512	
2002	14,477	2,106	4,049	19,165	39,797	(298)	(226)	(525)	

Table 9. Total WCPO commercial catches (metric tonnes) of blue marlin, black marlin, striped marlin

YEAR	ALL COMMERCIAL FISHERIES								
	Blue Marlin	%	Black Marlin	%	Striped Marlin	%	Sword-fish	%	Total
1950	...		...		...		...		...
1951	...		...		...		...		...
1952	...		...		...		...		...
1953	...		...		...		...		...
1954	...		...		...		...		...
1955	...		...		...		...		...
1956	...		...		...		...		...
1957	...		...		...		...		...
1958	...		...		...		...		...
1959	...		...		...		...		...
1960	...		...		...		...		...
1961	...		...		...		...		...
1962	14,197	34%	2,091	5%	15,207	36%	10,354	25%	41,849
1963	11,583	32%	2,100	6%	12,384	35%	9,741	27%	35,808
1964	10,221	29%	1,695	5%	17,020	49%	5,939	17%	34,875
1965	8,263	26%	2,213	7%	13,294	42%	8,173	26%	31,942
1966	8,711	29%	2,005	7%	9,562	32%	9,786	33%	30,064
1967	7,481	24%	1,654	5%	11,366	37%	10,603	34%	31,104
1968	6,988	23%	1,717	6%	11,629	39%	9,440	32%	29,775
1969	7,406	29%	1,906	7%	7,869	30%	8,737	34%	25,920
1970	10,446	39%	2,225	8%	6,850	26%	7,226	27%	26,747
1971	6,709	29%	2,759	12%	5,400	23%	8,251	36%	23,120
1972	8,009	36%	2,292	10%	4,095	19%	7,548	34%	21,944
1973	7,372	35%	2,262	11%	4,494	21%	6,809	33%	20,937
1974	7,045	34%	2,007	10%	4,068	20%	7,312	36%	20,432
1975	6,481	33%	2,172	11%	3,181	16%	7,773	40%	19,607
1976	6,194	32%	1,206	6%	2,866	15%	9,034	47%	19,299
1977	6,520	35%	1,177	6%	2,348	13%	8,583	46%	18,628
1978	7,821	35%	2,072	9%	3,346	15%	8,799	40%	22,036
1979	7,892	32%	2,325	9%	4,570	18%	9,988	40%	24,776
1980	8,625	40%	1,424	7%	3,999	18%	7,676	35%	21,724
1981	8,863	36%	1,974	8%	4,384	18%	9,204	38%	24,425
1982	9,399	39%	2,046	9%	4,180	17%	8,272	35%	23,897
1983	7,529	35%	1,822	8%	3,072	14%	9,053	42%	21,476
1984	9,358	39%	1,391	6%	4,298	18%	8,703	37%	23,750
1985	8,014	32%	1,104	4%	4,743	19%	11,288	45%	25,149
1986	8,708	34%	1,116	4%	5,175	20%	10,345	41%	25,346
1987	11,638	40%	1,513	5%	4,116	14%	11,844	41%	29,110
1988	10,876	35%	2,166	7%	6,389	21%	11,367	37%	30,798
1989	9,524	38%	1,168	5%	5,224	21%	9,404	37%	25,320
1990	8,571	36%	1,284	5%	3,552	15%	10,343	44%	23,750
1991	8,841	34%	1,576	6%	3,811	15%	11,482	45%	25,711
1992	10,590	33%	1,637	5%	3,702	11%	16,452	51%	32,381
1993	12,554	34%	1,445	4%	4,860	13%	17,823	49%	36,682
1994	12,727	37%	1,780	5%	4,973	14%	15,030	44%	34,510
1995	14,782	42%	1,380	4%	5,321	15%	13,663	39%	35,146
1996	12,692	41%	1,055	3%	4,028	13%	13,241	43%	31,016
1997	11,552	36%	1,191	4%	3,485	11%	15,858	49%	32,087
1998	13,799	37%	1,581	4%	4,966	13%	16,624	45%	36,970
1999	13,953	36%	1,982	5%	4,510	12%	18,642	48%	39,088
2000	13,200	35%	1,688	4%	3,453	9%	19,242	51%	37,584
2001	14,370	38%	1,901	5%	3,645	10%	17,416	47%	37,332
2002	14,776	37%	2,332	6%	4,049	10%	19,165	48%	40,321

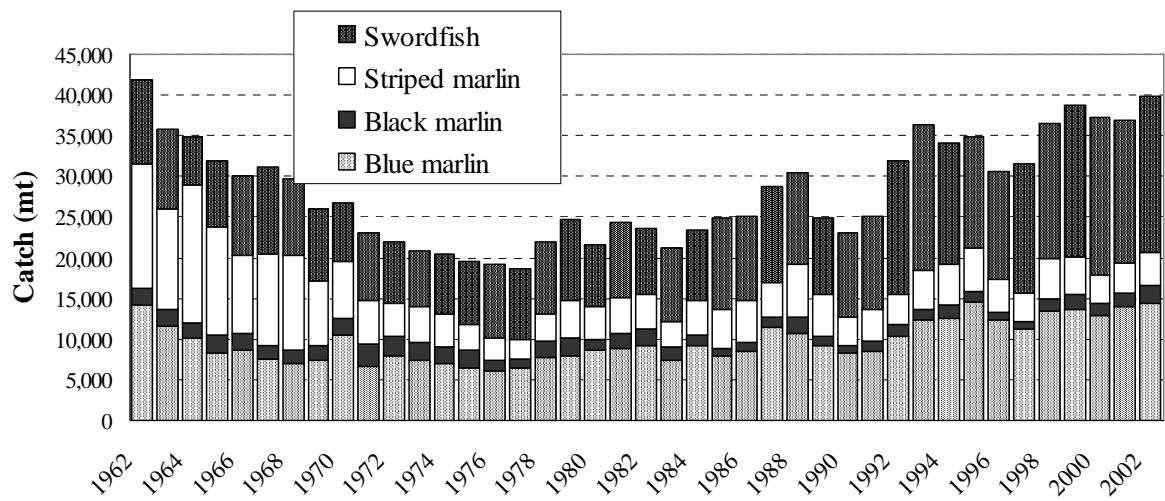


Figure 2. Annual catch of billfish species in the WCPO longline fishery
(2002 is provisional)

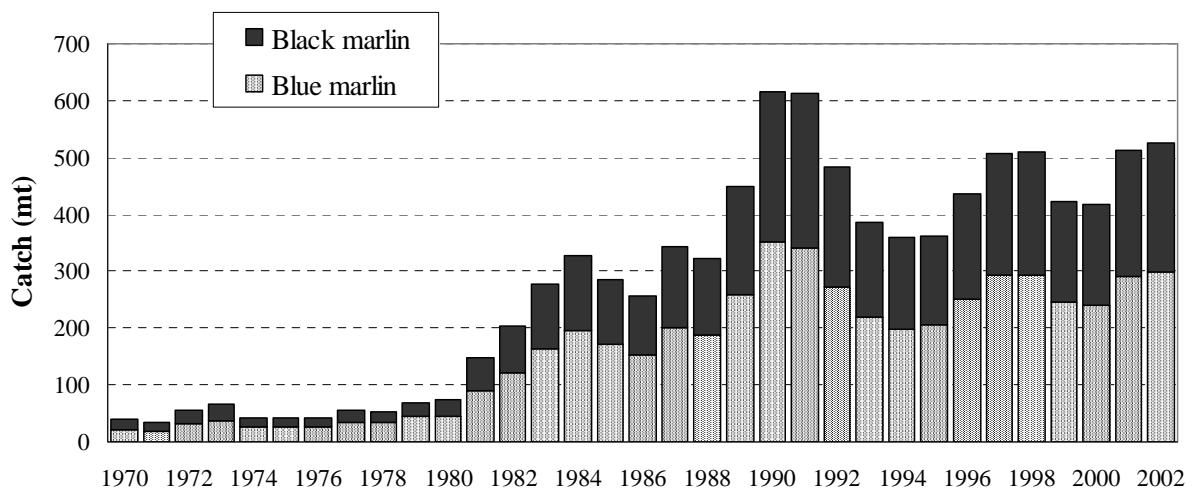


Figure 3. Annual catch of billfish species in the WCPO purse seine fishery
(2002 is provisional)

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