

Update of the Australian Southern Bluefin Tuna Fishery for the 2002-03 Season

1. Introduction

This report summarises catches and fishing activities in the 2002–03 quota year¹ of the Australian southern bluefin tuna (*Thunnus maccoyii*; SBT) fishery. It also provides a summary of the history of the Australian SBT fishery. Caton *et al.* (1995) provides a more detailed historical description of the fishery. The Australian Domestic SBT catch for the 2002-03 quota year (1 December 2002 to 30 November 2003) was 5391 tonnes. The 2002-03 figure is over the previously agreed Australian allocation of 5,265 tonnes because two operators exceeded their individual allocation over that season. This has been dealt with by deducting the overcatch from the operators concerned at the start of the 2003-04 season.

2. Operational Constraints on Catch

Regulatory Measures

Australia's commercial SBT catch is managed under a Total Allowable Catch (TAC). This TAC is made up of individual transferable quotas (ITQs) granted as statutory Fishing Rights (SFRs) under the *Southern Bluefin Tuna Management Plan 1995*.

Australia continued with restricted access arrangements to reduce the incidental catch of SBT in the domestic longline fishery. Longline fishers that did not hold adequate quota to cover incidental catch of SBT in areas of high abundance were prohibited from fishing in such areas. Those operators who were granted access were subject to a range of additional monitoring and compliance conditions including Vessel Monitoring Systems, and observer coverage.

3. Catch and Effort

In 2002–03, 99.7% of the Australian catch of SBT was taken by purse seine with the remainder taken by longline. Australian catch by gear and State for the quota years 1988-89 to 2002-03 is shown in Table 1. The Australian catch of SBT for the calendar years 2002 and 2003 is mapped in Figure 1 and Figure 2 respectively.

4. Historical Catch and Effort

History

Troll catches of SBT were reported as early as the 1920s off the east coast of Australia but significant commercial fishing for SBT commenced in the early 1950s with the establishment of a pole-and-live-bait fishery off New South Wales, South Australia and, later (1970), Western Australia. Purse seine gear overtook pole as the predominant method and catches peaked at 21 500 t

¹ Various time periods, such as 'calendar years', 'fishing seasons' and 'quota years', can be used when describing Australia's SBT fishery. Unless otherwise indicated, we have used quota years in this report, but note that fishing seasons of the various fishery components often span quota years. The start and end dates of Australian quota years have varied and are presented in Appendix 1.

in 1982. The bulk of this early Australian catch of SBT was canned. Following quota reductions in 1983–84, the Western Australian pole fishery for very small juveniles closed down and the south-eastern fishery began to target larger juveniles to supply the Japanese sashimi market. Surface catches were further reduced between 1989 and 1995 when about half of the Australian total allowable catch (TAC) was taken by Australia–Japan joint venture longliners in the Australian Fishing Zone (AFZ). The joint venture ceased in late 1995. From 1992 to 1998, domestic longliners operating off Tasmania and New South Wales also took around 5-10% of the total Australian catch.

In 1990–91 about 20 t of SBT tuna were transferred to fattening cages in Port Lincoln, South Australia, to enhance their value. These ‘farming’ operations increased from 3% of the Australian SBT TAC in 1991–92 to 98% in 1999–00 and has remained at or above that level since.

Following declaration of the Australian Fishing Zone (AFZ) in 1979, Japanese longliners fished under a range of bilateral conditions, real time monitoring program and joint-venture arrangements until 1997 when Japanese longliners were excluded from all AFZ fishing operations following failure to reach agreement on global TAC within the CCSBT. Caton and Ward (1996) provide copies of annual subsidiary agreements for the operations of bilateral-licensed longliners in the AFZ from 1979–80 to 1994–95.

Recent Seasons

The Australian domestic SBT catches for the 2002 and 2003 calendar years were 4711 t and 5822 t, respectively. The 2003 calendar year catch is larger than the previously agreed national allocation to Australia of 5265 t because it represents the aggregation of catches from periods in two quota years. The 2001–02 quota year catch was 5262 t while the catch for the 2002–03 quota year was 5391 t. The 2002–03 figure is over the previously agreed national allocation to Australia because two quota holders caught over the allocation in that season. This has been dealt with by deducting the over catch from their 2003–04 allocation.

5. Annual Fleet Size and Distribution

In 2002–03, a total of 26 commercial fishing vessels landed SBT in Australian waters.

South Australia

The one- to five-year-old SBT, which school from late spring to autumn in surface waters of the eastern Great Australian Bight, South Australia, were fished by seven purse seiners during the 2002–03 quota year, but various live bait, pontoon-towing and feeding vessels were also involved. Fishing commenced in early December 2002 and finished in late March 2003.

Western Australia

Four longliners caught SBT off the WA coastline in 2002–03. For confidentiality reasons all catches are incorporated in the NSW longline catch. Longline fishing in WA commenced in July 2003 and finished in November 2003.

New South Wales

During 2002–03, 15 domestic longliners participated at some time in the area of the fishery for older juveniles and adults in deeper waters off NSW in winter. Longline fishing off NSW commenced in June 2003 and finished in October 2003.

6. Historical Fleet Size and Distribution

Australians began fishing SBT in the early 1950s off New South Wales and South Australia and then later (1970) off Western Australia. Historically, the bulk of the Australian catch had been used for canning. Progressively over the mid to late 1980s, the Australian catch focused on supplying the

Japanese sashimi market, with an increasing amount of the catch being transhipped to Japanese freezer vessels in the Great Australian Bight.

The introduction of an ITQ based management plan in 1984 based on an Australian TAC of 14 500 tonnes resulted in the redistribution of quota ownership. In the late 1980s the Australian quota reductions to 5265 tonnes led to further restructuring. From 1990 to 1994 approximately half the Australian quota was taken by Australian-Japan joint venture longliners. With the termination of the joint venture arrangements in 1995 Australian catches again focused on the surface fishery with poling operations supplying the fresh chilled sashimi market and purse seiners providing SBT to farms. Since 1992 there has been a progressive increase in the number of SBT taken under farming operations. In the 2002-03 season this component utilised over 99% of the Australian quota.

7. Fisheries Monitoring

There are a series of logbooks and associated catch records that are required by law to be completed by fishers and fish receivers and sent to AFMA for the purposes of monitoring, compliance and research. Each logbook has been specifically designed for use in the various SBT catching sectors, that is pelagic longline, purse seine, and minor line/troll. All of the data provided from Logbooks and Catch Disposal Records must be supplied to AFMA within specified time periods specific to each record. Validation of this data is undertaken as a minimum on an annual basis through an audit process by AFMA compliance staff, and sometimes on a needs basis. The monitoring arrangements in the SBT fishery continue to be reviewed and refined in order to improve monitoring and compliance.

Catch Disposal Records

Catch disposal records for SBT are for recording SBT taken by fishers for the purposes other than farming and are signed by the fishing concession holder and the first receiver immediately after unloading the catch. Catch disposal records provide a means to verify logbook data.

Australian Daily Fishing Log and Farm Transit Log

In the SBT purse seine fishery for farms, the Master of the catcher vessel (with quota assigned) is required to complete the Australian Purse Seine and Pole Daily Fishing Log – for farmed SBT only. A specific permit called the Farm Transit Log is then completed by the holder of the SBT carrier boat permit or representative, and provided to the monitoring company which undertakes the fish count when fish are transferred from tow cages to farm cages.

Farm Disposal Record

A specific process has been designed to obtain data to allow for research, monitoring, and compliance of SBT fishing operations that support SBT farming operations. An independent company is contracted annually by AFMA to conduct a 40 fish sample and subsequent video count of all SBT transferred from tow cages to grow out cages. This count of captured fish will be multiplied by the average fish weight derived from the 40 fish sample and is then deducted from operators quota holdings. All mortalities that occur during the capture and towing operations must also be recorded on specific forms. AFMA Compliance Officers have been regularly deployed on farm tow vessels to observe procedures and protocols as part of a risk based SBT compliance program.

Observer Programmes

Observer programmes for the purse seine and longline sectors were implemented in the 2002-2003 fishing season and achieved greater than 10 percent coverage of catch and effort. A detailed overview of the 2004 SBT observer program is provided at Attachment 1 in Australia's 2002-03 Southern Bluefin Tuna Fishing Season report to the ninth meeting of Scientific Committee meeting.

Seasonal Area Restrictions

To minimise the risk of non-quota take of SBT by longliners off New South Wales and Western Australia, access to the waters through which SBT migrate has been restricted to vessels holding SBT quota since 2000 in NSW and 2001 in WA.

8. Other Factors

Import/Export Statistics

The Trade Information Scheme (TIS) that records all exported Australian fish has been implemented and refined. A TIS form is completed by an authorised signatory from the export-registered establishment that is the last to handle the consignment before the product leaves Australia and validated by a Government officer. The form is used for both farmed and non-farmed SBT. This program provides a complete record of SBT exports that can be compared with the Japanese Import Statistics.

Markets

More than 95% of Australia's SBT catch is exported to Japan.

Quota Year	Western Australia				South Australia				New South Wales			Tasmania			Large Longliners			Australia Total				Total All Gears
	Albany Pole	Esperance Pole	Long-line	Total	Pole & Purse Seine	Farm Cages	Long-line	Total	Pole & Purse Seine	Long-line	Total	Troll	Long-line	Total	Aust. Charter	Joint-venture	Total	Domestic Surface	Domestic Long-line	Total Long-line	RTMP	
1988-89	204	221	0	425	4872	0	0	4872	0	1	1	2	0	2	0	684	684	5299	1	685	0	5984
1989-90	133	97	0	230	4199	0	0	4199	0	6	6	14	0	14	0	400	400	4443	6	406	0	4849
1990-91	175	45	0	220	2588	0	0	2588	0	15	15	57	0	57	255	881	1136	2865	15	1151	#300	4316
1991-92	17	0	0	17	1629	138	14	1781	34	90	124	36	20	56	59	2057	2116	1854	124	2240	800	4894
1992-93	0	0	0	0	716	722	68	1506	16	238	254	23	44	67	0	2735	2735	1477	350	3085	650	5212
1993-94	0	0	0	0	621	1294	55	1970	0	286	286	7	105	112	0	2299	2299	1922	446	2745	270	4937
1994-95	0	0	0	0	908	1954	2	2864	0	157	157	4	109	113	0	1295	1295	2866	268	1563	650	5080
1995-96	0	0	0	0	1447	3362	0	4809	28	89	117	0	262	262	0	0	0	4837	351	351	0	5188
1996-97	0	0	0	0	2000	2498	0	4497	7	229	236	2	242	244	0	0	0	4507	472	472	0	4978
1997-98	0	0	^0	0	916	3488	^0	4403	~0	475	475	10	219	219	0	0	0	4433	664	664	0	5097
1998-99	0	0	^0	0	28	4991	^0	5018	~0	97	97	10	116	116	0	0	0	5016	216	216	0	5232
1999-00	0	0	^0	0	0	5130	13	5143	0	114	114	0	10	0	0	0	0	5130	127	127	0	5257
2000-01	0	0	^0	0	0	5162	6	5168	0	32	32	0	10	0	0	0	0	5162	38	38	0	5247
2001-02	0	0	7	7	0	5234	0	5234	0	*22	*22	0	10	0	0	0	0	5234	29	29	0	5262
2002-03	0	0	≈0	0	0	5375	0	5375	0	17	17	0	0	0	0	0	0	5375	17	17	0	5391

Note that a further 700t of Australian quota was 'frozen' (not allocated) in 1990-91.

^ 1997-98 and 1998-99 WA and SA non-farm catches are included in SA pole and purse seine catch, and in 1999-00 and 2000-01 WA longline catch is included in SA longline due to confidentiality guidelines.

~ 1997-98 to 1998-99 NSW pole and purse seine catches are included in NSW longline catch due to confidentiality guidelines.

! 1997-98 and 1998-99 Tas troll catches are included in Tas longline, and in 1999-00, 2000-01 and 2001-02 Tas longline catch is included in NSW longline due to confidentiality guidelines.

* 2001-02 NSW longline catch also includes QLD longline catch due to confidentiality guidelines.

≈ 2002-03 WA longline catch is included in NSW longline due to confidentiality guidelines, an explanation for the 2002-03 overcatch is included in the introduction to this paper. .

Table 1: Australian Catch by Gear and State for Quota Years 1988-89 to 2002-03

Figure 1: Australian SBT Catch in 2002

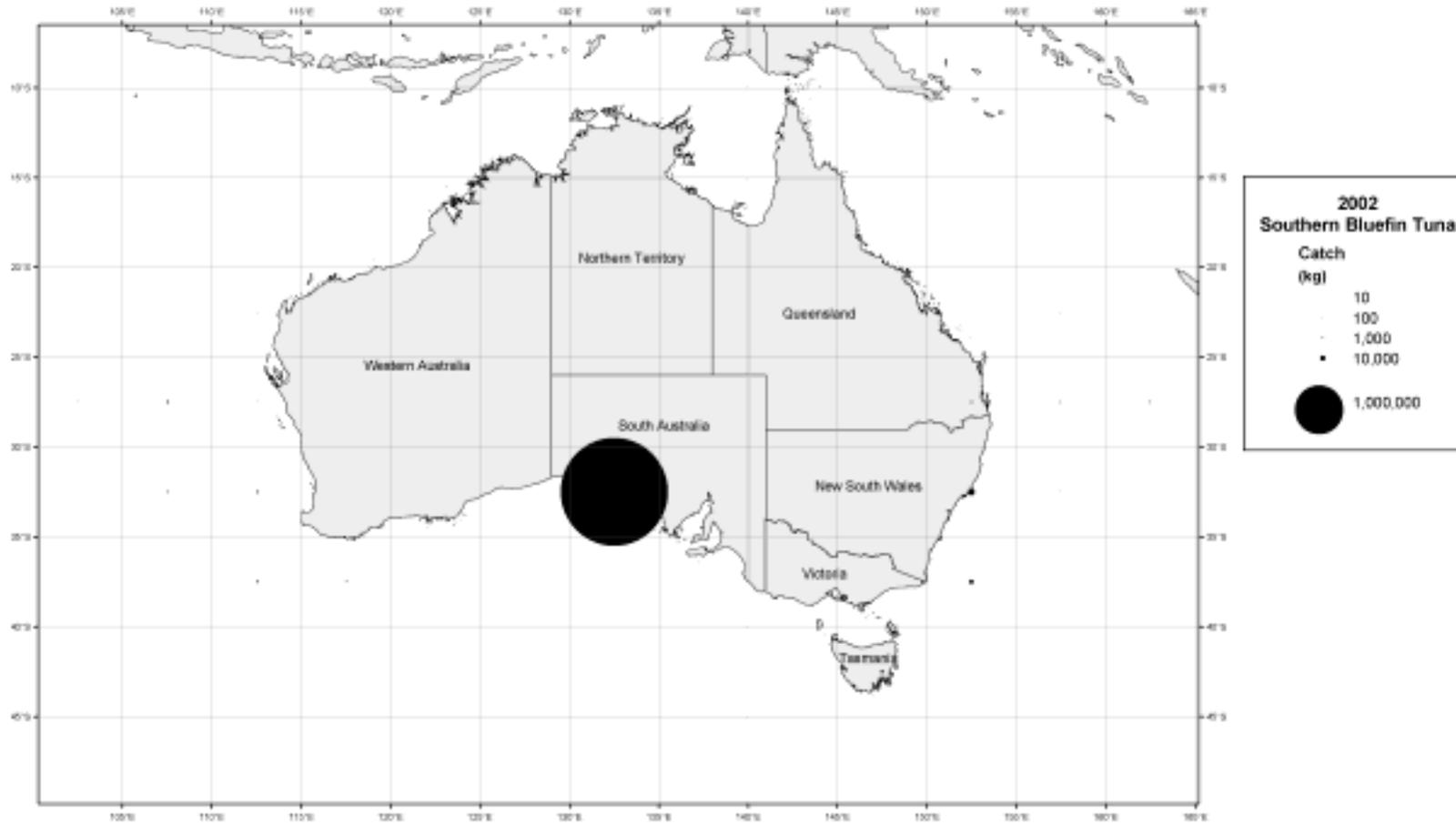


Figure 2: Australian SBT Catch in 2003

