CCSBT-CC/1010/SBT Fisheries – Australia (Rev1)

Australia's annual review of the Southern Bluefin Tuna Fishery

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Executive Summary

The 2010 update

The 2010 Fishing Season Report summarises catches and fishing activities in the Australian Southern Bluefin Tuna (SBT) Fishery up to and including the 2008–09 quota year (December–November) and some preliminary results for Year 1 of the 2009–11 season.

The fishing season

A total of 30 commercial fishing vessels landed SBT in Australian waters in 2008–09 for a total catch of 5242 t. A total of 95.7% of the catch was taken by purse seine with the remainder taken by longline. Seven purse seiners fished off South Australia for the farm operations during the 2008–09 quota year, but live bait, pontoon-towing and feeding vessels were also involved. Purse seine fishing commenced in early December 2008 and finished in early April 2009.

The 2007–08 and 2008–09 quota year catches were 5234 t and 5242 t, respectively, from a quota of 5265 t.

Observers

During the 2008–09 fishing season, there were 12 shots where SBT were retained. The observer coverage for this period was 8.4% of the total effort representing 15.54% of the total catch.

In the first year of the 2009–11 fishing season in the purse seine sector, observers monitored 9.0% of purse seine sets where fish were retained and 13.5% of the estimated SBT catch. In 2009, observers also monitored 17.2% of longline hook effort in the Eastern Tuna and Billfish Fishery (ETBF) during the months and in the areas of the SBT migration through that fishery. Observers monitored 8.5% of longline hook effort in the entire Western Tuna and Billfish Fishery, where three vessels operated in the fishery during this period.

Additional reporting requirements

Additional information required under resolutions and recommendations adopted at CCSBT15 in 2008, relating to vessel monitoring systems (VMS), transhipment and Ecologically Related Species are also reported.

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1. Introduction

This report summarises catches and fishing activities in the 2008–09 quota year of the Australian Southern Bluefin Tuna (*Thunnus maccoyii*; SBT) Fishery. It also provides preliminary data on Year 1 of the 2009–11 fishing seasons and 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 catches for the 2008 and 2009 calendar years were 5033 t and 5108 t, respectively. By quota year, the Australian domestic SBT catch was 5234 t in 2007–08 and 5242 t in 2008–09 (Table 1) from a quota of 5265 t.

Table 1. Total domestic catch of SBT for calendar years and quota years

Calendar	r Catch Quota		Catch
Year	(t)	Year	(t)
1990	4586	1989–90	4849
1991	4489	1990–91	4316
1992	5248	1991–92	4894
1993	5373	1992–93	5212
1994	4700	1993–94	4937
1995	4508	1994–95	5080
1996	5128	1995–96	5188
1997	5316	1996–97	4978
1998	4897	1997–98	5097
1999	5552	1998–99	5232
2000	5257	1999–00	5257
2001	4853	2000–01	5247
2002	4711	2001–02	5262
2003	5827	2002–03	5391
2004	5062	2003–04	5120
2005	5244	2004–05	5248
2006	5635	2005–06	5308
2007	4813	2006–07	5234
2008	5033	2007–08	5234
2009	5108	2008–09	5242

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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.

2. Operational Constraints on Effort

Regulatory Measures

Domestic operations are managed through individual transferable quotas (ITQs) granted as Statutory Fishing Rights (SFRs) under the *Southern Bluefin Tuna Management Plan 1995*.

The Australian Fisheries Management Authority (AFMA) uses a risk-based compliance strategy in its Commonwealth fisheries. The compliance program includes targeted compliance operations to check fishing vessels at sea and at landing ports; a comprehensive audit trail from the time SBT are caught to the time they are exported, including random audits of fishing companies and export establishments; and an annual review of compliance risks leading to refined strategies for the following fishing season.

Australia has continued to use a combination of area restrictions, minimum quota holdings, fishery observers, and mandatory Vessel Monitoring Systems (VMS) to reduce the incidental catch and mortality of SBT caught in the domestic longline fishery. A SBT habitat model incorporating archival tag and observer data with sea surface and sub-surface temperatures is used to predict likely areas of high SBT abundance in the longline fishery off the east coast, and hence the location of restricted access zones. In the Eastern Tuna and Billfish Fishery (ETBF), areas with a high probability of SBT interactions have been determined and are referred to as the Core Zone and Buffer Zone (see www.afma.gov.au/fisheries/tuna/etbf/mgt/zones.htm). Observer requirements have been modified as of the 2005–06 season so that the level of observer coverage depended on the amount of quota carried. To access the Core and Buffer zones, a minimum holding of 500 kg of SBT quota is now required. Requirements applicable to 2008 longline catches of SBT are given in Tables 2 and 3.

Table 2. Observer coverage requirements in the Core Zone of the ETBF, 2008

Initial quota holding	Uncaught quota remaining							
	1 kg-2 t	>2 t-4 t	>4 t–6 t	>6 t–10 t	>10 t			
500 kg-2 t	100%							
>2 t-4 t	100%	75%						
>4 t-6 t	100%	50%	50%					
>6 t-10 t	100%	25%	25%	25%				
>10 t	100%	10%	10%	10%	10%			

Table 3. Observer coverage requirements in the Buffer Zone of the ETBF, 2008

Initial quota holding	Uncaught quota remaining						
	1 kg-2 t	>2 t-4 t	>4 t–6 t	>6 t-10 t	>10 t		
500 kg-2 t	25%						
>2 t-4 t	25%	25%					
>4 t-6 t	25%	25%	25%				
>6 t-10 t	25%	25%	25%	25%			
>10 t	25%	10%	10%	10%	10%		

To improve compliance and management outcomes for its domestic fishery, and to better meet international management obligations, Australia implemented a range of amendments to its *Southern Bluefin Tuna Management Plan 1995* in February 2008. These included:

- multi-year national catch allocations for the Australian SBT Fishery to be set by AFMA in line with decisions made by the CCSBT;
- an amendment to allow AFMA to use any decision made under Article 8(3) of the Convention for the Conservation of Southern Bluefin Tuna for the purposes of determining the national catch allocation;
- a mechanism for any excess take of fish to be repaid in subsequent years by fishers and to broaden the basis for fishers to legally release live fish;
- the frequency of reviewing the monitoring arrangements to be changed from annually to no more than every five years; and
- AFMA's contact details and the economic efficiency objective to be updated.

3. Catch and Effort

In the 2008–09 quota year, 95.7% of the Australian catch of SBT was taken by purse seine with the remainder taken by longline (Table 4). Purse seine catch by fishing season with number of vessels and vessel search hours is given in Table 5. Australian catch by gear and State for the quota years 1988–89 to 2008–09 is shown in Table 6. The Australian catch of SBT for the calendar years 2008 and 2009 is shown in Figure 1 and Figure 2, respectively.

Table 4. Catch of SBT by fishing method in 2007–08 and 2008–09 seasons

Gear	State	Catch (t)
2007–2008		
Purse seine	South Australia	5211
Longline	New South Wales	23
2008-09		
Purse seine	South Australia	5015
Longline	New South Wales and Tasmania	
Pole-and-line	South Australia	227
Purse seine	New South Wales	

Insufficient data were available in 2009 to provide an estimate of the total recreational catch. The main areas for recreational fishing in 2009 were South Australia, Victoria and Tasmania. Recreational fishing data for Tasmania and South Australia are available for 2008 (see Section 4).

Discards

During the first year of the 2009–11 fishing season, no discarding of SBT was observed or reported in logbooks collected in the purse seine fishery in the Great Australian Bight. However, one observed set was aborted because of too many fish, and the fish were released alive.

In 2009, in the ETBF, south of 30°S and during the months of May to September, 16 observers monitored 180 000 hooks of a total of 1 048 000, representing 17.2% observer coverage of longline effort during the SBT migration. For the fishery as a whole, 6.4% of hooks were observed in 2009. The total catch number of SBT caught while observers were on board was 1558 of which 817 were retained, 741 were discarded (737 of which were released alive) and none were tagged. Individual retained SBT ranged from 70–196 cm in length. ETBF logbooks for 2009 showed 192 t (3482 fish) of SBT were retained in the ETBF and 1741 (33.3%) were discarded.

During 2009, observers monitored 8.5% of longline hook effort in the Western Tuna and Billfish Fishery (WTBF). Three vessels participated in this fishery in 2009, and no SBT were observed caught in 2009.

4. Historical Catch and Effort

Australian catch and effort (number of search hours and number of vessels) by fishing season in the purse seine fishery, for 1994–95 to Year 1 of 2009–11, are shown in Table 5. Catch by gear and State for the quota years 1988–89 to 2008–09 is shown in Table 6.

Table 5. Purse seine catch and effort for seasons 1994–95 to Year 1 of 2009–11

Season	Estimated catch	Actual catch	No. catcher	No. catcher Vessel search vessels hours		No. 1 [°] squares fished
	(t)	(t)				
1994–95	2179	2009	5	526	104	5
1995–96	2859	3442	6	631	89	11
1996–97	3134	2505	7	769	118	13
1997–98	3916	3629	7	671	143	8
1998–99	4418	4991	7	972	129	3
1999-00	4746	5131	8	764	107	5
2000-01	5100	5162	8	799	129	2
2001-02	5400	5234	7	1309	159	3
2002-03	5188	5375	7	1276	150	5
2003-04	5299	4874	6	1202	160	4
2004-05	5225	5215	8	1168	139	4
2005-06	5463	5302	7	1304	156	6
2006-07	5091	5230	6	1459	160	8
2007-08	4530	5211	7	1217	134	2
2008-09	4348	5015	7	1156	139	7
2009-10,Yr 1	3323	3998	6	417	78	3

Note that the 2009–11, Year 1 figures provided are preliminary because the fishing season does not finish until November 2011.

Overall, the data available on recreational catch of SBT is extremely limited, but an initial review revealed high year-to-year variability in catches and the locations in which SBT were taken (Rowsell *et al.* 2008). Between 1998 and 2002, indicative estimates of annual recreational catches ranged between 3 t and 85 t with the highest catches occurring around Tasmania (Table 7). These data are indicative estimates only and are based on a range of different data sources. No estimates of total Australian recreational catch of SBT have been available since 2003.

For the 2008 recreational SBT season (January-July), there are catch estimates available for Tasmanian and South Australian waters only. The Tasmanian estimate, obtained from on-site surveys and charter logbooks (Forbes et al. 2009) was 14 t. The South Australian catch estimate, from a statewide telephone-diary survey and charter fishery logbooks (PIRSA unpublished data), was 29.1 t. The other main region for recreational catch of SBT in 2008 and 2009 was off western Victoria. No estimates of recreational catch are available for this region.

5. Annual fleet size and distribution

In the 2008–09 quota year, a total of 30 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 2008–09 quota year, but various live bait, pontoon-towing and feeding vessels were also involved. Fishing commenced in early December 2008 and finished in early April 2009 for the season.

One pole-and-line vessel caught SBT off South Australia during the 2008-09 quota year.

Western Australia

There were no SBT caught off Western Australia in the 2008–09 quota year.

New South Wales

During the 2008–09 quota year, 20 domestic longliners reported landing SBT from the area of the fishery for older juveniles and adults in deeper waters off New South Wales.

One purse seine vessel caught SBT off New South Wales during the 2008-09 quota year.

Tasmania

One longline vessel caught SBT off Tasmania in the 2008–09 quota year.

Queensland

There were no SBT caught off Queensland in the 2008–09 quota year.

Figure 1. Australian SBT catch in the 2008 calendar year

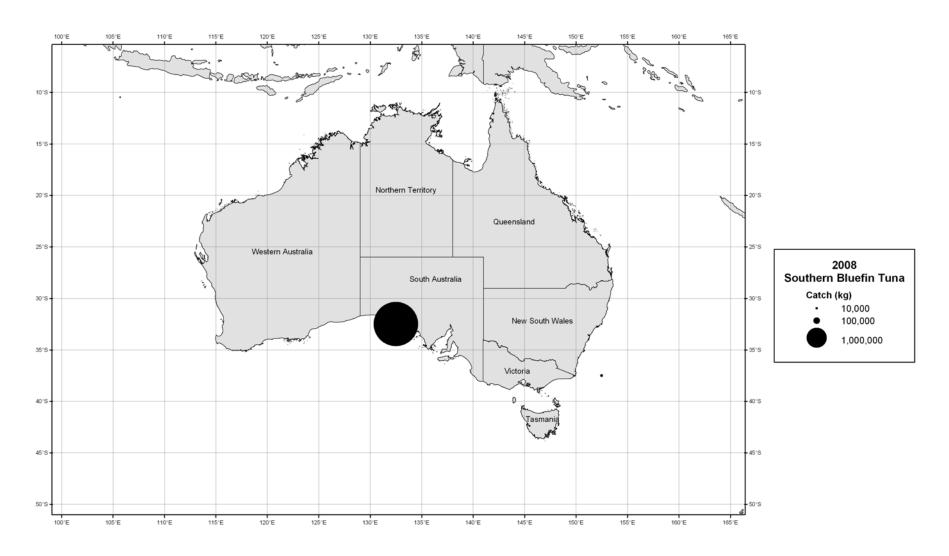


Figure 2. Australian SBT catch in the 2009 calendar year

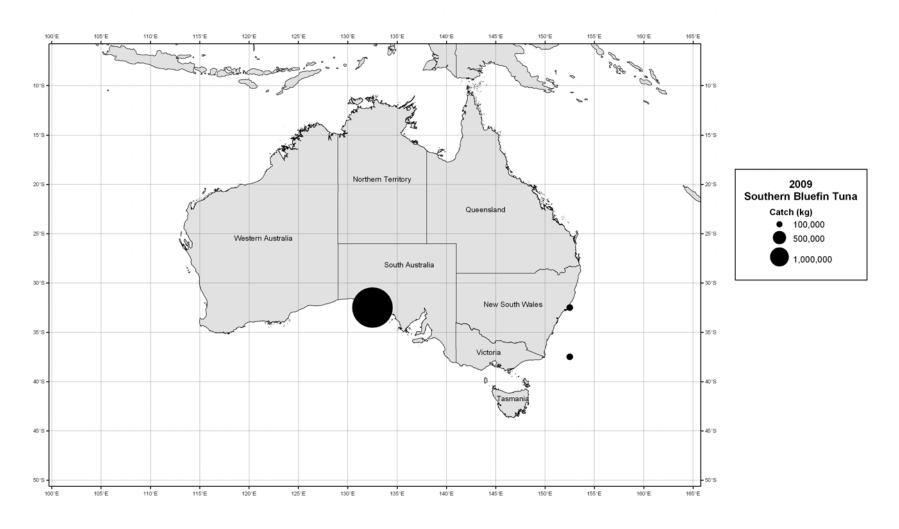


Table 6. Australian catch by gear and state for quota years 1988–89 to 2008–09

Quota		Western A	ustralia			South Au	ıstralia		Nev	w South W	ales		Tasmania	ı	La	rge Longli	ners		Australia '	Total		Total
Year	Albany	Esperance	Long- line	Total	Pole & Purse	Ranch Cages	Long- line	Total	Pole & Purse	Long- line	Total	Troll	Long- line	Total	Aust.	Joint-	Total	Domestic Surface	Domestic	Total	RTMP	All
	Pole	Pole	iiie		Seine	Cages	iiie		Seine	iiie			iiie		Charter	venture		Surrace	Long- line	Long- line		Gears
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^a	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	$0_{\rm p}$	0	916	3488	O_p	4403	0^{c}	475	475	0^{d}	219	219	0	0	0	4433	664	664	0	5097
1998–99	0	0	$0_{\rm p}$	0	28	4991	$0_{\rm p}$	5018	0^{c}	97	97	0^{d}	116	116	0	0	0	5016	216	216	0	5232
1999-00	0	0	$0_{\rm p}$	0	0	5130	13	5143	0	114	114	0	O^d	0	0	0	0	5130	127	127	0	5257
2000-01	0	0	$0_{\rm p}$	0	0	5162	6	5168	0	32	32	0	O^d	0	0	0	0	5162	38	38	0	5247
2001-02	0	0	7	7	0	5234	0	5234	0	22 ^e	22 ^e	0	O^d	0	0	0	0	5234	29	29	0	5262
2002-03	0	0	$0^{\rm f}$	0	0	5375	0	5375	0	17	17	0	0	0	0	0	0	5375	17	17	0	5391
2003-04	0	0	0^{f}	0	$O_{\rm p}$	4874	0^{g}	4874	0	226 ^e	226 ^e	0	20	0	0	0	0	4874	247	247	0	5120
2004-05	0	0	0	0	0	5214	0	5214	0	35	35	0	0	0	0	0	0	5214	35	35	0	5248
2005-06	0	0	0	0	0	5302	0	5302	0	6	6	0	0	0	0	0	0	5302	6	6	0	5308
2006-07	0	0	0	0	0	5230	0	5230	0	4	4	0	0	0	0	0	0	5230	4	4	0	5234
2007-08	0	0	0	0	0	5211	0	5211	0	23	23	0	0	0	0	0	0	5211	23	23	0	5234
2008-09	0	0	0	0	0	5015	0	5015	0	227^{i}	227 ⁱ	0	0	0	0	0	0	5015	22	227	0	5242

See footnotes on following page.

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

b1997-98 and 1998-99 WA and SA non-ranch 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.

c1997-98 to 1998-99 NSW pole and purse seine catches are included in NSW longline catch due to confidentiality guidelines.

d 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.

 $^{\mathrm{e}}2001\text{-}02$ and 2003-04 NSW longline catch also includes QLD longline catch due to confidentiality guidelines.

^f2002-03 and 2003-04 WA longline catch is included in NSW longline due to confidentiality guidelines.

^g2003-04 SA longline catch is included in NSW longline due to confidentiality guidelines.

^h2003-04 additional SA purse seine catch that did not go into ranch cages is included in SA ranch cages catch due to confidentiality guidelines.

ⁱ2008-09 SA pole-and-line catch, NSW purse seine catch and TAS longline catch included in NSW longline catch due to confidentiality guidelines.

Table 7. Indicative estimates of recreational catch (t) by Australian recreational fishers, 1994 to 2008.

Year	Recreational Catch (t)
1994	16
1995	insufficient data
1996	insufficient data
1997	insufficient data
1998	38
1999	3
2000	10
2001	60
2002	85
2003	insufficient data
2004	insufficient data
2005	insufficient data
2006	insufficient data
2007	insufficient data
2008	insufficient data
2009	insufficient data

6. Historical fleet size and distribution

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 (1970s), Western Australia. Purse seine gear overtook pole as the main method and catches peaked at 21 500 t 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. Use of the Australian SBT TAC in 'farming' operations increased from 3% of the TAC in 1991–92 to 98% in 1999–2000 and it has remained at similar high levels since.

Following declaration of the 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 a global TAC within the CCSBT.

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. The type of form used is dependent on the type of method used to catch

SBT in the fishery. All of the data provided from logbooks and catch disposal records must be supplied to AFMA within specified time periods specific to each record.

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 logbook and farm transit logbook

A logbook form is required to be completed by fishers when using pelagic longlining or when fishing with minor line methods. The Australian Pelagic Longline Daily Fishing Log is required to be completed for longline fishing. In the purse seine fishery, 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 logbook called the Farm Transit Log is completed by the holder of the SBT carrier vessel 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 and monitoring from farming operations. An agent acting on AFMA's behalf monitors the farming operations. All mortalities that occur during the capture and towing operations must be recorded on the appropriate form and must be available for inspection if requested by AFMA.

When SBT are transferred from tow cages to the fish farms, a video record must be carried out by the AFMA contracted monitoring company. The video recording is then used to undertake a count of the fish that are transferred into the fish farm. This count of captured fish is multiplied by the average fish weight (derived from a 40-fish sample) and decremented from quota using the Farm Disposal Record.

Observer program

Observer programs for the purse seine fishery have been in place since the 2002–03 season, and for the longline fishery (ETBF) since 2002.

The monitoring arrangements in the SBT fishery continue to be reviewed and refined in order to improve monitoring and compliance. Since 2000, in order to minimise the risk of non-quota take of SBT by longliners off New South Wales, access to the waters through which SBT migrate, during the time that core and buffer zones are in place, has been restricted to vessels holding SBT quota.

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.

This system was replaced on 1 January 2010 by the CCSBT Catch Documentation Scheme (CDS), which allows the flow of legal catch to be tracked and validated to the first point of sale on domestic or import markets.

Markets

In the 2009 calendar year, Australia exported 8101.6 t of SBT. The great majority of Australian exports were received by Japan (7994.4 t, ~99% of exports). A further 83 t (1% of exports) were exported to the USA, 4.1 t (0.1% of exports) to destinations in Asia and the Middle East, and 14.7 t (0.2% of exports) to Europe. A small amount was consumed domestically.

Observer coverage

Purse seine fishery

During the 2008–09 fishing season, there were 12 shots where SBT were retained. The observer coverage for this period was 8.4% of the total effort representing 15.54% of the total catch.

The purse seine observer program for the first year of the 2009–11 Australian SBT fishing season monitored fishing and tow operations in 33°17′–34°17′S and 131°47′–132°55′E in January, February and March 2010. One Australian observer monitored seven purse seine sets where fish were retained and one set that was aborted because of too many fish, and the fish were released alive. This represents 9.0% of the total sets in which fish were taken in the first year of the 2009–11 fishing season. From these observations an estimated 450 t of SBT were caught during observed sets, representing 13.5% of the estimated tonnage caught for the first year of the 2009–11 season. The observer recorded a total of 16 mortalities during purse seine operations.

The observer also monitored one tow operation and recorded 18 SBT mortalities during that towing operation.

Longline fishery

In 2009 in the ETBF, south of 30°S and during May to September (where SBT are usually caught), 16 observers monitored 180 000 hooks of a total of 1 048 000, representing 17.2% observer coverage of longline effort. For the fishery as a whole, 6.4% of hooks were observed in 2009. The total catch number of SBT caught while observers were on board was 1558 of which 817 were retained, 741 were discarded (737 of which were released alive) and none were tagged. Individual retained SBT ranged from 70–196 cm in length. Average length of observed discards for 2002 to 2006 are shown in Figure 1. ETBF logbooks for 2009 showed 192.0 t (3482 fish) of SBT were retained in the ETBF and 1741 (33.3%) were discarded. Note that Catch Disposal Records for 2009 reported 3537 SBT retained and landed in the ETBF; misidentification of SBT in logbooks possibly accounts for this discrepancy.

In 2009, 8.5% of longline hook effort was observed in the Western Tuna and Billfish Fishery (WTBF). Three vessels participated in this fishery in 2009, and no SBT were observed caught.

Fish release trials

In response to the operational characteristics of the SBT fishery, AFMA and the fishing industry agreed to undertake a trial encompassing two fishing seasons, commencing in the 2007–08 quota year, to investigate a mechanism to allow a single release of live fish to avoid exceeding Australia's national allocation of SBT. The first release of the trial was conducted on 6 April 2008.

Approximately 2000 SBT (39 t) were released at 35°14.5'S, 135°36.5'E. To select the release site, an aerial survey of three preferred release locations was conducted on 4 April 2008. These sites were selected because they were known as locations where wild SBT can be found. The final release site was selected because it had a strong presence of wild SBT indicating that the area was suitable habitat for SBT.

The infrastructure to undertake the release and aerial spotting was provided by industry and observed by two government officials. No mortalities were recorded during the tow and release of fish.

The second release took place on 17 March 2010 at 35°12.384S 135°45.424E. The 2010 release lasted approximately 3 hours 20 minutes during which time divers estimated that 500 fish had been released. The release was observed by an AFMA Compliance Officer and the Protec Marine representative. All fish were released alive and vigorous with no mortalities observed during the release. Each release complied with a standard set of procedures and was considered a success.

References

- Caton, A.E. and P.J. Ward. 1996. Arrangements on fisheries between the governments of Australia and Japan on tuna longlining. Annex to Ward P.J. (Ed.). 1996. Japanese longlining in eastern Australian waters 1962–1990. Bureau of Resource Sciences, Canberra
- Forbes, E., Tracey, S. and J. Lyle. 2009. Assessment of the 2008 recreational gamefish fishery of southeast Tasmania, with particular reference to southern bluefin tuna. Tasmanian Aquaculture and Fisheries Institute, University of Tasmania, Hobart
- Rowsell M., Moore, A., Sahlqvist, P. and G. Begg. 2008. Estimating Australia's recreational catch of southern bluefin tuna. Working Paper CCSBT-ESC/0809/17, thirteenth meeting of the Scientific Committee of the Commission for the Conservation of Southern Bluefin Tuna, Rotorua, New Zealand, September 2008

Appendix 1. SBT fishing season dates 1988–89 to 2008–09

Quota Year	Start Date	End Date
1988–89	1 October 1988	30 September 1989
1989–90	1 October 1989	30 September 1990
1990–91	1 October 1990	30 September 1991
1991–92	1 October 1991	31 October 1992
1992–93	1 November 1992	31 October 1993
1993–94	1 November 1993	31 October 1994
1994–95	1 November 1994	15 December 1995
1995–96	16 December 1995	15 December 1996
1996–97	16 December 1996	30 November 1997
1997–98	1 December 1997	30 November 1998
1998–99	1 December 1998	30 November 1999
1999–00	1 December 1999	30 November 2000
2000-01	1 December 2000	30 November 2001
2001–02	1 December 2001	30 November 2002
2002-03	1 December 2002	30 November 2003
2003-04	1 December 2003	30 November 2004
2004–05	1 December 2004	30 November 2005
2005–06	1 December 2005	30 November 2006
2006–07	1 December 2006	30 November 2007
2007–08	1 December 2007	30 November 2008
2008-09	1 December 2008	30 November 2009
2009–10	1 December 2009	30 November 2011