



CCSBT-ESC/0809/07

Surface Fishery Tagging Program (ESC agenda item 13.4)

1. Introduction

The surface fishery tagging program was designed at the Tagging Program Workshop in October 2001. The program had the following features:-

- Tagging of 5,000-7,000 one year old SBT in Western Australia;
- Tagging of 8,000-10,000 two to four year old SBT in South Australia;
- Fish to be caught using pole and line techniques; and
- Five year timescale.

The tagging program commenced during the 2001/02 surface fishery season and tagging continued each season (December to April) until the review of the tagging program by the Extended Scientific Committee (ESC) in September 2007.

At its review, the ESC expressed concern that the requirement for the voluntary return of tags was restricting the value that could be obtained from the program and recommended that tag deployments not occur during the 2007/08 season and instead work would focus on methods of tagging that do not require voluntary reporting. Consequently, the tagging program did not proceed in 2007/08. Table 1 shows the number of SBT tagged in the surface fishery each season since commencement of the tagging program. The SBT tagged in 2007/08 were tagged as part of the operation of other projects.

Table 1: Number of SBT tagged in the surface fishery each season.

Season	Western Australia	South Australia	Total
2001/02	2,855	464	3,319
2002/03	6,735	6,412	13,147
2003/04	5,269	5,009	10,278
2004/05	7,846	9,036	16,882
2005/06	10,231	9,884	20,115
2006/07	5,216	8,046	13,262
2007/08	82	0	82

The 2007 ESC meeting endorsed continued efforts to increase tag recovery rates and estimate tag reporting rates, including tag seeding experiments in the Australian surface fishery. A total budget of \$110,000 was agreed 2007/08 for coordination expenses, which included provision of rewards and freezer vessel observation.

2. Tag Recoveries

As at 21 July 2008, a total of 8,519 SBT had been reported as being recaptured from the surface fishery tagging program. As would be expected, most (7,446) of these fish were recovered from the sea cages in Port Lincoln tuna farms. One thousand and seventy three of

these fish were recaptured from the wild, including 766 commercial fishing captures, 169 while conducting tagging in the surface fishery, 91 from amateur fishers and 47 from other sources including tags found on beaches.

Attachment A shows the straight line movement pattern for fish tagged in the surface fishery and for fish tagged in the other SRP projects. Two of the movements shown in Figure 1, with a north easterly direction to the western Pacific, are less certain than the other movements shown in this figure as these two fish were small (22-25kg) and were reported from a cannery instead of from the capture vessel.

Summary information on tag releases and recaptures are set out in Attachment B. The information in Attachment B includes details of all CCSBT tags recaptured including those released in the surface fishery, releases in the various longline fisheries and some other minor releases. Attachment C provides additional details of recaptures by source.

Tag recovery activity in 2007/08 consists of the following elements:

- A private contractor at Port Lincoln acting on behalf of the CCSBT in promoting the return of tags; the collection of data on tag recapture details; and providing the information with the recovered tags to the Secretariat.
- Twenty days of observation on board freezer vessels by the above contractor to collect tags and tag recovery information. The observation period for 2007/08 had not commenced at the time of writing this report.
- A tag recovery mechanism with a Taiwanese representative in Mauritius visiting vessels, collecting tags and details, and providing rewards.
- An arrangement with an Indonesian representative for collecting tags and details at Benoa, and providing rewards within Indonesia.
- Member's fishing authorities promoting the tag recovery program in their fisheries
- Certain recreational game fishing associations within Australia publicising tag recovery by their members.
- Provision of rewards and feedback (usually in the form of recapture certificates that provides a history of the recaptured fish) to people who reported the capture of tagged fish.

3. The 2009 program

A draft budget for the 2009 tagging program is provided at Attachment D. The draft budget assumes continued efforts for tag recovery, but no tag deployment.

Figure 1: Movement of recaptured SBT that were tagged in the surface fishery.

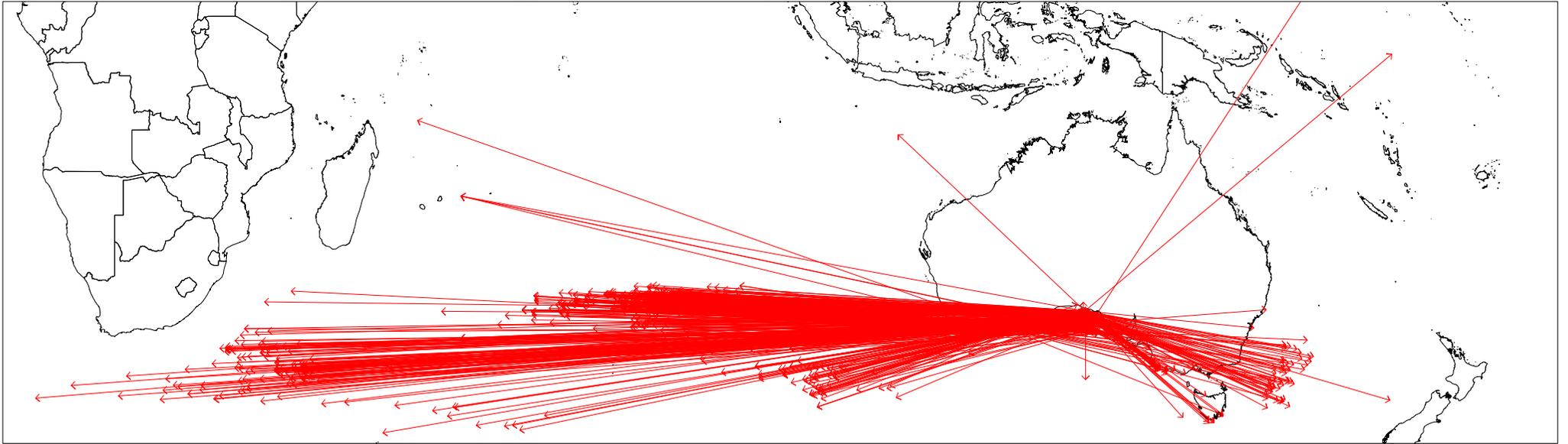
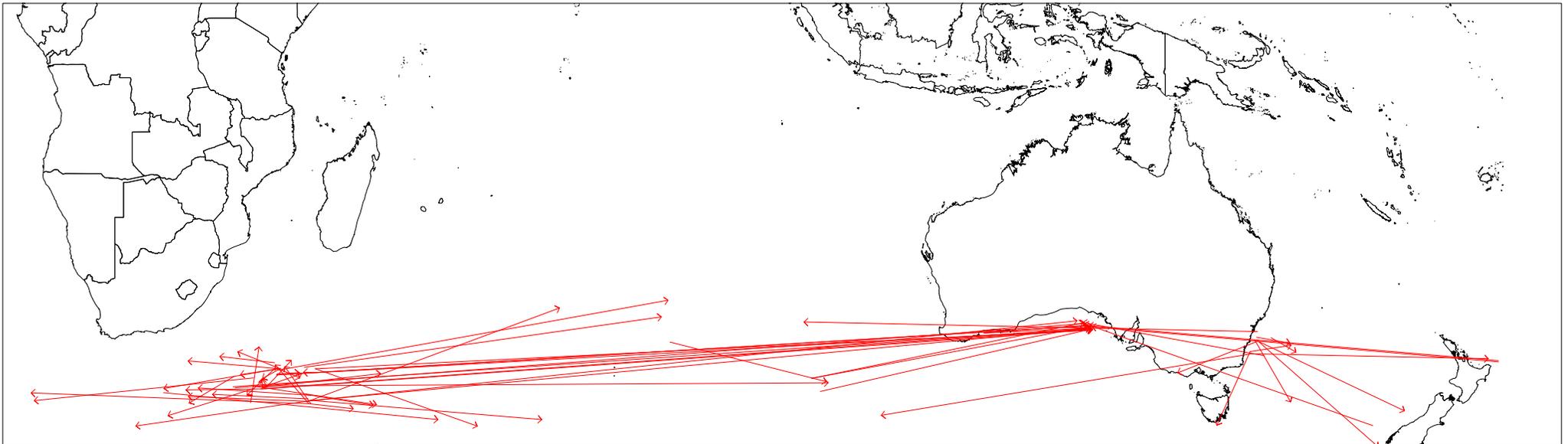


Figure 2: Movement of recaptured SBT that were tagged in the non-surface fishery component of the SRP tagging program



Summary of the number of SBT recaptured for each month of tag releases in SRP tagging projects
(Includes all data received by the Secretariat as at 21 July 2008 - most of the 2007/08 recaptures have yet to be received)

Notes:

- (1) The season shown is the season starting in 1 December each year and ending at 30 November each year
- (2) Project codes are: SRP_SEED is tag seeding into farms, SRP_TAG is the surface fishery tagging project, SRP_TAGA is the Australian east coast tagging; SRP_TAGJ is the Japanese tagging in the Indian Ocean; and SRP_TAGN is New Zealand tagging.
- (3) The column "Farming Related Recaptures" refers to tag captures from the farm in the case of the SRP_SEED project and the wild capture (before to going into the farm) for all other data.
- (4) Similar to "2" above, the data for the fishing seasons columns relate to the farm capture date for the SRP_SEED project and the wild capture date (before to going into the farm) for all other data.

Project Code	Release Area	Calendar Year of Release	Month of Release	Total Number of Fish Tagged	Total Number of Recaptures	Number of Recaptures in 2000/01	Number of Recaptures in 2001/02	Number of Recaptures in 2002/03	Number of Recaptures in 2003/04	Number of Recaptures in 2004/05	Number of Recaptures in 2005/06	Number of Recaptures in 2006/07	Number of Recaptures in 2007/08	Commercial Fishing Recaptures	Research Fishing Recaptures	Amateur Fishing Recaptures	Farming Related Recaptures	Other Recaptures
SRP_SEED	Area 03	2003	12	26	7	0	0	0	6	0	1	0	0	1	0	0	6	0
SRP_SEED	Area 03	2004	1	39	22	0	0	0	22	0	0	0	0	0	0	0	22	0
SRP_SEED	Area 03	2004	2	50	13	0	0	0	12	0	0	1	0	0	0	1	12	0
SRP_SEED	Area 03	2004	3	90	66	0	0	0	66	0	0	0	0	0	0	0	66	0
SRP_SEED	Area 03	2004	4	19	5	0	0	0	5	0	0	0	0	0	0	0	5	0
SRP_SEED	Area 03	2004	12	20	5	0	0	0	0	5	0	0	0	0	0	0	5	0
SRP_SEED	Area 03	2005	1	91	21	0	0	0	0	19	2	0	0	0	0	2	19	0
SRP_SEED	Area 03	2005	2	110	48	0	0	0	0	47	1	0	0	0	0	1	47	0
SRP_SEED	Area 03	2005	3	90	36	0	0	0	0	35	1	0	0	0	0	0	36	0
SRP_SEED	Area 03	2005	4	30	22	0	0	0	0	22	0	0	0	0	0	1	21	0
SRP_SEED	Area 03	2006	1	49	12	0	0	0	0	0	12	0	0	0	0	0	12	0
SRP_SEED	Area 03	2006	2	139	24	0	0	0	0	0	24	0	0	0	0	2	22	0
SRP_SEED	Area 03	2006	3	140	31	0	0	0	0	0	31	0	0	0	0	0	31	0
SRP_SEED	Area 03	2006	12	40	11	0	0	0	0	0	0	11	0	0	0	0	11	0
SRP_SEED	Area 03	2007	1	30	4	0	0	0	0	0	0	4	0	0	0	0	4	0
SRP_SEED	Area 03	2007	2	100	28	0	0	0	0	0	0	28	0	0	0	0	28	0
SRP_SEED	Area 03	2007	3	100	44	0	0	0	0	0	0	44	0	0	0	0	44	0
SRP_SEED	Area 03	2007	4	30	21	0	0	0	0	0	0	21	0	0	0	0	21	0
SRP_SEED	Area 03	2008	1	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SRP_SEED	Area 03	2008	2	112	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SRP_SEED	Area 03	2008	3	156	2	0	0	0	0	0	0	0	2	0	0	0	2	0
SRP_TAG	Area 02	2002	12	51	3	0	0	1	1	1	0	0	0	1	1	0	1	0
SRP_TAG	Area 02	2004	1	35	9	0	0	0	0	4	3	2	0	3	1	0	5	0
SRP_TAG	Area 02	2004	12	50	1	0	0	0	0	0	0	1	0	0	0	0	1	0
SRP_TAG	Area 02	2005	1	137	3	0	0	0	0	0	0	3	0	1	0	0	2	0
SRP_TAG	Area 02	2006	1	62	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SRP_TAG	Area 02	2006	12	72	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SRP_TAG	Area 02	2007	1	139	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SRP_TAG	Area 02	2008	1	29	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SRP_TAG	Area 03 (SA)	2002	4	464	93	0	0	12	66	10	3	2	0	15	2	0	75	1
SRP_TAG	Area 03 (SA)	2002	12	4284	795	0	0	365	327	77	24	2	0	54	2	4	731	4
SRP_TAG	Area 03 (SA)	2003	3	1928	576	0	0	6	451	97	19	3	0	44	0	1	529	2
SRP_TAG	Area 03 (SA)	2003	4	200	51	0	0	0	34	11	6	0	0	3	1	0	47	0
SRP_TAG	Area 03 (SA)	2003	12	4914	1260	0	0	0	347	554	271	85	3	98	8	2	1151	1
SRP_TAG	Area 03 (SA)	2004	4	80	23	0	0	0	0	16	6	1	0	3	0	0	20	0
SRP_TAG	Area 03 (SA)	2004	12	3394	870	0	0	0	0	125	523	219	3	50	27	6	787	0
SRP_TAG	Area 03 (SA)	2005	1	5642	1265	0	0	0	0	94	814	352	5	81	55	19	1108	2
SRP_TAG	Area 03 (SA)	2005	12	4385	597	0	0	0	0	0	232	361	4	22	8	6	560	1
SRP_TAG	Area 03 (SA)	2006	1	5495	531	0	0	0	0	0	104	422	5	44	9	13	463	2
SRP_TAG	Area 03 (SA)	2006	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SRP_TAG	Area 03 (SA)	2006	12	3322	106	0	0	0	0	0	0	98	8	4	16	12	74	0
SRP_TAG	Area 03 (SA)	2007	1	4724	91	0	0	0	0	0	0	83	8	10	7	14	58	2
SRP_TAG	Area 03 (WA)	2002	1	522	15	0	1	1	12	1	0	0	0	0	0	0	14	1
SRP_TAG	Area 03 (WA)	2002	2	1655	134	0	1	39	69	19	4	2	0	21	1	3	108	1
SRP_TAG	Area 03 (WA)	2002	3	678	29	0	0	2	25	1	1	0	0	1	1	0	27	0
SRP_TAG	Area 03 (WA)	2003	1	1760	435	0	0	7	277	110	35	5	1	63	4	1	366	1
SRP_TAG	Area 03 (WA)	2003	2	3310	444	0	0	10	277	111	39	5	2	61	7	0	375	1
SRP_TAG	Area 03 (WA)	2003	3	1614	89	0	0	2	48	27	10	2	0	9	0	0	78	2
SRP_TAG	Area 03 (WA)	2004	1	2386	325	0	0	0	3	138	118	65	1	46	3	1	273	2
SRP_TAG	Area 03 (WA)	2004	2	2848	382	0	0	0	11	157	164	49	1	75	4	2	294	7
SRP_TAG	Area 03 (WA)	2005	1	3703	162	0	0	0	0	6	61	93	2	21	1	1	134	5
SRP_TAG	Area 03 (WA)	2005	2	2794	78	0	0	0	0	2	25	51	0	9	1	0	63	5

**Surface Fishery Tagging Program
Draft Budget for 2009**

This proposed budget assumes that no tagging will be conducted during 2009 and the budget is therefore only directed at continued recovery of tags.

Expenditure Type	Budget \$
Coordination Expenses	
Tag purchase	0
Tag rewards	60,000 ¹
Tag collection expenses	8,800 ²
Tag collection on freezer boats	13,500
Miscellaneous	7,500 ³
Tag Deployment Expenses	
Tag placement contract	0
Vessel charter	0
Total Expenditure	89,800

¹ This estimate assumes that 3,000 tags will be returned in 2009 at a cost of \$20/tag. It assumes that non-farm recoveries and seeded tag recoveries do not decline and that farm recoveries will be down to 60% of the 2007 level. The 3,000 tags includes an allowance for 550 tags from 2008 being reported or having the rewards claimed in 2009. This lag often occurs for some of the farms.

² The Secretariat contracts an agent at Port Lincoln to recover tags and provide recapture details. The agent also promotes tag recovery to industry. The budget assumes 2,400 tags will be returned through this mechanism and includes a \$500 increase in the annual fee (to \$4,000) and a 50c increase in the per tag fee (to \$2.00).

³ This includes provision for freight and mailing costs for reward materials and purchase of measuring boards etc.