

みなみまぐろ保存委員会

CCSBT-ESC/1208/07

Surface Fishery Tagging Program – an update

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 finished in the 2006/07 season. 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 and 2009/10 were tagged as part of the operation of other projects.

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	1	83
2009/10	94	0	94

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

2. Tag Recoveries

As at 20 June 2012, a total of 11,227 SBT had been reported as being recaptured from the surface fishery tagging program. Most (9,797) of these fish were recovered from the sea cages in Port Lincoln tuna farms. 1,430 of the total SBT recaptures were recaptured from the wild, including 1,107 commercial fishing captures, 166 while conducting tagging in the surface fishery, 103 from amateur fishers and 54 from other sources including tags found on beaches.

Summary information showing the number of recaptures by source is shown in Attachment A. Only 95 SBT that were tagged in the surface fishery were recaptured during the 2010/11 season. This comprised 62 SBT from farms and 33 SBT from the commercial wild fishery. As was expected, there was a large decline (72%) in the number of farm recaptures from the previous season. The number of SBT recaptured in the wild fishery declined by 39% from the previous season.

Attachment B shows the straight line movement pattern as at June 2012 for fish tagged in the surface fishery (Figure 1^1) and for fish tagged in the other SRP projects (Figure 2).

Tag recovery activity in 2011/12 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.
- 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.
- 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 2013 program

A draft budget for the 2013 tagging program of only \$3,000 is provided at Attachment C. It is a 72% reduction from the 2012 budget due to a reduction in the expected number of recaptures.

Prepared by the Secretariat

¹It should be noted that there are reasons to be less confident in the two movements shown in Figure 1 with a north easterly direction to the western Pacific and the northward movement in Figure 1 to the Banda Sea. See CCSBT-ESC/0809/07 and CCSBT-ESC/0909/05 for details.

Source of Recaptures for the SRP Tagging Projects (Includes all data received by the Secretariat as at 20 June 2012 - Most recaptures for 2011/12 have yet to be received)

(1) The season shown is the season starting on 1 December each year and ending at 30 November each year.

- (2) Project codes are: SRP_SEED (tag seeding into farms), SRP_TAG (surface fishery tagging project), SRP_TAGA (Australian east coast tagging); SRP_TAGJ (Japanese tagging in the Indian Ocean); and SRP_TAGN (New Zealand tagging).
- (3) With the exception of the New Zealand charter fleet, the country/fishing entity listed below is the vessel flag unless the flag is not known, in which case the crew/finder's nationality is used.
- (4) The recapture in the highlighted cell is being investigated. It seems more likely that this SBT was caught in the previous season than the season reported with the recapture.

				Found	Farming	g Commercial Capture Fisheries			<u>.</u>							
		Research	Recreational	Found on			Taiwan									Unknown
Project	Recapture	Fishing	Fishing	Beach			(via Mauritius			New						
Code	Season			Deach	Australia	Australia	agents)	(other)	Japan	Zealand	Korea	Indonesia	Philippines	Thailand	Other	
SRP_SEED	2004	0	1	0	110	0	0	0	0	0	0	0	0	0	0	0
SRP_SEED	2005	0	2	0	126	0	0	0	0	0	0	0	0	0	0	0
SRP_SEED	2006	0	4	0	67	0	0		0	0		0	0	1	0	0
SRP_SEED	2007	0	0	0	110	0	0	0	0	0	0	0	0	0	0	0
SRP_SEED	2008	0	0	0	169	0	0	0	0	0	0	0	0	0	0	0
SRP_SEED	2009	0	0	0	120	0	0	0	1	0	0	0	0	0	0	0
SRP_SEED	2010	0	0	0	80	0	0	0	0	0	0	0	0	0	0	0
SRP_SEED	2011	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
SRP_TAG		0	0	0	0	0	4	0	0	0	0	0	0	0	0	0
SRP_TAG	2002	0	0	1	0	0	1	0	0	-	0	0	0	0	0	0
SRP_TAG	2003	13	5	5	391	3	13		13		-	1	0	0	0	0
SRP_TAG	2004	7	5	7	1789	3	53		29		-	1	0	2	0	3
SRP_TAG	2005	51	11	9	1345	4	50		67	0	-	0	-	0	0	0
SRP_TAG	2006	57	36	10	2093	2	155		77	1	7	2	-	5	0	2
SRP_TAG	2007	38	25	5	1843	4	16		91	0		6	-	2	3	-
SRP_TAG	2008	0	11	7	1391	1	59		60			14		0	0	0
SRP_TAG	2009	0	5	0	664	0	14	-	40		5	14	. 0	0	0	0
SRP_TAG	2010	0	3	4	219	2	13		21	14	0	3		-	1	0
SRP_TAG	2011	0	0	0	62	0	0		12		0	5	-	0	1	0
SRP_TAG	2012	0	2	1	0	0	0		0	_	0	5	0	0	0	0
SRP_TAGA	2002	0	0	0	0	0	0	-	1	0	0	0	0	0	0	0
SRP_TAGA	2003	0	0	1	0	0	0	-	0	1	0	0	0	0	0	0
SRP_TAGA	2004	0	0	0	0	0	0	-	1	1	0	0	-	0	0	0
SRP_TAGA	2005	0	0	0	0	0	0	0	2	0	0	0	•	0	0	0
SRP_TAGA	2006	0	1	0	1	0	0	-	2	0	0	0	Ŧ	0	0	0
SRP_TAGA	2007	0	0	0	0	0	0		1	1	0	0	-	0	0	0
SRP_TAGA	2010	0	0	0	0	0	0	0	0	2	-	0	•	0	0	0
SRP_TAGJ	2002	0	0	0	0	0	1	0	2	0	-	0	0	0	0	0
SRP_TAGJ	2003	0	0	0	3	-	0	-	8	-		0	-	0	0	0
SRP_TAGJ	2004	0	0	0	3	0	1	0	13	-	-	0	Ŧ	0	0	0
SRP_TAGJ	2005	0	0	0	5	0	0	-	11	0	-	0	Ŧ	0	0	0
SRP_TAGJ	2006	0	0	0	1	0	1	0	6	-	-	0	°	0	0	0
SRP_TAGJ	2007	0	0	0	3	0	0	-	4	0	0	0	0	0	0	0
SRP_TAGJ	2008	0	0	0	1	0	0	-	0	-		0	-	0	0	0
SRP_TAGJ	2009	0	0	0	0	0	0	0	1	0	-	1	0	0	0	0
SRP_TAGJ	2010	0	0	0	0	0	0	-	0	-	-	3	0	0	0	0
SRP_TAGN	2005	0	0	0	1	0	0	-		•		0	-	0	0	0
SRP_TAGN	2007	0	0	0	2	0	0	0	0	-	0	0	-	0	0	0
SRP_TAGN	2008	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0

Notes:

Attachment B

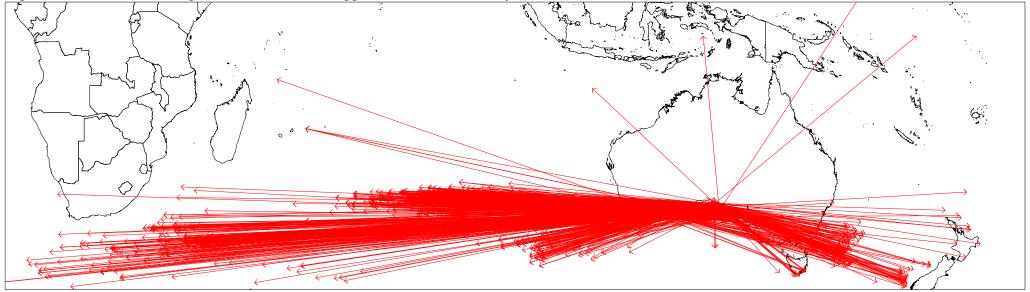
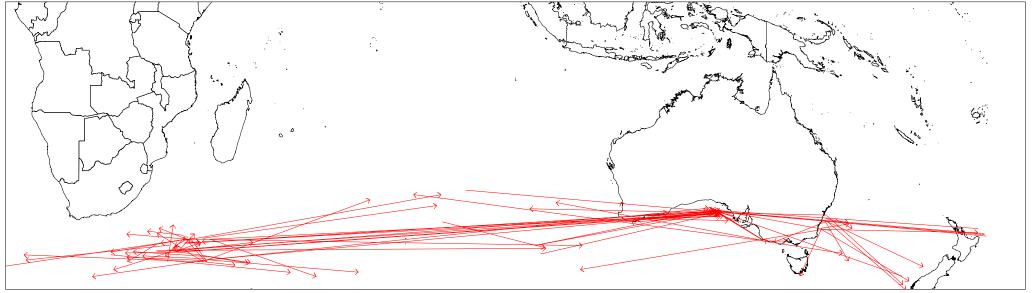


Figure 1: Movement of recaptured SBT that were tagged in the surface fishery.

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



CCSBT Tagging Program Draft Budget for 2013

This proposed budget assumes that no tagging will be conducted during 2013 and the budget is therefore only directed at continued recovery of tags.

Expenditure Type	Budget \$				
Coordination Expenses					
Tag purchase	0				
Tag rewards	750^{1}				
Tag collection expenses	$2,000^2$				
Tag collection on freezer boats	0				
Miscellaneous	250^{3}				
Tag Deployment Expenses					
Tag placement contract	0				
Vessel charter	0				
Total Expenditure	3,000				

¹ Few (if any) farm recaptures are expected in 2013, so significantly fewer rewards will be required than in the past. The budget assumes payment of \$15/tag for up to 50 tags (25-50 SBT) and would be mostly for wild recaptures. It should be noted that the Secretariat has stocks of physical rewards (t-shirts, caps etc.) remaining so that rewards can be provided for more than this number of tags if required.

² In the past, the Secretariat has contracted an agent at Port Lincoln to recover tags and provide recapture details. The agent also promoted tag recovery to industry. The cost of this was an annual fee of \$3,500 plus \$1.50 per tag. However, very few tag returns are expected in Port Lincoln for 2013, so it is proposed that the annual fee be abolished and that an increased price per tag (to \$20) be payed to the agent. The increased price per tag may help to "flush out" previously caught tags, hence the provision for 100 tag recoveries here.

³ This includes provision for freight and mailing costs for reward materials etc.