

みなみまぐろ保存委員会

# CCSBT-ESC/1107/05

# 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 3 June 2011, a total of 11,081 SBT had been reported as being recaptured from the surface fishery tagging program. Most (9,735) of these fish were recovered from the sea cages in Port Lincoln tuna farms. 1,346 of the total SBT recaptures were recaptured from the wild, including 1,027 commercial fishing captures, 166 while conducting tagging in the surface fishery, 101 from amateur fishers and 52 from other sources including tags found on beaches.

Summary information showing the number of recaptures by source is shown in Attachment A. The total number of surface fishery tags that were recaptured in the 2009/10 season declined by 68% from the number of recaptures in 2008/09. The decline was 67% for farm recaptures and 76% for wild recaptures. The higher decline for wild recaptures could be an artefact of the delay in receiving recaptures from this source.

Maps showing the straight line movement pattern of recaptures have not been produced this year as these trends do not differ from trends for last year, which were provided in CCSBT-ESC/1009/05.

Tag recovery activity in 2010/11 consists of the following elements (note that freezer vessel observation was not conducted):

- 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 2011 program

A draft budget for the 2012 tagging program is provided at Attachment B. It represents a 62% reduction from the 2011 budget. The draft budget assumes continued efforts for tag recovery, but no tag deployment. The budget also assumes that tag seeding of farms will not continue.

#### Source of Recaptures for the SRP Tagging Projects (Includes all data received by the Secretariat as at 3 June 2011 - Recaptures for 2010/11 have yet to be received)

#### Notes:

(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.

	Farming Commercial Capture Fisheries															
		Research	Recreational	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	0	0	1	0	0
SRP_SEED	2007	0	0	0	110	0	0	0	0	•	-	0	0	-	-	0
SRP_SEED	2008	0	0	0	169	0	0	0	0	v	-	0	Ű	-	-	-
SRP_SEED	2009	0	0	0	120	0	0	0	1	0	-	0	•	-	-	-
SRP_SEED	2010	0	0	0	80	0	0	0	0	v	-	0	-	-	-	-
SRP_TAG		0	0	0	0	0	4	0	0	-	-	0	-	-	-	0
SRP_TAG	2002	0	0	1	0	0	1	0	0	Ŭ	-	0	Ŭ	-	-	0
SRP_TAG	2003	13	5	5	391	3	13	4	13		-	1	0	-		0
SRP_TAG	2004	7	5	7	1789	3	53	51	29		-	1	0			3
SRP_TAG	2005	51	11	9	1345	4	50	29	67			0	Ũ	-	-	0
SRP_TAG	2006	57	36	10	2093	2	155	24	77	1	7	2	-			2
SRP_TAG	2007	38	25	5	1843	4	16	25	91	0	-	6	-			0
SRP_TAG	2008	0	11	7	1391	1	59	12	60			14	0	-	-	0
SRP_TAG	2009	0	5	0	664	0	13	15	40		5	14	0	-	-	0
SRP_TAG	2010	0	3	3	219	0	0	0	4	13		2	-		-	0
SRP_TAGA	2002	0	0	0	0	0	0	0	1	0		0	÷	-	-	-
SRP_TAGA	2003	0	0	1	0	0	0	0	0		0	0	-	-		-
SRP_TAGA	2004	0	0	0	0	0	0	0	1	1	0	0	•	-	-	-
SRP_TAGA	2005	0	0	0	0	0	0	0	2	-	0	0	Ŭ	-	-	-
SRP_TAGA	2006	0	1	0	1	0	0	0	2	-	-	0	•	-	-	-
SRP_TAGA	2007	0	0	0	0	0	0	0	1	1	0	0	-	-	-	-
SRP_TAGA	2010	0	0	0	0	0	0	0	0	-		0	•	-	-	-
SRP_TAGJ	2002	0	0	0	0	0	1	0	2	-	-	0	Ű	-	-	0
SRP_TAGJ	2003	0	0	0	3	0	0	0	8	-	-	0	Ũ	-	-	0
SRP_TAGJ	2004	0	0	0	3	0	1	0	13	-	-	0	0	9	-	•
SRP_TAGJ	2005	0	0	0	5	0	0	0	11	0	-	0	Ű	-	-	0
SRP_TAGJ	2006	0	0	0	1	0	1	0	6	-	-	0	0	-	-	0
SRP_TAGJ	2007	0	0	0	3	0	0	0	4	•	-	0	Ű	-	-	-
SRP_TAGJ	2008	0	0	0	1	0	0	0	0	•	-	0	•	-	-	-
SRP_TAGJ	2009	0	0	0	0	0	0	0	1	0	-	1	0	-	-	-
SRP_TAGJ	2010	0	0	0	0	0	0	0	0	v	-	1	0	-	-	-
SRP_TAGN	2005	0	0	0	1	0	0	-	0	v	-	0	-	-	-	-
SRP_TAGN	2007	0	0	0	2	0	0	0	0	-		0	-			
SRP_TAGN	2008	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0

#### CCSBT Tagging Program Draft Budget for 2012

This proposed budget assumes that no tagging will be conducted during 2012 and the budget is therefore only directed at continued recovery of tags.

Expenditure Type	Budget \$				
Coordination Expenses					
Tag purchase	0				
Tag rewards	$5,200^{1}$				
Tag collection expenses	$3,850^2$				
Tag collection on freezer boats	$0^3$				
Miscellaneous	$1,500^4$				
Tag Deployment Expenses					
Tag placement contract	0				
Vessel charter	0				
Total Expenditure	10,550				

<sup>&</sup>lt;sup>1</sup> At the time of preparing this paper, no information was available on actual tag recoveries for 2011. The cost estimates presented here are therefore imprecise and are based on a tag recovery rate of  $\frac{1}{2}$  of that achieved in 2010. Consequently, this estimate assumes that 260 tags will be returned in 2012 at a cost of \$20/tag.

<sup>&</sup>lt;sup>2</sup> The Secretariat contracts an agent at Port Lincoln to recover tags and provide recapture details. The agent also promotes tag recovery to industry. The cost is an annual fee of \$3,500 plus \$1.50 per tag. For 2012, a tag return rate of approximately  $\frac{1}{2}$  of the 2010 farm tag return rate has been assumed.

<sup>&</sup>lt;sup>3</sup> There will be no freezer vessel sampling during 2012.

<sup>&</sup>lt;sup>4</sup> This includes provision for freight and mailing costs for reward materials etc.