

## Report of activities for conventional and archival tagging and recapture of southern bluefin tuna by Japan in 2008/2009

日本によるミナミマグロ標識放流計画および標識再捕状況

Osamu SAKAI and Tomoyuki ITOH

境 磨 ・ 伊藤智幸

National Research Institute of Far Seas Fisheries

遠洋水産研究所

### 要約

日本は、2008年度に曳縄による加入量調査で漁獲されたミナミマグロ1歳魚274個体に対し通常標識の装着・放流を実施した。そのうち134個体にはアーカイバルタグの装着放流も行った。2008年8月から2009年7月までに、日本の延縄漁船より44個体分のミナミマグロ通常標識が再捕報告された（CCSBT標識35個体分59本、CSIRO標識9個体分12本）。また、3個体分のアーカイバルタグが回収された。過去8年間に日本は、外洋にて401尾の大型個体に、豪州沿岸にて154尾の小型個体にアーカイバルタグを装着し放流した。それらのうち19個体分のアーカイバルタグが現在までに回収されている。

### Summary

Japan conducted tag and release activity for the mainly age-1 southern bluefin tuna (SBT) during the trolling survey in December 2008 - January 2009. Total of 274 SBT were tagged two CCSBT conventional tags, and 134 of these fishes were also tagged archival tag. From Japanese longline vessels, 44 individuals with conventional tags were recovered between August 2008 and July 2009 (59 CCSBT tags from 35 individuals and 12 CSIRO tags from 9 individuals). In addition, 3 archival tags were also recovered from the Japanese longline vessels. For the past 8 years, Japan released 401 archival tags on large SBT from offshore by Japanese longline vessels and 154 archival tags on juvenile SBT from south coast of Western Australia. Until now, 19 of them has been recaptured.

## **1. Japanese tagging activity in 2008/2009**

In December 2008 and January 2009, the trolling survey was conducted in order to provide the index of recruitment level and explore the distribution pattern of age-1 SBT (Itoh 2009). During this survey, we tagged southern bluefin tuna (SBT) mainly in age-1 which had no or little damage on its mouth. These SBT were caught by the trolling or poling. This survey was conducted from 3 to 12 December 2008 (Leg 1) and from 17 to 29 January 2009 (Leg 2). The survey area of Leg 1 and Leg 2 were the east and south coast of Western Australia (32.0-35.5S, 114.5-118.0E and 34.0-35.5S, 117.7-121.4E), respectively (Fig. 1). Total of 274 SBT individuals (43-69 cm FL, with mean of 51.5 cm FL) were inserted CCSBT conventional tags in between pterygiophore at the base of the second dorsal fin (Fig. 2). 134 individuals of them were also tagged the archival tag (LTD2310; Lotek Wireless Inc.) into the body cavity and the incision was closed with sutures. Finlets were collected from 270 individuals of those tagged fishes for the future analysis before release.

## **2. Tag recapture in 2008/2009**

When Japanese commercial longline vessels were landing their SBT, some researchers from NRIFS visited those vessels to recover the recaptured tag. Then, they also requested fishermen to report the tag recapturing in other cruises. Researchers visited following major SBT landing ports; Shimizu port, Yaizu port and Ooigawa port.

From August 2008 to July 2009, CCSBT conventional tags from the total of 35 individuals (59 tags) which released in the CCSBT tagging activities were recovered. CSIRO tags from the total of 9 individuals (12 tags) were also recovered. In addition, archival tags which tagged by the CSIRO (2 individuals) and NRIFS (1 individual) were also recovered. These recapture information was reported to the CCSBT secretariat.

For the past 8 years, Japan released 401 archival tags on larger SBT from offshore by Japanese longline vessels and 154 archival tags on juvenile SBT from south coast of Western Australia. Until now, 19 of them have been recaptured.

## **3. Plan for 2009/2010 activity**

We have a plan to conduct the trolling survey in December 2009 and January 2010 similarly to 2008/09 season. We ask permission to use CCSBT conventional tag for the tagging during the trolling survey as well as in 2009-2010.

## **Reference**

Itoh, T. 2009 Report of the piston-line trolling survey in 2007/2008. CCSBT-ESC/0909/32.

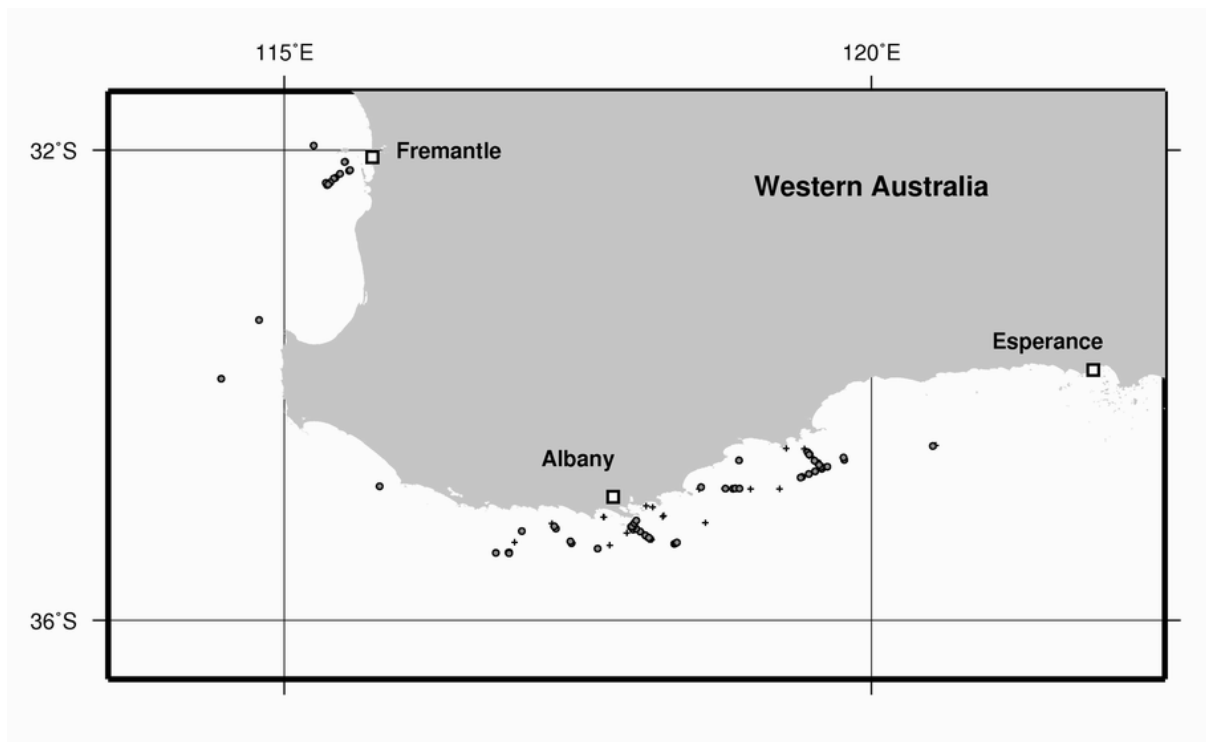


Fig. 1 Locations of SBT with conventional tags (and archival tags) released during the trolling survey in December 2008 – January 2009 (n=274).

Locations we released with archival tags (gray circles) and with only conventional tags (black crosses) are provided.