



Department of  
Natural Resources  
and Environment

**MAFRI PROJECT SPOTLIGHT**  
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## **QUEENSCLIFF SCIENTISTS HOST INTERNATIONAL WORKSHOP FOR AGEING SOUTHERN BLUEFIN TUNA.**

Southern bluefin tuna (SBT) are a prized delicacy in the Japanese Sashimi market, where prices of up to \$AUD 100 per kilogram can be obtained.

To establish a consistent way of estimating the age of the tuna across the various international laboratories involved in ageing SBT, the Commission for the Conservation of Southern Bluefin Tuna (CCSBT) called on MAFRI's internationally recognised Central Ageing Facility (CAF) to host a workshop. In CAF's 10 years of operation it has developed into a world-class facility with state-of-the-art "production" ageing techniques and methodologies that have been applied to over 200 species of fish.

The CAF routinely ages fish from key national and international fisheries by determining the numbers of the growth increments or rings on their otoliths (ear bones). CAF's particular expertise is to provide age estimations from species where interpretation of otoliths is extremely difficult. SBT is considered to be one of these "difficult" species. Since 1999, CAF has aged approximately 800 SBT otoliths per year, which are obtained from fish caught in Indonesia and off the coast of southern Australia.

Mr Kyne Krusic-Golub and Dr Sonia Talman from the CAF hosted the CCSBT Direct Age Estimation Workshop from 11 to 14 June 2002. Fifteen scientists from Australia, New Zealand, Japan, Republic of Korea and Taiwan attended the workshop to establish a standard method for estimating the age of SBT. The workshop covered a range of technical areas including otolith preparation techniques and interpretation of otolith morphology.

As part of the workshop, all participating nations exchanged SBT otoliths that were read before workshop began. At the completion of the workshop, these otoliths were read again by all participants. The success of the workshop was evidenced by a decrease in variation between readers and in the tendency to over-estimate the age of young fish.

The CCSBT will publish a manual that will detail the procedures and protocols agreed to by the workshop. This will help to improve the consistency in age data for SBT from various international laboratories. One of the main recommendations outlined in the manual was the adoption of CAF's procedures for preparing SBT otoliths, as this preparation method gave greater clarity for the readers.

The adoption of the methods outlined in the manual will increase the precision of aging SBT which, in turn, will help to ensure the sustainability of this valuable fishery.

For more information about this project, please contact Sonia Talman at MAFRI on (03) 52580111.