

Proposed use of CCSBT Research Mortality Allowance to facilitate electronic tagging of juvenile and adult SBT as part of Australia's contributions to the CCSBT SRP in 2005-06

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Abstract

A total of 17 tonnes of research mortality allowance is requested to continue two significant tagging initiatives aimed at the examining spatial dynamics of both juvenile and adult southern bluefin tuna as part of the CCSBT Scientific Research Program.

Proposal

As part of the CCSBT Scientific Research Program, Australia is proposing to continue two significant tagging initiatives in 2006-07 aimed at the examining spatial dynamics (movements, mixing, residency, regional fidelity and frequency of spawning migrations) of both juvenile and adult southern bluefin tuna (SBT).

The first, a Global Spatial Dynamics project involves archival tagging of juvenile (2-4 year old) SBT throughout their range (i.e. from South Africa to New Zealand) with the objective of determining movement and mixing rates, and periods of residency in different parts of this range. Polacheck et al (2003, 2004a, 2005a, 2006) provide full descriptions of the project and progress to date. The project has been developed as a collaboration between New Zealand, Taiwan and Australia. It remains our hope that the collaborative efforts will be expended to include collaborations with other CCSBT members (Polacheck et al 2004b, 2005b).

In 2006-07, it is planned to extend archival tagging operations to the western Indian Ocean and possibly off the east coast of Australia depending upon the availability of suitable tagging platforms and availability of juvenile fish. This will likely see an increase in the number of fish tagged in this year – up to a total of 150. With this being the objective, the CCSBT is requested to provide 12 tonnes of research mortality allowance for the project.

The second, a Tasman Sea Pop-Up and Conventional tagging project, involves tagging of adult SBT off the east coast of Australia. Results of the progress to date are provided in Paterson et al (2005) and Gunn et al 2006. The results provide the first records of interoceanic migration and spawning in adult SBT. The success of the project in tagging significant numbers of large SBT, and reductions in mortalities associated with tagging, suggest that ongoing tag releases of large SBT in the Tasman Sea are feasible and cost effective. Thus, Australia proposes to continue the tagging program and possibly also release some pop-up tags in the Western Indian Ocean in conjunction with Global Spatial Dynamics Project contingent upon the availability of a suitable platform. The number of tags available to this project in 2006/2007 is more limited and thus a smaller amount of quota is being requested. The CCSBT is requested to allocate 5 tonnes of Research Mortality

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