

REPORT ON SOUTHERN BLUEFIN TUNA FISHERY
SIZE MONITORING PROGRAM FOR THE EASTERN
SECTOR OF THE AUSTRALIAN FISHERY 2004/05

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Summary

Size data from the landed catch of southern bluefin tuna in NSW during 2005 were collected. These data, comprising individual landed weights (gilled and gutted) cover the period May 2005 to November 2005 so are over two fiscal years but logged as 2005 to avoid confusion.

The strict administrative requirements in the east coast longline fishery and the farm usage in South Australia, resulted in a lack of SBT quota being available for use on the NSW coast in the calendar year 2005. Hence only a few vessels landed SBT. The size data base for SBT in NSW probably accounted for 60% of the total number of fish landed during the year.

The size data base has been incorporated into an Excel spreadsheet and delivered to the appropriate scientific authority, BRS as previously.

Background and Need

Comprehensive size composition data are essential for any meaningful analyses of fish stocks. This project is only one part of the Australia wide SBT size monitoring program. The size database for catches of southern bluefin tuna in Australia is unbroken from the early 1960's and has been an integral part of all SBT population analyses over the last 25 or so years.

There is a significant chance that more SBT quota could become available for catch off the NSW south coast in future years. This quota would probably be caught by NSW based longliners who have had little quota in the past 2 – 3 years because of the high utilization rate in South Australian farms. Any catches of SBT need to be logged given the present state of the spawning stock.

Objectives

Collect scientifically suitable size (length and/or weight) data for integration into the SBT population models. This will involve extensive collections of individual weight data from processor records.

Additionally, physical length sampling of SBT catches at export establishments will be undertaken if sufficient quota is available to generate large, individual unloadings in the east coast fishery.

If sufficient quota is available then an otolith collection system can also be introduced for incorporation into the SBT otolith archiving system.

Methods

Suitable physical sampling for length and/or weight and extraction from processor hard copy or electronic records will be undertaken.

Results and Discussion

The longline fishing effort for SBT off the NSW coast has been reducing over the last few years due initially to a lack of available quota because of the high farm usage in SA. Additionally, the new administrative requirements before a fishing campaign can begin, have placed extra strains on fishing operations. Hence quota previously 'resident' on the east coast has been leased to SA tuna farm operators resulting in even less quota being available for east coast SBT longlining.

Size data is still necessary for scientific purposes even in low catch environments. Therefore individual size data (length and/or weight) is collected where possible. In low catch situations it is most cost effective to collect individual weight data from processors or individual operators (fisher's) records. The individual weights of approximately 60% of all the landed catch of SBT on the NSW coast have been collected and incorporated into a suitable data base for use by BRS and CSIRO.

This result wholly satisfies the main aim of the program i.e. to collect a scientifically representative sample of the landed catch, by size of SBT off the NSW coast.

There was insufficient quota available to generate large individual unloadings in the east coast SBT fishery to justify length and otolith collections.

The amount of quota available to east coast operators is likely to remain small, but can be subject to quick changes and the situation needs to be monitored as it is an important part – scientifically – of the overall fishery.

Benefits / Management Outcomes

The size data in the hands of the appropriate agencies – BRS and CSIRO - are incorporated into the overall SBT size data base and used in all of the population analyses. These size data are an essential ingredient of all their scientific studies. Hence benefits will flow to the industry and community at large as a result of better research outcomes.

Conclusions

A scientifically acceptable size data base for the longline catches of SBT off the east coast has been established and passed to BRS. In future years it is impossible to be certain ahead of time how much quota could become available for east coast longline use, however it is important that this sector of the fishery is monitored for the size of SBT caught, particularly if a larger quota becomes available.

Appendices

Graphs of the NSW southern bluefin tuna catch by size, for 2003, 2004 and 2005 are attached as appendices.

