
DRAFT AGENDA FOR THE WORKING PARTY ON TAGGING DATA ANALYSIS

Please note, all scientists are encouraged to obtain the tagging data, undertake analyses and contribute papers.

1. OPENING OF THE MEETING

2. ADOPTION OF THE AGENDA

3. STATUS OF THE INDIAN OCEAN TAGGING PROGRAMME RTTP-IO

- Overview and current status of the of the RTTP-IO and small-scale projects, including data analysis and storage, and an examination of the recoveries from the different tagging projects, by recovery platform, with reference catch and associated reporting rate (RTTP-IO with data prepared by RTTP-IO)

4. STATUS OF THE RTTP-IO data

- Overview and current status of the of the RTTP-IO data including indications of its state of readiness and limitations.

5. ESTIMATING GROWTH

- Results of growth analyses for BET, YFT and SKJ incorporating tagging data (Secretariat)
- Other analyses

6. ESTIMATING TAG SHEDDING RATES and TAG REPORTING RATES

- Examination of data from the double tag work (RTTP-IO) and estimation of tag shedding rates (provisional estimates provided by RTTP-IO)
- Examination of data from the RTTP-IO tag seeding experiments (data prepared by RTTP-IO)
- Estimation of tag reporting rates (provisional estimates provided by RTTP-IO)

7. CRITICAL EXAMINATION OF POTENTIAL EXTERNAL ANALYSES

- Review of the potential of estimating natural mortality, exploitation rates, and other factors using methods other than integrated stock assessment models (WP discussion)

8. MOVEMENT

- Examination of the movement of the yellowfin skipjack and bigeye and its implications for the stock assessments of these species (preliminary analyses provided by the RTTP-IO).

9. EXAMINATION OF THE PERFORMANCE OF INTEGRATED STOCK ASSESSMENT MODELS USING RTTP-IO TAGGING DATA

- An examination of the of the performance of integrated models relating to the stock assessments of for bigeye, yellowfin and skipjack tunas in the Indian Ocean
 - CASAL (Secretariat)
 - SS2 (Aires-Da-Silva and Nishida et al, respectively)
 - other models

10. OTHER ANALYSES:

- Archival tag status: review of the current status of the tagging programme using Archival Tags and the corresponding recoveries (preliminary analyses provided by the RTTP-IO)
- Comparison of tagging programmes: the results from the Indian Ocean compared to the results of the large-scale tuna tagging projects implemented in other oceans.

11. RECOMMENDATION RELATING TO NEW INFORMATION FOR THE ASSESSMENTS OF TROPICAL TUNAS

12. OTHER BUSINESS

- The tagging data users policy

TERMS OF REFERENCE FOR AN IOTC WORKING PARTY ON TAGGING DATA ANALYSIS (WPTDA)

These Terms of Reference for the new Working Party on Tagging Data Analysis reflect the Scientific Committee's acknowledgement of the huge potential of tagging data resulting from the RTTP-IO in revising current knowledge on biology and movement patterns of yellowfin, skipjack and bigeye, and in the assessment of these stocks,

Recognizing that a number of priority issues have been identified for the WPTDA by the Scientific Committee, the WP will undertake the following:

Analyses of the tagging data (together with other IOTC data such as catch and effort from the fishing fleets) in particular:

- To estimate the parameters of growth models for the three species.
- To estimate tag shedding rates.
- To estimate tag reporting rate for the necessary recovery platforms.
- To estimate fishing mortality and hence exploitable population sizes for the different fisheries for each species, using direct methods and integrated stock assessment models.
- To estimate the transfer rates between different regions of the Indian Ocean with the use of stock assessment models with spatial structure.
- To facilitate and manage the incorporation of the tagging data into stock assessments models.
- To discuss indicators of mixing between tagged and untagged tuna populations.
- To compare the results of the RTTP-IO with those from projects in other oceans.

ANALYSIS OF THE TAGGING-RECOVERY OF THE IOTC (FROM IOTC-2007-SC-R)

The different tagging operations done by IOTC (RTTP-IO, Small-scale tagging and tag seeding) now are reaching a phase where they can be exploited by the scientific community.

The analysis of the tagging-recovery data necessitates a preamble: the preparation of different clean databases according to the different scientific objectives. To achieve this goal, the PMU of the RTTP and the IOTC will have to verify and validate the tagging data and combine these data with ancillary data coming from various sources (i.e. reference catches, tag-seeding experiments, etc.). Then datasets, suitable for different analyses, will be prepared and documented by the IOTC and RTTP, some with the help of external experts. The preparation of the different databases according to the scientific objectives requires different amount of work. Therefore these data sets cannot be ready at the same time.

Integrated stock assessment models require extended computer time to be completed. Therefore, it is often not possible to finalise all the analyses during the limited time available to the working parties. Some integrated models still have some difficulties to integrate the spatial component; and more than one model will need to be tried.

Considering this situation, the best scenario will be:

- A preparatory work in order to obtain the data sets necessary for the different analysis.
- A reactivation of the Working Party on Tagging which will hold a new meeting on June 30-July 4 2008.
- An intercessional preparatory work including the necessary data preparation and runs of integrated stock assessment models to be completed at the IOTC headquarters and fully presented at the Working Party on Tagging.
- Further work as necessary will be completed and presented at the 2008 meeting of the WPTT (to be held on October 9-17th 2008) including an assessment of the status of the tuna stocks integrating the tag recovery data.

In terms of data preparation to fulfil these overall requirements:

- 1) A dataset for each species on growth;
- 2) A dataset with all recoveries from double-tagged fish to assess the tag shedding rates;
- 3) A dataset for the assessment of the reporting rates;
- 4) A dataset on all the recoveries done by the different tagging projects of the IOTC, by recovery platform, with reference catch and associated reporting rate;
- 5) A spatial and timely distribution of the recoveries as precise as possible with the degree of confidence.

For points 1 to 4, the work must be carried out before July's meeting and for some of them some preliminary analysis could be ready before this meeting. For point 5, the preparation of this dataset will require more work and it might not be ready for July's meeting.