

**MSE Modelling Coordinator (GBYP) Report
of the Atlantic-wide Research Programme on Bluefin Tuna (ICCAT GBYP –
Phase 5)**

by
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Introduction

In 2014 ICCAT began a research initiative for developing Management Strategy Evaluations (MSEs) for Atlantic Bluefin tuna (ABFT) through its “Grande Bluefin Tuna Year Programme” (GBYP). An important step in this process was to establish the GBYP Modelling and MSE Group (referred to here as the Core Modeling Group CMG) to develop a workplan and to initiate the required technical modeling framework. The main objectives of the CMG have been to:

Collate, manage and synthesize new data and information collected through GBYP Program and other appropriate sources;

Facilitate consultation and capacity building on Reference Points, Harvest Strategies and MSE for Bluefin for the SCRS and Commission;

Develop, document and maintain an integrated MSE modelling platform for:

- Examining the relative plausibility of alternative hypotheses about the population structure and dynamics of BFT and fisheries;
- Developing and testing new stock assessment approaches;
- Evaluating alternative harvest strategies and reference points, and;
- Building capacity and understanding of the role of reference points, harvest strategies and MSE in the fisheries monitoring, assessment and management system; and

Facilitate the evaluation, selection and adoption of harvest strategies for bluefin that meet the objectives of ICCAT, as specified by the SCRS and Commission.

Tasks

In April of 2015 the Modelling Coordinator was contracted through the GBYP fiscal year ending February 22, 2016. The tasks and deliverables associated with this contract were:

- 1) Review the 2014 meeting report of the ICCAT GBYP CMG and produce an updated workplan in collaboration with the CMG to be drafted in June 2015, taking into account the approved calendar of SCRS ICCAT meetings, with the following contents but not limited to:

Update of “*the detailed multi-annual work plan*” which includes: objectives, deliverables, milestones with dates; identify responsibilities and associated budget for achieving the objectives in the workplan, including specific work tasks based on the expert modeler deliverables (taking into account what is set by his contract);

A proposal for updating the members of the ICCAT GBYP Core Modelling Group (now ICCAT GBYP Modelling and MSE Group) in coordination with the Secretariat and continue discussion on developing the initial general structure for the OM.

Establish electronic tools for collaboration and communication.

- 2) provide a finalized version of Deliverable 1, incorporating any comment by the ICCAT Secretariat in June 2015.
- 3) Report from the MSE Modelling Workshop, finalizing the report within two weeks after end of meeting.
- 4) Report from BFT-MSE Meeting 2, finalizing the report within two weeks after meeting including a Final summary report with review of work done and workplan for the next Phase by February 22, 2016.

The first and second deliverables were provided to the Secretariat in draft by June 9 and in Final by June 19, 2015 (Powers, J.E. June 19, 2015. Proposed Multi-annual Workplan for the Development of Management Strategy Evaluations of Atlantic Bluefin Tuna by the International Commission for the Conservation of Atlantic Tunas (ICCAT)). It should be noted that the MSE Coordinator and the CMG fully expected these plans to evolve throughout the year and that these June plans were not final.

As noted in the June plan it was decided through discussion with the CMG that there would be three major coordination activities during GBYP fiscal year 2015.

Attendance of the MSE Coordinator at the 2nd SWGSM meeting and 3rd meeting of the Standing Working Group of Fisheries Managers and Scientists in support of the Western Atlantic Bluefin Stock Assessment 22-26 June 2015 in Bilbao to initiate MSE discussion with managers, enhancing capacity building, design features for MSEs, Harvest Strategies (HSs) and Harvest Control Rules (HCRs). The MSE Coordinator attended and chaired a session on the role of MSEs in management.

A meeting of the CMG and participants was conducted in association with SCRS Working Group meetings in September in Madrid in order to provide: an update on progress with Modelling and MSE Program; the MSE Coordinator and the MSE Modeling Expert made presentations to the BFT WG on that progress. Additionally, The MSE Modeling Expert authored several SCRS documents on that progress. The MSE Coordinator was a coauthor on those documents.

At the Madrid CMG coordination meeting it was decided to combine the activities under Deliverables 3 and 4 and have the Core Modeling Group meet in January of 2016 in Monterrey CA USA to achieve the objectives under those tasks. Since the meeting was scheduled so close to the end of the GBYP fiscal year, it was decided that all reporting associated with Deliverables 3 and 4 would be due by February 22, 2016.

A report of that meeting was submitted to the Secretariat (Report of the 2nd Meeting of the ICCAT GPYP Core Modelling and MSE Group, 21-23 January 2016, Monterey, CA USA).

The subjects covered in the Meeting of the CMG were: a review of progress since the September CMG and BFT WG meeting. There was a detailed discussion and conclusions of the MSE modeling setup and process including basic concepts and stock structure, past data that is available, basic population dynamics, management options, future recruitment and distribution scenarios, future catches, the generation of future data, parameters and conditioning, trial specifications and performance measures and statistics. This assures consistency in the model framework as cooperators develop candidate Management Procedures (MPs).

The meeting report also included an agreed upon schedule and workplan for the remaining MSE activities in the ensuing GBYP Phases. A separate report which gave a proposed budget associated with the workplan was provided to the Secretariat at the same time as the submission of the meeting report.

Ending Statement

These activities and the report emanating from them constitute the deliverables for the MSE Coordinator deliverables.