COMMON OCEANS

Report of Discussions Regarding Data Availability and Proposed Objectives for the Common Oceans Seabird Bycatch Data Preparation Workshop

Sustainable Management
of Tuna Fisheries
and Biodiversity Conservation
in the ABNJ

29-30 January 2018
National Research Institute of Far Seas Fisheries
Shimizu, Japan

Prepared by Joel Rice and BirdLife South Africa

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Food and Agriculture Organization of the United Nations

BirdLife SOUTH AFRICA
Giving Conservation Wings

Workshop Report

Project: FAO-GEF Project *Sustainable Management of Tuna Fisheries and Biodiversity Conservation in the ABNJ* (GCP/GLO/365/GFF)
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Report of discussions regarding data availability and proposed objectives for Global Seabird Bycatch Data Preparation Workshop FAO Areas Beyond National Jurisdiction (ABNJ) Common Oceans Tuna Project – Seabird Bycatch Component Japan 29-30 January 2018

Introduction

This report focusses specifically on discussions relating to the data availability and proposed analytical work relating to the goals of the Common Oceans and BirdLife International (CO, BLI) project on seabird bycatch assessment. The discussions were held between the BLI project team and members of the Japanese National Research Institute for Far Seas Fishery (NRIFSF) on 29-30 January 2018.

Background

In 2017, with the support of the FAO's Common Oceans program, BLI commenced workshops and a process to achieve outcomes of Element 4 – evaluating seabird bycatch from tuna longline fishing, specifically:

1. To estimate the number of seabirds killed in tuna longline fishing annually, from the most recent and credible set of annual observer and effort data (expected 2012 to 2016)

2. To evaluate the impact of seabird bycatch mitigation measures on Birds Per Unit Effort (BPUE)

The first phase of the project focuses on national scientists compiling national bycatch data and producing standardised reports and undertaking basic exploratory analysis. The second phase of the project (occurring concurrently with phase 1) will have the national scientists undertaking collaborative, intersessional work to collate datasets and identify factors contributing to the differences in BPUE.

The following points summarise the discussions regarding potential data availability and the proposed agenda for the Global Seabird Assessment Data Preparation Workshop, specifically with relation to Japan and NRIFSF.

Summary of discussion regarding data availability, analysis and Japan's involvement in the project

The meeting participants agreed on the following provisional agenda for the meeting:

1.1 Describe roles and project involvement
1.2 Objectives of ABNJ project
1.3 Objectives of Peru meeting
1.4 Planning for 2019, progress made from this project and other related projects on seabird bycatch

1.1 Describe roles and project involvement

Japan noted that currently they are participating in two projects which overlap to some extent with Element 4, one as a collaboration with scientists from New Zealand, and another through ICCAT. The extent of Japan's effort makes it potentially the biggest contributor of data to a global analysis of seabird bycatch rates. Concern was expressed that if data from all participating CPCs were to be pooled, the Japanese data may overwhelm other effort, resulting in conclusions that are not consistent with an analysis that is completed on an individual CPC basis. As such, Japanese scientists indicated their preference is to conduct an analysis of seabird bycatch by the Japanese Distant Water Longline Fleet (DWLF) and contribute that to the global seabird analysis. Unless data from other major distant water fleets were included, they would prefer this method to contributing their data to an overall assessment as main contributor.

1.2 Objectives of ABNJ project

Participants discussed that the original motivation of the ABNJ project was to facilitate the tRFMOs connection between science and management. This stemmed from the FAO belief that tuna management could be improved as a whole, based on harmonisation. When the ABNJ project began, recognition of seabird bycatch issues was much less at the forefront of the tRFMO agenda. This is partly because the early data is inconsistent and not very informative. Therefore through the process of delivering Element 4, the project should also note the apparent faults in data collection procedures for countries and the limitations of the currently available data that has been submitted to the RFMOs, as well as that the data held by CPCs may be richer than that held by RFMOs.

At the beginning of the CO ABNJ seabird component, an objective was set to evaluate the impact of seabird bycatch mitigation measures (MM), as they are in force through RFMOs' Conservation and Management Measures (CMMs). Including this as an objective in Element 4 can be interpreted in two ways:

1. Compliance related
2. What effect the mitigation measures have on BPUE outside of research trials

MM are designed to deter bird capture, therefor analysis of BPUE is a natural way to investigate the effectiveness of MM. However, straightforward analysis of how BPUE changed over time due to MM is complicated by the change in reporting rates over time. Naïve analysis can make it look like MM are not effective (i.e. if average BPUE increases as more vessels report/record it, reductions may indicate effective MM.) The analysis of this BPUE data and its trend over time, is complicated by many factors including seabird abundance, the change in implementation, effectiveness of mitigation measures and range of the fishery. These factors need to be accounted for to estimate the effect of MM. Currently there is a general lack of information related to the implementation and effectiveness of MM. Most of the reliable data is based on observer data, but even this is not uniformly reliable. Participants noted that, given the current data availability, inference on the effectiveness of mitigation measures would be unreliable, however recommendations about what data are necessary and appropriate methodologies/heuristics to collect such data could be included as an output of Element 4. Participants noted that the overall goal of the CO ABNJ project, to assess seabird bycatch, is feasible but requires a workplan and more coordination/collaboration. A workplan to achieve the goals of the project should be a primary focus of the Peru workshop outcomes.

Participants discussed that this project needs to redefine what can be achieved, in a more pragmatic and less politically sensitive way (i.e. avoid any implication of checking compliance). However, BLI stressed that the original aim, to assist national scientists in developing analyses relevant to the project goals, should remain a key focus. It is also crucial to remember that this process be led by CPCs. The CO ABNJ project wants to assess bycatch, but also build capacity within CPCs and RFMOs to minimise bycatch. The

role of BLI is to bring support to those CPCs that choose to engage with the CO ABNJ project and account for those that do not.

The participants noted that BLI is a Non-governmental Organisation, and although this project is funded by the FAO, BLI has no mandate for assessing compliance. Furthermore, it was suggested that many CPCs may choose not to be part of the project if the outcomes result in determination of non-compliance, which is due in part to the lack of data and control over the fleet by the respective governments.

Participants discussed the role of the CO ABNJ in bringing the issue of seabird bycatch to the attention of many RFMOs and CPCs. To that extent participants noted that RFMOs needed to evaluate the effectiveness of the implemented seabird bycatch mitigation measures. This potentially implies a compliance issue on the 'implementation of CMMs' and also the effectiveness of the mitigation measures in reducing seabird bycatch..

1.3 Objectives of Peru meeting

The goals of the upcoming Common Oceans Seabird Bycatch Data Preparation Workshop (COSBDPW) are to facilitate the achievement of the overall project goals. The working group will need to determine how to improve on historical estimates of N, and how to finalise collaborative work agreements which can then be taken forward after the workshop. Specific analyses and partnerships are envisaged as part of a workplan that will be a result of the workshop.

The participants noted that the attendees to the first two regional workshops of Element 4 were likely the scientists who would participate in the process, though the decision to collaborate would likely be made at a management level. Participants discussed how to achieve collaboration given differences in CPCs' political will regarding this project and the capacity for decision making (at a national or institutional level) of the invitees. It was noted that the attendees to the workshop are mostly scientists, which is appropriate for developing a work plan to address highly technical scientific methods and analyses, but not appropriate for making decisions about countries' involvement with the process. A meeting that includes managers and stakeholders should be convened after the final assessment workshop.

Outcomes from the workshop should include recommendations on the type of data that should be collected, in order to 'properly' monitor and evaluate seabird MM. This should include advice on standardising the data collected on MM-use by observers. Some noted issues are the representativeness of observer data to the overall fleet in terms of effort, seabird abundance, which MM is/are used, and total number of seabirds reported caught. The reported observer coverage is also variable based on how observed trips are extracted and defined.

We can narrow the analysis down and develop agreement with all CPCs to do very basic assessments of N. These methods could be presented to tRFMOs first, before finalising at the planned February 2019 Data Assessment workshop.

Because participants at the COSBDPW can't make formal agreements, we should focus on agreeing on a set of technical specifications on how to analyse and produce summaries of data and estimates of bycatch, this is noted as being in line with the initial project aims. Noting that the range of data availability is completely different from country to country, specific methods may need to be developed on a case by case basis. Therefore, the analysis can be done as simple or complex as capacity and data allow. Focused approaches on data analysis may be possible for some nations.

In general there are 4 broad categories that countries operating south of 25°S fall into, with respect to this project:

1) Countries participating in the process and with seabird bycatch data collected
2) Countries participating in the process but with little/no seabird bycatch data

3) Countries not participating in the process, but which have seabird bycatch data collected
4) Countries not participating in the process with little/no seabird bycatch data

Some countries are not involved in the process due to national constraints, or limited capacity. Additionally, because the project is a partnership between BirdLife and FAO, there is no mandate for data sharing or analysis. CPCs not participating in the process should be contacted again and invited to participate and notified of the intent of the project.

RFMO processes were noted as excellent venues, to communicate the project goals and progress to CPCs, because the conventions bind the nations, in a legal framework, to participate. This could be used to share data between RFMOs, and notify CPCs not participating of the analysis and results (when appropriate).

1.4 Planning for 2019, progress made from this project and other related projects on seabird bycatch

At the final assessment workshop (planned for February 2019), all CPCs attending will be requested to present their own analysis of seabird bycatch in their fleet(s).

Additional estimates of N (such as from publicly available/published data) could be provided by the project team. This will be the point at which the project can discuss further development of species specific-seabird population dynamics models that integrate abundance, survival and fisheries data. The final meeting (2019) should recommend a specific process to estimate and report N, that can be built-on every few years. This could take the form of a seabird standing committee within RFMOs, led by CPCs.

Japan expressed that other projects relating to seabird bycatch (i.e. NZ risk assessment and ICCAT process) could feed into this project, but also noted that the timing of the ICCAT process may not align with February 2019.

Summary of the Japanese involvement with the New Zealand seabird risk assessment

Japan gave an extensive overview of their collaboration with Dragonfly Data Science (NZ), which has developed a risk-based approach to understading seabird bycatch. This method defined vulnerability based on species, the overlap between species and fishing effort, and observed catch by species. At this point there have been preliminary calculations done based on data from the NZ area, from both Japan and NZ vessels. The main goals were to analyse the data via 3 strata:

- Japanese fleet as a whole
- Japanese fleet operating within New Zealand
- New Zealand longline only

The model includes factors related to the species, season and year. The variables included in the model are limited by the availability of the data. This process could be extended to all seabird species, but there are issues with distributions and available data. Identification of seabirds caught is also a problem and it is difficult to utilise unspecified data into the model. (Albatross spp. or Petrel spp.). The Japanese data has changed immensely over years therefore investigation of BPUE time-series to measure effectiveness of MM (before and after CMM) may not be possible or desirable. It was concluded that the Peru workshop should also explore whether a risk-based approach would be useful to include for the final workshop.

Attendees:

Name:	Affiliation:	Position:
Kazuhiro Oshima	Japanese National Research Institute for Far Seas Fishery (NRIFSF)	Senior Scientific Researcher
Sachiko Tsuji	Common Oceans Project Team	Advisor
Daisuke Ochi	(NRIFSF)	Fisheries Data Scientist
Yukiko Inoue	(NRIFSF)	Fisheries Data Scientist
Joel Rice	Common Oceans Project Team (Joel Rice Consulting)	Consultant
Ross Wanless	Common Oceans Project Team (BirdLife South Africa)	Project Manager
Nini van der Merwe	Common Oceans Project Team (BirdLife South Africa)	Observer

Closing

The meeting ended at 12:30pm on 30 January 2018

Fig 1: BLI project team with the NRIFSF data scientists working on the project (and two collegues from the NRIFSF team who did not form part of the meeting)

For more information on this project, please contact:

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