

Agreement on the Conservation of Albatrosses and Petrels

Third Meeting of the Seabird Bycatch Working Group

Mar del Plata, Argentina, 8 – 9 April 2010

ACAP Observer Report –
8th Meeting, Ecologically Related Species Working Group,
Commission for the Conservation of Southern Bluefin Tuna

Secretariat

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ACAP Observer Report – 8th Meeting of the Ecologically Related Species Working Group, Commission for the Conservation of Southern Bluefin Tuna

Meeting Title: 8th Meeting of Ecologically Related Species Working Group (ERSWG) of the Commission for the Conservation of Southern Bluefin Tuna (CCSBT)

Meeting Organisation: CCSBT

Date and Location: 1 – 3 September 2009, Busan, Republic of Korea

Chair Dr. Dae-Yeon Moon (Korea)

Website Address: http://www.ccsbt.org/

Your Name/Affiliation: Barry Baker, ACAP Secretariat

Capacity of Attendance: ACAP representative

Relevant Papers Tabled:

Papers

ERSWG8_04. CCSBT Secretariat 2009. Update of RFMO Resolutions concerning incidental catches of ecologically related species.

ERSWG8_05. Minami, H., Hosono, T., Kiyota, M. and Takeuchi, Y. 2009. Estimation of incidental takes of seabirds in the Japanese Southern Bluefin Tuna longline fishery in 2006-2007.

ERSWG8_11. Minami, H., Yokota, K. and Kiyota, M. 2009. Research on effectiveness of two different kinds of tori lines to reduce incidental take of seabirds in longline fishery.

ERSWG8_13. Miyamoto, T., Kitamura, T. and Minami, H. 2009. Guidance, extension and educational activities for mitigating interactions with ecologically related species in longline fishery.

ERSWG8_14. Walker, N.A., Thompson, F. and Abraham, E. 2009. Incidental capture of seabirds and New Zealand fur seals in southern bluefin tuna fisheries in New Zealand waters in 2006-07 and 2007-08.

ERSWG8_15. Rowe, S. 2009. Risk Assessment Methodology for incidental seabird mortality associated with New Zealand fisheries in the NZ-EEZ (Rowe, S.) 2009

ERSWG8_16. Sharp, B.R., Waugh, S.M. and Walker, N.A. 2009. A risk assessment framework for incidental seabird mortality associated with New Zealand fisheries in the NZ-EEZ.

ERSWG8_17. Melvin, E.F. and Walker, N. 2008. Optimizing Tori Line Designs for Pelagic Tuna Longline Fisheries. Report of work under New Zealand Ministry of Fisheries Special Permit 355.

ERSWG8_19. New Zealand 2009. Summary of education and mitigation activities in the New Zealand longline fishery.

Background Documents

ERSWG8_BGD_01. Waugh, S.M., Baker, G.B., Gales, R. and Croxall, J.P. 2008. CCAMLR process of risk assessment to minimize the effects of longline fishing mortality on seabirds. (submitted to CCSBT Commission15)

ERSWG8_BGD_02. Waugh, S.M. 2008. Stages in the process of managing seabird mortality in RFMO fisheries. (submitted to CCSBT Commission 15)

Information Papers

CCSBT- ERS/0909/Info_2. Hiroshi Minami, Osamu Sakai, Toshiyuki Tanabe. 2009. Review of the Japanese scientific observer program in the high sea waters in 2006 and 2007 fishing years.

CCSBT- ERS/0909/Info_3. ACAP. 2009. Mitigation measures for pelagic longline gear: A report on the work of the seabird bycatch working group.

CCSBT- ERS/0909/Info_6. FAO. 2008. Report of the expert consultation on best practice technical guidelines for IPOA/NPOA–Seabirds. FAO Fisheries and Aquaculture Report No. 880. 2008.

CCSBT- ERS/0909/Info_7. Waugh, S., Filippi, D., Walker, N., Kirby, D. 2008. Preliminary results of an Ecological Risk Assessment for New Zealand fisheries interactions with seabirds and marine mammals.

CCSBT- ERS/0909/Info_8. Melvin, E.F., Heinecken, C., Guy, T.J. 2009. Optimizing tori line designs for pelagic tuna longline fisheries: South Africa.

National Reports

Japan 2009. National report of Japan: overview of researches on ecologically related species in Japanese SBT longline fishery, 2006-2007

Australia 2009. Australian Country Report: Ecologically related species in the Australian Southern Bluefin Tuna Fishery

New Zealand 2009. New Zealand Country Report: Ecologically Related Species in the New Zealand Southern Bluefin Tuna Longline Fishery

Taiwan 2009. National Report of Taiwan for Ecologically Related Species in 2006-2008

European Community 2009. European Community's Annual Report to the Ecological Related Species Working Group

South Africa South Africa's Annual Report to the Ecologically Related Species Working Group of the Commission for the Conservation of Southern Bluefin Tuna

Philippines Annual Report on Ecologically Related Species Working Group

Summary of Content of Papers:

Japan 2009. National Report

Japan has been steadily reducing fishing capacity and now currently deploys less than 200 fishing vessels. Recent fishing grounds have been off the Cape of Good Hope, southern Indian Ocean and near Tasmania. There were 31.346 and 21.676 million hooks set in 2006 and 2007 respectively (data from CCSBT-ERS/0909/05). Sixteen species of seabirds were recorded as bycatch in 2006-2007. Annual total take of seabirds in 2006 and 2007 was estimated at 8,746 (95% CI: 4,082-14,182) and 3,852 (95% CI: 1,163-7,682), respectively. The recent level of incidental take of seabirds was considered to be stable around 2,000-9,000 birds/year.

Australia 2009. National Report

Most SBT taken in Australian waters are purse-seined in South Australian waters. Currently, longlining for SBT occurs primarily off south eastern NSW during the winter (May to October). There are very few recorded incidences of seabirds interacting with fishing vessels or gear in the SBT Fishery. There were no observed seabird interactions in the purse-seine sector in 2007–08 or 2008–09. In 2006–07, one white-faced storm petrel was discovered on the aft deck of a tow vessel. It was captured and later released.

The only SBT longline fishery with a substantive seabird interaction rate is the Eastern Tuna and Billfish Fishery. Through the introduction of a variety of mitigation measures, the catch of all seabirds has been reduced to a level under 0.05 seabirds per 1000 hooks. There has been less than 20 birds observed caught each year since 2004 comprising both albatross and petrel species.

New Zealand 2009. National Report

Longline fishing targeting SBT primarily occurs off the west coast of the South Island south of 42° S and along the east coast of the North Island north of 42° S. SBT also comprises a bycatch in the bigeye target fishery in the Bay of Plenty. Two fleets operate in NZ — a domestic fleet and a charter fleet. In 2008 the number of domestic longline vessels fishing declined to 35 vessels, most of which were small (< 50 GRT). In 2007 and 2008 four charter vessels fished for SBT. In terms of effort, 54% of hooks were observed on the Charter vessels in 2007, and 45% in 2008. For the domestic fleet 11% of the effort was observed in 2007 and 15% in 2008. A total of 143 seabirds from 13 taxa were observed caught during 2006-07 and 2007-08 in NZs SBT fishery. It is estimated that the total seabird catch was approximately 249 in 2006-07 and 93 in 2007-08. The observed seabird bycatch rate was 0.134 and 0.087 birds per 1000 hooks in 2006-07 and 2007-08, respectively.

Korea 2009. National Report

Fishing in the Korean SBT longline fishery occurs on the high seas of the western Indian Ocean off South Africa and occasionally extending into the SE Atlantic, and in the eastern Indian Ocean off the coast of Western Australia. Very little information was provided on seabird bycatch. During a recent trip in March-June 2009, observers reported that there was 107 seabirds caught.

Indonesia 2009. National Report

Very little information on seabird bycatch provided.

Taiwan 2009. National Report

The number of active vessels fishing for SBT in 2007 and 2008 was 30 and 41, respectively. Taiwan's SBT fleet operated mainly between $30^{\circ}\text{S} - 40^{\circ}\text{S}$ in the Indian and Atlantic Oceans. There are two fishing grounds in general: one is in the central Indian Ocean around $55^{\circ}\text{E} - 95^{\circ}\text{E}$, $30^{\circ}\text{S} - 40^{\circ}\text{S}$, and the other off the southeast coast of Africa around $30^{\circ}\text{E} - 55^{\circ}\text{E}$, $35^{\circ}\text{S} - 45^{\circ}\text{S}$. In 2006-2008, 30 seabirds were observed caught at a bycatch rate of 0.013, 0.013 and 0.003 birds/1000 hooks in 2006, 2007 and 2008. Total fishing effort during these years was not stated.

European Commission 2009. Report

No information on seabird bycatch provided. The EC is currently drafting an NPOA for the Community, and this is planned for adoption late in 2010.

Philippines 2009. Report

No information on seabird bycatch provided.

South Africa 2009. National Report

Seabird interaction is high in the waters along the south coast of South Africa, resulting in stringent bird mitigation measures being implemented in the fishery in accordance with South Africa's NPOA-Seabirds. A draft manuscript to be submitted for publication is attached to the report, and this provides information on seabird interactions and current mitigation measures. Bycatch rates declined from 0.318 birds/1000 hooks in 2007 to 0.048 birds/1000 hooks in 2008.

ERSWG8/0909/05. Minami et al 2009. Estimation of seabird bycatch in the Japanese SBT longline fishery in 2006-2007.

Estimates of annual incidental takes of seabirds in Japanese Southern Bluefin Tuna longline fishery for 2006-2007 fishing years were updated based on the data collected through the RTMP

(real time monitoring program) and observer programs. Annual seabird takes were 8,746 (95% CI: 4,082-14,182) in 2006 and 3,852 (95% CI: 1,163-7,682) in 2007, respectively. Japan considers recent level of incidental take of seabirds in the RTMP to be stable around 2,000-9,000 birds/year.

ERSWG8/0909/11. Research on effectiveness of two different kinds of tori lines to reduce incidental take of seabirds in longline fishery.

Evaluates the effectiveness of two different kinds of tori lines for various sized and shaped longline vessels. Firstly, observer data collected in the Southern Ocean were analyzed to examine factors affecting effectiveness of tori lines. Among the factors examined in the GLM analysis, number of albatrosses sighted during line setting and lengths of tori line had significant effects, and conventional tori line and light streamer toriline showed similar effectiveness in terms of reducing incidental take of seabirds. Secondly, controlled experiments with a chartered commercial fishing vessel and a research vessel were conducted in the North Pacific to compare the effectiveness of the conventional and light streamer tori-lines, and the results showed that the light streamer tori-line had larger aerial coverage, smaller bait-taken rate by Laysan albatross and smaller incidental taking rate of Laysan albatross. Finally, at-sea trials with about 30 small and middle-sized longline vessels were conducted to obtain feedback from fishers on effectiveness and practicality of these two types of tori lines. Japan concluded that these results indicated that both types of tori lines were effective in avoiding seabird interactions and that the light streamer tori-line was more user-friendly on small-sized longline vessels.

<u>Discussion:</u> ACAP noted that research on the effectiveness of both light and conventionally-configured tori lines was extremely important. However, based on the analysis presented it was not possible to fully evaluate the results. There were a number of unexplained covariates that could possibly have confounded the results e.g. was sink rate of gear used in both treatments similar; had bait type, line-weighting and time of set been standardised; what was the difference in aerial extent of streamer lines; was offal being discharged at any time during experimental work, and was this standardised across treatments. Japan was encouraged to address these issues and submit the results of this research to a peer-reviewed scientific journal, as the findings were relevant to all pelagic tuna fisheries. Also, in the discussion of the results the mechanism for effectiveness of light tori lines needs explanation. It is difficult to understand how light lines are effective when the lines don't extend to the water line where birds are attacking baited hooks.

ERSWG8/0909/13. Guidance, extension and educational activities for mitigating interactions with ecologically related species in longline fishery.

Outlines Japan's guidance, and educational activities for mitigating interactions with ecologically related species in longline fisheries. Japan has been holding seminars for fishers at key fishing ports as well as distributing free tori lines to longline vessels, to facilitate the use of tori lines and to test effectiveness of various kinds of tori lines in their commercial fishery.

ERSWG8/0909/14. Incidental capture of seabirds and New Zealand fur seals in southern bluefin tuna fisheries in New Zealand waters in 2006-07 and 2007-08.

Reports on the incidental capture of seabirds in vessels fishing for southern bluefin tuna in New Zealand waters during 2006/07 and 2007/08. The catch rates and total estimated capture of seabirds were estimated using ratio estimation. Effort was divided into strata based on the target species, fishing method, and fishing area. In the 2007 fishing year, 30 seabirds were observed caught, and the total estimated number of captures was 93. In the 2008 fishing year, there were 111 observed captures and 249 estimated captures.

ERSWG8/0909/15. Rowe, S. 2009. Risk Assessment Methodology for incidental seabird mortality associated with New Zealand fisheries in the NZ-EEZ (Rowe, S.) 2009

A risk assessment methodology that could be used in data deficient and data poor situations is described The approach has been used for assessing the risk of interactions with seabirds in New Zealand fisheries. The method uses expert opinion applied through a simple scoring system, with

thorough documentation of the rationale for scores assigned. In the absence of more detailed information, this approach represents a sound first step to assessing fisheries risk to seabirds.

ERSWG8/0909/16. A risk assessment framework for incidental seabird mortality associated with New Zealand fisheries in the NZ-EEZ.

Seabird interactions with fisheries were assessed using a variety of different data sources including seabird distributions and biological information, and data collected by government observers at sea. The risk assessments described in this paper and CCBST-ERS/0909/15 have been used within the New Zealand NPOA-Seabirds framework.

ERSWG8/0909/17. Optimizing Tori Line Designs for Pelagic Tuna Longline Fisheries. Report of work in New Zealand under Fisheries Special Permit 355.

Details a study conducted in New Zealand waters that sought to examine the efficacy of different tori line designs in pelagic longline fisheries. The design of the study required a departure from normal fishing conditions (including day setting), and consequently special permitting for the research to be undertaken. While the study provided a partial test of the protocol for data collection, a high number of captures in a short time (20

birds in 138 minutes) led to the experiment being abandoned. Captures were attributed to the bait caster locating baits outside the protection of the tori line.

ERSWG8/0909/19. Summary of education and mitigation activities in the New Zealand longline fishery.

Describes education and awareness programmes undertaken by New Zealand in the past year. Initiatives included writing articles for fishing magazines, holding workshops with fishers on non-fish bycatch issues, distributing equipment to release tangled or hooked animals (for example marine turtles), and producing photo identification guides. Guides have been produced in a variety of languages (English, Korean, Japanese, Indonesian, Spanish, French, Russian, Polish, Ukrainian), and made available online as well as in hardcopy.

CCSBT- ERS/0909/Info_3. Mitigation measures for pelagic longline gear: A report on the work of ACAP's Seabird Bycatch Working Group.

Summarises bycatch mitigation issues of potential relevance to CCSBT when developing research and management approaches to mitigate seabird bycatch in its fisheries. Although several seabird avoidance measures have been trialled to varying degrees in pelagic fisheries, proven and accepted seabird avoidance measures require substantial improvement. A recent review of pelagic longline mitigation noted that many of the mitigation measures currently adopted by fishers and fisheries managers have little empirical support as to their efficacy. This applies to measures such as side setting, light tori lines, bait casting machines, blue-dyed bait and line-shooter effect on mainline tension. ACAP concluded that thorough comparative experimental assessment of many mitigation measures needs to be undertaken against Southern Ocean assemblages of diving seabirds, with research based on larger sample sizes and more transparent methodologies before many measures could be applied with any confidence.

Outcome (e.g. summary of relevant discussions, resolutions, etc):

1. Attendance at Meeting

Members Australia, Japan, Korea, Taiwan, New Zealand attended the meeting. The European Community, Philippines and South Africa were not represented. The meeting noted that for the first time at an ERS meeting, reports were received from all Members and Cooperating Non-members, although the reporting format had not always been followed.

2. Estimation of Bycatch

Agenda Item 5.1 proposed that each Member and cooperating Non-Member report the actual and observed effort (e.g. hooks for longline or sets for purse seine) and the number of observed mortalities of each ERS species by year, ocean, latitude group and gear type, and estimate and report the scaled up number of mortalities by year and species. The intent was that the ERSWG would discuss the papers and attempt to provide initial global mortality estimates for seabird and other bycatch species by combining the scaled estimates from the different papers. An important part of this work was to identify whether there were any significant gaps in the information that prevent initial estimates from being made.

For longline fisheries Japan, New Zealand and Australia complied fully with this request, providing scaled up estimates for bycatch, although a breakup by species was not available for Japanese observer data. Other members (Korea, Taiwan and Indonesia in particular) provided very little data that was suitable for scaling up, a function mainly of the lack of observer data for ERS species in their fisheries. There was considerable discussion on the value of producing scaled up global estimates for the CCSBT fishery given that not all members had complied with the request of the Commission for data to be provided to enable this to occur. Some members were concerned that to include their estimates while others had not provided data would put them in a bad light.

3. Ecological Risk Assessment

New Zealand proposed that ERA be carried out on ERS species and offered to carry out such assessments for the Commission if Members and Cooperating Non Members were prepared to provide data for this purpose. The concept received little support initially from other Members (opinions voiced principally by Japan) because of concerns that:

- the Commission's funds should be directed toward the target species as a priority;
- CCSBT had yet to determine the best method of conducting an ERA; and
- they wished to avoid duplication of effort with the other tuna RFMOs that shared jurisdictional responsibilities for SBT and currently had ERA processes underway.

I offered ACAPs assistance to the Commission or any Member/s that wished to undertake an ERA in the intersessional period, drawing information from ACAP's Species Assessments for albatrosses and petrels, and distributional data previously provided to ERSWG by ACAP and BirdLife International and which is currently being updated. New Zealand offered to undertake this work at no cost to CCSBT, an offer which was supported by Australia but not Japan. At the end of the day, NZ is likely to undertake an ERA, with assistance from ACAP (me) and report back on this to CCSBT.

4. Mitigation

There was a good discussion on mitigation around the Japanese comparative study of light and standard configuration bird scaring (tori) lines. A positive critique of the Japanese BSL study led to general agreement on the inability of BSL alone to reduce bycatch to sustainable levels. While Australia and New Zealand were keen to actively promulgate the use of line-weighting, Japan was not prepared to go this far, noting that it was preferable for fishers to have a number of mitigation options available for consideration, rather than having an obligation placed upon them to pursue a particular mitigation approach.

5. Next Meeting

The meeting noted that the 2nd meeting of the Joint Tuna RFMO Meeting had agreed to hold a joint ERS meeting next year, and that it was preferred that no other meetings of ERS or equivalent Working Groups be held until after this meeting. Australia proposed that the next meeting of the ERSWG be held in 2012. This was supported by Japan, Korea and Taiwan, but not New Zealand, which believed the Commission may have a differing view on this. I spoke strongly of the need for

the ERSWG to meet annually, as is the practice of other similar working groups of the IOTC, WCPFC and CCAMLR, to better deal with the serious bycatch issues in its fisheries. I also noted the importance placed on ERS matters in CCSBT's recent Performance Review, and the current practice of other RFMOs such as IOTC and WCPFC to conduct annual meetings of their bycatch Working Groups, pointing out that annual meetings of CCAMLR's IMAF Working Group have been widely acknowledged as a contributing factor in the success of CCAMLR in reducing seabird bycatch to negligible levels in their fisheries.

After the discussion the meeting decided not to set a date for the next meeting, but to ask the Extended Commission to consider options for future meetings including delaying a meeting of the ERSWG until the first half of 2012.

Recommended Actions for ACAP:

Pressure needs to be placed on ACAP Parties who are also members of CCSBT (Australia, New Zealand) to encourage regular annual meetings of the ERSWG. CCSBT's performance in dealing with bycatch of seabirds remains poor and this has been recognised in the performance review carried out by the Commission and others. Particular issues that require pressure are implementation of appropriate mitigation measures; collection and reporting of data by all members and cooperating non-members, hopefully through the use of independent observer programs; and ecological risk assessments of all non-target taxa.

ACAP made a commitment at the meeting to work intersessionally with New Zealand in the preparation of a ERA for seabirds in CCSBT fisheries, and this will have resourcing implications. ACAP's assistance was also sought in the revision of the CCSBT pamphlet on seabirds likely to be encountered during fishing operations for SBT.

Further involvement in the work of the CCSBT is recommended. However, the dysfunctional nature of the ERSWG still remains an issue. At this stage I would recommend that ACAP encourage the WG to function effectively, or to ensure its current roles are made a standing item for discussion at the Scientific Committee. The latter course of action would at least ensure seabird bycatch matters were considered annually by the Commission, and go some way to dealing with the consistent assertions of some Members that CCSBT does not have competence to deal with ERS matters.

Have relevant papers been forwarded to Secretariat:

Yes. Electronic copies of the meeting documents are held by the Secretariat.

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SUMMARY

Text – restrict to 250 words if possible.

BACKGROUND

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RECOMMENDATIONS

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