



Agreement on the Conservation of Albatrosses and Petrels

Fourth Meeting of Seabird Bycatch Working Group

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Update of RFMO Coordination Strategy and Process for Intersessional Consultation

Secretariat / RFMO Coordinators

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Update of RFMO Coordination Strategy and Process for Intersessional Consultation

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This paper provides an update on progress made with implementation of ACAP's RFMO coordination strategy. The first section reviews progress made within individual tuna Regional Fisheries Management Organisations (tRFMOs) since SBWG-3/AC5. The second section discussed the merits of adopting a performance based approach in the design of seabird conservation measures. The third section proposes an intersessional consultation process for reviewing new information/research on seabird bycatch mitigation measures between meetings of the SBWG/AC.

Progress was made in a number of the tRFMOs over the past year, with a seabird conservation measure being adopted by the Inter-American Tropical Tuna Commission (IATTC) for the first time. A Memorandum of Understanding was also signed between the IATTC and ACAP. Progress was also made with the further development of seabird ecological risk assessments in the IOTC and WCPFC RFMOs. Within ICCAT the Sub-committee on Ecosystems (SC-ECO) made a number of significant recommendations in relation to seabird conservation, noting in particular that the combined use of tori lines, line weighting and night setting would be the most effective way to reduce seabird bycatch in pelagic longline fisheries. The above achievements provide a good framework for making significant advances in the tRFMOs over the next year.

The Agreement would like to acknowledge the voluntary financial contribution made by France, which supported ACAP's attendance at many of these meetings.

1 REVIEW OF PROGRESS MADE IN TUNA RFMO MEETINGS SINCE AC5

1.1 Third Joint Meeting of the Tuna Regional Fisheries Management Organisations (Kobe III)

The third meeting of the tuna Regional Fisheries Management Organisations (Kobe III) was held from 11-15 July, 2011. The meeting was preceded by a one day meeting of the Bycatch Joint Technical Working Group.

The Joint Technical Working Group agreed to the following recommendations:

- The Working Group agreed to meet electronically every 3 months and to meet in person whenever possible in conjunction with Kobe meetings or in the absence of Kobe meeting every three years. Over the next several years the Working Group proposes the following work plan:
 - Harmonization of data collection
 - Development of harmonized identification guides and release protocols
 - Identify and recommend research priorities
 - Prioritization of collaborative work
 - Progress BMIS information sharing website

- Funding sources
- Compliance with data reporting requirements

Kobe III endorsed the recommendations of the Working Group and forwarded them to the tuna Regional Fisheries Management Organisations for their consideration.

1.2 Western and Central Pacific Fisheries Commission (WCPFC)

The sixth meeting of the WCPFC Scientific Committee (WCPFC-SC6) held in August 2010 made a number of substantive recommendations in relation to seabird bycatch mitigation. These included:

- a) that line weighting of pelagic longlines is likely to be one of the most effective mitigation measures in reducing or eliminating seabird interactions with baited hooks, and that further research be undertaken to refine the 'weighted branch lines' specifications contained in CMM 2007-04.
- b) agreed that the use of live bait should be discouraged in fisheries operating in areas of high seabird abundance that do not already use live bait, and recommended that additional research be undertaken to confirm the findings presented in EB-WP-06, and to include different line weighting regimes, in areas north of 23 degrees North and in areas south of 30 degrees South for consideration by the WCPFC-SC.
- c) noted that recent research suggests that blue-dyed squid bait may be more likely to decrease seabird bycatch in pelagic longline fisheries than other blue-dyed baits such as fish, and recommended that additional research be carried out on the efficacy of blue-dyed squid bait over other blue-dyed baits, including during both setting and hauling, for consideration by WCPFC-SC.
- d) noted the findings in EB-WP-07, carried out south of 25 degrees South, that suggest mainline deployed with a line shooter (as in deep setting) into propeller turbulence at the vessel stern slows the sink rates of baited hooks and recommended that testing of the deep setting line shooter be carried out north of 23 degrees North, to determine its utility in mitigating against seabird interactions and other at risk species (e.g. marine turtles, marine mammals, sharks) in that area. The SC also noted that there are currently no specifications for the use of deep setting line shooters in CMM 2007-04 and recommended that the WCPFC Technical Compliance Committee (TCC) consider the development of specifications for 'deep setting line shooter', for inclusion in CMM 2007-04.

On the operation of seabird conservation measure (CMM 2007-04), WCPFC-SC6 noted that there are clear operational differences of longline fleets and seabird species composition in the areas north of 23 degrees North and south of 30 degrees South and recommended the TCC should consider the utility of separating Table 1 into two separate tables, one each for the area north of 23 degrees North and the area south of 30 degrees South. It agreed that minor proposed amendments to CMM 2007-04 should not be incorporated into the CMM until such time as there are sufficient changes to warrant revision.

There were no substantive outcomes in relation to seabird issues at either the TCC or Commission meetings held in 2010.

1.3 Commission for the Conservation of Southern Bluefin Tuna (CCSBT)

There was no meeting of the CCSBT's Ecologically Related Species Working Group (ERSWG) in 2010-11. A proposal was put to the CCSBT Commission meeting for a Memorandum of Understanding to be adopted between the CCSBT and ACAP. This proposal was blocked by Taiwan, who requested that it be referred to the next meeting of the ERSWG for advice.

1.4 IATTC

The First Meeting of the IATTC Scientific Advisory Committee (SAC) took place in 2010. Bycatch matters and specifically seabird bycatch was briefly addressed within a section on ecosystem considerations. Latest progress on mitigation methods and the need of further cooperation between IATTC and ACAP was highlighted. During the 81st Meeting of the IATTC Commission in 2010, a seabird CM was tabled by the IATTC Secretariat. In general terms the measure followed the two-column approach and very similar contents and concepts in the WCPFC CMM 2007-04. Although there was consensus for the adoption of this measure, the Commission adopted the document as a (non binding) recommendation (IATTC C-10-02) to begin on 1 September 2011 for longline vessels larger than 24m in length overall, and 1 September 2012 for longline vessels of less than 24 meters. In the later case, it was agreed that technical specifications for measures most suitable for use by small vessels would be considered by the Commission's working group on bycatch, the SAC, and the IATTC scientific staff (see SBWG-4 Doc 47 for further details).

During the 82nd Commission meeting in 2011, the seabird recommendation measure adopted in 2010 was tabled for adoption as a (binding) measure. The original text suffered slight changes in order to align it further with the WCPFC CMM 2007-04. In this revised text, vessels with outboard engines and smaller than 20m without any mechanization system for the deployment or recovery of the gear were not subject to the resolution. The text also requests the annual provision of available information regarding interactions with seabirds and the establishment of national observer programmes aboard longline vessels.

During the same meeting in 2011, a measure for the establishment of scientific observers for longline vessels was adopted as resolution, which represents an important complement to the conservation measure adopted on seabird bycatch referred above. The text specifies the need of the further development of technical specifications for observer protocols and coverage, which was tasked to the Scientific Advisory Committee in 2012. The measure will enter into force in January 2013 (see SBWG-4 Doc 47 for further details).

A Memorandum of Understanding between the IATTC and ACAP was signed after the finalisation of the Commission Meeting in 2011.

During the discussions in 2010 and 2011 for the development and adoption of the seabird conservation measure, the concept of having consistent CMs across the Pacific was repeatedly addressed. This has to do with (1) the fact that part of the fleet fish both on the Eastern and Western Pacific waters, and (2) the existence of a large overlapping area between IATTC and WCPFC in the central Pacific. In this regard, the Agreement should consider a strategic approach for the refinement of the CM in parallel for both RFMOs. The harmonisation process being effected through the Kobe process should facilitate this.

1.5 ICCAT

The 2010 (May-June 2010) and 2011 (May 2011) inter-sessional meetings of the ICCAT Sub-Committee on Ecosystems (SC-ECO) made a number of recommendations in relation to seabird bycatch mitigation. At the 2010 meeting, ACAP's review and best practice advice for pelagic longline fisheries (developed during SBWG3) was presented, together with a number of other relevant papers, from Brazil, Uruguay and BirdLife International. The increased importance of line weighting as a primary mitigation measure was noted, and the SC-ECO re-affirmed the recommendations it made in 2009 that tori lines should be used in combination with weighted branchlines to reduce seabird bycatch. No formal proposals to update (and strengthen) the current ICCAT Recommendation (Rec-07-07, which simply requires tori lines to be used south of 20°S, except for longline vessels targeting swordfish using monofilament line; if these vessels don't use tori lines, they are required to fish at night with weighted branchlines – minimum 60g swivel weight not more than 3m from the hook) were submitted at the ICCAT Commission meeting in November 2010.

At the 2011 meeting of the SC-ECO, a number of papers related to seabird bycatch and the efficacy of mitigation measures, were presented. The final report of the SC-ECO included a number of specific recommendations relating to seabird bycatch. In particular, the SC-ECO:

- a) noted that the key findings of the research presented reinforced previous recommendations from the SC-ECO that the combined use of tori lines, line weighting and night setting would be the most effective way to reduce seabird bycatch in pelagic longline fisheries.
- b) recommended continuing the research on measures to mitigate bycatch in ICCAT fisheries. The research should include the effect of mitigation measures on both bycatch and target species, as well as safety and feasibility of measures.
- c) noted that a variety of tori line designs and line weighting regimes were shown to be effective at reducing seabird bycatch when used in combination. On the basis of the research presented, the SC-ECO recommended that seabird bycatch mitigation measures ensure the sinking of baited hooks below the diving depth of seabirds within the aerial extent and protection of the tori lines.
- d) re-iterated the need for all CPCs to collect and provide by-catch data to the ICCAT's Standing Committee on Research and Statistics (SCRS), and highlighted the need for further analysis combining species distribution and by-catch data to fill existing data gaps, and to monitor levels and impacts of by-catch.
- e) recommended that the Secretariat attempt to collate user manuals or protocols describing data collection from CPC observer programs. Also, an attempt should be made to identify historical changes to the data collection protocols that might complicate data analyses and interpretation.

At the 2011 SC-ECO meeting it was reported that the Seabird Bycatch Working Group of ACAP will be meeting in August 2011, when they will be reviewing recent seabird bycatch mitigation research in pelagic longline (and other) fisheries with the aim of producing updated advice. The SC-ECO noted that it would be useful to have this advice and other relevant information presented at the ICCAT SCRS meeting in September 2011. The ICCAT

Commission meeting, at which any formal proposals to update Rec 07-07 will be presented and considered, takes place in Turkey in November 2011.

1.6 IOTC

The 2010 meeting of the IOTC Working Party on Ecosystems and Bycatch (WPEB) made a number of recommendations in relation to seabird bycatch mitigation for pelagic longline gear deployed in the IOTC convention area. This followed presentation of ACAP's review and best practice advice for pelagic longline fisheries (developed during SBWG3), together with a number of other relevant papers from Australia.

In particular, there were discussions on the existing conservation measure Resolution 10/06, in light of the new scientific evidence which recommended the removal of line setters and offal management from the list of mitigation options. As this left only 4 recommended mitigation measures available for use, it was suggested that the two-column approach would no longer be appropriate. It was proposed to greatly simplify the resolution by requiring that fishers choose two of the following four available options when using longline gear to fish south of 25°S: — 1) Weighted branch lines, 2) Night setting, 3) Bird-scaring lines (Tori Lines), and 4) Blue-dyed squid bait.

It was also noted that there was a need to adjust some of the specifications in Resolution 10/06. Line weighting regimes should be changed as per the following recommendations: — 40 grams weight attached at the hook; or 60 grams weight within 1 metre of the hook; or 98 grams weight within 2 metres of the hook

This advice was largely met with general agreement, but a small minority of scientists expressed reservation about the proposed removal of line shooters and offal management from the list of mitigation measures available. The scientists who expressed those reservations were encouraged to produce research results at the December 2010 Scientific Committee meeting in support of their positions. It was agreed that unless this was done, the advice to the Scientific Committee, to revise the resolution, would stand. Although there was further discussion on this at the Scientific Committee, and no new information provided, consensus could not be reached and the SC did not push this recommendation through to the Commission. Review of new mitigation research at SBWG4 may provide the basis for ACAP to press for further consideration of reviewing Resolution 10/06 in 2011.

The 2010 WPEB meeting also saw the presentation of a preliminary risk assessment for seabirds occurring in the Indian Ocean, which had been carried out intersessionally by ACAP and BirdLife International (BirdLife). The assessment examined characteristics that would put seabirds at risk from bycatch in longline fisheries operation and combined these characteristics to assess relative risk. Forty seabird populations were identified as High Priority, relative to the other species considered in the assessment. These included 10 species of albatrosses, together with grey and white-chinned petrels, and the flesh-footed Shearwater.

The presence of a large number of seabird species that are known to interact with pelagic longline gear, many of which have an unfavourable conservation status, supports the need to ensure that Resolution 10-06 is regularly updated to ensure best-practice mitigation measures are applied in areas of highest risk to seabird species and populations, and high levels of compliance are achieved by fishers. Currently, this measure is broadly applied to waters south of 25 degrees South, but the risk to seabirds may not be evenly spread across such a large area, and it may be appropriate to further refine the area of application to ensure risk to seabirds is adequately addressed through appropriate management.

The WPEB recommended the adoption of such an approach by initially undertaking a Level 2 Risk Assessment for those species identified as High Priority or, as appropriate, a Level 3 assessment for a smaller number of species where data are available to permit a model-based analysis. It was noted that resources to facilitate such further work would need to be provided, and that high-quality fishery observer data will need to be collected and made available for analysis. Intersessional work on level 2 and 3 risk assessments are likely to be carried out inter-sessionally and presented at the next meeting of the WPEB in October 2011.

2 ADOPTION OF PERFORMANCE BASED APPROACH

2.1 Performance Based Seabird Conservation Measures

Recent research by Melvin et al. (2010) demonstrates that the composition of species assemblages aggregating behind fishing vessels significantly affects the efficacy of the mitigation measures being used. In areas where deep-diving petrels (e.g. white-chinned petrels) are found, the mitigation measures being used must be capable of protecting the bait from seabird attack to a depth of 10 metres. Otherwise, the baits may be brought to the sea-surface and become available for secondary attacks by albatrosses and other seabirds.

Another issue for consideration is that seabird bycatch mitigation measures that are designed for larger industrial vessels may not be suitable for smaller vessels, such as those used in artisanal fisheries. For example, a streamer line design that requires an aerial coverage of 100m astern of the vessel may not be achievable on a smaller vessel, due to the inability to deploy the streamer line from an appropriate height, or for other reasons. Line weighting regimes should be analysed too in cases where the setting and recovery of the line is manually set.

The current two column approach commonly used in most tRFMO seabird conservation measures permits the use of a range of mitigation measures in combinations that may, or may not, be effective in protecting the bait from seabird attack. The specifications of the mitigation measures may also not provide sufficient flexibility to allow their use by all vessels found in the fishery. It is proposed that future seabird conservation measures be designed so that they are performance based i.e. that the mitigation measures being used are tailored and thus effective, either singly or in combination, for the seabird species found in that fishery/area.

Using this approach in a fishery where white-chinned petrels are found, it would be necessary to use mitigation measures that protect the baited hook from attack down to a depth of 10m. In a fishery where only shallow diving albatrosses are found it may only be necessary to protect the baited hook to a depth of 3m.

For this approach to be effective, we need to know two things. Firstly, the spatial and temporal distribution of seabirds likely to be caught in fishing operations must be identified. Secondly, the performance specification of the mitigation measures being used, either singly, or in combination, must be understood and the conservation measure designed so that they are applied effectively. Recent research indicates that branch-line weighting, tori lines and night setting are the most effective mitigation measures for reducing seabird bycatch in pelagic longline fisheries. Future seabird conservation measures should be built around the use of these mitigation measures to ensure they are effective in reducing seabird bycatch.

As key meetings of the IATTC and WCPFC will have already been held by the time SBWG-4 meets, it is proposed that the performance outcome approach be advocated in relevant

meetings of ICCAT and IOTC this year. Subject to outcomes achieved in these meetings, this approach would then be pursued at CCSBT, IATTC and WCPFC meetings in 2012.

3 REVIEW OF NEW RESEARCH DURING INTERSESSIONAL PERIOD

The next meeting of the SBWG will not be held until April/May 2013. During this period it is possible that new information may become available that may lead to the amendment of the best practice advice provided by the SBWG.

As noted above, some tRFMOs are reluctant to make changes to seabird conservation measures unless there is a need for substantive changes. In practice, this may mean that conservation measures are only reviewed/amended every five years or so.

To ensure that the most recent research and/or information is incorporated in the advice provided by ACAP to tRFMOs it is proposed that if new information becomes available that may result in a substantive change to the advice provided by the SBWG, that the Agreement's intersessional consultation process be adopted to review and, if appropriate, adopt this information.