

## INCIDENTAL MORTALITY

5.1 The Scientific Committee reviewed the WG-IMAF report (Annex 7). The Co-conveners of WG-IMAF presented advice to the Scientific Committee as set out below:

- (i) intersessional work of WG-IMAF (Annex 7, paragraphs 2.5 and 2.7);
- (ii) incidental mortality of seabirds and marine mammals in fisheries in the Convention Area (Annex 7, paragraphs 3.3, 3.4, 3.7, 3.10, 3.14, 3.16, 3.19 to 3.22, 3.24 and 3.25);
- (iii) implementation of conservation measures (Annex 7, paragraphs 3.35 and 3.45);
- (iv) France's action plan to reduce/eliminate seabird mortality in Subarea 58.6 and Division 58.5.1 (Annex 7, paragraphs 3.48, 3.54, 3.56, 3.58, 3.60 and 3.62);
- (v) incidental mortality of seabirds and marine mammals in fisheries outside the Convention Area (Annex 7, paragraphs 4.5 and 4.6);
- (vi) incidental mortality of seabirds during IUU fishing in the Convention Area (Annex 7, paragraphs 5.4 and 5.5);
- (vii) research into and experience with mitigation measures (Annex 7, paragraphs 6.3, 6.7, 6.8 and 6.11);
- (viii) observer reports and data collection (Annex 7, paragraphs 7.1, 7.2, 7.7, 7.8, 7.10, 7.12, 7.16 and 7.17);
- (ix) research into the status and distribution of seabirds and marine mammals (Annex 7, paragraphs 8.4 and 8.8);
- (x) assessment of risk in CCAMLR subareas and divisions (Annex 7, paragraphs 9.5 and 9.6);
- (xi) incidental mortality of seabirds in relation to new and exploratory fisheries (Annex 7, paragraphs 10.3 and 10.7);
- (xii) international and national initiatives relating to incidental mortality of seabirds and marine mammals in fishing (Annex 7, paragraphs 11.2, 11.7 and 11.12);
- (xiii) marine debris and its impacts on marine mammals and seabirds in the Convention Area (Annex 7, paragraphs 13.2 and 13.11 to 13.14);
- (xiv) streamlining the work of the Scientific Committee (Annex 7, paragraphs 14.4 and 14.7).

5.2 The Scientific Committee endorsed the report and its conclusions, and the plan of intersessional work (Annex 7, Table 1) subject to the comments set out below.

#### Incidental mortality of seabirds and marine mammals in fisheries in the Convention Area

5.3 The Scientific Committee welcomed the reports of scientific observers submitted to the Secretariat from krill trawl vessels and queried if extrapolations of incidental mortalities of seabirds could be made to unobserved portions of the krill trawl fleet using this available information on observed incidental mortalities of seabirds. Ms Rivera (WG-IMAF Co-convener) noted that in the longline fisheries, where all vessels carry observers, the current practice is to use observations from the sampled catch to extrapolate to the unobserved portions of the catch. It may also be possible to extrapolate incidental mortality estimates for seabirds to krill trawl vessels not carrying observers, provided that the assumptions of such extrapolations are clearly identified.

#### Implementation of conservation measures

5.4 The Scientific Committee noted that WG-IMAF considered implementation of Conservation Measures 26-01, 25-02, 25-03 and 51-01 (Annex 7, paragraphs 3.26 to 3.45), and acknowledged that this consideration is based on information from scientific observer reports submitted to the Secretariat.

5.5 The Scientific Committee agreed that the points identified by WG-IMAF are compliance issues only once reviewed by SCIC and endorsed by the Commission. To that end, the Scientific Committee agreed that for this year it would footnote in its report the relevant adopted outcomes of SCIC provided in the SCIC report as reviewed by the Scientific Committee (CCAMLR-XXVIII, Annex 5, paragraphs 2.31 to 2.34<sup>3</sup>).

5.6 The Scientific Committee agreed that, in future, working groups will advise on conservation measure implementation issues directly to SCIC and not to include the specific nature of those issues in their reports to the Scientific Committee. It agreed that the potential implications of such issues for the conservation of Antarctic marine living resources should be presented by the working groups in their reports. The Scientific Committee requested the Commission consider whether this is an appropriate procedure for reporting on implementation issues.

5.7 Dr K. Seok (Republic of Korea) indicated concern that Korea's vessels had not fully implemented Conservation Measures 26-01 and 25-02 (Annex 7, paragraphs 3.27, 3.29 and 3.37) during fishing in the Convention Area in 2008/09. Dr Seok noted that improved communication between observers and vessel masters may aid with Korea's commitment to ensure that its vessels fully implement these conservation measures in future.

5.8 The Scientific Committee noted discrepancies between the full implementation of Conservation Measure 25-02 with regard to the discharge of offal (Annex 7, paragraph 3.33) and the discharge of dead skates recorded by WG-FSA (Annex 5, paragraph 6.11 and Table 16).

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<sup>3</sup> 2.31 Australia provided advice to SCIC in relation to the report that the *Austral Leader II* had not deployed streamer lines during all sets. Australia advised that twin streamer lines complying with the requirements of Conservation Measure 25-02 had been deployed on all longline sets. Australia referred SCIC to the WG-IMAF Report (SC-CAMLR-XXVIII, Annex 7), paragraph 3.38, which stated that, during one night setting of an integrated weighted line, the streamer line became entangled with the main fishing line and subsequently broke. It was impractical and unsafe for the crew to attempt to retrieve or replace the broken streamer line during the night set. The broken streamer lines were retrieved during hauling on the following day. There was a minimal risk of seabird by-catch and no seabird by-catch was recorded during the setting of gear whilst the streamer line had broken. Australia therefore believed that this did not constitute an incident of non-compliance.

2.32 Australia also provided advice to SCIC in relation to the report that the *Austral Leader II* had not used haul-scaring devices on all hauls. Australia advised that a haul mitigation device had not been deployed during one longline haul due to adverse weather conditions which had caused waves to wash over the vessel's hauling bay. Australia advised that, in such conditions, haul mitigation devices could become entangled with the hauling winches or fishing line and posed a safety risk to crew, and noted that WG-IMAF had recognised that weather can affect the performance of haul mitigation devices. Given the adverse weather conditions at the time, there was minimal risk of seabird by-catch and again Australia confirmed that no seabird by-catch had been recorded during hauling whilst the mitigation device had not been deployed. Australia therefore believed that this did not constitute an incident of non-compliance.

2.33 South Africa advised that haul mitigation measures were used 98% of the time by the *Koryo Maru No. 11*. The remaining 2% of the time that they were not used was during four hauls due to poor weather.

2.34 Australia advised SCIC that it had investigated the report that the *Antarctic Chieftain* had used plastic packaging bands to secure bait boxes. Australia advised that observer coordinators from Australia and South Africa had both confirmed that an error had been made in the observer report and that bait box packaging bands had not been present on board the *Antarctic Chieftain*. The discrepancy had been resolved and an amended observer report had been submitted to the Secretariat.

5.9 The Scientific Committee further noted that although the Commission gave a definition of ‘offal’ at its Twenty-third Meeting (CCAMLR-XXIII, paragraph 10.28), there remains some ambiguity in the definition of ‘offal’ in relation to discards and the release of live organisms. The Scientific Committee recalled that the requirement to retain all offal in high-latitude fisheries was first introduced in 2000 (Conservation Measure 210/XIX) and defined to include fish parts, bait and whole dead fish in 2004 (CCAMLR-XXIII, paragraph 10.28).

5.10 To further clarify the situation, the Scientific Committee recommended the following definitions be considered by the Commission:

- (i) **Offal:** bait and by-products from the processing of fish and other organisms, including parts or sections of fish or organisms.
- (ii) **Discards:** whole fish or other organisms returned to the sea dead or with low expectation<sup>4</sup> of survival.
- (iii) **Releases:** fish or other organisms returned to the sea alive, with high expectation<sup>4</sup> of survival.
- (iv) **Benthic Organisms:** organisms defined in the VME Invertebrate Classification Guide and other habitat forming taxa, which are excluded from definitions (i) to (iii) above.

5.11 In order to avoid confusion associated with different types of offal discard or release, the Scientific Committee further recommended that Conservation Measures 25-02, 25-03 and 26-01, and all other relevant conservation measures that reference offal, discards, and/or the release of fish or other organisms, be revised to incorporate the abovementioned definitions.

5.12 The Scientific Committee requested that WG-IMAF and WG-FSA review whether the prohibition on offal and discarding of dead fish in Subarea 88.1 and exploratory fisheries south of 60°S continues to be required, given the risk status of those areas and the much-improved compliance with Conservation Measure 25-02, and the other requirements of data reporting.

Incidental mortality of seabirds and marine mammals  
in fisheries outside the Convention Area

5.13 Dr Barrera-Oro noted the importance of Members using proven and effective CCAMLR practices in respective EEZs to reduce the incidental mortality of Convention Area seabirds. He noted that Argentina adheres to these CCAMLR guidelines in its EEZ fisheries.

5.14 Dr Barrera-Oro believed, however, that submission of information on any incidental mortalities of these Convention Area seabirds outside the Convention Area was more appropriately done through ACAP. ACAP could in turn share this information with CCAMLR.

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<sup>4</sup> As described in observer logbook form L5.

5.15 The Scientific Committee encouraged a close collaboration between CCAMLR and ACAP but did note that not all CCAMLR Members are party to ACAP. Thus, consistent with CCAMLR Resolution 22/XXV, it is appropriate to request Members to submit information to CCAMLR on the incidental mortality of Convention Area seabirds that may occur in their fisheries.

5.16 Dr R. Leslie (South Africa) indicated that South Africa intends to submit a paper on incidental mortalities of seabirds in its fisheries outside the Convention Area at the next meeting of WG-IMAF.

#### Incidental mortality of seabirds during IUU fishing in the Convention Area

5.17 The Scientific Committee noted that WG-IMAF was not able to produce an estimate of the levels of incidental mortality of seabirds or marine mammals in IUU fishing due to a lack of information on the potential rate of interactions with IUU gillnet fisheries. However, the Scientific Committee noted that penguins and marine mammals are potentially at risk of incidental captures in gillnets depending on the depths and locations fished.

5.18 The Scientific Committee requested that Members submit reviews on the potential for gillnets to capture marine mammals and birds, based on experience in other domestic and international operations.

#### Observer reports and data collection

5.19 The Scientific Committee requested that ad hoc TASO consider the recommended observer coverage levels and sampling levels recommended by WG-IMAF (Annex 7, Tables 12, 13 and 14) and to report back to WG-IMAF regarding the feasibility of these recommended levels given other observer tasks.

#### Research into the status and distribution of seabirds and marine mammals

5.20 Prof. G. Duhamel (France) reiterated that the modelling study to evaluate the impacts of the longline fisheries on white-chinned and grey petrels in the Crozet Archipelago and Kerguelen Islands (SC-CAMLR-XXVIII/BG/13) used data from 2004 to 2006. Thus, any conclusions and recommendations based on that study (Annex 7, paragraph 8.8) must be considered in that context, particularly when France's fishery management actions following the study had succeeded in significantly reducing incidental mortality levels of the two petrel species.

5.21 The Scientific Committee noted that, whereas the incidental mortalities of both species had declined substantially with the implementation of France's action, the relative impacts of the current incidental mortality of the grey petrel in particular (estimated 25 birds and four birds in Division 58.5.1 and Subarea 58.6 respectively in 2008/09; see Annex 7, paragraphs 3.3 and 3.6), continue to be considered as a serious concern given the critical conservation status of this species.

5.22 The Scientific Committee further noted that France's commitment to assess the breeding population size of white-chinned and grey petrels in Division 58.5.1 (Annex 7, paragraph 3.52) will assist in a further understanding of the status in populations of these two species and the subsequent fishery impacts.

#### Assessment of risk in CCAMLR subareas and divisions

5.23 The Scientific Committee endorsed the advice from WG-IMAF with regard to the proposal for a five-day season extension for fishing into April in Subarea 48.3 under Conservation Measure 42-02 (Annex 7, paragraph 9.5).

5.24 The Scientific Committee noted that the decision rules, proposed by WG-IMAF for the Scientific Committee in 2010 with regard to the season extension proposed in Subarea 48.3 under Conservation Measure 42-02, needed a minor clarification (Annex 7, paragraph 9.6). The Scientific Committee recommended a minor change to Annex 7, paragraph 9.6(ii) to include the following text, in italics: 'or more than 10 *or fewer than 15* birds in total'.

5.25 The Scientific Committee noted that it is important to review the appropriateness of such season extensions on a regular basis (as stated in Annex 7, paragraphs 9.6 and 9.7) particularly with regard to climate change and its potential impact on breeding phenology.

#### Marine debris and its impacts on marine mammals and seabirds in the Convention Area

5.26 Dr Agnew noted that the increase in the use of the trotline system mentioned in Annex 7, paragraph 13.6, does not refer to an increase in trotline use in fisheries in Subarea 48.3, but an increase in the use of trotlines within the foraging range of chick-rearing wandering albatross from South Georgia.

5.27 In response to anecdotal reports that some trotline fisheries remove by-catch fish from trotlines by the cutting of snoods (Annex 7, paragraph 13.7), Dr M. Kiyota (Japan) noted that Japan's vessel that uses the trotline longline system manually removes the hooks from all by-catch fish.

#### Streamlining the work of the Scientific Committee

5.28 The Scientific Committee endorsed WG-IMAF's proposal to meet on a biennial basis. The significant accomplishments of WG-IMAF are to be commended and have been extremely important to the work of CCAMLR and reducing the incidental mortality of seabirds and marine mammals in CCAMLR fisheries. These outcomes indicate a reduced workload for WG-IMAF and allow a reduced meeting frequency. A biennial meeting schedule will also allow further involvement of WG-IMAF participants in ACAP, which is aiming to address incidental mortality of albatrosses and petrels in fisheries managed by adjacent RFMOs, including Convention Area seabirds.

5.29 Following the discussion in paragraphs 5.5 and 5.6, the Scientific Committee recommended that, in the future, SCIC should evaluate implementation/compliance of conservation measures. The working groups should evaluate the efficacy of conservation measures and the implications of any non-compliance with those conservation measures for marine living resources.

5.30 Given that the relatively low levels of incidental mortality within most areas of the Convention Area, the Scientific Committee agreed that a biennial schedule for evaluating levels of incidental mortality is appropriate.

5.31 The Scientific Committee agreed that evaluation of new and exploratory fisheries by WG-IMAF could occur on a biennial basis. Therefore, if a proposal is submitted for a new fishing method or area, either the Scientific Committee can evaluate this submission in regard to the risk of incidental mortality or request WG-IMAF to evaluate the submission at its next meeting.

5.32 Based on the above conditions (paragraphs 5.29 to 5.31), the Scientific Committee endorsed a biennial schedule for WG-IMAF.

#### Advice to the Commission

5.33 This section distinguishes between general advice (which the Commission may wish to note and/or endorse) and specific advice which includes requests to the Commission for action.

#### General advice

5.34 The Commission was requested to note:

- (i) intersessional work of WG-IMAF (Annex 7, paragraph 2.5);
- (ii) incidental mortality of seabirds and marine mammals in fisheries in the Convention Area (Annex 7, paragraphs 3.3, 3.4, 3.7, 3.10, 3.14, 3.16, 3.20 to 3.22 and 3.25);
- (iii) implementation of conservation measures (Annex 7, paragraph 3.35; paragraph 5.12);
- (iv) incidental mortality of seabirds and marine mammals in fisheries outside the Convention Area (Annex 7, paragraph 4.6);
- (v) assessment of risk in CCAMLR subareas and divisions (paragraphs 5.23 to 5.25);
- (vi) incidental mortality of seabirds in relation to new and exploratory fisheries (Annex 7, paragraph 10.3);

(vii) international and national initiatives relating to incidental mortality of seabirds and marine mammals in fishing (Annex 7, paragraph 11.12);

(viii) marine debris and its impacts on marine mammals and seabirds in the Convention Area (Annex 7, paragraphs 13.2 and 13.14).

5.35 The Commission was requested to endorse:

(i) intersessional work of WG-IMAF (Annex 7, paragraph 2.7);

(ii) information on incidental mortality of seabirds and marine mammals in fisheries in the Convention Area (Annex 7, paragraph 3.19);

(iii) implementation of conservation measures (Annex 7, paragraph 3.45; paragraphs 5.5 and 5.6);

(iv) France's action plan to reduce/eliminate seabird mortality in Subarea 58.6 and Division 58.5.1 (Annex 7, paragraphs 3.48, 3.54, 3.56, 3.58, 3.60 and 3.62);

(v) information on incidental mortality of seabirds and marine mammals in fisheries outside the Convention Area (Annex 7, paragraph 4.5; paragraph 5.16);

(vi) information on incidental mortality of seabirds during IUU fishing in the Convention Area (Annex 7, paragraph 5.4; paragraph 5.18);

(vii) research into and experience with mitigation measures (Annex 7, paragraph 6.7);

(viii) observer reports and data collection (paragraph 5.19; Annex 7, paragraphs 7.1, 7.2, 7.7, 7.8, 7.10, 7.12, 7.16 and 7.17);

(ix) research into the status and distribution of seabirds and marine mammals (Annex 7, paragraphs 8.4 and 8.8);

(x) assessment of risk in CCAMLR subareas and divisions (paragraphs 5.23 and 5.24; Annex 7, paragraph 9.6);

(xi) information on incidental mortality of seabirds in relation to new and exploratory fisheries (Annex 7, paragraph 10.7);

(xii) international and national initiatives relating to incidental mortality of seabirds and marine mammals in fishing (Annex 7, paragraph 11.7);

(xiii) information on marine debris and its impacts on marine mammals and seabirds in the Convention Area (Annex 7, paragraphs 13.11 to 13.13);

(xiv) streamlining the work of the Scientific Committee (paragraphs 5.28 to 5.32; Annex 7, paragraphs 14.4 and 14.7).



## Specific advice

5.36 The Commission was requested to consider taking action in respect of:

- (i) implementation of, and compliance with, conservation measures (paragraphs 5.5, 5.6 and 5.8);
- (ii) incidental mortality of seabirds during IUU fishing in the Convention Area (Annex 7, paragraph 5.5);
- (iii) research into and experience with mitigation measures and subsequent recommendation for changes to Conservation Measures 25-02, 25-03, 26-01 and 42-01 (paragraphs 5.10 and 5.11; Annex 7, paragraphs 6.3, 6.8 and 6.11);
- (iv) assessment of risk in CCAMLR subareas and divisions and subsequent recommendation for changes to Conservation Measure 41-02 (paragraphs 5.23 to 5.25; Annex 7, paragraph 9.5);
- (v) international and national initiatives relating to incidental mortality of seabirds and marine mammals in fishing (Annex 7, paragraph 11.2).