

## ASSESSMENT AND AVOIDANCE OF INCIDENTAL MORTALITY OF ANTARCTIC MARINE LIVING RESOURCES

### Marine Debris

6.1 The Commission noted that at the request of the Scientific Committee the Secretariat had developed a set of standard forms and guidelines which should be used for reporting data on the following topics relating to marine debris (SC-CAMLR-XX/BG/22):

- (i) loss or discarding of fishing gear;
- (ii) collection of marine debris by vessels at sea;
- (iii) surveys of marine debris on beaches;
- (iv) entanglement of mammals (and birds) in marine debris;
- (v) marine debris associated with seabird colonies; and
- (vi) animals externally contaminated (i.e. soiled) by hydrocarbons or other substances.

6.2 The Commission also noted that the Scientific Committee considered a review prepared by the Secretariat of all data submitted by Members since 1986.

6.3 The Commission noted that the Scientific Committee had recommended discontinuing the current system of reporting on collection of marine debris by vessels at sea. Few reports had been received and all were essentially anecdotal. The Commission endorsed this recommendation and noted that the Scientific Committee would prefer to receive data from standardised quantitative surveys from vessels of debris at sea; Members engaged in such activities were encouraged to report on this and their methods to the Secretariat (SC-CAMLR-XX, paragraph 4.100).

6.4 The Commission endorsed the Scientific Committee's recommendations that in respect of the other topics (SC-CAMLR-XX, paragraph 4.101):

- (i) the current versions of instructions for collecting data should be adopted, subject to any amendments notified to the Secretariat before the end of the Commission meeting;
- (ii) the current versions of the standard recording/reporting forms for these data should be adopted, subject to any amendments notified to the Secretariat before the end of the Commission meeting;
- (iii) the CCAMLR Secretariat should only accept data on these topics which are submitted on the standard reporting forms and which have been collected according to the prescribed standard methods;

- (iv) data provided by Members on:
  - (a) surveys of marine debris on beaches,
  - (b) entanglement of mammals in marine debris, and
  - (c) marine debris associated with seabird colonies

should be incorporated into the CCAMLR database once appropriate consultation and validation with relevant Members had been undertaken (SC-CAMLR-XX, paragraph 4.102), for sites where at least five years of data exist. Other submitted data would be archived in appropriate electronic formats; and

- (v) the submission of Members' Reports on Assessment and Avoidance of Incidental Mortality should now be discontinued.

6.5 The Commission noted that Members are still encouraged to provide reports to the Scientific Committee on their own data, where these contain information that would amplify and assist the interpretation of trends and/or when they are reporting on data not yet submitted in part or in full to the CCAMLR database (SC-CAMLR-XX, paragraph 4.101).

6.6 The Commission noted the following points from the rest of the Scientific Committee report on this topic (SC-CAMLR-XX, paragraphs 4.110 to 4.121):

- (i) that reports on surveys of beached marine debris conducted in accordance with the CCAMLR standard method, by Uruguay (King George Island – Subarea 48.1), Chile (Cape Shirreff, Livingston Island – Subarea 48.1) and the UK (Bird Island, South Georgia – Subarea 48.3, and Signy Island, South Orkney Islands – Subarea 48.2) indicated a general increase this year in levels of debris, including numerous plastic packaging bands;
- (ii) that entanglements of Antarctic fur seals at Bird Island, South Georgia, have doubled compared with last year and that plastic packaging bands accounted for the majority of entanglements; and
- (iii) that unprecedented levels of longline fishing hooks were recorded in association with wandering albatrosses at Bird Island, South Georgia, indicating widespread discarding of gear and offal complete with hooks; similar findings had been reported from Marion Island (Subarea 58.7).

6.7 The Commission noted the Scientific Committee's concern in relation to the overall trend this year of increasing levels of debris and entanglement and the increase in reports of plastic packaging bands (SC-CAMLR-XX, paragraph 4.121). It requested Members to improve their standards of disposal and treatment of debris, particularly in respect of plastic packaging bands.

## Trends in Marine Mammals and Bird Populations

6.8 The Commission noted that new data on this topic had been reported by the Scientific Committee based on discussions at WG-EMM and ad hoc WG-IMALF (SC-CAMLR-XX, paragraphs 4.124 and 4.125), and that WG-EMM might review how to incorporate data on long-term trends in populations of seabirds and marine mammals into its work on assessment of the marine ecosystem.

## Incidental Mortality of Marine Animals during Fishing Operations

6.9 The Commission reviewed the report of the Scientific Committee and its ad hoc WG-IMALF in respect of assessment and avoidance of incidental mortality of Antarctic marine living resources (SC-CAMLR-XX, paragraphs 4.24 to 4.96). It endorsed the report and its conclusions, subject to the comments set out below.

### Status of Seabirds at Risk

6.10 The Commission noted evidence of recent population declines of seabird species in Subareas 48.3 and 58.6, attributed mainly to combinations of longline fishing in areas adjacent to the Convention Area and IUU fishing for toothfish within the Convention Area (SC-CAMLR-XX, paragraph 4.27). This provides the first potential evidence of the initial impact of IUU fishing on Convention Area seabirds.

### Incidental Mortality of Seabirds during Regulated Longline Fishing in the Convention Area

6.11 The Commission noted that, in respect of seabird by-catch, the operation of the main regulated longline fisheries in 2001 had maintained the high standard of last year in Subarea 48.3 and had shown considerable improvement in the South African EEZ in Subareas 58.6 and 58.7. It endorsed associated advice relating to fishing seasons in Subareas 58.6 and 58.7 (SC-CAMLR-XX, paragraphs 4.30 and 4.33 to 4.36).

6.12 Considerable concern was expressed at the levels of seabird by-catch reported by France for its EEZs in Subarea 58.6 and Division 58.5.1 in 1999 and 2000; these were regarded as unacceptably high, especially in relation to levels in regulated longline fisheries elsewhere in the Convention Area.

6.13 France indicated that it shared these concerns, had progressively applied all elements of Conservation Measure 29/XIX and had achieved a considerable reduction in seabird by-catch, which was now confined to white-chinned petrels. The total number of birds killed needed to be viewed in the light of the large local populations of white-chinned petrels and the potential high levels of by-catch of this species in IUU fishing in

these areas. France indicated that it was engaged in equipping new vessels for this fishery and would do everything possible to reduce seabird by-catch given the characteristics of the fishery and its environment. This issue should also be considered by the international organisations and countries whose scope includes the regulation of fishing activities outside the Convention Area. It would be desirable to strengthen the cooperation between CCAMLR and these organisations, such as, for example, organisations involved in tuna fishing (ICCAT, IOTC, CCSBT).

#### Compliance with Conservation Measure 29/XIX

6.14 The Commission noted that overall compliance with Conservation Measure 29/XIX this year, compared to last year, was substantially improved in all subareas and divisions and was again complete in Subarea 88.1 (SC-CAMLR-XX, paragraph 4.37 and Table 56). However, it also recognised that some vessels were still failing to comply with elements of the conservation measure which had been in place for several years and which were operationally very simple to achieve (SC-CAMLR-XX, paragraphs 4.37 and 4.38) and that only four of 24 vessels longline fishing in the Convention Area had fully complied with Conservation Measure 29/XIX (SC-CAMLR-XX, paragraph 4.39).

6.15 The Commission also noted the advice of the Scientific Committee both this year (SC-CAMLR-XX, paragraph 4.41) and last year (SC-CAMLR-XIX, paragraphs 4.40 and 4.41) on the topic of excluding from fishing those vessels which fail to comply with Conservation Measure 29/XIX.

6.16 Some Members indicated that it would be premature to act in accordance with SC-CAMLR-XX, paragraph 4.41 because:

- (i) despite their best endeavours in working with technical coordinators and fishing companies, it was sometimes difficult to ensure that all fishing operations exactly met the precise specifications of Conservation Measure 29/XIX, especially with respect to the design of streamer lines, the timing of setting and the operational difficulties of achieving the prescribed line-weighting regime;
- (ii) there were potential difficulties in ensuring total accuracy of reporting through the Scheme of International Scientific Observation; and
- (iii) no (or negligible numbers of) seabirds had been killed by several vessels that narrowly failed to comply with certain elements of Conservation Measure 29/XIX.

6.17 Other Members felt that given:

- (i) the simplicity and feasibility of complying with Conservation Measure 29/XIX;

- (ii) the changes to be introduced for next year to improve reporting through the Scheme of International Scientific Observation; and
- (iii) the feasibility and desirability of using two scientific observers;

vessels which do not comply with Conservation Measure 29/XIX next year should be prohibited from fishing in the Convention Area. This should be emphasised to technical coordinators, fishing companies and national authorities at the earliest opportunity.

6.18 Taking these views into account, the Commission stated that vessels equipped or configured so that they are unable to comply with Conservation Measure 29/XIX should not be allowed to fish in the Convention Area. It was the responsibility of Members to ensure, *inter alia*, through in-port inspection, that vessels were appropriately equipped and configured.

6.19 The Commission further recommended that, for vessels persistently failing to comply with Conservation Measure 29/XIX, Members should take all steps possible either to ensure strict compliance in the future or to prevent such vessels from fishing in the Convention Area.

6.20 The Commission recognised that achieving compliance with Conservation Measure 29/XIX has important implications as a precondition for extending longline fishing seasons for toothfish (SC-CAMLR-XIX, paragraph 4.41; SC-CAMLR-XX, paragraphs 4.48 and 4.49).

6.21 In this regard, several Members noted that failure to achieve 100% compliance with each element of Conservation Measure 29/XIX could arise by accident, through misunderstanding or by misreporting. They noted that not all elements of the conservation measure are equally effective in reducing seabird by-catch, and, in any case, failure to meet the exact specification of some elements of the measure (e.g. streamer line design) was unlikely to affect seabird by-catch rates.

6.22 On behalf of ad hoc WG-IMALF, Prof. Croxall agreed that not all elements of Conservation Measure 29/XIX were likely to be equally effective in reducing rates of seabird by-catch. However, he noted:

- (i) the advice last year (SC-CAMLR-XIX, paragraph 4.40) that appropriate line-weighting regimes are likely to be the best single measure but that further work on their performance in areas of high seabird abundance is still required; and
- (ii) that the Scientific Committee had endorsed the WG-IMALF proposal for rigorous experiments to investigate the contribution that each element of Conservation Measure 29/XIX, singly or in combination, made to reducing potential seabird by-catch rates (SC-CAMLR-XX, paragraphs 4.62 and 4.63). Until this was done, objective reassessment, or prioritisation, of the elements of Conservation Measure 29/XIX could not be undertaken.

6.23 The Commission advised that, in regard of assessments next year of compliance with Conservation Measure 29/XIX, particularly with respect to extension of fishing seasons, that Members, technical coordinators, fishing companies and fishers should work together with scientific observers to ensure that complete compliance is achieved. The Commission may need to determine whether any discretion might be accorded, in regard of uncertainties in reporting or in other circumstances, in respect of failure to comply with minor technical details of Conservation Measure 29/XIX.

#### Incidental Mortality of Seabirds during Longline Fishing outside the Convention Area

6.24 The Commission noted that the estimated potential level of seabird by-catch arising from IUU fishing in the Convention Area in 2001 is, at 36 000–69 000 birds (lower level) to 48 000–90 000 birds (higher level), comparable to the totals in recent years (SC-CAMLR-XX, paragraph 4.50). It is, therefore, still potentially unsustainable for populations of albatrosses, giant petrels and white-chinned petrels breeding in the Convention Area (SC-CAMLR-XX, paragraph 4.53); this forms an important part of the Commission's determination to take even more stringent measures to combat IUU fishing.

6.25 The Commission noted several reports, concerning incidental mortality of Convention Area seabirds, from areas outside the Convention Area (SC-CAMLR-XX, paragraphs 4.56 to 4.58). It endorsed the recommendation of the Scientific Committee that responses be sought by the Secretariat on seabird by-catch levels, mitigation measures in use and observer programs from all Members and other countries conducting or permitting longline fishing in areas where seabirds from the CCAMLR Convention Area are killed (SC-CAMLR-XX, paragraph 4.59).

#### Research into and Experience with Mitigating Measures

6.26 The Commission welcomed the ongoing research into improvements to mitigating measures (SC-CAMLR-XX, paragraphs 4.60 and 4.61). It recalled its discussions on compliance with different elements of Conservation Measure 29/XIX (see paragraphs 6.15 to 6.23) and endorsed the proposal of the Scientific Committee that rigorous experiments be conducted on the effect of different elements of the measure, when applied to the Spanish longline system. It noted the importance of the proposal in terms of its potential to improve and simplify Conservation Measure 29/XIX (SC-CAMLR-XX, paragraphs 4.62 and 4.63) and strongly urged Members to support the proposal as a high priority.

International and National Initiatives relating to  
Incidental Mortality of Seabirds in relation to  
Longline Fisheries

6.27 The Commission encouraged Members who have not yet developed and implemented national plans in support of the FAO IPOA–Seabirds, to do this as soon as possible (SC-CAMLR-XX, paragraph 4.65), recalling that it had originally requested that this be done by February 2001. It commended those Members, particularly Japan, New Zealand and the USA, who had produced plans.

6.28 Australia emphasised that its Albatross Threat Abatement Plan, developed in 1999, is still fully operational and will also serve to implement its NPOA–Seabirds.

6.29 Japan advised on its extensive activities to minimise seabird by-catch in longline fisheries outside the Convention Area. Japan noted that some comments were made on its national plan in support of IPOA–Seabirds at the meeting of ad hoc WG-IMALF. It will review these comments and will modify and improve the plan if necessary and practicable. Japan also advised that it had introduced mandatory use of streamer lines on its vessels fishing while targeting southern bluefin tuna and the issue of seabird by-catch would be addressed in the relevant tuna management fora.

6.30 The European Community recognised the importance of this and suggested that CCAMLR Members should promote the introduction of conservation measures in relation to seabirds in regional fisheries organisations responsible for areas adjacent to the CCAMLR Convention Area.

6.31 The European Community noted that this issue is likely to be discussed at the Annual Meeting of ICCAT in Murcia, Spain, later this month. In that case, the European Community will be pleased as CCAMLR Observer to convey information on the work accomplished by CCAMLR in this area, and encourage progress thereon in the ICCAT framework.

6.32 Brazil reported on the development of a new South American strategy for the conservation of albatrosses and petrels (see SC-CAMLR-XX, paragraphs 4.69 and 4.70). This strategy includes promotion of research into levels of seabird by-catch and appropriate mitigation measures, development of training and education programs, promotion of national measures to protect seabirds and of Environmental Impact Assessments prior to starting new fisheries and promotion of cooperation between fishing companies, non-governmental organisations, government agencies and research institutes.

6.33 The Commission noted the view of the Scientific Committee that the greatest threats confronting the conservation at sea of albatrosses and petrels breeding in the Convention Area are the levels of mortality likely to be associated with IUU longline fishing inside the Convention Area and with longline fishing for species other than *Dissostichus* in areas adjacent to the Convention Area. It agreed that there is an urgent

need for collaborative work with appropriate regional fisheries organisations. The Commission requested Members to give every assistance to developing appropriate collaboration and data exchange with the relevant tuna commissions and other regional fisheries organisations (SC-CAMLR-XX, paragraphs 4.73 and 4.74).

#### Incidental Mortality of Marine Mammals in Longline Fisheries

6.34 The Commission noted that there was only one (unidentified) marine mammal reported killed by a longline vessel in the Convention Area in 2001 (SC-CAMLR-XX, paragraph 4.76).

#### Incidental Mortality in Trawl Fisheries

6.35 The Commission noted that one Antarctic fur seal was reported killed by a trawl vessel in Division 58.5.2 and that no instances of incidental mortality of seabirds were reported in Divisions 58.4.2 and 58.5.2. However, in Subarea 48.3, trawlers fishing for icefish reported 132 birds entangled of which 92 were killed, a total three times the estimated seabird by-catch mortality for all regulated longline fishing in this subarea in 2001. One of the vessels responsible was the same trawler responsible for all seabird trawl mortality (19 black-browed albatrosses) last year (SC-CAMLR-XX, paragraphs 4.77 and 4.78).

6.36 The Commission noted, however, the advice of the Scientific Committee that insufficient data were available to determine the precise cause of the high levels of seabird by-catch associated with certain vessels fishing for icefish in Subarea 48.3 and the consequent difficulty in proposing appropriate remedies, e.g. in the form of a binding conservation measure (SC-CAMLR-XX, Annex 5, paragraphs 8.19 and 8.20).

6.37 Accordingly, noting the advice of the Scientific Committee (SC-CAMLR-XX, paragraph 4.80) the Commission recommended that in respect of vessels trawl fishing for icefish in Subarea 48.3 in 2001/02:

- (i) new data recording and reporting arrangements be put in place for scientific observers, to ensure that more data are available to investigate and resolve the causes of the problem; and
- (ii) mitigating measures be tested with the aim of incorporating appropriate recommendations into Conservation Measure 173/XVIII.

6.38 The Commission further noted the advice of the Scientific Committee concerning interim precautionary limits on the number of seabirds killed by each vessel trawl fishing for icefish in Subarea 48.3 in 2001/02 (SC-CAMLR-XX, paragraphs 4.80 and 4.83).



6.39 Taking into account the extensive discussion on this topic (SC-CAMLR-XX, paragraphs 4.84 to 4.93), the Commission endorsed the advice of the Scientific Committee that a catch limit per vessel of 20 birds should not restrict most of the fishing fleet but could suffice as an appropriate interim measure this year for protecting seabirds while maintaining by-catch rates at levels not dissimilar from the longline fishery in the area and requiring improvements in fishing practice.

#### Incidental Mortality in Other Fisheries

6.40 The Commission noted that no instances of incidental mortality of marine mammals or seabirds had been recorded for the exploratory squid fishery or the toothfish pot fishery in Subarea 48.3 (SC-CAMLR-XX, paragraph 4.95).