

ASSESSMENT AND AVOIDANCE OF INCIDENTAL MORTALITY
OF ANTARCTIC MARINE LIVING RESOURCES

5.1 Over the last few years CCAMLR has adopted and implemented a set of steps to monitor and evaluate the impact of anthropogenic debris and waste on marine living resources in the Convention Area (CCAMLR-V, paragraphs 40 to 43).

5.2 The Commission noted that reports required from Members on assessment and avoidance of incidental mortality in the Convention Area in the 1992/93 season had been submitted by Australia, Brazil, Japan, Norway, South Africa, UK and USA (CCAMLR-XII/BG/6, 8, 9, 10, 12 and 18).

5.3 Observations of lost and discarded fishing gear at sea were reported by Australia and Brazil. The UK reported the first observation of penguins contaminated with oil, which must have originated from nearby pollution at sea, at Bird Island, South Georgia (SC-CAMLR-XII/BG/15).

Marine Debris

5.4 Periodical surveys of beached marine debris were reported by Australia (increase in debris since the last survey at Heard Island), Brazil (King George Island), Chile (Livingston Island), UK (South Orkney Islands and South Georgia), USA (less debris than in previous years in the Antarctic Peninsula and no observations at all of debris at Seal Island, South Shetland Islands). South Africa plans to conduct a full survey of the beaches of Marion Island for marine debris in the near future.

5.5 The UK presented reports on surveys of beach debris for the last two years (winters of 1991 and 1992) at Bird Island, South Georgia (CCAMLR-XII/BG/3 and CCAMLR-XII/BG/4) and the last year (1992/93) at Signy Island, South Orkney Islands (CCAMLR-XII/BG/7).

- (i) At Bird Island the 1991 survey reported a 75% reduction in debris compared to 1990; packaging bands and fishing net fragments were still the main types of debris. In 1992, however, there was a 20-fold increase in debris, chiefly due to large quantities of nylon string and rope. The incidence of packaging bands and fishing net also increased though most packaging

bands had been cut. The end of open incineration practices at Bird Island reduced the incidence of items of local provenance from 20% to 0.

- (ii) At Signy Island the current survey showed a further reduction (totalling 80% overall) in both weight and number of items of debris, compared to the two previous surveys. Whether this reflects improved adherence to the various regulations designed to protect the Southern Ocean marine environment or simply results from the reduction in fishing activity in the area, due to the closure of Subarea 48.2 to finfishing, is unknown.

5.6 In SC-CAMLR-XII/BG/17 Chile presented a summary of historical human impact at Cape Shirreff, Livingston Island. Beach debris from fishing and other activities carried out by 10 countries has been identified and this material has had an impact on juvenile fur seals (*Arctocephalus gazella*) and kelp gulls (*Larus dominicanus*). Some packaging bands, which have sharp edges and have the potential of causing damage to fur seals, have been found partly buried in sand in some areas. Chile suggested that:

- (i) Members of CCAMLR agree to use their influence on the international scientific communities in order to improve Conservation Measures for the Southern Ocean Ecosystem, i.e. to reinforce MARPOL 73/78 and encourage other nations to ratify it; and
- (ii) a monitoring network be established around Antarctica and its islands with a view to check whether the overall pollution problem is increasing, remaining stable or decreasing. This monitoring should include the recording of entanglements of birds and marine mammals, as well as other damage that this pollution is causing to other Antarctic marine biota, in order to propose appropriate Conservation Measures.

5.7 Last year the Commission requested the Secretariat to draft standard guidelines for conducting surveys of beached marine debris (CCAMLR-XI, paragraph 5.6). The required guidelines were prepared by the Science Officer in consultation with Members (CCAMLR-XII/BG/5). The guidelines were drafted in the same format as CEMP Standard Methods. In presenting the guidelines to the Commission, the Science Officer pointed out that, although all current surveys conducted by Members are aimed at monitoring the accumulation of marine debris by type and its change over time, the sampling effort and

the amount of data collected do not yet justify the planning of assessment studies. Therefore, current studies should be designed as baseline studies and should be continued until the baseline required for planning of assessment studies is established. The data obtained should be regularly reviewed in order to assess progress in establishing a baseline.

5.8 The Commission noted that the guidelines had been briefly discussed by the Scientific Committee and that a number of Members had indicated that they would be undertaking surveys of beached debris in the near future in accordance with these guidelines (SC-CAMLR-XII, paragraphs 10.27 and 10.28). The Commission approved the guidelines and recommended that Members use them for conducting surveys of beached marine debris. It was agreed that the guidelines should be reviewed in two years time when Members had gained more experience in using the guidelines to conduct surveys.

Entanglement and Mortality in Marine Debris

5.9 The Commission noted that the Scientific Committee had reviewed data and papers on the entanglement of Antarctic fur seals in marine debris (SC-CAMLR-XII, paragraphs 10.23 to 10.26). There were reports from Australia of three animals entangled at Heard Island (CCAMLR-XII/BG/8) and from the USA of 14 animals - a much higher number than usual - entangled at Seal Island, South Shetland Islands (CCAMLR-XII/BG/12). The main entangling materials were packaging bands and synthetic cord. The UK had reported 10-fold and 75% increases in observations of entangled fur seals in winter and summer, respectively, on Bird Island, South Georgia (SC-CAMLR-XII/BG/6). The main entangling materials were plastic packaging bands and fragments of fishing net.

5.10 In relation to these new data on oiled seabirds, entangled seals and the levels and potential impacts of discarded debris, the Commission decided that it is necessary to reiterate the Commission's call (CCAMLR-V, paragraph 40) for Members, who have not already done so, to ratify and implement Annex V of the 1978 Protocol to the 1973/78 International Convention for the Prevention of Marine Pollution from Ships (MARPOL), and the 1972 Convention on the Prevention of Marine Pollution by Dumping of Wastes and other Matters (London Convention). As of March 1993, 15 CCAMLR Members and four Acceding States have accepted Annex V to MARPOL 73/78.

5.11 In addition, the Commission noted the recommendation of the Scientific Committee that a further step to alleviate the persistent problem of entanglement of fur seals with packaging bands would be to prohibit (including a phase-out period) the use of plastic packaging bands on bait boxes on fishing vessels in the Convention Area (SC-CAMLR-XII, paragraphs 10.25 and 10.34).

5.12 Accordingly, the Commission adopted Conservation Measure 63/XII (see paragraph 8.39).

5.13 The Commission also agreed to draw this Conservation Measure to the attention of Contracting Parties to other elements of the Antarctic Treaty System and to non-members in the Convention Area and to encourage them to take similar action within their areas of competence.

Incidental Mortality During Fishing Operations

5.14 The Scientific Committee discussed in detail reports received from several Members on observations of incidental mortality during fishing operations and actions taken to prevent such mortality (SC-CAMLR-XII, paragraphs 10.1 to 10.21). The Commission endorsed the initiative of the Scientific Committee to establish an *ad hoc* Working Group to consider incidental mortality arising from longline fishing operations (SC-CAMLR-XII, paragraph 10.19).

5.15 The Commission welcomed the efforts of Australia, Japan, New Zealand and Russia in research aimed at improving the design of “tori” poles and streamer lines described in Conservation Measure 29/XI (SC-CAMLR-XII, paragraphs 10.11, 10.13, 10.14 and 10.17).

5.16 Experience by some Members in using the streamer line specified in Conservation Measure 29/XI has shown that there may be some problems in its design. In this regard, the Scientific Committee recommended that until better designs are elaborated, it would be appropriate to revise Conservation Measure 29/XI. The Scientific Committee proposed several specific details of the required revision (SC-CAMLR-XII, paragraph 10.33).

5.17 The Commission considered this recommendation and the revised Conservation Measure 29/XII was adopted (see paragraph 8.39).

5.18 The Commission noted with regret from the report of the Scientific Committee that reporting of data on incidental mortality and on the effectiveness of mitigation measures was incomplete. The Commission noted the recommendation that it consider means for placing Scientific Observers on a high proportion of longline vessels in the Convention Area for at least one fishing season to collect the data required for a reliable assessment of the number and species of birds incidentally captured on longlines in the CCAMLR Convention Area (SC-CAMLR-XII, paragraphs 10.31 and 10.32).

5.19 The Delegation of New Zealand noted its additional recommendations that there was a need for rapid feedback between observers and the Commission on the effectiveness of mitigation measures under different prevailing circumstances and the desirability of having two observers on board to obtain complete coverage of all longline sets.

5.20 The recommendation of the Scientific Committee on placing Scientific Observers on a high proportion of longline vessels was considered by the Commission. Several Members felt it was necessary to explore all available mechanisms of the Convention to meet this objective. The Commission agreed that an item on conducting scientific observations of longline fisheries be discussed by SCOI next year. The Commission urged Members, in the meantime, to use more extensively the recently adopted Scheme of International Scientific Observation for placing observers on longline vessels. However, it was realised that such effort would be largely dependent on funds available to individual Members.

5.21 The Delegation of Poland proposed that the Commission amend Conservation Measure 30/IX in order to allow Polish fishing vessels to defer the installation of cable-less net echosounders to the end of 1995, due to plans to withdraw these trawlers from the Convention Area at that time. The Commission noted that the measure was passed two years ago, and recommended the Government of Poland to urge its fleet to comply with the measure. The Delegation of Poland asked that this issue be placed on next meeting's agenda and this was agreed.

Conference on Marine Debris

5.22 The Delegation of the USA drew the Commission's attention to the forthcoming Third International Conference on Marine Debris: Seeking Global Solutions, which will be held in Miami, Florida, from 8 to 13 May 1994 (CCAMLR-XII/BG/22). This conference will address several matters of direct interest to CCAMLR, including consideration of the sources, types, distribution, and impacts of marine debris. The Delegation of the USA agreed to provide a CCAMLR observer to this conference and to report to the Commission at its next meeting.