

## ADDITIONAL MONITORING AND MANAGEMENT ISSUES

### Marine debris

6.1 Following last year's practice, the Secretariat prepared a paper on the current status of national surveys on monitoring of marine debris and its impact on marine mammals and seabirds in the Convention Area (SC-CAMLR-XXIII/BG/11).

6.2 The CCAMLR marine debris database contains data from 11 sites, all within Area 48. Of these, four sites have data for at least three years that have been collected according to CCAMLR standard methods. It should be noted that Uruguay has submitted data on beached marine debris from their site on King George Island for the fourth consecutive year and the data have been included in this year's review. Members, locations and durations are as follows:

- (i) beached marine debris: Chile (Cape Shirreff, Livingston Island, South Shetland Islands 1993 to 1997), UK (Bird Island, South Georgia 1989 to present, and Signy Island, South Orkney Islands 1991 to present) and Uruguay (King George Island, South Shetland Islands 2001 to present);
- (ii) debris associated with seabird colonies: UK (Bird Island 1993 to present);
- (iii) marine mammal entanglement: UK (Bird Island 1991 to present and Signy Island 1997 to present);
- (iv) hydrocarbon soiling: UK (Bird Island 1993 to present).

6.3 A summary of the trends presented in SC-CAMLR-XXIII/BG/11 indicated that:

- (i) marine debris, principally packaging items, fishing gear, and wood items, reached a peak in the period from 1994 to 1996 at Bird Island and Signy Island and has declined thereafter;
- (ii) whereas the level of marine debris found in seabird colonies at Bird Island increased particularly since 1998, substantial declines from previous seasons were noted in 2004, with fishing gear such as lines and hooks continuing to form the major part of the debris;
- (iii) marine mammal (Antarctic fur seal) entanglement at Bird Island reached a peak in 1993 and has shown a general decline since, with the lowest levels on record being reported for the 2003 and 2004 seasons. Packaging bands, synthetic string and longline fragments continue to be the main entanglement material;
- (iv) marine mammal (Antarctic fur seal) entanglements were reported for the first time from Cape Shirreff;
- (v) for the first time an Adélie penguin was reported entangled at King George Island during the 2002 season, with nylon wrapped around its wing;
- (vi) the number of seabirds contaminated with hydrocarbons remains low.

6.4 The Scientific Committee discussed a Secretariat recommendation for the formation of a task group to develop a set of standardised procedures for analysing marine debris data which could include a time-series analysis exploring the relationship of marine debris levels at monitored sites with the level of debris in the marine environment in the Convention Area (SC-CAMLR-XXIII/BG/11, paragraph 35).

6.5 Prof. Croxall suggested that an alternative to an additional intersessional group might be to invite Members with experience in the analysis of marine debris to submit papers, particularly on the technical aspects of the monitoring and evaluation of such data. Dr Constable also suggested that the Scientific Committee could solicit information from CEP for information relating to monitoring marine debris or marine pollution methods that they might use or propose for estimating trends.

6.6 The Scientific Committee welcomed these suggestions for procedures to help develop analysis of marine debris and invited the submission of pertinent papers for consideration by the Scientific Committee next year.

#### Surveys of marine debris on beaches

6.7 Standardised surveys of marine debris were reported from Signy Island, South Orkney Islands (SC-CAMLR-XXIII/BG/15), and Bird Island, South Georgia (SC-CAMLR-XXIII/BG/13). Marine debris surveyed decreased 60% on Signy Island and levels on Bird Island were the lowest since 1990. A decrease in plastic packaging bands at both sites was encouraging, yet their continued presence indicates that the ban on their use in the Convention Area in 1995/96 (Conservation Measure 25-01) has yet to prove entirely effective and should continue.

6.8 Surveys in 2002/03 and 2003/04 at Cape Shirreff indicated substantial decreases in the number and weight of plastics since 1996/97 (SC-CAMLR-XXIII/BG/10). Surveyed items included: plastic packaging bands, sanitary/medical type debris, incinerated plastic and egg cartons. The latter item raises concern about the possible transmission of avian diseases. The reductions in marine debris support the view that implementation of Conservation Measure 25-01 has been effective in achieving these results.

#### Entanglement of marine mammals in marine debris

6.9 Standardised reporting of the entanglement of Antarctic fur seals in marine debris was reported from Signy Island, South Orkney Islands (SC-CAMLR-XXIII/BG/12), where no entangled animals were recorded, and Bird Island, South Georgia (SC-CAMLR-XXIII/BG/14), where 14 entangled seals were recorded between 1 April and 31 October 2003, an increase of 56% from the previous year, and 11 entangled seals were recorded during the 2003/04 summer, a 45% decrease from the previous year and the lowest number of entanglements recorded. Plastic packaging bands and nylon braid were the most frequently recorded entangling material. Although the plastic packaging band entanglements were reduced in summer (27%), they caused the majority of winter entanglements (71%). For the second year, no entanglements in fishing nets were observed.

#### Marine debris associated with seabird colonies

6.10 Marine debris associated with seabirds at Bird Island, South Georgia, from 1 April 2003 to 31 March 2004 was reported in SC-CAMLR-XXIII/BG/16. There were 52 items of fishing gear (mostly longlining gear), a substantial reduction from last year. More of these items were associated with wandering albatrosses than with any other species. Plastic items were most frequently associated with grey-headed albatrosses. The quantity of fishing gear and entanglements associated with giant petrels was well above the average.

#### Seabirds and marine mammals soiled with hydrocarbons

6.11 One case of contamination with oil of a wandering albatross was recorded at Bird Island, South Georgia, between 1 April 2003 and 31 March 2004 (SC-CAMLR-XXIII/BG/16). The soiling was of a small area of plumage and breeding success was apparently not affected.

#### Submission of additional information on marine debris

6.12 Dr Fanta reported that the Brazilian Antarctic Program had removed debris (wood, metal, plastic, glass) from its Antarctic station since 1985; in recent years virtually no debris of marine origin had been reported.

6.13 Dr Naganobu reported that, as in the previous years, no fishing gear had been lost from Japanese krill trawlers and that all damaged nets had been disposed of in the incinerators installed on board all of those vessels.

6.14 Mr Watkins reported that data were collected in 2003/04 on marine debris at Marion Island and it is South Africa's intention to submit the data to CCAMLR next year.

#### Marine mammal and bird populations

6.15 The Scientific Committee noted reports from WG-EMM and ad hoc WG-IMAF with respect to information on the status of marine mammal and bird populations in the Convention Area (section 3 and paragraphs 5.24 to 5.43). The Scientific Committee confirmed its view that a general review of this topic should occur every five years. It noted that the last review of bird populations occurred in 2000 and of marine mammal populations in 2001. It was suggested that the relevant expert groups of SCAR be requested to provide a review of the current status and trends of these populations in the Convention Area. Dr Fanta indicated that these SCAR groups would next meet in 2006 and had anticipated this request and would expect to complete it at the 2006 meetings.

6.16 Dr Constable suggested that information on trends may arise from the many aspects of work being undertaken by the Scientific Committee and its working groups. This work

includes information on distribution and abundance of predators, ecosystem modelling considerations reflecting the marine biodiversity of the Convention Area, and assessments of the impacts of incidental mortality on bird populations.

6.17 Prof. Croxall noted that these suggestions potentially involved very considerable additional work, unlikely to be accomplished without considerable refinement of the precise requirements, either by WG-EMM or relevant SCAR experts, within such a limited time span.

#### Management advice

6.18 The Scientific Committee agreed that further consideration for refinement of CCAMLR's requirements for information on the status and trends of marine mammal and bird populations be undertaken and communicated to the relevant SCAR experts during the intersessional period. The Scientific Committee further tasked the correspondence group on land-based predators to develop and/or refine CCAMLR's requirements, in consultation with the Convener of WG-EMM and liaise with the SCAR representative to the Scientific Committee (Dr Fanta).