

## SCIENTIFIC COMMITTEE

4.1 The Chairman of the Scientific Committee presented an overview of the Committee's report, and then returned to substantive matters and advice from the Scientific Committee pertinent to the specific agenda items of the Commission.

4.2 The Commission agreed to initially consider all recommendations, advice, research and data requirements of the Scientific Committee. Decisions concerning specific matters have been included where necessary under the agenda items to which they refer.

### Intersessional Activities

4.3 The third meeting of the Working Group on Ecosystem Monitoring and Management (WG-EMM) was held from 21 to 31 July 1997; the Subgroup on Statistics and the Workshop on International Coordination met from 14 to 18 July 1997; WG-FSA met from 13 to 24 October 1997; and two ad hoc groups, the Working Group on Incidental Mortality Arising from Longline Fishing (WG-IMALF) and the group dealing with fish by-catch in krill fisheries, continued their work during the intersessional period.

4.4 Ten Member countries participated in commercial fishing; nine scientific cruises were conducted in the Convention Area. Eight Members carried out CEMP-related research programs. Forty-three scientific observation cruises were carried out in accordance with the CCAMLR Scheme of International Scientific Observation and also by national scientific observers.

### Fishery Status and Trends

4.5 The Commission noted that the total reported catch of krill in 1996/97 (1 July 1996 to 30 June 1997) was 82 508 tonnes which was about 20% less than the total catch reported during 1995/96 (101 707 tonnes). The catches were taken mainly in Subareas 48.1 and 48.3 by Japan and Poland, with smaller catches taken by Ukraine and the UK.

4.6 Japan and Poland advised that they planned to continue fishing during 1997/98 at levels similar to those of the previous year. In addition, Ukraine planned a joint venture with Canada, the UK planned increased krill fishing activity, and the Republic of Korea, Russia and Uruguay would resume fishing (SC-CAMLR-XVI, paragraphs 2.3 and 2.4).

4.7 The total reported catch of finfish in the Convention Area in 1996/97 was 10 562 tonnes, of which *D. eleginoides* comprised 97%. Catches were taken mainly by Chile and France in Subarea 48.3 and Division 58.5.1, respectively, and by South Africa in Subareas 58.6 and 58.7 (SC-CAMLR-XVI, paragraph 2.8 and Table 3). The reported catches during 1996/97 were greater than those reported during 1995/96 (8 805 tonnes). In addition, unreported catches were estimated as being of the order of five- or six-times greater than the regulated catches (see paragraph 4.10 below).

4.8 The Commission noted that the new fishery for *Martialia hyadesi* by the Republic Korea and the UK, in Subarea 48.3, yielded 28 tonnes of squid in June 1997; a further 53 tonnes since then, making a total of 81 tonnes for the 1996/97 fishing season.

4.9 There was no fishery for crabs in the Convention Area during 1996/97.

4.10 The Commission noted the substantial amount of both regulated and unregulated fishing for *D. eleginoides* which occurred during 1996/97, in particular, in the Indian Ocean sector (Area 58). The total reported catch of *D. eleginoides* from Exclusive Economic Zones (EEZs) outside the CCAMLR Convention Area, and from inside the CCAMLR Convention Area, was 32 991 tonnes (SC-CAMLR-XVI, Annex 5, Appendix D, Table D.1). In addition, the unreported catch derived from landings in ports of southern Africa and Mauritius was estimated to be 74 000 to 82 200 tonnes. The total catch of 107 000 to 115 000 tonnes was estimated by WG-FSA (SC-CAMLR-XVI, Annex 5, paragraph 3.20). It was thought that about 130 000 tonnes of *D. eleginoides* were available on the world market.

## Dependent Species

### CCAMLR Ecosystem Monitoring Program

4.11 The Commission approved the revised management plan for the Seal Island CEMP site and extended site protection for five years (SC-CAMLR-XVI, paragraph 4.35(i)), and endorsed the establishment of a CEMP monitoring site at Bouvet Island (SC-CAMLR-XVI, paragraph 4.35(ii)).

### Marine Mammal and Bird Populations

4.12 The Commission noted that the next review of the status and trends of Antarctic seals and seabirds should occur in the year 2000 and that an allowance for this would need to be made in the 1998/99 budget (SC-CAMLR-XVI, paragraphs 4.90 to 4.96).

## Harvested Species

4.13 An overview of biological reference points and their use in other international fisheries management bodies was prepared by the Secretariat (WG-FSA-97/35). The Scientific Committee noted that the biological reference points used by CCAMLR are as advanced as any currently in use in fisheries management. Nonetheless, there were difficulties in applying the current decision rules to some stocks (SC-CAMLR-XVI, Annex 5, paragraphs 3.68 and 3.70). WG-FSA had been tasked with examining the implications of the key elements of the decision rules at its next meeting (SC-CAMLR-XVI, paragraph 5.23).

4.14 The Commission noted the difficulty encountered by the Scientific Committee in reconciling decision rules for *D. eleginoides* where indicators were in conflict. For example, in Subarea 48.3, the Generalised Yield Model (GYM) suggested the stock was approaching a decision rule reference point, while the CPUE trend suggested it may already have exceeded it

(SC-CAMLR-XVI, paragraph 5.55). WG-FSA had been tasked with addressing such issues as a high priority.

#### Future Work and Data Requirements

4.15 The Commission endorsed the plans for the synoptic survey to estimate the standing stock of krill in Area 48 (SC-CAMLR-XVI, paragraphs 5.13 to 5.19), noting that:

- (i) the survey was planned for the austral summer of 1999/2000;
- (ii) the survey would concentrate its effort in Subareas 48.1, 48.2 and 48.3; and
- (iii) task groups and a survey steering committee have been set up to deal with specific aspects of the survey.

4.16 The Commission noted that the allocation of precautionary catch limits for krill fishing to subareas within Area 48 should be deferred until the results from the planned synoptic survey in Area 48 become available (SC-CAMLR-XVI, Annex 4, paragraph 7.7).

4.17 The Commission also noted that the proposed workshop on Area 48 (SC-CAMLR-XVI, Annex 4, paragraphs 8.110 to 8.120) would provide essential input into the planning of the Area 48 krill standing stock survey.

4.18 The Commission endorsed the plans of the Scientific Committee to conduct a workshop to investigate the development of long-term management strategies for *Chamsocephalus gunnari*. The workshop is planned over a period of three-and-a-half days immediately prior to the next meeting of WG-FSA (SC-CAMLR-XVI, paragraphs 5.61 and 5.64).

#### Consideration of Management Areas and Stock Boundaries

4.19 The Commission considered a proposal by South Africa to move the boundary between Subareas 58.6 and 58.7 east to 45°E (see SC-CAMLR-XVI, Annex 5 and Figure 2). The proposed boundary is likely to coincide with a natural boundary between stocks in the shelf area of Prince Edward Islands and stocks in the shelf area around Crozet Island (SC-CAMLR-XVI, paragraphs 5.29 and 5.30).

4.20 France indicated that it would not be in a position to consider this matter until the next meeting of the Commission. The Commission agreed to defer a decision until CCAMLR-XVII.

#### Scientific Research Exemption

4.21 The Commission endorsed the conclusion of the Scientific Committee that the correct interpretation of Conservation Measure 64/XII was that the 50-tonne catch limit applied to each research cruise.

4.22 In the absence of any new information from Members, the Scientific Committee was unable to comment further on the applicability of the 50-tonne limit for krill research.

#### CCAMLR Data Management

4.23 The Commission noted that most of the problems with the CCAMLR databases, and tasks identified for the Secretariat last year, had been addressed. Some tasks will require further follow up and assistance from Members (SC-CAMLR-XVI, paragraphs 10.1 to 10.3, 10.6 and 10.13).

4.24 The Secretariat had processed more data in 1997 than in previous years, and this was made possible by employing contract labour. The Commission noted that a greater quantity of data is expected during 1998 because of the likely increase in activities associated with new and exploratory fisheries.

4.25 The Commission endorsed the approach outlined for the development and implementation of a CCAMLR web site (SC-CAMLR-XVI, paragraphs 10.8 to 10.11). It concurred with the Scientific Committee that development of the web site should not proceed at the expense of the higher priority database management activities essential to the assessment work of the Scientific Committee and its working groups.

4.26 The Commission noted that the Secretariat maintains two datasets whose raw data have been acquired from public domain National Oceanic and Atmospheric Administration (NOAA) (USA) datasets. It was agreed that these data should not be subject to CCAMLR's rules of data access, and that the Secretariat should entertain direct requests for access to these data from individual researchers (SC-CAMLR-XVI, paragraph 18.15).

#### Publications

4.27 The Commission noted that the following documents were published during 1997:

- (i) annual reports;
- (ii) *CCAMLR Scientific Abstracts* covering papers presented in 1996;
- (iii) extensively revised edition of *CEMP Standard Methods*;
- (iv) *Scientific Observer Manual*;
- (v) *Statistical Bulletin*, Volume 9; and
- (vi) *CCAMLR Science*, Volume 4.

4.28 It was also noted that the following documents are being prepared for publication:

- (i) flier and stickers for Fish the Sea Not the Sky;
- (ii) Understanding CCAMLR's Approach to Management;
- (iii) educational brochure on marine debris in the Antarctic; and
- (iv) seabird identification guide.

4.29 The Commission noted that *CCAMLR Science* was enjoying a growing reputation within the Antarctic scientific community, and thanked contributors and the editorial team for maintaining the high standard of the journal.

#### Activities of the Scientific Committee during the 1997/98 Intersessional Period

4.30 The Commission noted the activities planned during the 1997/98 intersessional period (SC-CAMLR-XVI, paragraphs 13.1 to 13.3, 13.8 and 13.9).

4.31 Delegations from Argentina, Brazil, Chile, Germany, Japan, Republic of Korea, UK, Ukraine and USA discussed the possibility of a cooperative research program in the near future. Members reviewed former activities which had been conducted in the Peninsula area during the 1994/95 and 1996/97 seasons, and emphasised that the major purpose of this group was to aid the activity of WG-EMM as well as other organisations which have interconnection with CCAMLR.

4.32 The Commission noted the activities planned during the 1997/98 intersessional period (SC-CAMLR-XVI, paragraphs 13.1 to 13.3, 13.8 and 13.9) including:

- (i) meeting of WG-EMM;
- (ii) meeting of WG-FSA;
- (iii) workshop focused on Area 48;
- (iv) workshop on long-term management strategies for *C. gunnari*; and
- (v) work of technical groups on IMALF, fish by-catch in krill fisheries, and international coordination.

The Commission welcomed the invitation from the Government of India to host the 1998 meeting of WG-EMM.

#### Election of Vice-Chairmen of the Scientific Committee

4.33 The Commission congratulated Dr V. Siegel (European Community) and Dr K. Shust (Russia) on their election as Vice-Chairmen of the Scientific Committee for the period from the end of the Sixteen Meeting until the end of the Scientific Committee meeting in 1999. Prof. B. Fernholm (Sweden) and Dr S. Kim (Republic of Korea) were thanked for their term as Vice-Chairmen.