

SCIENTIFIC COMMITTEE REPORT

3.1 The Chairman of the Scientific Committee, Dr K.-H. Kock (Germany), introduced the report of the Scientific Committee.

3.2 Decisions of the Commission relating to conservation measures arising from recommendations of the Scientific Committee are reported in sections 6 and 8 of this report. The Commission endorsed the recommendations, advice and interim research plans of the Scientific Committee, unless otherwise indicated.

Fish Resources

3.3 The only fish species targeted in commercial fisheries in the 1993/94 season were *Dissostichus eleginoides* and *Electronacarlbergi*. A catch of 603 tonnes of *D. eleginoides* was reported from the longline fishery in Subarea 48.3 under Conservation Measure 69/XII, although an additional 43 tonnes were reported taken by Russian longliners in the same subarea from October to January. 5 083 tonnes were taken in Division 58.5.1. A catch of 114 tonnes of myctophids was taken in Subarea 48.3.

3.4 The Commission endorsed the requests for data specifically identified by WG-FSA (SC-CAMLR-XIII, Annex 4, Appendix D). It noted that the new submission date for STATLANT data (31 August) had made it easier for the Secretariat to prepare data for the WG-FSA meeting. It also noted the Scientific Committee's concern that some of the catches taken in Subarea 48.3 were not recorded in official statistics (SC-CAMLR-XIII, paragraph 2.19).

3.5 Details of the Commission's discussion on stocks are given under Item 8. The Commission noted its appreciation of the efforts taken by the Scientific Committee and WG-FSA to incorporate considerations of uncertainty into assessments of fish stocks (see SC-CAMLR-XIII, paragraph 2.79). It considered that this was in line with its requests for more work on this subject made last year (CCAMLR-XII, paragraph 4.26).

3.6 The Commission endorsed the Scientific Committee's advice in respect of stocks in Division 58.5.1. For *D. eleginoides*, it endorsed the already established French conservation measures, and the advice that trawl surveys of the entire stocks of the western and northern shelves would provide useful indices of abundance. For *Champscephalus gunnari*, it endorsed the advice that the fishery in the 1994/95 season be kept to a low level to allow the present strong cohort to spawn a second time. The prohibition of directed fishing for *Notothenia rossii* and *Notothenia squamifrons* should be retained.

Krill

3.7 The data requirements identified by WG-Krill were endorsed by the Commission (SC-CAMLR-XIII, Annex 5, Table 3).

3.8 The Commission congratulated the Scientific Committee and WG-Krill on their considerable progress with the calculations of potential krill yield (SC-CAMLR-XIII, paragraphs 5.18 to 5.26). Estimates of unexploited biomass and the constant $F_{0.1}$, which is the proportion of the estimate of unexploited biomass which can be set as an annual catch limit, have been subject to rigorous analysis over the last two years. It noted that all key parameters of the yield model are now based on analyses of empirical data.

3.9 The Scientific Committee has elaborated the three decision rules for its choice of a suitable value of $F_{0.1}$. The first is one which chooses $F_{0.1}$ to ensure stable recruitment; the second is one which chooses $F_{0.1}$ in order to ensure that sufficient krill biomass remains after fishing to supply predator populations; and the third rule chooses the lower of the first two values of $F_{0.1}$ to calculate a yield from the estimate of unexploited biomass. The Commission noted that the Scientific Committee had endorsed a value of 0.116 as being the best available at this time.

3.10 The Commission endorsed the three decision rules, and noted that they incorporate the central tenets of the Convention as set out in Article II. It encouraged the Scientific Committee in its steps towards applying this approach to the assessment of other stocks (see SC-CAMLR-XIII, paragraph 2.79).

3.11 The Delegation of the USA noted that the Secretariat had obtained a STATLANT report from FAO of a catch of 71 tonnes of krill this year by Latvia. The Commission endorsed the Scientific Committee's recommendation that the Secretariat further investigate this catch, and in addition request information from Lithuania on possible activity in the Convention Area since Lithuania and Latvia have both been active in the southwest Atlantic recently (SC-CAMLR-XIII, paragraph 14.27).

CEMP

3.12 The Commission recognised the considerable progress which had been made in developing the CCAMLR Ecosystem Monitoring Program over the last year and encouraged the Scientific Committee in its efforts towards an objective review of monitoring results and integrated ecosystem assessment (SC-CAMLR-XIII, paragraphs 6.29 to 6.33). It noted that new CEMP-related research programs were being initiated by Italy, South Africa and Norway

(SC-CAMLR-XIII, paragraph 6.3), and that five Members had submitted data in 1994 which was an improvement on the situation in 1993 when only three Members submitted data (CCAMLR-XII, paragraph 4.31). The Commission encouraged more Members to participate in CEMP activities (SC-CAMLR-XIII, paragraphs 6.3 to 6.5).

3.13 The Commission endorsed the advice and recommendations regarding CEMP (SC-CAMLR-XIII, paragraphs 6.42 to 6.46).

Joint Meeting of WG-Krill and WG-CEMP

3.14 The Commission noted that the second joint meeting of these two Working Groups had been particularly helpful in furthering the Scientific Committee's integrated approach to ecosystem monitoring and management, and noted that considerable progress had been made on a number of topics (SC-CAMLR-XIII, paragraphs 7.3 to 7.24).

3.15 The Scientific Committee, at its thirteenth session, established a new Working Group on Ecosystem Monitoring and Management (WG-EMM) to replace WG-CEMP and WG-Krill. The decision to establish WG-EMM was taken following the Scientific Committee's review of ways to organise its work more efficiently (SC-CAMLR-XII, paragraph 15.16; CCAMLR-XII, paragraph 4.45). The Commission expressed its approval of this review by the Scientific Committee, and endorsed the terms of reference, list of priority activities and intersessional tasks of this Working Group (SC-CAMLR-XIII, paragraphs 7.41 to 7.43).

Marine Mammals and Birds

3.16 The Commission noted the Scientific Committee's report on SCAR's Antarctic Pack Ice Seals (APIS) Program and noted that this program is likely to provide valuable information useful to the Scientific Committee's work. It endorsed the close interest and support being shown by the Scientific Committee for this program (SC-CAMLR-XIII, paragraph 8.5; SC-CAMLR-X, paragraph 7.11), and recalled its 1993 recommendation for close coordination and communication between CCAMLR and the APIS Program (CCAMLR-XII, paragraph 4.40).

Other Matters

3.17 The Commission endorsed the Scientific Committee's recommendations that: information on planned research cruises compiled by CCAMLR should be lodged on an electronic bulletin board being developed by SCAR (SC-CAMLR-XIII, paragraph 14.11); a summary of CCAMLR's data holdings and data access protocols should be lodged on SCAR's Antarctic Master Directory (SC-CAMLR-XIII, paragraph 14.14); and some published CCAMLR material should be lodged with the International Centre for Antarctic Information and Research (ICAIR) World Wide Web server (SC-CAMLR-XIII, paragraph 14.30).

3.18 The Commission congratulated the Scientific Committee and Secretariat for the production of *CCAMLR Science* this year. It noted that this was a high quality publication of which CCAMLR could be justifiably proud.