

DATA MANAGEMENT

Intersessional Work

10.1 Last year, the Scientific Committee agreed that Dr Ramm (Data Manager) should submit a regular status report to the Scientific Committee on progress in the management of CCAMLR data (SC-CAMLR-XVI, paragraph 10.14). The status report was specifically aimed at addressing the measures taken to maintain the integrity of the CCAMLR database (SC-CAMLR-XVI, paragraph 10.13(i)).

10.2 Dr Ramm reported on these measures and, more generally, on the work undertaken by the Secretariat's Data Management group since last year's meeting (SC-CAMLR-XVII/BG/6). These activities included the work of Mr N. Williams (Computer Systems Officer) and Mr E. Appleyard (Scientific Observer Data Analyst), Ms N. Slicer (part-time Data Management Assistant) and Mrs L. Millar (part-time Data Entry Specialist). The group had also received support from Mr D. O'Connor (short-term contract programmer) from February to April to assist with the development of programs associated with CEMP indices, fishery data entry, and the generation of tables for the *Statistical Bulletin*, and from May to early October to assist with the development of the CCAMLR website.

10.3 The increasing needs of the Commission and Scientific Committee had led to increases in the quantity of data processed and managed by the Secretariat. The amount of data processed is doubling approximately every three years. Recent increases were attributed largely to the submission of haul-by-haul data from longline fisheries and data collected under the CCAMLR Scheme of International Scientific Observation.

10.4 A major role of Data Management was to ensure that the integrity of the data was maintained, and this was achieved by:

- (i) developing the CCAMLR database so that it continued to meet the evolving needs of the Commission and Scientific Committee;
- (ii) maintaining the primary database system (SQL Server) at a high level of efficiency so as to take advantage of recent developments in database software and computer hardware;
- (iii) safeguarding the CCAMLR database against changes which may compromise the integrity of historical data; and
- (iv) maintaining a high level of security for accessing and using CCAMLR data.

10.5 Another major role of Data Management was to support the analyses of the Commission and Scientific Committee. This involved close collaboration with participating scientists, and the exchange of data, information and computer programs. The Scientific Committee noted that this exchange could only operate effectively if both parties used compatible software and, specifically, if the Secretariat maintained an up-to-date suite of software.

10.6 As with the CCAMLR database, maintaining the integrity of routine analyses was a continuous process which was achieved by:

- (i) developing the routine analyses so that these continue to meet the evolving needs of the Commission and Scientific Committee; and
- (ii) updating existing routines (e.g. CEMP indices, routines for generating tables in the *Statistical Bulletin*) so that these continue to operate correctly as the CCAMLR database evolves.

10.7 The report (SC-CAMLR-XVII/BG/6) also highlighted the activities of the Data Management group during the intersessional period. Details of the work in support of WG-EMM and WG-FSA had been presented to these working groups in a summarised format (WG-EMM-98/23 and WG-FSA-98/5) and in related meeting papers. The highlights included:

- (i) validation of the GYM;
- (ii) monitoring fisheries under the conservation measures in force;
- (iii) developing the method for analysing bathymetry data;
- (iv) developing the routine analyses of CEMP data and indices;
- (v) producing Volume 10 of the *Statistical Bulletin*, covering the split-years 1987/88 to 1996/97; and
- (vi) developing the CCAMLR website.

10.8 The Scientific Committee endorsed the tasks allocated to the Secretariat by the Working Groups during the forthcoming intersessional period (Annex 4, paragraphs 12.2 to 12.4 and 12.6; Annex 5, paragraphs 9.16 to 9.20). These tasks included the transfer of survey data to the newly designed database, and the correction of problems and errors identified by Drs Gasiukov and Everson (Annex 5, paragraphs 3.6 and 3.7).

Coordinating Working Party on Fisheries Statistics (CWP)

10.9 The Scientific Committee discussed a proposal for Dr Ramm to participate in the Eighteenth Session of CWP, scheduled in Luxembourg from 6 to 9 July 1999. The provisional agenda of that meeting (CCAMLR-XVII/BG/9, Appendix 2) included consideration of STATLANT issues (item 8), statistical implications of the precautionary approach (item 12), and elasmobranch statistics (item 13).

10.10 The Scientific Committee considered that participation at this meeting would promote:

- (i) development of methods for collecting fishery data, including statistics on elasmobranchs;
- (ii) exchange of trade data including information on commodity classification and foreign landings and transshipping;
- (iii) exchange of data on landings and fleet and fishery statistics;
- (iv) exchange of information on the methods for collecting fishery and by-catch data, including observer programs and VMS; and
- (v) links with regional fishery agencies.

10.11 The Scientific Committee noted that some links were already established, and that some of the information on the trade of *Dissostichus* spp. used during the recent meeting of WG-FSA had been provided by FAO.

10.12 The Scientific Committee encouraged and supported Dr Ramm's participation at the CWP meeting, and provided guidance for the development of papers on CCAMLR's

contribution to the meeting. Specifically, under item 12 of the provisional agenda, the Scientific Committee was interested about progress in the ecosystem approach to resource management, and:

- (i) how far advanced other agencies were in data submission protocols and analyses; and
- (ii) how other agencies derived management advice from ecosystem analyses.

10.13 The Scientific Committee proposed that, if possible, item 12 of the provisional agenda should be aimed at defining the types of data that were required to facilitate the ecosystem approach to resource management.

10.14 The Scientific Committee endorsed the allocation of funds to support Dr Ramm's participation at the CWP meeting.

CCAMLR Website

10.15 At the Sixteenth Meeting of CCAMLR, the Commission had agreed that the objective of the CCAMLR website would be to provide a framework for organising, presenting and delivering information to Members, related organisations and the general public (CCAMLR-XVI, paragraph 4.25; see also SC-CAMLR-XVI, paragraph 10.8). The information was to be delivered at two levels:

- (i) general information and some published material would be available to Members and the general public via open-access webpages; and
- (ii) detailed information, meeting business and selected datasets would be restricted to meeting participants and approved users via password-protected webpages.

10.16 The Scientific Committee noted that the Secretariat had begun work on the website. Sections of the website were developed and some webpages were made available to participants at the 1998 meetings of WG-EMM and WG-FSA. In early October, selected webpages containing general information were released for preview by the Commission. The website homepage (<http://www.ccamlr.org>) was language neutral, and it is intended to present information and documents in all four languages of the Commission (CCAMLR-XVII/BG/23).

10.17 The Scientific Committee agreed that effective use of the website would:

- (i) enhance the work of Members, both intersessionally and during meetings, by expediting the exchange of material and facilitating communication and the decision-making processes as the website will allow immediate access to CCAMLR's bibliography, meeting papers, reports, publications, maps, data requirements, and summary data;
- (ii) allow the immediate viewing by Members of specific information as and when it is received by the Secretariat;
- (iii) provide a further option for the dissemination of publications, including booklets and educational material which, in comparison with the production and dissemination of paper-based publications, will be relatively inexpensive and will immediately reach a worldwide audience; documents can also be posted on the website in a specific format for downloading and printing as required; and

- (iv) allow the general public, including students, to access general information about CCAMLR; the timely presentation of information on the website will allow a better informed and more focused debate of CCAMLR matters.

10.18 The Scientific Committee noted that working group participants who had accessed the website prior to the meeting of WG-EMM had found that the webpages had been well structured and presented, and had provided valuable information prior to the meeting. WG-EMM had found that the website had the potential to grow into a very useful tool which would facilitate the exchange of information and expedite decision-making (Annex 4, paragraph 13.13).

10.19 In addition, Dr Everson advised that the website would be valuable in drawing public awareness to the work of CEMP and increase the awareness of the program. At a broader scale, the website would facilitate the exchange of information between agencies within the Antarctic Treaty System.

10.20 Dr Naganobu pointed out the importance of a security system and the Scientific Committee discussed the various levels of security afforded to the website. Dr Ramm explained that the guiding principle used in developing the security system for the website was that information and documents on the website were afforded a level of security equivalent to those already in place within the Secretariat and at CCAMLR meetings. For example, open access would be given to published documents such as the *Statistical Bulletin* which are already in the public arena. In contrast, access to meeting papers which were currently provided as hard copies would be restricted to meeting participants.

10.21 The Scientific Committee agreed that the proposed use of passwords to restrict access to parts of the webpages containing detailed information (paragraph 10.15(ii)) would provide adequate protection to CCAMLR information not in the public domain. It was agreed that the security of such information should be kept under constant review.

10.22 The Scientific Committee agreed that the development of the website must proceed as an important task alongside the other urgent data management priorities for the intersessional period, and endorsed the recommendations made by WG-EMM in that regard (Annex 4, paragraphs 13.14 to 13.16). In addition, Dr Ramm was asked to investigate ways of linking the website to other agencies within the Antarctic Treaty System, and to those of Members of the Joint Committee on Antarctic Data Management.