

## DATA MANAGEMENT

10.1 Dr Ramm (CCAMLR Data Manager) reported on the work undertaken by the Secretariat's Data Centre in the 1999/2000 intersessional period (SC-CAMLR-XIX/BG/9). The three main functions of the Data Centre are: management of CCAMLR data; monitoring of CCAMLR fisheries; and development of data analysis routines.

### Management of CCAMLR Data

10.2 The amount of data managed in 1999/2000 was high, and continued to follow the trend reported in recent years. About one third of all data held in the CCAMLR databases has been submitted within the past three years, and approximately 15% of all records were processed in the 1999/2000 intersessional period.

10.3 A major, unbudgeted, task of the Secretariat during 1999/2000 was the implementation of the new CDS. This involved the development of a database, data processing routine and a confidential web-based reporting system. The implementation of the CDS and the significant budgetary constraints imposed on the Secretariat in 2000 has impacted on the work of the Data Centre, its computing facilities and the level of support at the various meetings.

10.4 The data section of the CCAMLR website was updated to include information on CCAMLR data requirements and the submission of data. Electronic data forms, in Microsoft Excel format, are now available for submitting catch and effort reports, fine-scale data, STATLANT data, scientific observer data and CEMP data. The *Scientific Observers Manual*, *CEMP Standard Methods* and the *Fishery Data Manual* are available online.

10.5 In spite of increasing efficiencies in data management and computer technology, CCAMLR data place ever-increasing demands on the Secretariat's resources. These resources were insufficient in 1999/2000 to allow the archiving of core data from the CCAMLR-2000 Survey (see Section 14).

### Fishery Monitoring

10.6 The Data Centre monitors all fisheries conducted under conservation measures in force. Information of fishing activities is submitted on five-day, 10-day or monthly catch and effort reports; most fisheries are monitored by five-day catch and effort reports. New and exploratory fisheries are the most demanding in terms of monitoring by the Data Centre. Monitoring includes:

- correspondence with Contracting Parties regarding their data and/or overdue reports;
- monitoring of catches of target species by fine-scale rectangle in new and exploratory fisheries, and closure of fine-scale rectangles when catches exceed 100 tonnes;
- monitoring of by-catch;
- revision of fishery closure dates;
- regular reporting of catches, aggregated by reporting period and species, to Contracting Parties; and
- monthly reporting of total catches of target species to all Members.

10.7 A new format was developed in 1999/2000 to report catches, aggregated by reporting period and species, to Contracting Parties. These reports are now in Microsoft Excel format, and are disseminated to Contracting Parties via email only.

#### Data Analysis

10.8 Staff at the Data Centre have continued to develop the analysis and presentation of the CEMP indices. Developments over the past two years have resulted in a significant improvement in the presentation of CEMP information, and a reduction in the size of the annual report on CEMP indices.

10.9 Data Centre staff have also undertaken a major overhaul of the research survey database and the routine used in length-density analyses. This overhaul was necessary because of the increasing quantity and diversity of survey data and their importance in the assessments of WG-FSA. Trawl survey data and commercial trawl data had been initially managed as a single dataset. While appropriate in earlier years, this procedure constrained the type of survey data that could be stored in the CCAMLR database and placed limitations on their interpretation. The overhaul of the survey database has resolved these historical difficulties.

#### Projections for the Intersessional Period 2000/01

10.10 Dr Ramm made the following projections for the intersessional period 2000/01:

- the data processing load is expected to increase further due to the high number of exploratory fisheries notified in 2000/01, an overall increase in the quality and level of detail in the data reported, and a likely increase in the level of scientific observer coverage in krill fisheries;
- development of management procedures and analysis/reconciliation routines for CDS data;
- increased support for the Scientific Committee and working groups, including the workshop on *C. gunnari*; and
- pending budget allocation, development of computing resources to support the activities of WG-FSA and archive the CCAMLR-2000 Survey datasets.

10.11 The Scientific Committee noted the report, and thanked the staff of the Data Centre for their continued high level of support to the Scientific Committee and its working groups during the past year. It also noted that additional comments on CCAMLR Data Management, including the status of computing facilities, are offered in a number of sections of this report (paragraphs 12.11 and 14.2).

10.12 Dr Miller advised the Scientific Committee that CEP had requested information on the Secretariat's experience with data management (SC-CAMLR-XIX/BG/17). This information would assist CEP in developing its own capacity for exchanging information and data. The Scientific Committee sought the Commission's approval to recommend that the Secretariat submit a paper on this topic at CEP-IV.