CHARTER OF THE COMMITTEE OF AGE READING EXPERTS

A WORKING GROUP OF THE TECHNICAL SUBCOMMITTE TO THE CANADA-US GROUNDFISH COMMITTEE

OVERVIEW

The Committee of Age Reading Experts (CARE) was initiated after a series of meetings in 1982 by the Technical Subcommittee (TSC) of the Canada-US Groundfish Committee. The first two workshops were convened in 1983 (April 27-29 and August 3-5) to document and standardize current methods used to age groundfish. These workshops discussed use of appropriate age structures, preparation of samples, equipment required, and reading procedures. Additional issues discussed were development of procedures for interagency calibration and methodology for age validation work. The primary objectives of these meetings were to reduce variation in age reading between agencies and to produce a manual of standard techniques. Target species for these initial meetings were rockfish of "regional management concern". From 1986 through 2002, CARE meetings were held every two years and included participation by agencies (state and federal) and institutions involved in age determination work. Participants were from agencies in the USA (California, Oregon, Washington, Alaska) and Canada (British Columbia). Focal topics are provided by the TSC and member agencies. Throughout the history of CARE, the primary issue of concern continues to be interagency calibration and the validation and standardization of age reading criteria.

The membership of CARE has seen little turnover in its history. These long term members provide a stabilizing force for continuing CARE responsibilities within their original intent. In the event of member turnover or simply in the interest of promoting long term consistency, this charter, initiated in 2000, provides a framework within which the original intent of CARE may continue. This charter also expedites familiarization of new CARE Members to the responsibilities and function of CARE.

ADMINISTRATION OF CARE

Selection of Officers

Three positions will administer to CARE responsibilities. Officers will be volunteer CARE Members, or CARE Participants as approved by CARE Members. Positions will begin July 1 of the rotation year, and will last for two years. No person shall hold responsibilities of one position for more than 1 term. These terms shall rotate among agencies. Rotation will be from Vice-chair to chair for subsequent workshops, with no one agency supporting both Vice-chair and Chair positions. The position of secretary rotates among agencies every two years. One agency may support both the Secretary and either the Vice-chair or Chair. If an individual vacates their role prior to completion of their term, it is recommended that a replacement be identified according to the following: the departing person should submit the name of an individual within their agency to the CARE chair (or vice chair if the chair is vacating); and/or the CARE chair should submit a request to the Age Lab supervisor of the agency of the departing individual, to submit a name of someone within their agency. Upon submission of a name the CARE chair will apprise the Membership and request confirmation or objection. If these events do not result in a candidate the CARE chair will request a volunteer from the Membership, and will then request of the Membership confirmation of or objection to the candidate.

Responsibilities of Officers

Chair:

- Acts as formal liaison with the Chair of the TSC
- Ensures that recommendations of CARE and TSC are documented, considered, and acted upon
- Interacts with Vice-chair, Secretary and sub-committees of CARE providing information, advice and direction to ensure that responsibilities are met
- Organizes biennial CARE meeting, sets agenda, and chairs meeting

- Guides meeting according to set agenda facilitating documentation and discussion
- Prepares the annual report to the TSC
- Distributes final minutes, recommendations status, etc, to the TSC and CARE Members

Vice-chair:

- Liaises with Chair to assist organization of CARE meetings
- Directs and initiates Primary Exchanges
- Receives and collates results of Primary and Secondary Exchanges.
- Monitors and collates all exchange information twice per year
- Provides Chair with table of exchange results in time for annual TSC meeting/report and or CARE meeting
- Attends to other formal responsibilities as assigned by Chair

Secretary:

- Acts as rapporteur for the biennial CARE meeting
- Distributes a draft of CARE meeting minutes in appropriate format to all CARE Members within one month of the meeting
- Incorporates appropriate edits to minutes and submits final meeting minutes to the CARE Chair

Subcommittees (Working Groups)

Working groups serve a valuable purpose by focusing on specific issues of concern to CARE and the TSC. Committee members are CARE Members or CARE participants as approved by CARE Members, and should be volunteers of appropriate experience and interest. Committee members should serve for the life of the working committee or a maximum of 2 terms or longer, as approved by the CARE membership. The identified working committee selects a chair to lead the group and direct the process. The subcommittee chair should:

- Coordinate the work of the group to ensure progress and completion of the task
- Update the Chair on status of work as appropriate
- Upon notification by the CARE Chair, provide a written summary of work on an annual basis in time for inclusion into the CARE Annual Report

CARE MEMBERSHIP

CARE Member

- a Member of CARE is one who has an agency representative on the TSC or approval of an agency which has a representative on the TSC
- a Member of CARE actively participates in mandated CARE activities, CARE functions, or serves as an officer of CARE

CARE Participant

- a Participant of CARE meetings or functions is one who does not have an agency representative in the TSC
- a Participant does not serve as an officer of CARE, unless approved by the CARE Membership
- a Participant may advise CARE Members regarding mandated CARE activities

Member Responsibilities

- CARE Members must work with CARE Officers to address issues of concern to TSC and CARE
- Members are encouraged to promote and apply standardized methodologies and criteria
- Members should participate in CARE activities in a manner, which advises and educates the membership.
- Members are required to expedite processing of structure exchange samples
- A member agency that drafts written materials which characterize the methodologies and/or protocols of other
 agencies with intent for distribution and/or publication, are encouraged to allow the agencies involved to
 review and comment on the final draft prior to distribution.

CARE MEETINGS & WORKSHOPS

Duration of Meeting

The purpose of the meeting will define the duration, though a minimum of 3 days is strongly encouraged for accomplishing CARE business and workshop exercises.

Structure of Meeting

Meetings will follow the agenda set by the officers and membership. The format should remain relatively informal to promote discussion, exchange of information and calibration of age-reading criteria.

Chronicle of Meeting

Meeting minutes will be recorded in writing. A draft will be available for review by all Members one month after the meeting. Following review by all Members, this draft will have tentative standing for distribution to the TSC by the CARE Chair. This draft will be "accepted" or "rejected" at the next meeting of CARE.

AGE STRUCTURE EXCHANGE PROTOCOL

Primary Structure Exchanges/Species

Primary exchanges are initiated by the TSC, for those species of heightened interest. These are inter-agency exchanges. These exchanges are required, and must be conducted well in advance of the next CARE workshop. Exchange results must be submitted to include in the "Structure Exchange Table".

Secondary Structure Exchanges/Species

Secondary exchanges are initiated by CARE Members for those species of interest, and while of interest to the TSC, are not mandated for exchange. These are interagency exchanges. Exchange results may be submitted for inclusion in the "Structure Exchange Table".

Primary Exchange Protocols:

- The Vice-chair, as advised by the CARE Chair, will inform the membership to initiate Primary Exchanges (species and numbers of fish) as identified by the TSC.
- Exchanges should be initiated in a reasonable amount of time prior to the CARE workshop or whenever recommended by the TSC, and should be completed in a timely manner.
- Exchanged samples should be processed by each agency within two weeks, or longer if agreed on by all when sample size is large. Members unable to quickly process samples should rotate their turn to the end of the exchange and send the sample to the next cooperating lab.
- Appropriate agencies (those who are in production reading status for that species) should allow at least 1 production reader to participate in Primary Exchanges.
- Precision test results from the Exchange should be submitted to the Vice-Chair in time for the CARE Chair to include in the CARE annual report to the TSC and/or at the CARE meeting.

Secondary Exchange Protocols:

- CARE members initiating Secondary Exchanges between agencies should notify the Vice-chair and expedite results to the Vice-chair upon completion.
- These exchanges should be initiated throughout the two year interim between CARE meetings.
- Species and numbers of structures exchanged are to be set by CARE members.
- Samples may be processed at a pace agreed upon by the participants, however, members are encouraged to carry out all exchanges expeditiously.

General Exchange Protocols:

- The Vice-chair receives and reposits results for all exchanges in a standardized EXCEL table format (see "Product Format"), and next submits them to the CARE Chair who will then submit them to the Web Site Committee for publication to the CARE Web site.
- To facilitate a timely exchange, limit the number of agencies to four. Limiting the number of agencies involved also avoids excessive degradation of broken and burnt otolith specimens.
- Each agency should submit an "agency age estimate" that is resolved for all readers participating within that agency (intra-lab readings should be maintained in-house).
- When exchanging otolith samples, each agency should "conserve" structures, and burn only one-half of potentially four surfaces for each specimen. This assures adequate and ideally "equal" growth information available to all participants.
- Exchanges that require involvement of more than four agencies should be conducted in a way to assure integrity of structures so as to allow more than 4 comparable opportunities.

PRODUCT FORMAT

Meeting Minutes

CARE Meeting minutes should be prepared and submitted according to the following (see example in Appendix A):

- Use the meeting agenda outline for headings and subheadings (discussion should be prefaced by the speaker's full name (first occurrence) and subsequently last name, and may be quoted or paraphrased.
- Dynamic discussion should be summarized as to the theme, recognizing all participants, and with key points discretely credited.
- Other non-agenda items should be prefaced as "Non-Agenda Item:", and noted in the minutes in their sequence of occurrence.

Annual Report to the TSC

The CARE annual report (see example in Appendix B) to the TSC is submitted at the annual meeting of the TSC. The Chair should solicit status reports (paragraph) from subcommittee chairs, or other points of interest raised by CARE, and at the discretion of the Chair.

Age Structure Exchange

The Age Structure Exchange precision results will be submitted to the Vice-chair in a manner consistent for inclusion into the "Summary of Structure Exchange Table" (see example in Appendix C). The type and formulation of reported statistics should be calculated according to current convention.

Precision Test Statistics and Formulation

Precision testing is routinely conducted to measure the "readability" of a sample. Several statistics are routinely calculated to describe this precision. Some of the most commonly used statistics (noted below), and their mathematical formulation are presented in Appendix D.

- average percent error (APE)
- coefficient of variation (CV)

Computer Software Standards

To expedite exchange of documents or spreadsheets, the following software standards were approved to be standard, circa 2000. Updates to these standards will be frequently made to reflect evolution of software.

- Word Processing ~ Microsoft WORD (documents saved as "WORD 97-2002&6.0/95-rtf(*.doc)")
- Spreadsheet ~ EXCEL (documents saved as "Microsoft EXCEL97-2002&5.0/95")