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CIRCULAR COMMUNICATION TO MEMBERS OF THE SCIENTIFIC COMMITTEE
AND INVITED PARTICIPANTS
IWC.SC.85

Consideration of results of North Pacific minke whale implementation simulation trials at SC/55

Doug Butterworth, Chair of North Pacific Minke *Implementation Simulation Trials* Steering Group has asked that the following attachment be circulated to members of the Scientific Committee and Invited Participants.

Dr. Nicky Grandy
Secretary to the Commission

CONSIDERATION OF RESULTS OF NORTH PACIFIC MINKE WHALE IMPLEMENTATION SIMULATION TRIALS AT SC 55

During the course of the forthcoming Scientific Committee meeting, the Committee will need to recommend a particular variant of the RMP for application to the minke whale populations in this region, in the light of the results presented of *the Implementation Simulation Trials* developed for this purpose.

Part of the brief of the Intersessional Workshop on these trials that took place in Seattle in January earlier this year was to facilitate the Committee's process of interpreting these rather complex results. In particular, the Workshop was specifically tasked with initiating discussion on approaches to advise on the relative plausibility of such trials, and the application of these approaches in this instance.

Annex A contains an extract of the sections of the Workshop's report that relate to these issues. These fall into three categories:

(1) Description of Trials

In addition to the overall summary paper to be prepared for this purpose, as mentioned in Annex A, please note the request for separate papers by individual scientists to address the relative merits, demerits and plausibilities of the different hypotheses considered in this exercise and their associated trials.

To assist other members of the SC to become familiar with the issues in question, scientists intending such contributions are encouraged to forward them to the Secretariat as soon as possible, so that they can be posted on the IWC website.

(2) Consolidation of trial results, including the matter of the relative plausibility of hypotheses underlying the different trials

Annex A reports that written suggestions from a number of individuals on how best to proceed towards this end are to be sought, by mid-April if possible. These contributions will be e-mail circulated to an expanded North Pacific minke whale Intersessional Steering Group to encourage dialogue on this matter before the SC meeting, but without any attempt to reach a consensus within this expanded group.

An e-mail correspondence group for this purpose has been set up with the address: npminketrials@marine.csiro.au. SC members or Invited Participants who will attend the SC meeting, but who are not already on the Intersessional Steering Group, are invited to join this new correspondence group if they wish. They can do so by advising Andre Punt at: aepunt@u.washington.edu, giving their email address.

(3) New data/information/analyses of pertinence to trial plausibility

Attention is drawn to the penultimate paragraph of section 9.2 in Annex A. Scientists who wish to make submissions on these issues are reminded that these should desirably be forwarded to the Secretariat by mid-April to allow electronic availability via the IWC website.

Yours sincerely,

Doug Butterworth
Chair of North Pacific Minke *Implementation Simulation Trials* Steering Group

ANNEX A

Intersessional Workshop Report Sections

LAST 2 PARAGRAPHS OF ITEM 8. METHODS TO EXAMINE RESULTS OF TRIALS

In addition to the trial results described above, the Workshop considered it important that the Scientific Committee receive a brief paper explaining the *Implementation Simulation Trials* in a non-technical manner. It should succinctly: (1) describe the hypotheses underlying the trials and their rationale; (2) clarify the range of uncertainties spanned by the trials and (3) explain the six RMP variants under consideration. It was agreed that Donovan would undertake responsibility for producing this document, and that he could request draft contributions (and comments) from other Workshop participants. The document would provide the basis for an introductory PowerPoint presentation on these trials to be made by Donovan to the RMP sub-committee at the 2003 Scientific Committee meeting.

This summary paper will not discuss the relative merits, demerits and plausibilities of the different hypotheses (Baselines A, B, C and D) and their associated trials. Such issues are to be addressed in papers developed by individual scientists and submitted to the Scientific Committee for discussion after the presentation referenced above.

9. RELATIVE PLAUSIBILITY OF TRIALS

Two broad issues were discussed under this agenda item: the process to be used by the Scientific Committee for translating the results from the *Implementation Simulation Trials* into a recommendation as to which RMP variant to implement, and what auxiliary information (and in particular new 'data') might be considered in this process.

9.1 Process

The performance statistics output when the *Implementation Simulation Trials* above are run for each of the six RMP variants under consideration will be voluminous. A structured approach needs to be developed to allow the Scientific Committee to most effectively consider and interpret these results and ultimately develop a recommendation as to which RMP variant to implement. This will presumably require some method for consolidating the trial results. Certain participants expressed the view that this consolidation process needed to take account of the relative plausibility of the hypotheses underlying the different trials, in particular to avoid a recommendation being perhaps based only upon the trial for which acceptable performance proved the most difficult to achieve. Other members did not believe the latter was likely but there was little time for further discussion of this matter.

In discussion, a number of pertinent questions that might need to be addressed during any review process were raised. These are summarised below.

(a) What comprises acceptable performance by an RMP variant in a trial?

(b) Should the Committee concentrate only on results of trials for which performance was not always acceptable?

(c) Can sensitivity trials for which performance hardly differs from the corresponding base-case trial be ignored in the consolidation process?

(d) How can plausibility be assessed, and should this be qualitative (e.g. high / medium / low) or numeric?

(e) Can trials accorded 'low' plausibility be eliminated from the consolidation process?

(f) How should the Committee proceed if consensus on the relative plausibility of a trial cannot be achieved?

(g) Can some 'plausibility'-weighted average of each performance statistic over the trials comprise a sufficient basis for summarising results, taking account also of the fact that the trial 'design' did not provide a full 'cross' of all factors (e.g. most trials are for $MSYR_{mat}$=1%, with only a few of the these repeated for $MSYR_{mat}$=4%)?

The Workshop agreed that a number of individuals familiar with the RMP trials process be invited to contribute written suggestions on this process if they wished. Those to be so invited were the participants at the Workshop and Cooke, Hammond, Magnússon, Schweder, Stefansson and Stokes; Donovan would provide a contribution related to the process used for the AWMP.

These contributions would be requested for submission by mid-April if possible, for circulation to an e-mail group comprising the Intersessional Steering Group augmented by those listed above and any other members of the Scientific Committee wishing to join[1]. Dialogue within this group on the suggestions made would be encouraged, but the group would not be expected to attempt to reach a consensus before the Scientific Committee meeting.

9.2 Data

In an ideal situation, decisions about the relative plausibility of trials would be determined at the trial development and selection stage, and prior to the results of runs of trials becoming available. It was noted, however, that in the case of these North Pacific minke *Implementation Simulation Trials*, trials had been included in the final set on the basis that at least some participants considered the associated underlying hypothesis plausible. This had been agreed on the understanding that a discussion of relative plausibility would take place at a later stage and before any RMP variant might be recommended.

The Committee had previously agreed that the trials themselves and the data to be used in their conditioning (sighting estimates of abundance and 'J'-non 'J' stock mixing proportion estimates by sub-area and month) should be finalised by this time (IWC, 2003). However, at the Workshop, the question arose as to whether new auxiliary information could be used when commenting on the plausibility of various trials at the Scientific Committee meeting.

No consensus was achieved on this point; some believed that it was not acceptable to bring new information, others believed that it was. This must be considered further in Berlin. Given this, it was acknowledged that attempting to specify what comprised acceptable 'data' in the context of plausibility would be unproductive. The Workshop however, **recommended** that any 'new' information and/or analyses pertaining to this issue should preferably be forwarded to the Secretariat to allow electronic availability (e.g. via its web-site) to the Scientific Committee by mid-April.

In this regard, Pastene and Kawahara gave brief presentations regarding respectively genetic and ecological / oceanographic studies they intended to pursue in relation to the issue of relative plausibility of different stock-structure hypotheses for report to the Scientific Committee. The content of these presentations was not discussed by the Workshop.

[1] Anyone wishing to join should contact Andre Punt: aepunt@u.washington.edu