



Australian Government

Australian Fisheries Management Authority



Sub-Antarctic Resource Assessment Group (SARAG)

MINUTES
TELECONFERENCE
18 SEPTEMBER 2013

SUB-ANTARCTIC Resource Assessment Group (SARAG)

CHAIR: Dr Malcolm Haddon (Interim Chair)

Date: 18 September 2013

Venue: Teleconference

Attendance

Members

Dr Malcolm Haddon, Interim Chair

Mr Martin Exel, Industry Member

Mr Les Scott, Industry Member

Dr Dirk Welsford, AAD

Dr Philippe Ziegler, AAD

Ms Sarah Kirkcaldie, AFMA Member

Mr Matthew Daniel (Executive Officer)

Dr Heather Patterson, Permanent observer,
ABARES

Dr Sally Wayte, Observer (CSIRO)

Ms Renee Kinnersly, Observer (AFMA)

Mr Rhys Arangio, Observer (Industry)

Apologies

Professor John Buckeridge, Chair

Dr Rich Hillary, CSIRO

Introduction

A Sub-Antarctic Resource Assessment Group (SARAG) teleconference was held on 18 September 2013.

The primary objective of the meeting was to discuss the Heard Island and McDonald Islands stock assessment for 2013.

Agenda item 1 - Preliminaries

The meeting was opened at 10.30am on 18 September 2013 by the Interim Chair, Dr Malcolm Haddon.

1.1 Declaration of interests

Dr Haddon advised he is employed by CSIRO and is not undertaking specific research projects in relation to Sub-Antarctic fisheries, although he does provide advice to other researchers in relation to stock assessments, particularly for the Macquarie Island Toothfish Fishery (MITF). Dr Haddon is also a member on the Northern Prawn Fishery Resource Assessment Group. Dr Haddon has no financial interest in the fisheries.



Mr Exel declared his interest in all agenda items. He advised that he is the General Manager, Environment and Policy, Austral Fisheries P/L. Austral Fisheries P/L owns Statutory Fishing Rights (SFRs) in the Australian sub-Antarctic fisheries and waters under the jurisdiction of Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR). Mr Exel also declared that he is the Director of the Institute of Marine and Antarctic Studies, Chair of the Commonwealth Fisheries Association (CFA), member of the South East Trawl Fishing Industry Association (SETFIA), Member of the Great Australian Bight Industry Association, Member of Coral Sea Fishers Association and Chair of the Coalition of Legal Toothfish Operators. He was not aware of any investigation or prosecution action by AFMA against his Company or of any legal action taken by his Company against AFMA.

Mr Scott advised that he is the Managing Director of Australian Longline P/L and Managing Director of Petuna Sealord Deepwater Fishing P/L and which holds various fishing rights in, and operates vessels in the Australian Sub-Antarctic fisheries and waters under the jurisdiction of CCAMLR. Mr Scott is also an advisor to Petuna Fisheries. Mr Scott further advised he is a member on SlopeRAG, the Sub-Antarctic demersal longline member on the Threat Abatement Plan, industry representative on the Australian delegation to CCAMLR, director to CFA and Director of SETFIA. Mr Scott was not aware of any investigation or prosecution action by AFMA against his Company or of any legal action by his Company against AFMA.

Ms Wayte advised she is a CSIRO employee and was undertaking work on the Macquarie Island Toothfish Fishery stock assessment and Management Strategy Evaluation. Ms Wayte also attends ShelfRAG. Ms Wayte has no financial interest in the fisheries.

Dr Welsford advised that he is employed by the Australian Antarctic Division (AAD) and was responsible for monitoring and assessing the Heard Island and McDonald Islands (HIMI) Fishery and other CCAMLR fisheries and also data collection for the MITF. Dr Welsford advised that AAD get core funding but also seek grants from Fisheries Research and Development Corporation (FRDC) and AFMA. However, members noted that Dr Welsford salary was not connected to these grants.

Dr Ziegler advised that he is employed by AAD and will be involved in the HIMI assessment this year. Dr Ziegler has no pecuniary interest in the sub-Antarctic and his salary is not connected to any research grants.

Dr Patterson advised she is an employee of the Department of Agriculture, Fisheries and Forestry and is one of the authors of the Australian Bureau of agricultural Resource Economics and Science (ABARES) Fishery Status report. Dr Patterson noted that she had no financial interest in the sub-Antarctic fisheries.

Ms Kirkcaldie advised she is employed by the Australian Fisheries Management Authority (AFMA) and is currently acting manager for sub-Antarctic fisheries at AFMA.

Mr Daniel advised he is employed by AFMA and is the Manager for the Southern Bluefin Tuna Fishery. He also advised that he attends the Southern Bluefin Tuna Management Advisory Committee (SBTMAC)

Ms Kinnersly advised she is employed by the Australian Fisheries Management Authority (AFMA).

Mr Arangio advised he was attending the meeting as an observer and that he is employed by Austral Fisheries P/L. Mr Arangio further advised that he is the secretary of the Coalition of Legal Toothfish Operators. Mr Arangio was not aware of any investigation or prosecution action by AFMA against his Company or of any legal action taken by his Company against AFMA.

Messrs Scott, Exel, and Arangio declared their interest under agenda item 2. Messrs Scott, Exel and Arangio left the teleconference and the remaining members agreed that they could all re-join the teleconference and participate in all discussions and recommendations.



1.2 Apologies

An apology was received from Professor Buckeridge and Dr Rich Hillary.

1.3 Adoption of agenda

SARAG members adopted the agenda without change.



Agenda item 2 – Patagonian Toothfish stock assessment

Dr Ziegler presented that updated 2013 stock assessment for the Heard Island and the McDonald Islands Patagonian Toothfish (*Dissostichus eleginoides*) fishery (Division 58.5.2).

Dr Ziegler noted that the revised stock assessment was based on the same methods discussed at the August SARAG meeting.

Members noted that one of the issues encountered in the stock assessment included that the longline season had finished but the data in the assessment was based on a calendar year so there could be a misconception that there may be an overcatch.

SARAG noted that the stock assessment model in 2011 had poorly representative the fleet structure of the Fishery. The updated stock assessment compared the effects of a range of alternative fishery structures as well as model assumptions for year class strength (YCS) on stock assessment estimates and projected catch limits that satisfy the CCAMLR decision rules.

Members noted that growth was re-estimated from all length-at-age data collected from the HIMI toothfish Fishery from 1997-2011 with least squares using a von Bertalanffy growth function. Dr Ziegler explained that the Von Bertalanffy growth model fits the data well and produced stable stock status estimate but that it resulted in very high length-at-age for young fish. Members noted that in the Fishery, small fish are rarely caught and therefore there is an over representation of large fish at young ages. A corrected line was used for ages 1-4 to give a more realistic growth for the first four years but this approach resulted in inconsistent model fits and higher estimates of stock biomass. Therefore, the new but uncorrected von Bertalanffy growth function that produced more consistent results was used for the assessment.

Mr Exel stated that L_{∞} was equal to 4,509mm and Patagonian Toothfish never get that big. Dr Ziegler explained that the model estimates appropriate lengths for the fish ages observed in the fishery, and only asymptotes at very large ages.

Mr Exel expressed concern that last minute changes were made to the growth model and further investigations were needed before these results should be used to set the total allowable catches (TACs). Mr Exel suggested that the old growth model with the updated new data be used. Dr Ziegler explained this could not be done due to time constraints. He noted that the old growth model consistently estimated larger length-at-age and that the new growth model was consistent with the length-at-age data. Members suggested that a sentence be inserted in the paper noting that the Working Group of Fish Stock Assessment had previously raised issues about updating the growth model and these had been addressed in this assessment.

SARAG noted that the model fits to the survey observations were generally acceptable for all scenarios. However, none of the various scenarios was able to capture the strong inter-annual variability in abundance-at-length from the surveys in the most recent years 2012 and 2013. Scenarios 2.1, 2.2 and 2.3 were very similar although members noted that the error bars increased with only one trawl structure (scenario 2.3)

Members discussed the Year Class Strength (YCS) figure noting that the YCS showed much stronger inter-annual fluctuation in the period up to the mid 1990s compared to the period after. While the causes of the strong 'saw-tooth' pattern are not clearly understood, the YCS during the early assessment years were not as well defined by observations as those during the later years. It was suggested that the assessment period should start at 1992.



SARAG agreed that that scenario 2.4 was the most appropriate scenario and members requested that the assessment note why scenario 2.4 was the preferred scenario. Based on this assessment the recommended catch limit for the 2013/14 and 2014/15 seasons is 3,005 tonnes.

SARAG accepted the 'Integrated Stock Assessment for the Heard Island and the McDonald Islands Patagonian toothfish (*Dissostichus eleginoides*) fishery (Division 58.5.2) with the suggested changes as discussed.

Members thanked Dr Ziegler and Welsford for presenting the 2013 stock assessment.

Other

Agenda item 3 – Other Business

No other business items were raised or discussed.

Agenda item 4 - Next meeting

SARAG noted that there would be a requirement to hold a teleconference in mid-November 2013 to discuss the HIMI Fishery TAC recommendations arising from CCAMLR. It was expected that the next face-to-face meeting of SARAG would be held in Hobart in March 2014.

The Chair thanked members for participating in the teleconference and closed the meeting at 12.00 pm.



