第6回南極国際動向研究会(2020年1月10日) 話題提供

# 1) SCAR「南極条約体制に関する 常設委員会(SC-ATS)」について

# 2) 第38回南極海洋生物資源保存 委員会(CCAMLR-38)について

## 国立極地研究所 高橋 晃周

## Standing Committee on the Antarctic Treaty System

- SCAR is an official Observer to the Antarctic Treaty and provides independent, objective scientific advice in a variety of fields, particularly on environmental and conservation matters.
- The Standing Committee on the Antarctic Treaty System (SCATS) is the body within the SCAR structure tasked with developing SCAR's scientific advice to: ATCM, CEP, CCAMLR, the Convention for the Conservation of Antarctic Seals (CCAS), and the Advisory Committee to the Agreement on the Conservation of Albatrosses and Petrels (ACAP).

## Terms of reference (1)

- Develop and provide independent scientific advice to the Antarctic Treaty System (ATS);
- Respond to requests for advice from the Antarctic Treaty System;
- Coordinate these tasks across SCAR's subsidiary groups, the Executive Committee, and, where required, National Committees and the SCAR Delegates;
- Co-represent SCAR at the various meetings of bodies that make up the ATS, and primarily the Committee for Environmental Protection (CEP) and the formal meeting of the Antarctic Treaty Consultative Parties;

## Terms of reference (2)

- Adhere to a set of guiding principles as follows:
- Ensure that its advice is accurate, independent, current, and traceable to source,
- Rely on peer-reviewed, publicly-available science,
- Formulate advice on a broad, inclusive, open-consultation basis to provide the most appropriate advice no matter where the expertise on which it rests resides,
- Provide timely advice with the proviso that accuracy takes priority;
- Report to the SCAR Delegates or the Directors (Executive Committee) as appropriate.

## Members (1)

- <u>Dr Aleks Terauds</u> Chief Officer, Australia, 2014 2020
- <u>Dr Thomas Bracegirdle</u> Physical Sciences Group Representative, UK, 2016 – 2020
- <u>Dr Cassandra Brooks</u>\*- Deputy Chief Officer, USA, 2018 2022
- <u>Dr Mary-Anne Lea</u>\*- Expert Group on Birds and Marine Mammals (EG-BAMM) and SCAR-CCAMLR Liaison, Australia, 2018-2022
- <u>Dr Daniela Liggett</u> New Zealand, 2014 2022
- Prof Bettina Meyer\* Germany, 2018-2022
- <u>Dr Chandrika Nath</u> Secretariat, from June 2018
- Dr Luis Pertierra Spain, 2018-2022

## Members (2)

- <u>Dr Marcelo Reguero</u> Geosciences Group Representative, Argentina, 2016 – 2020
- <u>Dr Yan Ropert-Coudert</u> Life Sciences Group Representative, France, 2014 – 2022
- <u>Dr Akinori Takahashi</u>\* Japan, 2014 2022
- <u>Dr Anton Van de Putte</u>\* Standing Committee on Antarctic Data Management (SCADM) Chief Officer, Belgium, 2016 – 2020
- <u>Dr George Watters</u>\* USA, 2018 2022

\*Delegate member to SC-CAMLR38

## Activities



https://www.scar.org/policy/scats-reports/

## Activities

| Date                  | Activity  |
|-----------------------|---|
| 22-26 October<br>2018 | Participate in SC-CAMLR (Mary-Anne Lea, Cassandra Brooks,<br>Aleks Terauds, Steven Chown)   |
| 29 Oct- 2 Nov<br>2019 | Participate in CCAMLR (Mary Anne-Lea, Cassandra Brooks)   |
| November 2018         | Finalisation of Use of Animals Code of Conduct (Yan Ropert-<br>Coudert)   |
| December 2018         | Finalisation of update of the Anthropogenic Noise in the<br>Southern Ocean (Aleks Terauds, Chuck Kennicutt, Steven Chown<br>Chandrika Nath)   |
| February 2019         | Publication of "A snapshot of biodiversity protection in Antarctica" (Wauchope et al. 2019 <sup>1</sup> ) (Aleks Terauds)   |
| March 2019            | Finalisation of the Draft Code of Conduct for Geological Activities<br>in Antarctica (Marcello Reguero, Aleks Terauds, Kevin Hughes)  |
| April 2019            | Memorandum of understanding signed with the International<br>Polar Heritage Committee (Chandrika Nath)  |
| April 2019            | Review and Update of the "Checklists for supply chain managers<br>of National Antarctic Programs for the reduction in risk of<br>transfer of non-native species" (Aleks Terauds, Steven Chown)                                    |
| May 2019              | Participation in SC-CCAMLR Working Group – Ecosystem<br>Monitoring Management (Bettina Meyer)   |
| June 2019             | Joint SCAR/CEP Workshop on Further Developing the Systematic<br>Area Protection of Antarctica (Aleks Terauds, Chandrika Nath,<br>Steven Chown, Yan Ropert-Coudert, Luis Pertierra, Hanne<br>Nielsen, Heather Lynch, Peter Convey) |
| 3 July 2019           | Successful presentation of the SCAR Lecture <sup>2</sup> at ATCM XLII - CEP   |
| 1-5 July 2019         | Twenty-three papers submitted to XLII (6 Working Papers, 16<br>Information Papers, 1 Background Paper; 16 as lead-proponent)<br>See Appendix 1 for details (Aleks Terauds)  |
| Ongoing               | Editorial input to the Antarctic Environments Portal (Aleks   |
| Ongoing               | Ierauds, Akinori Takanashi, Carlotta Escutia)   |
| Ongoing               | program (Aleks Terauds, Chandrika Nath)   |

#### https://www.scar.org/policy/scats-reports/

## Activities

| Date          | Activity  | Working           | Age      |
|---------------|---|-------------------|----------|
| 22-26 October | Participate in SC-CAMLR (Mary-Anne Le               | Paper             |          |
| 2018          | Aleks Terauds, Steven Chown)                        | WP017             | CEP      |
| 29 Oct- 2 Nov | Participate in CCAMLR (Mary Anne-Lea                |                   | 10c      |
| 2019          |   | WP037             | ATC      |
| November 2018 | Finalisation of Use of Animals Code of C            |                   | 15       |
|               | Coudert)  | WDOFO             | CED      |
| December 2018 | Finalisation of update of the Anthropog             | WP050             |          |
|               | Southern Ocean (Aleks Terauds, Chuck                |                   | 10a      |
|               | Chandrika Nath)                                     |                   |          |
| February 2019 | Publication of "A snapshot of biodivers             |                   |          |
| March 2010    | Antarctica" (Wauchope et al. 2019 <sup>-</sup> ) (A | WP052             | CEP      |
| March 2019    | Finalisation of the Draft Code of Condu             |                   |          |
| 1             | in Antarctica (Marcello Reguero, Aleks              |                   |          |
| April 2019    | Memorandum of understanding signed                  |                   |          |
| Amril 2010    | Polar Heritage Committee (Chandrika M               |                   |          |
| April 2019    | Review and Update of the "Checklists f              |                   |          |
|               | of National Antarctic Programs for the              |                   |          |
| May 2010      | Participation in SC CCAMLE Working G                |                   |          |
| Ividy 2019    | Monitoring Management (Betting May                  | WDOCO             | CED      |
| luno 2010     | Inint SCAR/CER Workshop on Eurther C                | WP068             |          |
| Julie 2019    | Area Protection of Antarctica (Aleks Te             |                   | 100      |
|               | Steven Chown, Van Bonert-Coudert, Lu                | WP070             | CEP      |
|               | Nielsen Heather Lynch Peter Convey)                 |                   |          |
| 3 July 2019   | Successful presentation of the SCAR Le              |                   |          |
| 5 5417 2015   | VVII (Chouse Chouse)                                | 1                 | 1        |
| 1-5 July 2019 | Twenty-three papers submitted to XLII (6 V          | Vorking Papers    | . 16     |
| ,             | Information Papers, 1 Background Paper; 1           | 6 as lead-prop    | onent)   |
|               | See Appendix 1 for details (Aleks Terauds)          |                   |          |
| Ongoing       | Editorial input to the Antarctic Environmen         | its Portal (Aleks | <b>,</b> |
|               | Terauds, Akinori Takahashi, Carlotta Escutia        | a)                |          |
| Ongoing       | Input into SG-CCR and CEP Climate Change            | response work     | s        |
|               | program (Aleks Terauds, Chandrika Nath)             |                   |          |

#### Appendix 1 SCAR submissions to the 2019 CEP/ATCM

| orking<br>per | Agenda     | Title   | Proponents   |
|---------------|------------|---|--|
| P017          | CEP<br>10c | SCAR's Code of Conduct for the Use of Animals for Scientific Purposes in Antarctica   | SCAR   |
| P037          | ATCM<br>15 | Sixty Years of Treaty-Supported Antarctic Science   | SCAR   |
| P050          | CEP<br>10a | Review and Update of the "Checklists for supply<br>chain managers of National Antarctic Programs<br>for the reduction in risk of transfer of non-native<br>species" | COMNAP<br>SCAR   |
| P052          | CEP 11     | Antarctic Environments Portal   | Australia<br>Netherlands<br>New<br>Zealand<br>Norway<br>SCAR<br>Spain<br>USA |
| P068          | CEP<br>10c | Anthropogenic Noise in the Southern Ocean: an Update  | SCAR   |
| P070          | CEP 9e     | Recommendations arising from the Joint SCAR /<br>CEP Workshop on Further Developing the<br>Antarctic Protected Area System. Prague, Czech                           | Australia<br>Czech<br>Republic   |

#### https://www.scar.org/policy/scats-reports/

## Activities

| Secretariat of the Antarctic Treaty About Environmental Pro                                     | tection Meetings | Inform | ation Exchange                                | Data              | Q             |
|---|------------------|--------|---|-------------------|---------------|
| Environmental Protection > CEP > Guidelines and Procedures                                      |                  |        |   |                   |               |
| Guidelines and Procedures   |                  |        | ENVIRONMENT PF                                | ROTOCOL<br>IMPACT |               |
| ENVIRONNMENTAL IMPACT ASSESSMENT (ANNEX I)  | VIEW/DOWNLOAD    |        | ASSESSMENT<br>FAUNA AND FLOR<br>WASTE MANAGEM | A                 |               |
| Revised Guidelines for Environmental Impact Assessment in<br>Antarctica                         | <u>+</u>         |        | MARINE POLLUTIO                               | DN<br>IS          |               |
| Environmental Guidelines for Operation of RPAS in<br>Antarctica                                 | .↓               |        | LIABILITY<br>THE COMMITTEE                    |                   |               |
| CONSERVATION OF ANTARCTIC FAUNA AND FLORA (ANNEX II)  | VIEW/DOWNLOAD    |        | TOOLS FOR DELEC                               | CATES             | ES            |
| SCAR's Code of Conduct for the Use of Animals for Scientific<br>Purposes in Antarctica          | <b>⊥</b>         |        | CEP HANDBOOK                                  |                   |               |
| Non-native Species Manual. Revision 2019  | <u>ب</u>         |        |   |                   |               |
| SCAR's Environmental Code of Conduct for Terrestrial<br>Scientific Field Research in Antarctica | <u>ب</u>         |        | DOWNLOAD DOCI                                 | JMENTS            | ₹             |
|   |                  |        | CEP REPORTS                                   |                   | $\rightarrow$ |

https://www.ats.aq/devAS/EP/GuidelinesAndProcedures?lang=e

### Antarctic Environments Portal

| Anta<br>environments.aq  | rctic Environments Portal   | nents Portal Login<br>Forgot Password?<br>Registration             |                     |        |
|--|---|--|---------------------|--------|
| Home Map About Con   | tact  | Search   |                     | Search |
| Overview   |   | Interactive<br>Map   |                     | Ø      |
| The Antarctic Environments Portal<br>policy, by allowing easy access to<br>the management of the Antarctic e<br>Portal is to contribute to the Comr<br>advice and recommendations to th  | The Antarctic Environments Portal provides an important link between Antarctic science and Antarctic<br>policy, by allowing easy access to reliable, science-based information on a range of issues relevant to<br>the management of the Antarctic environment. The primary objective of the information placed in the<br>Portal is to contribute to the Committee for Environmental Protection (CEP) in its development of<br>advice and recommendations to the Antarctic Treaty Consultative Parties on environmental protection. |  | Emerging<br>Issues  | ۲      |
| The Portal also enables the Scientific Committee on Antarctic Research (SCAR), to fulfil its advisory role to Antarctic policy makers. All scientifically-based information available through the Portal is prepared by Antarctic experts and is thoroughly peer-reviewed before being published. An Editor, supported by an Editorial Group oversees the review process and is responsible for ensuring information available |   | What's Changed<br>Inland aquatic biodiversity in An                | tarctica 21/08/2019 |        |
| through the Portal is apolitical and   | through the Portal is apolitical and up-to-date.<br>All of us associated with the Antarctic Environments Portal are deeply saddened at the sudden loss of<br>Prof. David Walton who since 2015 has been the Editor of the Portal. David was a remarkable man and<br>a great Antarctican. His ability to communicate science across many disciplines was exceptional and<br>why he was such a natural fit as the first Editor of the Portal. We will miss David deeply and offer our   |  | 19/08/2019          |        |
| Prof. David Walton who since 201   |   |  | ds and 10/05/2019   |        |
| why he was such a natural fit as th  |   |  | 15/04/2019          |        |
| heartfelt condolences to his wife S<br>on the SCAR website: https://www  | Sharon and their three children. A full obituary for David can be found w.scar.org/general-scar-news/walton-obituary/   | Pathways for the Introduction of<br>Terrestrial Non-Native species | 27/11/2018          |        |
|  | Climate change as an emerging threat to<br>Emperor Penguins   |  |                     |        |
|  | The Emperor Penguin (Aptenodytes forsteri) is uniquely adapted to breed in the Antarctic winter - eggs are laid and chicks reared mainly on stable sea  |  |                     |        |

#### https://www.environments.aq



**Fig. 2.** Antarctic science-policy communication pathways. Arrow colours reflect the source of the communicated information. The dotted arrow highlights a particular opportunity for further improvements in communication between some individual national delegations to the ATCM and their respective national science funding bodies to consider more targeted funding of environmental science relevant to Antarctic policy needs.

#### Hughes et al. 2018 Environ. Sci. Policy

水産庁プレスリリース

#### 「南極の海洋生物資源の保存に関する委員会(CCAMLR)第38回 年次会合」の 結果について



令和元年11月5日 水産庁

令和元年10月21日(月曜日)から11月1日(金曜日)まで、ホバート(豪州)において、「南極の海洋生物資源の保存に関する委員会(CCAMLR) 第38回 年次会合」が開催され、メロ、オキアミの資源管理措置等について議論が行われました。

#### 3.参加国・地域

日本、アルゼンチン、豪州、ベルギー、ブラジル、チリ、中国、フランス、ドイツ、インド、イタリア、韓国、ナミビア、オランダ、ニュージーランド、 ノルウェー、ポーランド、ロシア、南アフリカ、スペイン、スウェーデン、ウクライナ、英国、米国、ウルグアイ、EU

#### 4.我が国出席者

森下 丈二(もりした じょうじ)農林水産省顧問(我が国代表)ほか、水産庁、外務省、国立研究開発法人 水産研究・教育機構、国立極地研究所及び関係業界 の関係者

https://www.jfa.maff.go.jp/j/press/kokusai/191105.html

水産庁プレスリリース

#### 5.結果概要

(1) 2019/20年漁期(2019年12月-2020年11月)のメロ、オキアミの資源管理措置

(ア)メロ

メロのTACを10,800トン(前年漁期: 11,629トン)とすることが合意されました。我が国漁船の操業が認められた海域のTACは、合計で4,453トン(前年: 4,441トン)となりました。

また、現在閉鎖(操業禁止)されている海域において、メロ資源状況の調査を目的とする我が国の調査計画が昨年に引き続き認められました。

(イ)オキアミ

オキアミのTACを869.5万トン(前年漁期同)とすることが合意されました。(我が国漁船の操業はない)

(2) 海洋保護区(MPA\*3)の設置

ウェッデル海、東南極、南極半島西岸における海洋保護区の設置提案について協議が行われましたが、合意に至らず、引き続き協議することとなりまし た。

\*3 MPA : Marine Protected Area

(3) 次回年次会合次回年次会合は、令和2年(2020年)10月にホバート(豪州)で開催予定です。

https://www.jfa.maff.go.jp/j/press/kokusai/191105.html

|   |   |                              | Home Ski                 | p to Content  | Log in     |  |
|---|---|------------------------------|--------------------------|---------------|------------|--|
|   | vation of Antarctic Marine Living Resources   | _                            | _                        | S             | EARCH      |  |
| About CCAMLR Conservation m                             | easures Science Fisheries Compliance Data Meetings Publicati  | ons                          |                          |               |            |  |
| A Home / News / Meeting of Anta                         | rctic experts comes to a close  | English                      | Français                 | Русский       | Español    |  |
| About CCAMLR  | Meeting of Antarctic experts comes to a close   |                              |                          | A-            | A+ 🖶       |  |
| Basic Documents<br>History                              | Today sees the close of the Thirty-eighth Meeting of the Commission for the<br>Conservation of Antarctic Marine Living Resources (CCAMLR) in Hobart, Australia.   |                              | - Rom                    |               |            |  |
| CAMLR Convention  | Farly in October, scientists met to review the status and trends of fish stocks   |                              |                          |               | 10         |  |
| Commission  | regulated by CCAMLR. The Scientific Committee subsequently reviewed the<br>outcomes of that meeting, together with several other specialist working groups<br>responsible for monitoring ecosystems in the Southern Ocean. The meetings<br>concluded in the last week of October with the Meeting of the Commission, CCAMLR's decision-making body. |                              |                          |               |            |  |
| Scientific Committee                                    |   |                              |                          |               |            |  |
| Membership  |   |                              |                          |               |            |  |
| <ul> <li>First CCAMLR Performance<br/>Review</li> </ul> | CCAMLR is a consensus-based organisation consisting of 26 Members (25 countries and the European Union). The Commission meeting was chaired by Mr Fernando Curcio Ruigómez (Spain).   |                              |                          |               |            |  |
| Second CCAMLR<br>Performance Review                     |   |                              |                          |               |            |  |
|   | Members. Representatives from other Contracting Parties as well as intergovernmer   | tal, environn                | nental and fi            | shing indus   | stry       |  |
| Who's who in CCAMLR                                     | organisations participated as official observers.   |                              |                          |               |            |  |
| Media   | Many important issues were discussed. Of particular note:   |                              |                          |               |            |  |
| Achievements and<br>Challenges                          | <ul><li>This was the second year in which there were no reports of illegal fishing in t</li><li>The Commission agreed to new prohibition of the discharge of plastics and d</li></ul>   | he Conventic<br>umping and d | n Area.<br>lischarging ( | of oil or fue | l products |  |
| CCAMLR Logo   | from fishing vessels in the entire Convention Area.   |                              |                          |               |            |  |

#### https://www.ccamlr.org/en/news/2019/meeting-antarctic-experts-comes-close

Many important issues were discussed. Of particular note:

- This was the second year in which there were no reports of illegal fishing in the Convention Area.
- The Commission agreed to new prohibition of the discharge of plastics and dumping and discharging of oil or fuel products from fishing vessels in the entire Convention Area.
- CCAMLR initiated a major new program to foster capacity building with a General Capacity Building Fund that will support all Contracting Parties, with priority given to those that are least effective in the implementation of their obligations under the Convention. The Commission also expanded the General Science Capacity fund which will support scholarships for young scientists.

https://www.ccamlr.org/en/news/2019/meeting-antarctic-experts-comes-close

- A new survey has estimated that the size of the krill stock in the South Atlantic is 62.6 million tonnes. This is very similar to the krill stock size of 60 million tonnes determined by the last survey in 2000.
- A major new research program will run over the next few years to provide a new approach to managing krill fisheries. The program will focus on regular determination of krill population size in different areas, utilising scientific and fishing vessel-based studies, and will take into account predators and the krill life cycle to ensure that catches remain sustainable.
- The Commission agreed precautionary catch limits for all toothfish fisheries in the Convention Area.

https://www.ccamlr.org/en/news/2019/meeting-antarctic-experts-comes-close

 Research and monitoring plans for existing marine protected areas (MPAs), as well as proposals to establish three new MPAs – in East Antarctica, the Weddell Sea, and the Western Antarctic Peninsula – were the subject of much discussion. Members will continue to work intersessionally on proposals for these MPAs before they are again considered at next year's meeting.

### Discussion on MPAs (SC-CAMLR-38 Report, para 6.21 - 6.77)

- Para 6.28. (China) 'SC-CAMLR-38/20 presented the critical elements for the development of RMPs for CCAMLR MPAs previously raised by China (CCAMLR-XXXVII/32), with the aim to ensure the transparency of all RMPs and to provide a guiding framework of all Members participating in the RMPs and future reviews on scientific basis. The paper identified critical elements including, inter alia:
  - (i) baseline data be collated from the very beginning of elaboration of MPAs and presented;
  - (ii) broadly stated objectives be translated into specific, measurable, achievable, relevant or realistic and time-bound (SMART) management objectives;
  - (iii) indicators and their parameters be identified;
  - (iv) data collected be standardised.

It recommended that the Scientific Committee recognise the importance of these critical elements in the development of RMPs for CCAMLR MPAs, and use it as a foundation to facilitate further cooperation on this important matter.'

### Discussion on MPAs (SC-CAMLR-38 Report, para 6.21 - 6.77)

- Para 6.37. (Russia) 'The development and approval of a unified approach to the formulation of an RMP must precede the establishment of new MPAs and form the basis for the revision of existing RMPs.'
- Para 6.37. (Russia) '...emphasised that some elements should be taken into account to develop RMPs for MPAs, namely:
  - (i) an MPA is created by the Commission approving the entire set of required documents accompanying the establishment of the MPA. An integral part of this set of documents is the MPA RMP
  - (ii) RMPs shall be developed based on 'the best available data which must be adequate to ensure a unified approach to the development of scientifically based RMPs for specific MPAs' indicators and their parameters be identified;
  - (iii) baseline data, essential for the development of RMPs, must include the qualitative and quantitative characteristics of marine ecosystems and biodiversity, as well as the oceanographic and climate history of the region.
  - (iv) RMPs should include provisions governing procedures and sources for establishing the values of the allowable catch in order to provide resource support for the implementation of the RMP.

### Discussion on MPAs (SC-CAMLR-38 Report, para 6.21 - 6.77)

- Para 6.38. (Argentina) '...requiring the adoption of a complete RMP before the establishment of an MPA contradicts CM 91-04...'.
- Para 6.39. (Argentina) '...further indicated that the adoption of RMPs has gained greater weight than the MPA objectives themselves and has entangled the Scientific Committee in protracted discussions about data quality and amount.' '...the requirements proposed as the starting dataset for MPAs are excessive, requiring not only the collation of huge amounts of data but also impossible achievements, ...and run the risk of blocking the establishment of any MPA.' 'RMPs should not become one more management tool but have been conceived to determine whether the MPA objectives are being achieved, for example to monitor the effects on the ecosystem that occur as a result of climate change and human activity.'
- Para 6.40. 'Many Members agreed with the views expressed by (Argentina). and noted that any requirement to adopt a complete RMP before the establishment of an MPA would contradict the provisions of CM 91-04'.

### Discussion on MPAs (SC-CAMLR-38 Report, para 6.21 - 6.77)

- Para 6.41. (Russia) '...noted that there may be a need in rethinking regarding the approach as to how CCAMLR addresses MPAs. With regard to quotations from the preamble of CM 91-04 containing the word 'conservation' it was suggested to turn to the document of the higher order one forming the basis of Commission's work namely the Convention, and its respective provisions (Article II points 1 and 2), whereby the term 'conservation' includes the notion of 'rational use'. He further underlined that nothing in the Convention prioritises conservation over rational use these are identified as equally important goals..'
- Para 6.41. (Russia) 'With regard to claims that RMPs may establish thresholds for scientific data that are too high – (Russia) underscored that the thresholds that prove too high for individual Members can be met if all Members unite their efforts – it was suggested to think about launching in the future a large-scale scientific collaboration exercise, involving as many Members as possible, as an alternative to current 'competition' between individual MPA proposals.'

### Discussion on MPAs (SC-CAMLR-38 Report, para 6.21 - 6.77)

### - Weddell Sea MPA -

 Para 6.72. SC-CAMLR-38/BG/15 set out observations and comments on the scientific basis and draft RMP of the WSMPA proposal, recalled issues identified by the Scientific Committee, and reiterated points previously raised by China regarding outstanding scientific issues to be addressed in the WSMPA proposal, indicating further work is still needed to be done in the Scientific Committee.