# 水産資源管理談話会報

第 36 号

(財)日本鯨類研究所 資源管理研究センター

2005年 12月

翻訳・公表希望者は以下の手続きとり、著者の許可を得た上で翻訳・公表する。

- 1. 翻訳・公表希望者は文章(FAX、手紙)で著者、表題および 会報の号を明記し、資源管理談話会事務局を通じて要請し、 著者の許可を得て翻訳・公表する。
- 2. 翻訳公表物を資源管理談話会事務局に送付する。

# 目 次

お知らせ			••••	2
IWC 科学委員会、その現状	畑中	1 實	[	• 3
改訂管理方式(RMP)のおさらい	田中	栄 次	•••••	11
系群と管理の単位・北西太平洋ミンククジラを例と 後藤睦夫・上田真久・Luis A.				17
小型捕鯨業の昔と今	磯 根	岩		22
北太平洋ミンククジラへの RMP の適用試験 ( I ST ) -	あれ	から	10 年	
	川原	重幸		32

IWC 科学委員会、その現状

財団法人日本鯨類研究所 畑中 寛

2003年の科学委員会を例にして、科学委員会における議論のやり方、議論の内容等について概要を述べる。

# 会議の概要と議論の仕組み

- 1. 出席科学者約30カ国から170名程度、ドキュメント総数206編、我が国は例年30名程度出席
- 2.12 日の会期のうち4日が本会議、8日が分科会や作業部会
- 3.分科会および作業部会が14、ここで実質的議論

#### 各分科会、作業部会における議論の内容

- 1.RMP(改訂管理方式)
- ・議題 5、6
- ・RMP に関わる一般的課題と RMP の当てはめ (IST) がある
- ・後者は、北西太平洋ミンク(11年を要して終了) 北東大西洋ミンク(1回で終了) 北太平洋ニタリ(やり直し) ミンク日本海系群の詳細評価の準備
- 2.BC(混獲)
- 議題 7
- ・混獲の実態をどう把握するか、また、どう回避するかについて議論をするのが目的。しかし、 混獲している国への批判、難題の押しつけ等になりがち
- 3.AWMP(原住民生存捕鯨管理方式)
- ・議題8
- ・2002 年にホッキョククジラについて完成、しかし、RMP よりも極めて緩やかな捕獲枠を算出、 また根拠もなく単一系群シナリオを採用
- ・コククジラについての方式を作成中
- 4, BRG (原住民捕鯨対象種の資源評価)
- ・議題 9
- ・各種 / 系群について資源評価を行い、捕獲枠を勧告
- ・今年の会合では、ホッキョククジラの系群構造についてのレビューを予定

- 5. IA (詳細評価)
- ・議題 10.1、10.2
- ・SOWER のプランニング (海域選定、調査内容)
- ・南ミンクの詳細評価(工 DCR / SOWER3 巡目の資源量推定値が 2 巡目のそれの 1 / 2 1 / 3になったのはなぜか、g(0)の推定等)
- 6.SD(系群の定義)
- ・議題 11
- ・系群の定義、unit to conserve の考え方、できるだけ細かく割ろうとする意図
- 7.E(環境)
- ・議題 12
- ・環境保護系研究者の集まり、捕獲調査で使われたデータは使わないとの主張
- ・議題が拡散しすぎ、議題を選定する委員会が作られた
- 8.SM(小型鯨類)
- ・議題 13
- ・いるか類の資源状態、特に漁業その他で悪影響を受けている資源の保護に関心
- ・我が国は従来から小型鯨類は条約の対象外として扱うべきでないと主張してきたが、我が国 による管理への干渉がつよく、2001年の会議から不参加
- 9.WW(ホエールウオッチング)
- ・議題 14
- ・ホエールウオッチングの管理方法について議論
- 10 . DNA
- ・議題 15
- ・DNA 登録による市場管理をねらう者が参加
- 11. SP (捕獲調查)
- ・議題 16
- ・捕鯨推進派と反捕鯨派の最も対立する場
- ・捕獲調査計画を出すと、ガイドラインに沿ってレビューする
- ・2003年にはアイスランドが捕獲調査計画を提出
- ・本年我が国は、北西太平洋捕獲調査計画の一部見直しが予定されている
- ・南極海ミンク調査は 18 年に及ぶ長期計画であるが、2004 / 05 シーズンで終了、結果のレビューのための会合をアレンジする小グループが作られている
- 12. SAN (サンクチュアリー)
- ・議題 17
- ・本年は南極海サンクチュアリーの見直しの年

# まとめ

- ・捕鯨推進派、反捕鯨派、中立派が存在
- ・IP(招待科学者)数名(RMPの専門家、商業捕鯨時代から活躍している重鎮等)が重要な役割、ただし、中間派的行動から出られない
- ・批判されれば必ず反論しなければならない。また、自分の意見を明確にしなければならない。
- ・調査計画には仮説がないため不適切との議論が出される(我々の感覚とはかなり異なる)
- ・遠慮、配慮といった日本的考え方は通用しない
- ・反捕鯨の旗手も世代交代しつつ継続
- ・議長をどちらがとるか、ラボルツアーとしての要注意人物(自派の意見に偏ったドラフティング) 報告書ドラフトのチェックなど、非英語圏の科学者は大きなハンディ。

#### CHAIR'S ANNOTATIONS [N]

# ITEM 1: INTRODUCTORY REMARKS

The meeting of the Scientific Committee (SC) will be held in the conference centre, 26 May - 6 June 2003. This will be a 12 day The meeting of the Scientific Committee (SC) will be neid in the conference centre, 26 May = 6 June 2003. This will be a 12 day meeting one day less than we have had in the past. Therefore, we will have to adjust our workload and schedules accordingly. It will be preceded (24 - 25 May) by a 2-day meeting to consider the *Implementation Review* of North Atlantic minke whales. A list of the work agreed to be attempted during the intersessional period (<a href="http://www.iwcoffice.org/SCWEB/SCAction.htm">http://www.iwcoffice.org/SCWEB/SCAction.htm</a>) and the list of intersessional correspondence groups and their terms of reference (Annex S: <a href="http://www.iwcoffice.org/SCWEB/sc">http://www.iwcoffice.org/SCWEB/sc</a> 2002.htm) can be found on the past of the publisher.

Item 1.3: Meeting procedures and time schedule

Date	Items	Comments
Monday 26 May, 9am	Plenary, then read documents	Items 1-3, possibly 4
Tuesday 27 May, 9am	Initial meetings of sub-committees and working groups (max 15 minutes each)	To elect Chairs, review draft agenda, identify documents etc.
Wednesday 28 May – Monday 2 June	Predominantly sub-committees (possibly some plenary sessions)	Complete agenda and agree reports
Tuesday 3 June	Tentative rest day!	Subject to cancellation if insufficient progress made
Wednesday 4 June – Friday 6 June	Plenary sessions. Intention to finish at 5pm on Friday	Complete agenda and agree report, including draft initial agenda for 2004
Saturday 7 June	Convenors to complete editorial work on sub consider refinements of this agenda, prioritie by the agenda or by discussions during the m	-committee and plenary reports, and if necessary s, and changes in organizational structure implied ecting.

Item 1.4: Establishment of sub-committees and working groups
The following groups were identified by the convenors immediately after SC54. Although each group has a tentative annex number, some reports may be incorporated directly into the Scientific Committee's report. PLEASE NOTE: that this year you will be asked to sign up for sub-committees and working groups in advance. Details were circulated. I may also appoint additional ad hoc groups if 1 believe that to be necessary. 計206

Title	Annex	] D
Revised Management Procedure	D	] ≀
Implications of 200 mile whaling zone	E	
Aboriginal Subsistence Whaling Management Procedure	F.	_
Bowhead, Right and Gray Whales	G	] :
In-depth Assessments	H	
Other Southern Hemisphere whales (i.e. not minke or right whales)	I	1 2
Stock Definition	J	1
Estimation of bycatch and other human-induced mortality	K	_
Environmental Concerns	L	1 2
Small Cetaceans	M	1 2
Whalewatching	N	1
DNA	0	
Sanctuaries	P	
Scientific Permits	V 北大西洋分	
	Revised Management Procedure Implications of 200 mile whaling zone Aboriginal Subsistence Whaling Management Procedure Bowhead, Right and Gray Whales In-depth Assessments Other Southern Hemisphere whales (i.e. not minke or right whales) Stock Definition Estimation of bycatch and other human-induced mortality Environmental Concerns Small Cetaceans Whalewatching DNA Sanctuaries	Revised Management Procedure  Implications of 200 mile whaling zone Aboriginal Subsistence Whaling Management Procedure  Bowhead, Right and Gray Whales G In-depth Assessments Other Southern Hemisphere whales (i.e. not minke or right whales) I Stock Definition J Stock Definition Estimation of bycatch and other human-induced mortality K Environmental Concerns L Small Cetaceans M Whalewatching DNA O Sanctuaries Sanctuaries Q Q

#### ITEM 2. ADOPTION OF AGENDA

The order of the agenda is based on that of last year, but amended *inter alia* to take account of our work plan and Commission mandates. The Commission accepted our priorities and initial agenda, and adopted the reduced budget as given under Items 19 and 21 of the last year's report.

I recognise that some Contracting Governments do not believe that certain topics should be on the Commission and/or Scientific Committee agendas. The appropriate forum to discuss such views is in the Commission. It is not within my

mandate as Chair to exclude items specifically requested for rog 2] inclusion by the Commission (2) inclusion by the Commission (e.g. by Resolution). To facilitate plenary and sub-committee discussions, I strongly request that any objections to specific items or particular topics on the agenda be raised briefly under this agenda item and then provided in writing to the rapporteur for inclusion in our report. It is not acceptable for these objections to be repeated during discussions of the items themselves in plenary or during subcommittees. A written reference in the relevant reports to the statements made here under Item 2 will be sufficient.

# **Draft Agenda**

# 1. INTRODUCTORY ITEMS [N]

- 1.1 Chair's welcome and opening remarks
- 1.2 Appointment of rapporteurs
- 1.3 Meeting procedures and time schedule [N]
- 1.4 Establishment of sub-committees and working groups [N]
- 1.5 Computing arrangements

### 2. ADOPTION OF AGENDA [N]

# 3. REVIEW OF AVAILABLE DATA, DOCUMENTS AND REPORTS

- 3.1 Documents submitted [N]
- 3.2 National progress reports on research [N]
  3.3 Data collection, storage and manipulation
  - 3.3.1 Catch data and other statistical material
  - 3.3.2 Progress of data coding projects

  - 3.3.3 Progress on program verification projects
    3.3.4 Archiving of simulated datasets to test abundance estimation methods (N)

# 4. COOPERATION WITH OTHER ORGANISATIONS [N]

- 4.1 Convention on the Conservation of Migratory Species (CMS)
  - 4.1.1 Scientific Council

  - 4.1.2 Agreement on Small Cetaceans of the Baltic and North Seas (ASCOBANS)
    4.1.3 Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and Contiguous Atlantic Area (ACCOBAMS)
- 4.2 International Council for the Exploration of the Sea (ICES)
- 4.3 Inter-American Tropical Tuna Commission (IATTC)
  4.4 International Commission for the Conservation of Atlantic Tunas (ICCAT)
- 4.5 Convention for the Conservation of Antarctic Marine Living Resources (CCAMLR)
  4.6 Southern Ocean GLOBEC
- 4.7 North Atlantic Marine Mammal Commission (NAMMCO)
- 4.8 FAO Committee on Fisheries (COFI)
  4.9 Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES)
- 4.10 North Pacific Marine Science Organisation (PICES)
- 4.11 Eastern Caribbean Cetacean Commission (ECCO)
- 4.12 Other

# 5. REVISED MANAGEMENT PROCEDURE (RMP) - GENERAL ISSUES [N]

- 5.1 Adjustment of the convergence criteria for the CATCHLIMIT program [N]
- 5.2 Implications of choice of component of population to which MSYR, MSYL and density dependence apply in RMP trials [N]
- 5.3 Levels of information required for Pre-Implementation Assessments and for proceeding to an implementation [N]
- 5.4 Spatio-temporal considerations in the context of the RMP [N]
- 5.5 Data availability [N]
- 5.6 Implications of restricting whaling to 200 miles of whaling nation's coast (EEZ) [N] 5.7 Data required: value of collecting tympanic bullae [N] 5.8 Comparison of RMP and AWMP [N] 5.9 Work plan

# 6. RMP - PREPARATIONS FOR IMPLEMENTATION

#### 6.1 Complete North Pacific minke whale Implementation [N]

- 6.1.1 Report of Implementation Simulation Trials Workshop
- 6.1.2 Report of the Intersessional Steering Group 6.1.3 Relative plausibility of trials

- 6.1.4 Review results of trials
  6.1.5 Recommend Implementation options

# 6.1.6 Review survey plans 6.2 North Atlantic minke whale Implementation Review [N]

- 6.2.1 Report of steering group
- 6.2.2 Implementation Review
- 6.2.3 Recommendations

#### 6.3 Western North Pacific Bryde's whales [N]

- 6.3.1 Report of working group on the reconstruction of past catches
- 6.3.2 Sightings surveys
- 6.3.3 Pre-Implementation

# 6.4 Initial planning for in-depth assessment of North Pacific minke whales [N]

6.5 Work plan

#### 7. ESTIMATION OF BYCATCH (BC) [N]

# 7.1 Estimation of bycatch based on fisheries data and observer programmes [N] 7.1.1 Collation of Information from Fisheries

- 7.1.2 Other

### 7.2 Estimation of bycatch based on genetic data [N]

- 7.2.1 Report of Bycatch Workshop Feastbility Steering Group 7.2.2 Analytical tests for assignment to stocks and/or areas
- 7.2.3 Use of capture-recapture methods for estimating bycatches from market data
- 7.3 Work plan

#### 8. ABORIGINAL SUBSISTENCE WHALING MANAGEMENT PROCEDURE (AWMP)

- 8.1 Review intersessional progress
- 8.2 Eastern North Pacific gray whale review trial results [N]
- 8.3 Consider progress on development of potential SLA(s) for Greenland fisheries
  8.4 Greenlandic Research Programme [N]
  8.5 Scientific aspects of an Aboriginal Whaling Scheme

- 8.6 Dialogue with Commission and hunters
- 8.7 Work plan

# 9. ABORIGINAL SUBSISTENCE WHALING STOCK ASSESSMENTS [N]

- 9.1. Bering-Chukchi-Beaufort Seas stock of bowhead whales (BRG, AWMP) [N]

- 9.2 Eastern North Pacific stock of gray whales (BRG)
  9.3 Minke whales and fin whales off Greenland (AWMP)
  9.4 Humpback whales off St. Vincent and the Grenadines (AWMP)
  9.5 Catches by non-member nations (BRG) [N]
- 9.6 Work plan

#### 10. WHALE STOCKS [N]

# 10.1 Matters relevant to more than one stock (IA)

- 10.1.1 DESS: progress with data entry and analysis options
- 10.1.2 SOWER Circumpolar cruises [N]

  - 10.1.2.1 SOWER 2002/2003 10.1.2.2 PLANS FOR FUTURE CRUISES
- 10.1.3 Evaluation of abundance estimators against simulated datasets [N]

#### 10.2 Antarctic minke whales (IA) [N]

# SCIENTIFIC COMMITTEE MEETING, BERLIN, GERMANY, 26 May - 7 June, 2003

- 10.2.1 Review of new data and analyses 10.2.2 Updated estimates by Area 10.2.3 Inter-year comparisons and trend 10.2.4 Other 10.2.5 Plans for completion of minke review [N] 10.3 Southern Hemisphere blue whales - review progress on in-depth assessment (SH) [N] 10.3.1 Abundance and trend estimation 10.3.2 Progress on sub-species differentiation 10.3.3 Other 10.3.4 Work plan 10.4 Southern Hemisphere humpback whales - review progress on in-depth assessment (SH) [N] 10.4.1 New estimates of abundance and rate of increase, stock structure information 10.4.2 Further population dynamics modelling 10.4.3 Other 10.4.4 Work plan 10.5 Other small stocks - bowhead, right and gray whales (BRG) [N] 10.5.1 Small stocks of bowhead whales 10.5.2 North Atlantic right whales 10.5.3 Southern Hemisphere right whales 10.5.4 Other small stocks of right whales 10.5.5 Western North Pacific gray whales [N] 10.5.6 Work plan 10.6.1 Report of Steering Group on an in-depth assessment of sperm whales
- 10.6 Other [N]

  - 10.6.2 Consideration of proposals for further in-depth assessments 10.6.3 Classification of abundance estimates

#### 11. STOCK DEFINITION (SD) [N]

- 11.1 Statistical and genetic issues pertaining to stock definition 11.1.1 Report of intersessional workshop
- 11.2 Options for units to conserve, including management implications
- 11.3 Review instances of recovery of cetacean sub-stocks/units to conserve after severe depletion
- 11.4 Development of stock and harvesting archetypes suitable for consideration in management
- 11.5 Work plan

# 12. ENVIRONMENTAL CONCERNS (E)

- 12.1 Review results from intersessional workshop on modelling cetacean-fisheries interactions [N]
- 12.2 Symposium on high latitude climate change effects on cetaceans [N]
- 12.3 Habitat related issues
  - 12.3.1 Steering group report on POLLUTION 2000+
  - 12.3.2 Progress report on SO-GLOBEC/CCAMLR [N]
  - 12.3.3 State of Cetacean Environment consider form of SOCER [N]
  - 12.3.4 Arctic issues
  - 12.3.5 Review results from workshop on habitat degradation, if held
  - 12.3.6 Acoustic issues (if time)
- 12.4 Work plan

# 13. SMALL CETACEANS (SM) [N]

- 13.1 Review status of small cetaceans in the Black Sea
- 13.2 Progress on previous recommendations [N]
- 13.3 Takes of small cetaceans
  - 13.3.1 Review existence of directed and incidental takes in member countries, with a view to requesting data in the future
  - 13.3.2 Summarise takes in 2001
- 13.4 Work plan

# 14. WHALEWATCHING (WW)

14.1 Whalewatching data collection [N]

- 14.1.1Report of intersessional correspondence group
  14.1.3 Compendium of data forms used on whalewatching platforms

- 14.1.3 Compensium of data forms used on whatewatching plat
  14.2 Whalewatching management workshop[N]
  14.3 National whalewatching guidelines and regulations
  14.2.1 National guidelines and regulations for whalewatching
  14.2.2 Review of their effectiveness
- 14.5 Whale and dolphin 'swim with' programmes [N]
- 14.6 Other
- 14.4.1 Directory of relevant researchers
- 14.5 Work plan

# 15. DNA TESTING (DNA) [N]

- 15.1 Progress on genetic methods for species, stock and individual identification
- 15.2 Progress on collection and archiving of samples from catches and bycatch
  15.3 Reference databases and standards for a diagnostic register of DNA profiles
- 15.4 Work plan

# 16. SCIENTIFIC PERMITS

- 16.1 Review proposals to facilitate the review process [N]
- 16.2 Review of results from existing permits [N]

  16.2.1 Japan Antarctic minke whales (JARPA)

  16.2.2 Japan North Pacific common minke, Bryde's, sei and sperm whales (JARPN II)
- 16.3 Review of new or revised proposals [N] 16.3.1 JARPA

  - 16.3.3 Iceland North Atlantic fin, sei and common minke whales

# 17. WHALE SANCTUARIES

- 17.1 Review proposals to facilitate the review process [N] 17.2 Preparations for review of Southern Ocean Sanctuary [N]
- 17.3. South Atlantic Sanctuary proposal
- 17.4 South Pacific Sanctuary proposal

# 18. RESEARCH AND WORKSHOP PROPOSALS AND RESULTS [N]

- 18.1 Review results from previously funded research proposals 18.2 Review proposals for 2003/2004
- 19. COMMITTEE PRIORITIES AND INITIAL AGENDA FOR THE 2004 MEETING [N]
- 20. DATA PROCESSING AND COMPUTING NEEDS FOR 2003/2004 [N]
- 21. FUNDING REQUIREMENTS FOR 2003/2004[N]
- 22. WORKING METHODS OF THE COMMITTEE [N]
- 23. ELECTION OF OFFICERS [N]
- 24. PUBLICATIONS
- 25. OTHER BUSINESS
- 26. ADOPTION OF REPORT [N]