

**SCIENTIFIC COMMITTEE ON ANTARCTIC RESEARCH
WORKING GROUP ON BIOLOGY BIRD BIOLOGY SUBCOMMITTEE.
MINUTES OF MEETING, 16–18 JULY 1998, CONCEPCION, CHILE**

1. WELCOME AND APOLOGIES

Members and observers (Annex 1) were welcomed to the meeting by the Chair, Mr J. Cooper. Apologies had been received from Drs W.R. Fraser, J. Moreno, P. Jouventin and H. Weimerskirch. The Chair recorded the extensive contributions made by Peter Prince who had died earlier in the year, and the Committee stood in silence for a minute as a mark of respect. Dr J.P. Croxall reported on various bursaries that had been established in Mr Prince's name to assist students undertaking ornithological research involving banding. The Chair thanked the host nation and the National Delegate, Prof J. Valencia, for their assistance provided for the meeting.

2. ADOPTION OF AGENDA

The draft agenda was adopted (Doc. 1). All tabled documents are listed in Annex 2.

3. MATTERS ARISING FROM CAMBRIDGE MEETING, 1996

The minutes of the previous meeting, held in Cambridge in July–August 1996, had been circulated inter-sessionally, and have been subsequently published in *Marine Ornithology* (1997, 25: 77–87; Doc. 2).

3.1 Central Data Bank (CDB) for Antarctic Bird Banding

An in-press review of 10-year data and results was tabled (Doc. 3) following a lapse in annual reporting to SCAR. Gaps in data submissions were identified, with the ability to incorporate these data if submitted. Country-specific reports were distributed to members and observers to facilitate completion of data submissions. These missing data prevent a synthesis of banding trends for the period 1987–1996. Members and observers were also asked to identify nations whose banding efforts were not in the report. Attendees were reminded that the SCAR Working Group on Biology funding of the CDB meant that there was a financial interest in obtaining these data.

The issues of implanted transponder registration and the role of the CDB to record these data were discussed. These data had been requested from national programmes, but no data had yet been submitted. A transponder database was seen as highly desirable in light of the increased use of transponders (Doc. 4). A further concern, that of a lack of external indication of the presence of a transponder was discussed. The meeting suggested that the CDB develop a pro-forma reporting data sheet for transponder users. It was noted that greater data reporting protocols will be implemented under the Madrid Protocol, and this will be relevant to this issue, and it was desirable that SCAR be pro-active on this issue.

The Chair noted with deep appreciation the voluntary efforts of Dr T.B. Oatley of SAFRING (South African Bird Ringing Unit), who had run the CDB since its inception, and who had recently

retired. The new SAFRING Officer (Mr D. Oschadleus) has indicated that he will continue the programme.

3.2 Recent publications on Antarctic and sub-Antarctic birds

Lists for 1992–1997 were tabled (Docs. 5a–5f) as in press or in prep. manuscripts. Attendees were asked to provide details of missing or new publications to the Secretary or to send reprints to the British Antarctic Survey Library. The Chair tabled Doc. 6 which listed forthcoming papers in *Marine Ornithology*, including the Proceedings of the Third International Penguin Conference.

3.3 International Giant Petrel Banding Project

The report on the International Giant Petrel Banding Project was tabled (Doc. 7). The Chair described this long-standing Subcommittee project that had now been completed and thanked Ms D. Patterson who took over the project from Dr S. Hunter. Supplementary data (Doc. 8) will be forwarded to Ms Patterson for inclusion in the text. The Chair will forward the report to the CDB.

3.4 Compilation of masses of Antarctic and sub-Antarctic seabirds

The Chair described this long-standing Subcommittee project, and indicated that he would approach Dr W.R. Fraser, who had been unable to attend, for a progress report and an indication of future activity. The meeting indicated interest in continuing this compilation.

3.5 APIS collaboration

No information had been received by the BBS from the SCAR Group of Specialist on Seals. It was noted that several APIS (Antarctic Pack Ice Seals) cruises were to be undertaken in the 1998/99 season, and that these presented opportunities for ship-based seabird research. The Chair indicated that as the 1998/99 season was the last for the APIS Programme, this would be the last time the item will be discussed.

3.6 Report on Penguin Banding Workshop

The report from Dr W.R. Fraser (Doc. 9) was tabled. The Secretary was asked to disseminate the report to attendees of the Banding Workshop with a strict deadline for comments before the report will be submitted for publication (see *Marine Ornithology* 25: 85–87, 1997).

4. SPECIES SYNTHESSES OF ANTARCTIC AND SUB-ANTARCTIC SEABIRD DISTRIBUTIONS AND ABUNDANCE

4.1 The Antarctic Petrel *Thalassoica antarctica* synthesis (Doc. 10) had been submitted for publication. Some data had been received and will be included. (see *Waterbirds* 22: 14–28, 1999).

- 4.2** The Snow Petrel *Pagodroma nivea* synthesis had been published in *Marine Ornithology* (23: 69–99. 1995; Doc. 11).
- 4.3** Some data for the South Shetland Islands and South Georgia for the giant petrel *Macronectes* sp. synthesis (Doc. 12) will be included before submission to *Marine Ornithology*.
- 4.4** Five documents were tabled for the Wilson's Storm Petrel *Oceanites oceanicus* synthesis (Docs. 13–17). Missing data were requested by August 1998 to ensure submission to *Marine Ornithology* in 1998. Dr M. Sallaberry indicated he would compile the breeding distribution of Black-bellied Storm Petrels *Fregetta tropica* and add this to the Wilson's Storm Petrel compilation.
- 4.5** A draft larid synthesis (Doc. 18) had been distributed inter-sessionally, and some data had been received by Dr E.J. Woehler. These data, and any subsequently received, will be incorporated and the manuscript redistributed. It is hoped that the synthesis will be submitted to *Marine Ornithology* during 1999.
- 4.6** Ms S. Poncet indicated that the cormorant *Phalacrocorax* spp. synthesis was close to completion, and that recent data from sub-Antarctic islands was requested by her. The Secretary was asked to liaise with Ms S. Poncet with regard to identifying data gaps and the production of maps for the synthesis. The Secretary was asked to provide copies of recent data reports and in-press manuscripts that contain cormorant data.
- 4.7** Syntheses for Cape or Pintado Petrel *Daption capense* and Antarctic Fulmar *Fulmarus glacialisoides* were being undertaken by Mr P. Hodum who indicated that draft texts of both would be circulated before the end of 1998.

The Chair commended all authors, and asked that all data that are submitted to authors be copied to the Secretary to ensure all data were included in the individual syntheses (e.g. Doc. 20).

5. PENGUIN CONSERVATION ASSESSMENT AND MANAGEMENT PLAN

The current draft of the penguin CAMP was tabled (Doc. 21). Minor errors had been identified in the current draft, but the current text is close to completion. A review was undertaken of the taxa that are of interest to SCAR and have a threatened status (Royal, Rockhopper and Macaroni Penguins *Eudyptes* spp.) in an effort to update the information in the CAMP document. New data on penguins from the Falkland Islands and South America were noted (Docs. 21a,b).

6. SEABIRD POPULATION STATUS AND TRENDS

The population and trends workshop, originally planned for 1998, had not been held. Inter-sessionally, Dr W.R. Fraser had offered to host the workshop in Montana in April or May 1999. The meeting considered the composition of workshop participants, and the selection criteria to be applied to population data to maximize the usefulness of the workshop. It was considered that only data collected annually for 10 years or for more than half the years over which the study that collected

the data had occurred would be of use to assessing trends. Other data collected less frequently would be useful in an indicative manner, and would be complementary to detailed studies. The Secretary was asked to liaise with Dr Fraser to identify workshop participants, based on an evaluation of the population data summarized in Table 1 of Doc. 22 against these criteria. Once these data sets had been evaluated, the Secretary was asked to invite data owners and formally request access to these data for the proposed workshop (Doc. 23). The SCAR Working Group on Biology had been asked to support this workshop, and it was noted that CCAMLR had also included a budget item for this workshop. New population data from Marion Island were tabled (Doc. 24).

7. SOUTHERN OCEAN ISLANDS AND THE WORLD HERITAGE CONVENTION

The meeting noted with pleasure that Gough Island, Heard and McDonald Islands and Macquarie Island were all now listed under the World Heritage Convention. The meeting also noted that the New Zealand Government has nominated all its five southern island groups for listing under the Convention (subsequently listed in 1999).

8. REVIEW OF BIRD POPULATIONS OF PROTECTED AREAS WITHIN THE ANTARCTIC TREATY AREA: A PROPOSAL

The meeting discussed the proposal by the Chair to review the avifauna of Protected Areas (PAs) within the Antarctic Treaty Area. This proposal arose from a preliminary examination of Management Plans for PAs which revealed an inadequacy in the quantitative description of their avifaunas. Inter-sessionally, accounts for two PAs (SSSIs 27 and 14) submitted for publication had been rewritten to improve the descriptions of the avifaunas (Docs. 25 and 26). The management plan for SSSI 13 (Doc. 27), the list of current PAs and national responsibilities for PAs were circulated (Docs. 28 and 29). The Chair offered to review the Management Plans for all PAs with a view to identifying those PAs that have resident avifaunas. This subset of PAs would then be the basis for the proposed review. Members and observers would be approached inter-sessionally to commence the reviews before the next meeting in 2000. These reviews would be collaborative, with all ornithologists working in PAs being involved in the review. The Chair suggested that the reviews could make suggestions on the appropriateness or otherwise of the boundaries with respect to the distribution of bird colonies. The reviews would provide the best available data on the avifaunas of PAs, and include maps of colonies and a review of relevant literature.

9. IMPORTANT BIRD AREAS OF THE ANTARCTIC CONTINENT: A PROPOSAL

BirdLife International had approached the Subcommittee inter-sessionally to encourage the production of an Important Bird Area (IBA) Inventory for the Antarctic Continent (Doc. 30). The Chair briefly described the function and production of IBA inventories elsewhere around the world. An example of an IBA was tabled (Doc. 31). The species' compilations prepared by Subcommittee members (agenda item 4) and the review of Protected Areas (agenda item 8) were identified as fundamental to such an undertaking. It was agreed that the Chair and Secretary would commence work on the Antarctic

IBA inter-sessionally, with a preliminary list of Antarctic IBAs to be tabled at the next meeting of the Subcommittee.

It was noted that the Committee for Environmental Protection (CEP), established under the Madrid Protocol, would be meeting in May 1999. One of the CEP's roles is to identify sites that require protection, and the production of an Antarctic IBA was seen as a valuable contribution to the CEP. An attempt would be made to include the Antarctic IBA project to the CEP meeting agenda.

10. FISHERIES-SEABIRD INTERACTIONS

10.1 BirdLife International Seabird Conservation Programme

BirdLife International commenced a programme in 1997 to address global seabird conservation issues. The first task, a review of interactions between seabirds and longline fisheries, is to be undertaken during 1998.

10.2 Illegal, unregulated and unreported longline fisheries in the Southern Ocean

Dr J.P. Croxall reported on the most recent meeting of CCAMLR WG-IMALF. A report from CCAMLR assessing incidental mortality of seabirds during fishing operations was tabled (Doc. 33). It was noted that a field guide was in production to assist CCAMLR observers on fishing vessels in the Southern Ocean (Doc. 33a), and that a poster had been produced to encourage CCAMLR Conservation Measures to be adopted by operators of fishing vessels (Doc. 34). It was noted that substantial numbers of seabirds continue to be taken in illegal fisheries in the Southern Ocean, with estimates approaching 100 000 birds annually. Two reports on Norwegian and Mauritius' involvement in illegal longlining operations were tabled (Docs. 35, 36).

10.3 Workshop on Macquarie Island and Heard Island fisheries

A brief report on a workshop held in April 1998 on predator-prey-fisheries interactions in the trawl fisheries for Patagonian toothfish around Macquarie Island, and Heard and McDonald Islands was given by Dr Woehler (Doc. 37).

10.4 Albatrosses and the Bonn Convention

The meeting noted that the Australian nomination of southern hemisphere albatrosses to the Convention on the Conservation of Migratory Species of Wild Animals (the Bonn Convention or CMS) had been successful (Docs. 38, 39). It was noted that other Southern Ocean species (in particular giant petrels *Macronectes* spp. and some *Procellaria* petrels) were also under threat from longline fishing but not currently listed. The Chair offered to draw the attention of the CMS Secretariat to the Bird Biology Subcommittee's expertise on Southern Ocean seabirds. Regional agreements were required for some species/regions, and the meeting encouraged the inclusion of non-albatross species in any regional agreements that were to be written.

10.5 FAO International Plan of Action

The Chair reported on the development by the Food and Agriculture Organization (FAO) of a draft International Plan of Action to reduce seabird bycatch (Doc. 40). A further report

on its adoption will be tabled at the next meeting of the Bird Biology Subcommittee. The meeting noted its approval for the development of the plan of action.

10.6 Southern Bluefin Tuna fishery

The Chair drew the attention of attendees to the existence of the Commission for the Conservation of Southern Bluefin Tuna and its Working Group on Ecologically Related Species. Whereas most Southern Bluefin Tuna (SBT) is caught outside the Subcommittee's area of interest, the fishery has a major impact on Southern Ocean seabird populations. The meeting noted with pleasure the adoption of several conservation measures that the SBT fishery had adopted in order to reduce seabird bycatch.

10.7 Threat Abatement Plan

Dr G. Robertson reported on the development of an Australian Threat Abatement Plan (TAP) for reducing the bycatch of seabirds in longline fisheries (Doc. 41). The substantial bycatch of White-chinned Petrels *Procellaria aequinoctialis* outside of the CCAMLR and SCAR areas has been documented (Docs. 42, 43).

10.8 Mitigation measures

Dr G. Robertson addressed the issue of mitigation measures available to reduce seabird bycatch (Docs 44 & 60).

10.9 Related studies

Several studies investigating the diets of Southern Ocean seabirds were tabled (Docs. 45–48).

11. DISEASE

Attendees were reminded of SCAR Recommendation XXIV-3 regarding the reintroduction of indigenous species to the Antarctic and sub-Antarctic following a report of a Macaroni Penguin *Eudyptes chrysolophus* being returned to Marion Island.

12. TOURISM

Dr E.J. Woehler described the numerous national guidelines for tourism visits to the Antarctic and sub-Antarctic islands. Further, commercial operators adhere to IAATO guidelines which are different again from national guidelines. He then proposed that the Subcommittee develop universal guidelines for all tourism operations in the Antarctic and subantarctic, with a view to eliminating all discrepancies and ambiguities (Doc. 50). The meeting recommended that the SCAR Group of Specialists on Seals be involved in the formulation of these universal guidelines.

13. DATA MANAGEMENT

Dr L. Belbin, Chair of the SCAR-COMNAP Joint Committee on Antarctic Data Management (JCADM) briefly outlined the goals of the Committee. JCADM is actively interacting with all SCAR groups to inform them of Antarctic data management initiatives (Doc. 51). The Australian Antarctic Data Centre (AADC) offered to host data sets compiled by Sub-

committee members, including the species' compilations, and to make these available to members via the World Wide Web. The Secretary and Dr Belbin agreed to prepare a precis of the AADC's offer, including a schema for the proposed database and a description of data management issues for the next meeting of the Subcommittee.

14. REPORT ON THE THIRD INTERNATIONAL PENGUIN CONFERENCE

The Chair reported on the Third Penguin Conference, held in Cape Town, South Africa in September 1996. A total of 29 papers submitted for publication in the Proceedings has been accepted.

15. REPORT ON THE FIRST ALBATROSS CONFERENCE

Dr G. Robertson reported on the First Albatross Conference, held in Australia in September 1995. The report from the Workshop held in association with the Conference had been published and distributed widely (Doc. 52). The document is also available electronically at <http://www.antdiv.gov.au/science/bio/albatross/>. The Conference volume is with the printers and will be available in mid 1998.

16. REPORT ON SEABIRD AT SEA WORKSHOPS

The two co-convenors for the two seabird at sea workshops, Dr E.J. Woehler and Mr J.A. van Franeker, reported on the two workshops held in 1996 and 1997. A synopsis of the conclusions was tabled (Doc. 53), and minutes of the workshops will be circulated amongst attendees and then submitted to *Marine Ornithology* for publication.

17. REPORT ON CCAMLR AREA 48 WORKSHOP

Dr J.P. Croxall reported on the CCAMLR Area 48 Workshop held in the USA in May 1998 and tabled sections of the workshop's report (Doc. 54). He described the data sets made available for the workshop and reported that the findings will be published in *CCAMLR Science*.

18. REPORT ON POLAR FRONT WORKSHOP

The Antarctic Polar Front workshop had been cancelled by the French organisers. The meeting requested clarification from Dr Y. le Maho of the likely timing of the workshop. The meeting noted the ongoing need for such a workshop but was concerned about the existing workload of its members. Dr G. Robertson described the joint Australian/French research proposed for Heard Island and Iles Kerguelen for the 1999/2000 season.

19. REPORTS ON OTHER MEETINGS OF INTEREST

Attendees were informed of several meetings that had taken place, including a meeting of the SCAR Subcommittee on Evolutionary Biology of Antarctic Organisms, in Padua, Italy in October 1997 (Doc. 55). The Society for Conservation Biology held an international symposium in Sydney, Australia

in May 1998 where there had been a session on Southern Ocean seabirds.

20. NOTIFICATION OF FORTHCOMING MEETINGS OF INTEREST

Attendees were informed of the forthcoming meetings that would be of interest:

1. 22nd International Ornithological Congress, South Africa, August 1998 (Doc. 57)
2. SCAR Biology Symposium, New Zealand, August 1998
3. Penguin Disease Workshop, Australia, August 1998 (Doc. 58)
4. NIPR Symposium on Polar Biology, Japan, December 1998
5. Second International Conference on the Biology and Conservation of Albatrosses and Other Petrels, Hawaii, USA, May 2000
6. Fourth International Penguin Conference, Chile, September 2000.

21. NEW/PROJECTED INITIATIVES TO SEABIRD RESEARCHERS

Attendees were informed of the Southern Ocean GLOBEC Programme (Doc. 59). This three-year programme, commencing in 1999/2000, comprises multi-national research cruises to the Southern Ocean, offering research opportunities in the Antarctic Peninsula and Prydz Bay regions.

22. OTHER BUSINESS

22.1 Web presence

The Chair and Secretary indicated that they would approach the Secretary of the SCAR Working Group on Biology inter-sessionally to investigate the establishment of a web page for the Subcommittee in association with the existing working group web page.

22.2 Meeting procedures

The Chair described the policy of encouraging the distribution of manuscripts and data at Subcommittee meetings. Dr Woehler indicated that an increasing number of documents were distributed electronically before the meeting, permitting attendees to read them in advance. He then indicated that there would be an increasing proportion of meeting documents circulated in this manner for future meetings.

23. RECOMMENDATIONS

A total of 12 recommendations was adopted by the Bird Biology Subcommittee for presentation to the SCAR Working Group on Biology (Annex 3). The following budget requests in US\$ were also made to the Working Group:

	1999	2000
Central Data Bank for Antarctic Bird Banding	3000	3000
Data management & Antarctic IBA Inventory	10 000	10 000
Population Status and Trends Workshop	2500	
WWW presence	1000	500
Chair and Secretary travel to next meeting		6000
	16 500	19 500

24. MEMBERSHIP

The Chair indicated that two vacancies had become available on the Subcommittee. Dr G. Robertson nominated Dr A. Kato for membership. The Chair indicated he would step down following the next meeting of the Subcommittee. The meeting considered potential nominations for the position of Chair

from 2000. The current Chair and Secretary were then recommended for reappointment for the period 1998–2000.

25. DATE AND PLACE OF NEXT MEETING

The Chair moved that the SCAR Working Group on Biology approve that the Subcommittee meet in conjunction with SCAR XXVI in Tokyo, Japan in July 2000. The Subcommittee would meet before the Working Group meeting.

26. CLOSURE AND THANKS

The Chair reiterated his thanks for the assistance provided by Prof J. Valencia in the organization of the meeting, the University of Concepción for hosting the meeting and the SCAR Secretariat for their inter-sessional assistance.

ANNEX 1

MEMBERS AND OBSERVERS, SCIENTIFIC COMMITTEE ON ANTARCTIC RESEARCH BIOLOGY SUBCOMMITTEE, 16–18 JULY 1998, CONCEPCION, CHILE

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ANNEX 2

LIST OF TABLED DOCUMENTS AT THE 1998 MEETING OF THE SUBCOMMITTEE

1. Agenda. 4 pp.
2. Scientific Committee on Antarctic Research Working Group on Biology Bird Biology Subcommittee minutes of meeting, 31 July–2 August 1996, Cambridge, United Kingdom (*Marine Ornithology* 25: 77–87, 1987).
3. Sixth review of data held by the Central Data Bank for Antarctic Bird Banding, July 1987–June 1996. R.M. Wanless & T.B. Oatley (*Marine Ornithology* 28: 47–52, 2000).
4. E-mail from Dr K.R. Kerry on the use and registry of implanted electronic tags. 2 pp.
- 5a. Publications and theses on Antarctic and sub-Antarctic birds, 1992. J. Cooper, A.L. Plös & C.M. Phillips (*Marine Ornithology* 23: 135–139, 1995).
- 5b. Publications and theses on Antarctic and sub-Antarctic birds, 1993. C.M. Phillips, E.J. Woehler & J. Cooper (*Marine Ornithology* 23: 141–146, 1995).
- 5c. Publications and theses on Antarctic and sub-Antarctic birds, 1994. E.J. Woehler, C.M. Phillips & J. Cooper (*Marine Ornithology* 23: 141–146, 1995).
- 5d. Publications and theses on Antarctic and sub-Antarctic birds, 1995. C.M. Phillips. (*Marine Ornithology* 28: 53–57, 2000).
- 5e. Publications and theses on Antarctic and sub-Antarctic birds, 1996. C.M. Phillips & E.J. Woehler. 6 pp.
- 5f. Publications and theses on Antarctic and sub-Antarctic birds, 1997. C.M. Phillips & E.J. Woehler. 7 pp.
6. Content pages for *Marine Ornithology* 23(2), 1995; 24, 1996; 25, 1997; 26, 1998; 27, 1998. 5 pp.
7. Interim report on the International Giant Petrel Banding Project, 1988/89. D.L. Patterson & S. Hunter (*Marine Ornithology* 28: 69–74, 2000).
8. Post-fledging dispersal of Southern Giant Petrels *Macronectes giganteus* banded at Admiralty Bay, King George Island, Antarctica. S.G. Trivelpiece & W.Z. Trivelpiece (*Marine Ornithology* 26: 63–68, 1998).
9. Annex to Doc. 2: SCAR Bird Biology Subcommittee minutes of the Workshop on alternative penguin marking techniques, held in Cambridge, 30 July 1996. W.R. Fraser Convener, D.L. Patterson Rapporteur. (*Marine Ornithology* 25: 85–877, 1997).
10. Distribution and abundance of the Antarctic Petrel *Thalassoica antarctica*. J.A. van Franeker, M. Gavrilov, F. Mehlum, R.R. Veit & E.J. Woehler (*Waterbirds* 22: 14–28, 1999).
11. Breeding distribution of the Snow Petrel *Pagodroma nivea*. J.P. Croxall, W.K. Steele, S.J. McInnes & P.A. Prince (*Marine Ornithology* 23: 69–99, 1995).
12. Breeding distribution and population status of the Northern Giant Petrel *Macronectes halli* and the Southern Giant Petrel *M. giganteus*. D.L. Patterson, E.J. Woehler, J.P. Croxall, J. Cooper, S. Poncet & W.R. Fraser (*Marine Ornithology* in press).
13. How much do we know about the biology of Wilson's Storm Petrel (*Oceanites oceanicus*) in Antarctica. M.A. Sallaberry & J.S. González (ms). 10 pp.
14. Uso de sensor infrarrojo como nuevo método para la estimación de densidad de *Oceanites oceanicus* nidificantes en Antártida. J.L. Orgeira (*Hornero* 14: 249–252, 1997).
15. Nidificación y hábitat del petrel de Wilson (*Oceanites oceanicus*) en Punta Cierva, Costa de Danco, Península Antártica. J.L. Orgeira (*Ornitología Neotropical* 8: 49–56, 1997).
16. Distribution and abundance of birds in the Errera Channel, Antarctic Peninsula, during the 1992/93 breeding season. C.A. Aguirre & J.M. Acero (*Marine Ornithology* 23: 129–134, 1995).
17. The breeding birds of Cape Geddes, Laurie Island, South Orkney Islands, Antarctica. N.R. Coria, P.G. Blendinger & D. Montalti (*Marine Ornithology* 24: 43–44, 1996).
18. Distribution and abundance of Southern Ocean larids ms. E.J. Woehler. 28 pp.
19. Recent studies on the Antarctic Shag *Phalacrocorax brandsfieldensis* and the status of their breeding populations at some colonies located at the South Orkney and South Shetland Islands and at the Antarctic Peninsula. R. Casaux (unpublished ms). 5 pp.

20. Survey of marine birds and mammals of the South Sandwich Islands. P. Convey, A. Morton & J. Poncet (*Polar Record* 35(193): 107–124, 1999).
21. Penguin Conservation Assessment and Management Plan. S. Ellis, J.P. Croxall & J. Cooper (Eds). IUCN SSC CBSG report 1998.
- 21a. Falklands Islands penguin census 1995/96. M. Bingham. London & Port Stanley: Falklands Conservation.
- 21b. The penguins of South America and the Falkland Islands. M. Bingham, *Penguin Conservation* 11: 8–14, 1998.
22. The status and trends of Antarctic and sub-Antarctic seabirds. E.J. Woehler & J.P. Croxall (*Marine Ornithology* 25: 43–66, 1997).
23. Draft preliminary announcement and invitation for SCAR Bird Biology Subcommittee Workshop on Status and Trends of Seabird Populations, April 1999.
24. Trends in population size and breeding success at colonies of Macaroni and Rockhopper Penguins, Marion Island, 1979/80–1995/96. J. Cooper, A.C. Wolfaardt & R.J.M. Crawford (*CCAMLR Science* 4: 89–103, 1997).
25. The birds of the Potter Peninsula, King George Island, South Shetland Islands, Antarctica, 1965–1998. S. Hahn, H.U. Peter, P. Quillfeldt & K. Reinhardt (*Marine Ornithology* 27: 1–6, 1998).
26. The status of breeding birds at Harmony Point, Nelson Island, Antarctica, in summer 1995/96. P. Silva, M. Favero, R. Casaux & A. Baroni (*Marine Ornithology* 26: 75–78, 1998).
27. Management Plan for SSSI 12 Canada Glacier, Taylor Valley, Victoria Land. *SCAR Bulletin* 129: 6–9, 1998.
28. List of protected areas (SPAs and SSSIs) within the Antarctic Treaty System. 8 pp.
29. National responsibilities for revising management plans of Antarctic protected areas.
30. Letter from Dr C. Bibby of BirdLife International to Chair SCAR Bird Biology Subcommittee describing IBA Programme.
31. Report on Falkland Islands Important Bird Area (IBA) Programme.
32. Terms of Reference for workshop addressing Antarctic Protected Areas as defined by the CEP. 1 p.
33. Extract from the Report on the Sixteenth Meeting of the Commission (Hobart, Australia, 27 October to 7 November 1997) paragraphs 6.29–6.65 and 9.16–9.37 on the assessment and avoidance of incidental mortality of Antarctic marine living resources. 8 pp.
- 33a. Identification guide to Southern Ocean seabirds for commercial fishery observers. D. Onley & S. Bartle, Draft text.
34. 'Fish the sea not the sky' poster produced by CCAMLR.
35. The Patagonian Toothfish and Norwegian interest. G. Album, Report 3/97 of the Norwegian Society for the Conservation of Nature/Friends of the Earth Norway.
36. The involvement of Mauritius in the trade in Patagonian Toothfish from illegal and unregulated longline fishing in the Southern Ocean and what might be done about it. *ISOFISH Occ. Rpt.*, 1998. 40 pp.
37. Report of the workshop on predator-prey-fisheries interactions at Heard Island and McDonald Islands and at Macquarie Island. Unpublished report to participants, Australian Antarctic Division.
38. Conservation of Southern Hemisphere albatrosses – a regional Agreement under CMS (prepared by A. McNee). 3 pp.
39. Southern Hemisphere albatross conservation. Australian agenda paper tabled at Valdivia Coordinating Committee meeting, 1998.
40. Draft Plan of Action for reducing incidental catch of seabirds in longline fisheries. FAO, Rome 1998. 9 pp.
41. Draft Threat Abatement Plan for the incidental catch (or by-catch) of seabirds during oceanic longline fishing operations. Environment Australia, 1998. 56 pp.
42. Tuna longline fisheries off southern Africa: the need to limit seabird bycatch. P.G. Ryan & C. Boix-Hinzen (*S. Afr. J. Sci.* 94: 179–182, 1998).
43. Foraging White-chinned Petrels *Procellaria aequinoctialis* at risk: from the tropics to Antarctica. H. Weimerskirch, A. Catard, P.A. Prince, Y. Cherel & J.P. Croxall (*Biol. Conserv.* 87: 273–275, 1999).
44. The culture and practice of longline tuna fishing: implications for seabird by-catch mitigation. G. Robertson (*Bird Conserv. Int.* 8: 211–221, 1998).
45. The diet of the Antarctic Shag during summer at Nelson Island, Antarctica. M. Favero, R. Casaux, P. Silva, E. Barrera-Oro & N. Coria (*Condor* 100: 112–118, 1998).
46. Diet of Cape Petrel *Daption capense* during the post-hatching period at Laurie Island, South Orkney Islands, Antarctica. N.R. Coria, G.E. Soave, D. Montalti (*Polar Biol* 18: 236–239, 1997).
47. How important are pelagic preys for the Kelp Gull during chick-rearing at the South Shetland Islands? M. Favero & M.P. Silva (*Polar Biol* 19: 32–36, 1998).
48. Trophic relationships between the Kelp Gull and the Antarctic Limpet at King George Island (South Shetland Islands, Antarctica) during the breeding season. M. Favero, P. Silva & G. Ferreyra (*Polar Biol* 17: 431–436, 1997).
49. SCAR Recommendation XXIV-3 regarding reintroduction of indigenous species.
50. Proposal for universal guidelines for human visitors to the Antarctic and Subantarctic. E.J. Woehler.
51. JCADM presentation: overheads. 9 pp.
52. The incidental mortality of albatrosses in longline fisheries. K. Alexander, G. Robertson & R. Gales. 1997. (Report on the workshop held at the First International Conference on the Biology and Conservation of Albatrosses, Hobart Australia, September 1995). 44 pp.
53. Synopsis of two seabird at sea workshops, E.J. Woehler & J.A. van Franeker. 2 pp.
54. Report on background, aims and objectives of CCAMLR Area 48 Workshop, held in La Jolla, California, USA, 1998. 5 pp.
55. Meeting of the SCAR Subcommittee on 'Evolutionary Biology of Antarctic Organisms', Padova, 6–8 October 1997. 9 pp.
56. Society for Conservation Biology, Southern Ocean seabird symposium speakers, May 1998.
57. Call for presentations at the 22nd International Ornithological Congress Round table Discussion on 'Death by drowning: a global review of bird bycatch by longline fisheries'. 2 pp.
58. Brochure for 'Workshop on Diseases of Antarctic Wildlife', to be held in Australia, August 1998. 2 pp.
59. Draft GLOCHANT newsletter article from E. Hoffmann on SO-GLOBEC. 2 pp.
60. Draft proposals for mitigation research on seabirds and fisheries interactions by G. Robertson. 2 pp.

ANNEX 3

RECOMMENDATIONS SUBMITTED TO THE SCAR WORKING GROUP ON BIOLOGY

WORKSHOPS AND FUNDING

1. The sum of US\$ 3000 a year for 1997 and 1998 be allocated to fund the continued operation of the Central Data Bank for Bird Banding, including a register of implanted transponder projects, at the Avian Demography Unit, University of Cape Town, South Africa.
2. To approve the postponement of the workshop reviewing the status and trends of Antarctic and sub-Antarctic seabirds from 1998 to April/May 1999 or 2000, and to support the workshop with the sum of US\$ 2500.
3. To endorse the production of an Important Bird Areas (IBA) report for the Antarctic Continent, utilizing information collated by the Bird Biology Subcommittee and following international guidelines adopted by BirdLife International for its IBA Programme. The production of the Antarctic IBA report will be undertaken as part of the synthesis of the breeding distribution and abundance of Antarctic and sub-Antarctic birds (see Recommendation 7, below). Further, that the Working Group on Biology support the production of the Antarctic IBA report by providing US\$ 10 000 for both 1999 and 2000 to employ an officer for six months part time employment in each year. Matching support will be forthcoming from the Australian Antarctic Data Centre.
4. The sum of US\$ 6000 be allocated to allow the Chair and Secretary to attend the next meeting of the Subcommittee in 2000; and to offer partial support to enable the attendance of Subcommittee members who otherwise will be unable to attend.

MEMBERSHIP

5. The Bird Biology Subcommittee requests of the SCAR Working Group on Biology that Dr Akiko Kato be appointed to the Subcommittee, and that J. Cooper be re-appointed Chair and E.J. Woehler be re-appointed as Secretary.

INTERNAL RECOMMENDATIONS

6. That the Working Group on Biology recommends that SCAR requests that National SCAR Committees ensure that details of implanted transponders projects are submitted promptly on an annual basis to the Central Data Bank for Antarctic Bird Banding administered by the Bird Biology Subcommittee.
7. That the Working Group on Biology supports the synthesis of all data on the breeding distribution and abundance of breeding Antarctic and sub-Antarctic birds into a single data structure accessible through the SCAR Working Group on Biology web site.
8. Noting the proposed classification under World Conservation Union's (IUCN) Red List Categories of Threat for

Rockhopper and Royal Penguins as Vulnerable, and for Macaroni Penguin as Near Threatened, the SCAR Working Group on Biology recommends that National SCAR Committees give research and monitoring of these species a high priority.

9. Recollecting Rec XXIV–Biol 6, concerning threats to Southern Ocean seabirds due to mortality in longline fisheries, and noting the major international initiatives that have been developed in the last two years to address these problems,
Recommends that:
 - 9.1 SCAR requests National Committees support research and related activities under the forthcoming Food and Agricultural Organization's International Plan of Action;
 - 9.2 SCAR requests that National Committees, especially those of countries which are members of the Valdivia Group, support the development of a Range State Agreement for Southern Ocean albatrosses under the Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention);
 - 9.3 in order to address the key problems currently impeding the reduction of seabird mortality in longline fisheries, SCAR requests that National Committees support research and related initiatives for developing and using improved mitigating measures, especially in South America.
10. Noting that discrepancies exist between national and the International Association of Antarctic Tour Operators (IAATO) guidelines with respect to recommended distances for approaching birds in the Antarctic, that the Working Group on Biology supports the SCAR Bird Biology Subcommittee investigating the feasibility of future reconciliation of this discrepancy with a view to standardizing the guidelines for non-scientific visits to birds in the Antarctic.
11. The Subcommittee recommended that for future international coordinated projects within the Southern Ocean (e.g. SO-GLOBEC), studies that wish to determine the quantitative abundance (density) of seabirds at sea, a method that incorporates bird flux through the survey area is to be used in preference to the BIOMASS protocol. At present, two methods are available, and the method used is dependent on the objectives of the seabird project. The Vector method has the advantage of including all birds in the transect for density calculations, resulting in greater detail in quantitative analyses. The Snapshot method accepts some loss of quantitative detail for uncommon species, with the advantage of being less labour intensive (i.e. fewer observers required). Irrespective of the method chosen, a 300-m transect width and basic time unit of 10 minutes (or an alternative that can be analysed in 10-minute periods) are recommended.
12. To approve the establishment of a section of its web site to publicise the activities and provide ready public access to services and products of the SCAR Bird Biology Subcommittee.