



Convention on the Conservation of Migratory Species of Wild Animals

Secretariat provided by the United Nations Environment Programme



REPORT OF THE FIFTEENTH MEETING OF THE SCIENTIFIC COUNCIL OF THE CONVENTION ON THE CONSERVATION OF MIGRATORY SPECIES OF WILD ANIMALS

Rome, Italy, 27 and 28 November 2008

1. OPENING REMARKS

1. The Scientific Council of the Convention on the Conservation of Migratory Species of Wild Animals (CMS) held its 15th meeting at the headquarters of the Food and Agriculture Organization of the United Nations (FAO), Rome, on 27 and 28 November 2008. Mr. John Mshelbwala, Chair of the Scientific Council, opened the meeting and welcomed all participants (the list of participants is contained in annex XII to the present report).

2. Mr. Lahcen El Kabiri, Deputy Executive Secretary of the CMS, in his introductory remarks, said that the contribution of the meeting of the Scientific Council to achieving the 2010 Global Biodiversity Target was important within the framework of the Convention and highlighted the importance of cooperative action. As part of the general policy to cut costs and improve efficiency, the meeting would only last for two days and councillors should bear the shortened timeframe in mind. He further drew the Council's attention to the many achievements in implementing the Convention's work plan, including negotiation and conclusion of several agreements and progress in the implementation of those already existing.

3. Mr. Mshelbwala said that the previous triennium had been very busy for the Secretariat and the Council, and the successes achieved bore testament to their work. The Council's agenda for the current meeting was challenging and would require the councillors' cooperation to cover all the items within the two days allocated. As part of the Convention's implementation process for achieving the 2010 target, the meeting was expected to produce recommendations for the ninth meeting of the Conference of the Parties.

4. He recalled that the 32nd meeting of the Standing Committee had approved the appointment of three additional councillors: Mr. Zeb Hogan (Fish), Mr. Alfred Oteng-Yeboah (African fauna) and Mr. Barry Baker (By-catch). The Committee had also endorsed the recommendation that the Scientific Council continue to hold full meetings within a condensed timeframe with full participation of councillors, as opposed to meetings with regional representation.

2. ADOPTION OF THE AGENDA

5. The meeting adopted its agenda, which is attached as Annex I to the present report.

6. The meeting also approved the provisional schedule contained in document UNEP/CMS/ScC15/Doc.2.1, which provided that several agenda items should be dealt with by taxonomic and thematic working groups.

7. In the course of the meeting, the taxonomic working groups and the thematic working groups were convened and reported to the plenary at its last session. The deliberations of those groups are reported and/or referenced under the relevant agenda items whenever possible. Written reports from the groups are attached to the present report as Annexes IV-XI.

3. REVIEW OF STRATEGY IMPLEMENTATION PLAN FOR THE SCIENTIFIC COUNCIL 2006-2011

8. Introducing the item, Dr. Marco Barbieri, Acting Scientific and Technical Officer, recalled that the Strategy Implementation Plan (SIP) for the Scientific Council for 2006-2011 had been adopted at the 13th meeting of the Council, held in Nairobi from 16 to 18 November 2005, and was set forth in Annex II to the report of that meeting. The report on progress achieved since the first review of SIP implementation (CMS/ScC14/Doc.21) would be substantively discussed at the Council's next intersessional meeting and he would therefore focus only on the main developments having occurred since the conduct of that review in March 2007. In that regard, he highlighted Actions 1.1.1, 1.1.4, 1.1.5, 1.3.1, 1.3.3, 1.3.5, 1.3.6, 1.5.7 and 2.1.1.

9. Concerning Action 1.1.1, the draft review of Chondrichthyan fishes tabled at the 14th meeting had been finalized and published. A similar review of migratory freshwater fish was now to be coordinated by Mr. Zeb Hogan, appointed councillor for fish, who looked forward to receiving input for that purpose from interested parties, adding that the species concerned would benefit from inclusion in the Appendices to the Convention. Concerning Action 1.1.4, significant progress had been made in compiling the information on the availability of Action Plans for Appendix I species, which would be circulated in due course. As for Action 1.1.5, five new action plans, each relating to an Appendix I species, had been prepared with funding from various sources and were to be submitted for final endorsement at the current meeting.

10. With regard to Action 1.3.1, a paper reviewing the results of scientific work on climate change would be tabled for discussion. No such positive news could be reported with regard to Actions 1.3.3 and 1.3.5, however, as no suitable experts had been identified to review the effects of by-catch and unregulated fisheries on migratory species and of barriers to migration on migratory species, respectively. The Council might therefore wish to modify the strategy for the identification of such experts and also reshape the terms of reference with more of a view to available resources. By contrast, a review of the impact of invasive alien species on migratory species, covered under Action 1.3.6, had been commissioned, following the receipt of a grant from the Italian Government, and Mr. Barry Baker, appointed councillor for by-catch, had agreed to review the resulting advanced draft. Volunteers to assist him in that task would be welcome. As for Action 1.5.7, indicators of the status of migratory species would be submitted to the current meeting. Lastly, a significant number of the draft proposals for listing of species prepared under Action 2.1.1 and endorsed by the 14th meeting of the Scientific Council had been submitted for consideration by the Conference of the Parties.

11. Emphasis was placed on the importance of considering SIP in the context of budget discussions and synergy with other conventions. Also stressed was the need for intersessional work to take on board the encouraging progress thus far achieved, with key focus on scientific outcomes and links with other agreements. Appendix I species should always remain the priority.

12. The Scientific Council took note of the review of its Strategy Implementation Plan for 2006-2011.

4. SMALL-SCALE PROJECTS FUNDED BY CMS

13. Introducing the item, Mr. Barbieri, Acting Scientific and Technical Officer, recalled that the practice of funding small-scale conservation and research projects under the Small Grants Programme had changed substantially since the eighth meeting of the Conference of the Parties to the CMS in November 2005. Until that time, such projects had been funded mainly by resources from the Trust Fund of the Convention originating from surpluses. The programme had supported some 50 conservation and research projects selected by the Scientific Council amounting to some US\$ 1.5 million. Since 2005, however, owing to exhaustion of the Trust Fund, that funding system had been replaced by one based on voluntary contributions. Of 18 proposed small-scale projects, six had been funded to the tune of about €125,000. In reassessing the situation, the Council might therefore wish to discuss such issues as project appeals to donors and other potential sources of project funding with a view to making recommendations to the Conference of the Parties.

14. In the ensuing discussion, it was emphasized that small-scale projects were a vital showcase for activities pioneered by the CMS. They were its very backbone, not least in view of their distinctive nature and positive impact in the field. The establishment of a sustainable and predictable funding mechanism with enough flexibility for rapid response was therefore deemed essential to the continuation of such projects, which suggested the need for a return to budget funding. Indeed, wide support was expressed for a strong recommendation to that effect. While not a prerequisite, the provision of seed money or local counterpart funding by countries submitting project proposals was also suggested as a means of encouraging top-up funding.

15. Among the arguments made in favour of budget funding was the fact that environment - let alone the conservation of individual species - was not a priority for developing countries owing to competing needs and they would be in no position to implement the Convention without firm funding for their small-scale conservation projects. Another advantage of such projects was that their worth exceeded the financial outlay because they often triggered other conservation-related activities. The Small Grants Programme was, therefore, an effective and relatively inexpensive way of launching such activities and initiating future agreements. A reallocation of budget resources to enhance the efficiency of that tool might therefore be extremely appropriate, particularly given that lack of funding was seen to hamper development in the case of other agreements. That view was confirmed by the representative of the Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and Contiguous Atlantic Area (ACCOBAMS), who informed the meeting that funding systems based on voluntary contributions involved so much uncertainty as to be essentially unworkable, whereas an alternative funding system could provide opportunities for synergy with the CMS family of agreements. Other points made included the need to evaluate projects on the basis of scientific quality and urgency, rather than on donor appeal, and to propose ways of dealing with failures along the way.

16. Given the overwhelming consensus in favour of reviving the Small Grants Programme through a sustainable source of funding, the Chair said that he would draft a strong recommendation to that effect for further discussion by the Council with a view to its submission to the Conference of the Parties. The Chair submitted the proposed recommendation he had prepared at the last session of the meeting and it was agreed that it

should be transmitted to the Conference of the Parties. The text is attached as Annex II to the present report.

5. SCIENTIFIC COUNCIL TASKS ARISING, *INTER ALIA*, FROM RESOLUTIONS, RECOMMENDATIONS AND OTHER DECISIONS OF THE CONFERENCE OF THE PARTIES

5.1. Concerted actions for selected Appendix I species/groups (Resolutions 3.2, 4.2, 5.1, 6.1, 7.1 and 8.29 refer)

17. Reporting on progress in the implementation of concerted actions was discussed within the taxonomic working groups, as were recommendations on further implementation of concerted actions and possible identification of candidate species to be recommended for concerted actions. The reports of the taxonomic and thematic working groups are reproduced in Annexes IV to XI to the present report.

5.2 Cooperative actions for Appendix II species (Recommendations 5.2, 6.2, 7.1 and 8.28 refer)

18. Reporting on progress in the implementation of cooperative actions was discussed within the taxonomic working groups, as were recommendations on further implementation of cooperative actions and possible identification of candidate species to be recommended for cooperative actions. The reports of the taxonomic working groups are reproduced in annexes IV to VIII to the present report.

5.3 Other resolutions and recommendations (not already covered under previous agenda items)

a) Resolution 8.1: Sustainable Use

19. This item was addressed in the thematic working group on sustainable use. The chair of the group, Mr. Pierre Devillers, reported orally to the Council at its last session.

20. He said that the meeting of the thematic group had been attended by the councillors for the European Community (chair) and the Islamic Republic of Iran, by the Conference-appointed councillor for sea turtles and by an observer, the representative of CITES.

21. It had been agreed that a text on the possible usefulness of the Addis Ababa principles in the implementation of the CMS would be prepared in the next few weeks by the chair of the group, in collaboration with the CMS officer for Agreements, and circulated to the members of the working group and to all Scientific Councillors. The document would include a short introduction recalling the objectives of the Convention and note its direct filiation from the principles enunciated in the 1982 United Nations Charter for Nature. It would then examine for each of the Addis Ababa principles whether they could be of practical application in cases where the Convention authorized wise use and regarded it as a conservation tool. It had been agreed that recognition of practical usefulness would not necessarily involve or consider adherence to any underlying philosophy. It was anticipated that for most of the principles there would be a positive recommendation regarding practical use, within the limits set above.

b) Resolution 8.7: Assessing the contribution of CMS in achieving the 2010 Biodiversity Target

22. Mr. Barbieri, Acting Scientific and Technical Officer, referring to the report contained in document UNEP/CMS/Sc15/Doc.14 and its annexes, recalled that in resolution 8.7 the eighth meeting of the Conference of the Parties had requested the CMS Secretariat and the Scientific Council to continue working towards the adoption of suitable indicators to measure the achievement of the 2010 Biodiversity Target. Two existing indices had been selected as a basis for further work towards developing specific indicators for migratory species.

23. Mr. John O'Sullivan (BirdLife International) gave a PowerPoint presentation on the red list index (RLI), based on the Red List of Threatened Species drawn up by the World Conservation Union (IUCN). He outlined its purpose, how it was calculated, and its potential applicability to migratory species. The RLI provided a measure of biodiversity loss in terms of extinction of species, illustrating trends in overall extinction risk. Although based on systematic status assessments of all species and widely used by many organizations, the relatively broad categories used in its calculation meant that the RLI was only moderately sensitive to status change. He provided specific data for various species and groups of species to illustrate some general trends and how the RLI could be utilized. He responded to several questions concerning general and technical matters, including the interpretation of data, coordination with the IUCN, and how to deal with species for which limited past data were available.

24. Mr. Ben Collen (Zoological Society of London) gave a PowerPoint presentation providing similar information for the living planet index (LPI), which measured changes in the abundance of selected species and was particularly useful for modelling long-term non-linear trends. Current LPI data indicated that migratory species were generally less under threat than non-migratory species. Nevertheless, care should be taken not to oversimplify the situation: disaggregating data was essential in identifying specific problems and areas where efforts should be targeted. The ensuing discussion and questions drew attention, in particular, to variations in the trends indicated by the RLI and the LPI and the reasons why that might be the case. It was stressed that how statistical data were presented to decision-makers could influence future actions and policies on conservation, and attention should be paid to how others might interpret such data.

25. At the suggestion of the Chair, a drafting group was established under the chairmanship of Mr. Colin Galbraith to prepare a submission to the Conference of the Parties on the usefulness of the two indices for the work of the Scientific Council and actions under the Convention. The text of the submission is attached as annex III to the present report.

c) Resolution 8.13: Climate change and migratory species

26. Mr. Colin Galbraith (United Kingdom), chair of the working group on climate change and migratory species established by the Scientific Council at its 14th meeting, gave a PowerPoint presentation on climate change as an additional challenge for migratory species. Stressing that climate change was a reality and that its effects were felt everywhere, he outlined some of the main trends observed and their effects on migratory species and the migration process. The complexity of the issue should not prevent it from being addressed at all levels. He described various developments over the previous three years in the areas of research and action and outlined a number of possible recommendations that could be made to the Parties to the Convention and the CMS Secretariat. Encouraging initiatives by Parties to focus attention on the issue, in particular the draft resolution that would be submitted to the

forthcoming Conference of the Parties by Australia, he suggested that a specific meeting on climate change and migratory species be organized.

27. During the ensuing discussion, general support was expressed for the draft resolution to be presented by Australia, as the effects of climate change on migratory species, and the environment in general, could not be over-emphasized. Several examples of changes observed in migration patterns were mentioned and it was stressed that the issue of climate change should be taken into account at all levels of government and society. Smaller countries would benefit from resources and guidance in assessing which species to monitor as a priority. International cooperation, including with non-Parties, and cooperation with other organizations should also be encouraged. It was suggested that action be taken under the Convention to address the specific and serious situation of the Arctic region.

28. Mr. Lahcen El Kabiri, Deputy Executive Secretary of the CMS, informed the Council that he would represent the CMS at the high-level segment of the 14th Conference of the Parties to the United Nations Framework Convention on Climate Change, to be held in December 2008.

29. The issue was discussed further within the working group on climate change and migratory species. The report of the thematic working group is attached as Annex X to the present report.

d) *Resolution 8.14: By-catch*

30. Reporting on progress on resolution 8.14 on by-catch, recommendations on by-catch, including input to draft resolution 9.7, and the work plan for the working group on by-catch for the triennium were discussed within the thematic working groups. The report of the thematic working group on by-catch is attached as Annex IX to the present report.

e) *Resolution 8.22: Adverse human induced impact on cetaceans*

31. Ms. Heidrun Frisch, CMS Marine Mammal Officer, recalled that, pursuant to resolution 8.22 of the eighth meeting of the Conference of the Parties, a programme of work to address human-induced impact on cetaceans had to be developed by the Scientific Council and the Secretariat. For this purpose, an outline of a report and a work plan had been agreed by the 14th meeting of the Scientific Council. Although considerable progress had been made since the 14th meeting, some work remained to be done. As an analysis of the gaps was intended to serve as the basis for the programme and it had not yet been completed, the timetable for adoption of the programme had been revised. The Scientific Council was being asked to review the proposed changes to the programme of work outlined in document UNEP/CMS/Conf.9.26/Rev.1.

32. The issue was discussed in the working group on aquatic mammals, which welcomed the progress made and approved the revised work plan.

f) *Other resolutions and recommendations under development*

33. Mr. Barbieri, Acting Scientific and Technical Officer, introduced draft resolution 9.19/Rev.1 on anthropogenic marine/ocean noise impacts on cetaceans and other biota, explaining that substantive discussion would take place in the taxonomic working group on aquatic mammals, whose report on that discussion is reproduced in Annex V to the present report.

34. The representative of France, speaking on behalf of the European Community, explained the rationale behind the resolution and highlighted some changes introduced into the revised version that had been made available to the Council.

35. Although one representative considered that before the CMS could add to the issue there was a need for scientific input, others were in favour of a resolution on the impact of noise. Work was already being done under other agreements, for example, ACCOBAMS had a working group on noise, which was finalizing guidelines to be adopted by the Parties to the Agreement.

36. Draft resolution 9.19/Rev.1 was considered in detail by the working group on aquatic mammals, which made several suggestions for amendment as shown in the report of the working group attached as annex V to the present report.

6. REVIEW OF PROPOSALS FOR AMENDMENTS TO APPENDICES I AND II TO THE CONVENTION

(a) Discussion and evaluation of proposals

37. Mr. Barbieri, Acting Scientific and Technical Officer, informed the Council that the Secretariat had received 24 proposals for listing of new taxa in the Appendices, 13 for Appendix I and 11 for Appendix II. They included aquatic mammals, terrestrial mammals, birds and fishes. The relevant taxonomic and thematic working groups would hold substantive discussions on the proposals with a view to making recommendations to the Council. The reports of the taxonomic and thematic working groups on those discussions are reproduced in annexes IV to XI to the present report.

(b) Conclusions and recommendations to the Conference of the Parties

38. Summarizing the relevant elements of the reports of the Working Groups, Mr. Barbieri, Acting Scientific and Technical Officer, indicated that two proposals for inclusion in Appendix II had been withdrawn (*Oxyura maccoa* and *Rynchops flavirostris*), while the other proposals had been fully supported by the working groups with the exception of two on shark species (*Squalus acanthias* and *Lamna nasus*), one on bird species (*Falco cherrug*) and one on mammal species (*Ammotragus lervia*). The Council would therefore have to decide what recommendations should be made to the meeting of the Conference of the Parties on those species.

39. The appointed councillor for fish summarized the outcome of the discussions in the taxonomic working group concerning *Squalus acanthias* and *Lamna nasus* in terms of meeting the criteria for inclusion in Appendix II. There had been unanimous support for listing the two species of sharks as far as the population in the northern hemisphere was concerned, but concern had been expressed that data on the southern hemisphere population did not meet the criteria.

40. The Scientific Council acknowledged that there was a clear difference in status between the northern and southern populations of the two shark species, noting, however, that for a species to qualify for listing it sufficed for a significant portion of the population to meet the criteria. Consequently, the species would qualify for listing.

41. The appointed councillor for birds reported that the taxonomic working group had agreed that the Saker falcon was migratory in CMS terms and that it was endangered throughout a significant part of its range. Doubts had been expressed, however, regarding the figures for one country within its range, namely, Mongolia. The majority of councillors had felt that the precautionary principle should be followed and the falcon should be listed. Two councillors, on the other hand, wanted a further scientific assessment to be made before listing the Saker falcon.

42. After a lengthy discussion, the Scientific Council agreed that the species met the criteria for inclusion in Appendix I, but in view of the divergent opinions in the working group two options should be put to the meeting of the Conference of the Parties for a final decision: (a) the precautionary approach should be followed and the Saker falcon should be listed forthwith; or (b) a further review should be undertaken before a decision was adopted.

43. The Council confirmed the recommendation of the working group on terrestrial mammals that, while all possible measures should be taken to conserve the Barbary sheep, however, at the present stage it could not support its listing in Appendix I.

7. PROGRESS ON OTHER MATTERS REQUIRING SCIENTIFIC COUNCIL ADVICE

7.1 Potential new Agreements (including Memoranda of Understanding and Action Plans)

44. Mr. Barbieri, Acting Scientific and Technical Officer, introduced draft resolution 9.2 on priorities for CMS Agreements, requesting the taxonomic working groups to address the issues relevant to the taxon within their competence and to provide advice to the Council.

45. The discussion of those issues is articulated in the reports of the taxonomic working groups, which are reproduced in Annexes IV to VIII to the present report.

7.2 Taxonomy Issues

7.2.1 Taxonomy reference for mammalian species

46. The proposed new nomenclatural reference for mammalian species was discussed by the taxonomic working groups on terrestrial and aquatic mammals, the reports of which are reproduced in annexes IV and V to the present report. See also item 7.2.3 below.

7.2.2 Taxonomy of *Orcaella*

47. The proposed nomenclature for *Orcaella* was discussed in the taxonomic working group on aquatic mammals, the report of which is reproduced in annex V to the present report.

7.2.3 Harmonization of the taxonomy between CMS and CITES Appendices

48. Mr. Barbieri, Acting Scientific and Technical Officer, drew attention to document UNEP/CMS/ScC15/Doc.8 on taxonomy and nomenclature of fauna listed in the Appendices to the CMS and CITES. He pointed out that several issues were involved and that they were partly inter-linked. Two Conventions such as CITES and the CMS had to have a common understanding of the species listed in the Appendices to both Conventions and for several

years the Secretariats of the two Conventions had been collaborating on identifying the correspondence between taxa in their respective Appendices. Recent developments, particularly those stemming from the Conference of the Parties to CITES, suggested that there was a need for more harmonization on taxonomy and nomenclature among biodiversity-related environmental agreements. The CMS and CITES obviously had a leading role to play in that respect. The Council would have to reflect on the extent to which the CMS references should be aligned on those of CITES and indeed whether that was advisable. It should draw up a definite recommendation for the ninth meeting of the Conference of the Parties as far as references for mammals were also concerned (see also item 7.2.1 above) and, from a longer-term perspective, consider modifying the references currently used for birds in the CMS, which were overdue for review.

49. The representative of CITES underlined the need to achieve a balance between use of the most accurate scientific terms and the terms it was most practical to use.

50. During the ensuing discussion, the question of harmonization of the terms used in agreements under the CMS was raised. It was emphasized that nomenclature was a tool, whereas taxonomy was a science, although they were tightly intertwined and, as a scientific body, the Council's recommendations should be based on science.

51. Many countries did not have domestic legislation on specific species but, by adopting international conventions, benefited from an international framework thereon. For the purposes of communication and the development of legislation, nomenclature must remain stable. It was also pointed out that not only were there discrepancies in taxonomy but also in the ranges of distribution used in various Conventions. Although it might appear to be an administrative matter, it had political ramifications.

52. The work on harmonization of the taxonomy in the CMS and CITES appendices could be applied to other conventions, including regional agreements. It was suggested that a pragmatic approach would be for all the relevant conventions to take joint nomenclature decisions. BirdLife International and IUCN, for example, had a system for rapidly updating their red lists.

53. In response, the representative of IUCN said that, because of the numbers of species and subspecies involved, taxonomy was a considerable problem, but that IUCN tracked synonyms on the red list as far as possible.

54. The Chair recalled that a meeting of Chairs of the scientific advisory bodies of biodiversity-related conventions had decided that all Chairs should be invited to the meetings of each body, and communication between the bodies should thus improve in future.

55. With regard to the effect on national legislation, it was suggested that it might be opportune to use synonyms and revise the nomenclature approximately every 10 years. The important issue was implementation of the conventions and some sort of harmonization at the international level would help countries, in particular developing countries, to streamline their legislation.

56. The Chair referred the agenda item to the taxonomic working groups for further discussion. The relevant recommendations of the working groups are included in their reports.

7.3 Migratory Species and Diseases

57. Ms. Rebecca Lee (WWT) gave a PowerPoint presentation on the task force's work. She outlined the history of the H5N1 virus and recent developments. The direct impacts of the virus were mortality among the bird population, including threatened species and curtailment of research into bird species, while indirect impacts were measures taken against wild birds and affected public perception. The task force had been established to provide information, liaise with relevant bodies, improve response effectiveness, issue advice and promote early warning systems. She also introduced the salient points of draft resolution 9.8 on responding to the challenge of highly pathogenic avian influenza H5N1 and provided information on the future areas for the work of the task force, which would concentrate on: preventing destruction of bird species and their habitats; preparedness plans; guidance; surveillance programmes; species identification and outbreak reporting; practical guidance documents; and wider work on wildlife disease, *inter alia*.

58. Ms. Ruth Cromie (WWT) gave a PowerPoint presentation on responding to the challenges of wildlife diseases. She highlighted the broader context of the development of wildlife disease, its consequences, the rapid rise of diseases and the factors compounding the problem. The connectivity between wildlife health and human health meant that zoonotic diseases were a serious concern. She suggested that the CMS could contribute to implementation of broader conservation instruments, encourage and support national health strategies, broaden draft resolution 9.8 and use the lessons learned from HPAI H5N1 to tackle other wildlife health issues. There should be broader wildlife disease research, a co-convened FAO/ CMS scientific task force on emerging diseases of wildlife, into which the current CMS working group on migratory species as vectors of disease would be incorporated, and a workshop thereon. The approaches suggested in the presentations found support among the councillors. In connection to tracking diseases, the Councillor from Italy drew the Council's attention to the mapping tool set up on the European Union for Bird Ringing (EURING) website.

59. Reporting on migratory species and diseases, recommendations and endorsement of the proposals contained in document UNEP/CMS/ScC15/Doc.13 and input to draft resolution 9.8 were discussed within the thematic working groups. Following discussion, the relevant working group endorsed the proposal to establish a scientific task force on emerging diseases of wildlife and welcomed the opportunity to bring its experience to a new body. The report of the group is attached as annex XI to the present report.

7.4 Range State List

60. Mr. Barbieri, Acting Scientific and Technical Officer, invited suggestions to rectify the List of Range States of Migratory Species included in the CMS Appendices, the latest version of which was contained in document UNEP/CMS/Inf.9.5. Two councillors pointed to the need for some changes to the information concerning their respective countries.

61. One councillor indicated that classification as a Range State for a particular species sometimes rested on a single sighting many years previously, which might add nothing to conservation efforts but could involve significant expenditure of administrative and financial resources by the country concerned. It was therefore agreed that the criteria for classification as a range State would be discussed by the Scientific Council at its next meeting.

7.5 Artificial Barriers to Migration and other Threats to Migratory Species and their habitats

62. It was agreed that Mr. Barbieri, Acting Scientific and Technical Officer, would liaise with the Scientific Councillor for the Netherlands in reviewing the terms of reference for the proposed review of the effects of barriers to migration on migratory species. Specific threats to marine turtles were discussed within the taxonomic group on marine turtles, the report of which is reproduced in annex VII to the present report.

8. REPORT TO COP ON SCIENTIFIC COUNCIL ACTIVITIES DURING 2006-2008

63. The Chair outlined the proposed contents of his report to the ninth meeting of the Conference of the Parties and invited suggestions from the Council for further items for inclusion. In the absence of comments, he said that he would finalize the report.

9. ELECTION OF THE CHAIRPERSON AND VICE-CHAIRPERSON OF THE SCIENTIFIC COUNCIL FOR THE PERIOD 2009-2011

64. The representative of the Secretariat said that the following nominations had been received for the positions of Chair and Vice-Chair of the Scientific Council for the period 2009-2011: Chair, Mr. John Hyelakuma Mshelbwala; Vice-Chairs, Mr. Colin Galbraith and Mr. Pierre Devillers. There being no other nominations, the proposal was accepted unanimously.

10. DATE AND VENUE OF THE 16TH MEETING OF THE SCIENTIFIC COUNCIL

65. Pending approval by the meeting of the Conference of the Parties, it was agreed that the Council would hold two meetings in the next triennium, the 16th intersessionally in 2010 and the 17th shortly before the tenth Conference of the Parties. Suggestions of possible venues for the two meetings were invited.

11. ANY OTHER BUSINESS

66. In response to a question from the floor on agenda item 7.2.3, the Chair confirmed that the working group on birds would continue to discuss document UNEP/CMS/ScC15/Doc.8 intersessionally and report to the 16th meeting of the Council.

67. Mr. Wim Wolff (Netherlands), a founder member of the Council, expressed gratitude to his colleagues as he stepped down from his position. The Council paid tribute to his work over the previous 20 years and extended warm wishes to him for the future.

68. It was requested that studies be conducted into the status of lions in Central Africa, as the species seemed to be disappearing from certain countries. Attention was drawn to the extension of elephant conservation measures from Western Africa to Central Africa.

69. Concern was expressed that the duration of the meeting had not provided enough time to discuss all scientific issues in appropriate depth and a request was made to reconsider the duration of meetings in the future.

12. CLOSURE OF THE MEETING

70. Mr. Robert Hepworth, Executive Secretary of the CMS, congratulated councillors on their work within the Council and in their home countries, sometimes in difficult circumstances. Emphasizing that science was the foundation of the Council's work, he acknowledged that sufficient time should be provided for discussions during meetings. He took note of the issues that would be raised before the meeting of the Conference of the Parties, in particular the desire to revive the Small Grants Programme, and the possible solutions suggested by the Council to resolve differing views on 2 of the proposals for shark listings, and on the saker falcon.

71. The Council expressed appreciation to Mr. Barbieri, Acting Scientific and Technical Officer, who had taken up a new post within the CMS Secretariat and wished him well in the future.

72. Following the customary exchange of courtesies, the Chair declared the meeting closed at 6.40 p.m. on Friday, 28 November 2008.

AGENDA OF THE MEETING

1. Opening remarks
2. Adoption of the agenda
3. Review of Strategy Implementation Plan for the Scientific Council 2006-2011
4. Small scale projects funded by CMS
5. Scientific Council tasks arising *inter alia* from resolutions, recommendations and other decisions of the Conference of the Parties
 - 5.1. Concerted actions for selected Appendix I species/groups (Res. 3.2, 4.2, 5.1, 6.1, 7.1 and 8.29 refer)
 - 5.2. Co-operative actions for Appendix II species (Recommendations 5.2, 6.2, 7.1 and 8.28 refer)
 - 5.3. Other resolutions and recommendations (not already covered under previous agenda items)
 - a) Resolution 8.1: Sustainable Use
 - b) Resolution 8.7: Assessing the contribution of CMS in achieving the 2010 Biodiversity Target
 - c) Resolution 8.13: Climate change and migratory species
 - d) Resolution 8.14: By-catch
 - e) Resolution 8.22: Adverse human induced impact on cetaceans
 - f) Other Resolutions and Recommendations under development
6. Review of proposals for amendments to Appendices I and II of the Convention:
 - (a) Discussion and evaluation of proposals
 - (b) Conclusions and recommendations to the Conference of the Parties
7. Progress on other matters requiring Scientific Council advice
 - 7.1. Potential new Agreements (including Memoranda of Understanding and Action Plans)
 - 7.2. Taxonomy issues
 - 7.2.1 Taxonomy reference for mammalian species
 - 7.2.2 Taxonomy of Orcaella
 - 7.2.3 Harmonisation of the taxonomy between CMS and CITES Appendices
 - 7.3. Migratory Species and diseases
 - 7.4. Range State List

- 7.5 Artificial barriers to migration and other threats to migratory species and their habitats
8. Report to COP on ScC activities during 2006-2008
9. Election of the chairperson and vice-chairperson of the Scientific Council for the period 2009-2011
10. Date and venue of the 16th meeting of the Scientific Council
11. Any other business
12. Closure of the Meeting

Statement of the Chair of the CMS Scientific Council on the Small Grants Programme

The Scientific Council regards the Small Grants Programme as an essential, and possibly the most essential, tool for the implementation of the Convention. Created at the fourth meeting of the Conference of the Parties in 1994, from 1994 to 2005 the Small Grants Programme was the main instrument through which the Convention was able to bring seed money to significant conservation projects. It changed the nature of the Convention from a somewhat formal administrative instrument to a dynamic and respected conservation tool. It was used to prepare the Action Plans that have been the basis of many of the agreements concluded under the Convention and to support activities in the field of conservation. It had an impact that went well beyond the funds mobilized by the Convention as it was a powerful catalyst to generate much larger funds coming from the Range States themselves or from international donors. Without it, many projects that made a substantial contribution to raising the profile of the CMS and resolving essential conservation issues would never have been possible, particularly in developing countries where funds would not otherwise have been available to initiate projects. Without this dependable, predictable resource that is allocated according to conservation needs, the nature of the Convention would be profoundly changed and its appeal as an effective conservation tool gravely damaged.

This essential mechanism functioned extremely well until 2005. During the past triennium, a change of policy left the funding to the vagaries of donor interest. Predictably, this approach has failed, as the most needed actions are, almost by definition, often the least susceptible to attracting the interest of donors. Indeed, this interest is strongly guided by media potential and will privilege fields that already enjoy widespread attention, rather than those in which the Convention is the best or only tool, and thus can truly make a difference.

The Scientific Council urges the Conference of the Parties to take all necessary measures to revive and sustain the Small Grants Programme in the form it had between 1994 and 2005, namely, that of a predictable, regulated source of funds for real world conservation, driven only by conservation needs and scientific quality, not by attractiveness to potential donors.

This very strong plea was expressed in interventions at plenary sessions of the Scientific Council by the Councillors for the European Community, the Netherlands, Côte d'Ivoire, France, Belgium, Germany, Kenya, Burkina Faso, Morocco, Australia, the former Yugoslav Republic of Macedonia, by six Conference-appointed Councillors and by the Executive Secretary of ACCOBAMS, and was unanimously supported by the Council.

The chair also drew attention to the statement on financing of research and conservation projects recommended by the Scientific Council, which had been endorsed by its 14th meeting and is included in the report of that meeting. The statement is reproduced below.

“Having reviewed, in part through the analysis conducted by its taxonomic working groups, the achievements of the first half of the 2005-2008 triennium, the Scientific Council reiterates its opinion that the concrete conservation actions that it has identified selected, prioritized and recommended for funding have been and are one of the principal assets, and a unique trademark of the Convention, as well as the main pathway through which the convention will contribute to the 2010 target. The Council thus expresses its deep concern at the difficulties of funding that have impeded during

the first half of the triennium both the continuation of ongoing actions and the initiation of new ones, in sharp contrast with the situation of past periods. The Scientific Council regards the guarantee of secure funding for the actions it reviews and recommends a vital requirement if the quality of the implementation of the Convention and its relevance to effective conservation are to be maintained and if the credibility and the usefulness of the work of the Scientific Council are to be preserved. Such a secure and predictable level of funding existed in the past as a fixed budget allocated by each COP, taken from Convention reserves.

Two possible ways to recreate this situation appear to exist:

- Either the COP undertakes to again allocate a fixed budget, taken from its resources, and this without reducing the support given to other necessary Convention activities;*
- Or the secretariat expands its present fund-raising programme to generate sufficient resources allowing a fixed sum to be reserved for projects selected by the Council procedure.”*

Submission to the 9th Conference of the Parties on Migratory Species Indicators

The Scientific Council reviewed work undertaken intersessionally to produce draft migratory species indicators. Two draft indicators, the Red List Index, and the Living Planet Index, each with variations to show changes in the subset(s) of species which can be considered migratory, were presented to SC15.

The Scientific Council welcomed the work undertaken, noting the value of having more than one indicator to measure the outcomes in species populations achieved by the Convention and by the actions of others. During discussion a number of questions about the detail behind the indicators were raised. Overall it was considered that they represented a good first step, noting that there were issues about how representative the draft indicators are, how well they can be applied to groups of species for which limited population information exists, and whether these analyses take into account known data biases. The Council noted the possibility of a time-lag effect in some long-lived species where changes occurring today may only be detected in later years. The Council also noted that the collective effort applied from CMS and other Conventions to some species groups is especially important; for example, work in relation to the great whales has benefited from the co-ordination of the IWC in particular.

The Scientific Council expressed the importance of explaining and interpreting the trends observed. At a gross level, CMS listed migratory species appear to be doing better than other migratory species. However, when more detailed analyses are undertaken, more subtle and complex messages emerge. At the same time, it was acknowledged that some of the detailed data necessary to carefully evaluate population trends may not be available, especially for rare species. Importantly, the Scientific Council noted that whilst this overview may imply that no additional funding is necessary to support activities of CMS listed species as these species are recovering from very low population levels, an alternative perspective is that conservation actions are beginning to succeed in some cases.

The Scientific Council recommends that:

- Further work is undertaken to develop these and perhaps other indicators, for example of the impacts of climate change;
- Further analyses should be based on the following variables and combinations of variables: a) IUCN red listed species, b) CMS species, c) CMS Appendix I species, d) AEWAL listed, e) ACAP listed, f) migratory species, g) non-migratory species, h) terrestrial mammals, i) aquatic mammals (including both great whales and small cetaceans), j) reptiles, and k) fish;
- Population estimates are collected in similar ways to ensure that comparisons are compatible;
- Contracting Parties make information available to both the Red List Consortium and the Living Planet Consortium to ensure the indicators are based upon as much information, and of as high a quality, as is possible;
- SC16 further discuss these issues and make a clear recommendation to CoP10 on the adoption of an indicator suite to help measure the effectiveness of the convention; and
- The Scientific Council working group is maintained, to help draft specific and carefully stated recommendations for the COP, and to offer other advice as necessary.

REPORT OF TAXONOMIC WORKING GROUP ON BIRDS

The Working Group met twice, in the afternoon/evening of 27th November, and in the afternoon of 28th, for a total of somewhat less than four hours in all. It proved extremely difficult to cover a demanding agenda in this time. Some 28 Scientific Councillors and observers attended all or part of these meetings. The following matters were discussed.

Concerted Action issues

The Group received oral and written reports on the following fourteen Concerted Action species, listed in the order in which they appear on Appendix I of the Convention. The names of the focal point Councillors presenting the reports are given in brackets. An * next to the name indicates that the Councillor concerned has recently agreed to be the focal point for reporting on these species, and the Secretariat is asked to ensure that these names appear against appropriate references to the species in future. The written reports, and a summary of oral reports, will be passed to the Secretariat.

Humboldt Penguin (Roberto Schlatter*), Balearic Shearwater (Borja Heredia*), Andean Flamingos (Roberto Schlatter), Lesser White-fronted Goose (John O'Sullivan), Ruddy-headed Goose (Daniel Blanco), Ferruginous Duck (Jelena Kralj*), White-headed Duck (Borja Heredia*), Lesser Kestrel (Pierre Devillers via John O'Sullivan), Siberian Crane (Taej Mundkur*), Houbara Bustard (Mohammad Sulayem*), Great Bustard (Attila Bankovics), Red Knot *rufa* (Daniel Blanco*), Slender-billed Curlew (Pierre Devillers via John O'Sullivan), and Aquatic Warbler (Jiri Flousek*).

During related discussions, the following matters arose. Concerning the Lesser White-fronted Goose, it was noted with satisfaction that a dedicated officer had been appointed, thanks to funding from the government of Norway; the post is based at the AEWA Secretariat. The newly agreed Action Plan on the species gives some grounds for optimism. On the Houbara Bustard, the Scientific Councillor from Saudi Arabia said that he expected that the proposed Agreement on the species, which has been several years in preparation, would be finalised by the end of next year. The draft action plan attached to the proposed agreement needs to be reviewed and agreed. An Agreement is the preferred option of Saudi Arabia over a Memorandum of Understanding. Concerning the Great Bustard, there was some debate about the value of adding the eastern population *dybowski* (occurring in part of the Russian Federation, in Mongolia and China), to Appendix I, and the possibility of extending the existing MoU on the Middle European population to cover this subspecies. It was agreed to discuss these matters by correspondence, and to look at the matter again at the next meeting of the Scientific Council, with a view to taking any appropriate action at COP 10. As concerns the White-headed Duck, it was noted that the threat from the introduced Ruddy Duck continues to be a real and worrying one. Although good progress has been made on eliminating the species in the United Kingdom, with only a few hundred individuals remaining to be removed, the situation in the Netherlands and France is somewhat less clear. It is hoped that a recent Resolution from AEWA MOP4 will stimulate sustained efforts in these countries: speedy and determined action is likely to be more effective, and far less costly overall. On the Lesser Kestrel, it was noted that the species would be covered by the newly agreed Memorandum of Understanding on African-Eurasian Birds of Prey. It will of course continue to be subject to Concerted Action reporting, but within a new framework. Concerning the Slender-billed Curlew, it was noted that the Working Group set up under the CMS MoU on the species, has recently been reorganised, and is planning a major push to

publicise the fate of this critically endangered bird, and to encourage ornithologists and birdwatchers to make a final effort to locate any remaining individuals. More information would be given about this at the forthcoming Conference of the Parties, and the associated side-event. As concerns the Aquatic Warbler, considerable activity is being undertaken by the Aquatic Warbler Conservation Team; the International Single Species Action Plan (first published in 1995) is under revision in late 2008. (CMS may wish to endorse this Plan in due course.) On a general point relating to focal point reports on Concerted Action species, the view was expressed that we should concentrate on concrete facts, such as population estimates and conservation status, in each part of the whole range of a given Concerted Action species. This approach is of course more difficult for some species than others, but should be followed wherever possible. At this meeting, no reports were received on two other Concerted Action Species for whom focal point councillors have been designated, White-winged Flufftail and Blue Swallow. The Appointed Councillor for Birds agreed to contact the appropriate Scientific Councillors, who were not present at this meeting of the Council, and seek updates. It is notable, however, that an Action Plan has been produced for the flufftail (see next item). Focal point Councillors are still needed for Black-faced Spoonbill and Spoon-billed Sandpiper, and Chinese Crested Tern, and this matter will be explored intersessionally.

The Working Group considered and endorsed the proposed Action Plans for the following species: White-winged Flufftail, Madagascar Pond Heron, Chinese Crested Tern, Black-faced Spoonbill, and Spoon-billed Sandpiper. Minor typographical changes will be notified to the Secretariat. Still on the subject of action planning, the meeting supported the suggestion that a new Action Plan for the Ruddy-headed Goose should be produced. After some discussion, it was decided to propose the following Appendix I species for Concerted Action, and the production of Action Plans as appropriate: Dalmatian Pelican, Swan Goose, and Marbled Duck.

As regards Cooperative Action, reports were received on Corncrake (Colin Galbraith) and Quail (Pierre Devillers via John O'Sullivan), and a more detailed report on Black-necked Swan (Roberto Schlatter). Councillors were conscious that debate on Cooperative Action for birds had become rather limited at recent meetings, and would value some guidance from the Council, the Secretariat and others, on how to re-energise this element of our work. The Working Group decided not to identify new species for Cooperative Action at this meeting.

The Working Group endorsed the finalised international Action Plan for the Lesser Flamingo. During the discussions on this item, Kenya was complimented on the production of a related National Action Plan for the species. The meeting noted that Tanzania was also preparing such a plan and, in view of the extraordinary, and indeed unique, importance of the Tanzanian breeding colony at Lake Natron, urged the government of Tanzania to consult as widely as possible on this vital new Plan, and wished it success in its production. It was noted that the connection between Asian and African Lesser Flamingo populations remains uncertain and should be researched through satellite telemetry and genetic and isotope studies across its range. The Asian breeding population of Lesser Flamingo, which is confined to just one location, in India, remains at risk during and outside the breeding season in India and Pakistan. There is a need to implement priorities under the Action Plan in these countries, particularly those relating to research, and the management and conservation of the species and its habitats.

On proposals for amendments to the Appendices of the Convention, the Working Group supported the addition of the following species to Appendix I. Baer's Pochard, Egyptian Vulture, Peruvian Tern, Yellow-breasted Bunting, Cerulean Warbler and Streaked Reed-

warbler. The proposal to list Saker Falcon proved an issue for considerable debate. The majority of Councillors who spoke felt that listing on Appendix I was justified on scientific grounds and should go ahead. Councillors from two countries felt it should not.

The Working Group noted that the proposals to add Maccoa Duck and African Skimmer to Appendix II had been made as a result of a misunderstanding. It was agreed to review, in the coming triennium, the status of the Maccoa Duck for possible addition to Appendix I.

There was only time for a short discussion on Agenda item 7.1 relating to draft Resolution 9.2. It was proposed that a useful attachment to the Resolution would be the Statement of the Range States that was produced at a meeting in New Delhi in 2005.

Given the lack of time, there was no opportunity to discuss the question of the harmonisation of taxonomy between the Appendices of CMS and CITES (Agenda item 7.2.3). (It was subsequently proposed to discuss this matter by correspondence intersessionally.)

The Working Group briefly considered the matter of projects that would benefit from “small grant” funding should such become available, and proposed that the following would be of high conservation value, at a likely cost of €20,000 - €30,000 in each case:

1. A workshop on Spoon-billed Sandpiper, associated with a field-survey of non-breeding birds, perhaps in Bangladesh early in 2010. The translation of the new Action Plan into Asian languages would greatly assist.
2. For the Swan Goose, the organisation of an expert meeting in 2009, at a location within the range of the species, in order to finalise an existing draft Action Plan, to translate it and publish it. (A more detailed proposal was submitted to the Working Group and is available separately.)
3. A workshop to finalise, produce and translate an Action Plan on the Dalmatian Pelican, including by means of an expert meeting in one of the Range States. (A more detailed proposal was submitted to the Working Group and is available separately.)
4. Support for efforts to find any remaining individuals of Slender-billed Curlew by means of survey of passage, and particularly wintering, sites; if birds are located, the capture and satellite marking of individuals to enable the unknown breeding grounds to be located, and associated work.
5. A project on Saker Falcon, if deemed appropriate in the light of continuing discussions.

REPORT OF THE TAXONOMIC WORKING GROUP ON AQUATIC MAMMALS

Agenda Item 5.1 Concerted Actions for Appendix I species

Heredia (Spain) reported on the status of the Mediterranean monk seal in Atlantic waters. A meeting of the international working group took place in Madeira (Portugal) in June 2007. Subsequently an MoU was signed among Mauritania, Morocco, Portugal, Spain and the CMS Secretariat in Tenerife (Spain) in October 2007.

There are now 170-180 seals at the Cabo Blanco colony. In the last 2 years up to 14 individuals have been observed using open beaches in the vicinity of the breeding caves, including individuals of all age classes.

In 2006 and 2007 there were 48 and 46 pups born respectively, which is close to the average productivity before the 1997 die off (52 pups). Seventy-four percent of the pups born have survived to the first moult.

During 2008 a monk seal has been observed repeatedly around the Island of Mallorca.

All these facts justify some optimism about the recovery of the population, but close monitoring and conservation action must continue.

Schlatter (Chile) reported that there is no recent information on the franciscana reported from Brazil, Uruguay or Argentina.

He also reported on the southern marine otter and the southern river otter. The southern marine otter continues to be investigated by experts of the University Andres Bello in Central Chile (leadership Gonzalo Medina) and some NGOs. The species continues to be under threat, but several law-enforcements actions on capture and fur trade, plus the creation of recent new Marine National Parks along the Chilean coast, should ensure protection of marine coastal range fragments, especially in northern Chile. The species is assumed to be stabilized in numbers

The southern river otter also continues to be investigated by experts from the Universidad Austral de Chile (Valdivia, southern Chile) and from the Andres Bello University (central Chile) and several Wildlife NGOs. The species continues to be under threat by worsening habitat conditions (outside National Parks) in the currently reduced geographical distribution. There is no recent information from Argentina. A binational meeting was held jointly by Chile and Argentina during 2006 to update knowledge and status for the species.

The Group agreed that it would be appropriate to designate the Gangetic dolphin (*Platanista gangetica gangetica*) for Concerted Action. It was added to Appendix I at COP7. If it is so designated, an ScC focal point will need to be identified.

The Black Sea bottlenose dolphin (*Tursiops truncatus ponticus*) has been proposed for inclusion in Appendix I. In the event that the proposal is accepted by COP9, Gurielidze (Georgia) agreed to act as the ScC focal point for the subspecies.

It was noted that an ScC focal point has not been identified for the six species of great whales designated for Concerted Action at COP8: the fin, sei, sperm, southern right, blue and humpback whales. Alvarez (Australia) agreed to assume that role. He and Ewers reported on recent actions by Australia relating to five of the species.

All cetaceans (whales, dolphins and porpoises) are protected in Australian waters. Under State legislation, all cetaceans are protected in waters to three nautical miles. As part of Australia meeting its obligations under the Convention for Biological Diversity, amendments to the EPBC Act were introduced to appropriately manage the sustainable access and equitable distribution of benefits derived from genetic and biochemical resources.

Whale watching in Australia is focused predominantly on inshore dolphins, and humpback and southern right whales, which migrate relatively close to the Australian coastline. In 2005, all States and Territories and the Australian Government adopted the revised *Australian National Guidelines for Whale and Dolphin Watching*. These Guidelines establish a national framework for all jurisdictions for the regulation of interactions between people and cetaceans. Australia supports the work of the whale watching Sub-committee and in March-April 2008 hosted the IWC Intersessional Workshop for the Strategic Planning of Large-scale Whale/Dolphin Watching Research.

Whale strandings, entanglements and impacts of oil and gas exploration are major areas of focus for Australia's cetacean conservation initiatives. The most recent development is a buoyant satellite tag that can be attached to entangling material to allow the animal to be tracked until conditions are suitable. Best practice training for Government staff involved in disentanglement operations on humpback and right whales are conducted annually around the country, with updates on equipment and drawing upon case histories provided by an extended network involved in disentanglement events, including from the Northern Hemisphere.

Management tools such as the development of recovery plans and guidelines are developed at the national level to provide management measures to address key threatening processes that impact on cetacean conservation. Recovery plans for five threatened great whale species – the humpback, southern right, blue, fin and sei whales – have been adopted. The increase in world oil prices has led to an increase in proposals to identify and develop offshore oil and gas fields.

The CMS *Memorandum of Understanding for the Conservation of Cetaceans and their Habitats in the Pacific Islands Region* was signed by the Australian Government in September 2006. Capacity-building workshops held in Auckland in September/October 2006 were supported financially and by participation of the Australian Government. The workshops introduced participants from South Pacific Island countries to the latest rescue techniques for whale strandings and entanglements. In November 2007, Australia provided funding for the First Melanesian Capacity Building Training Workshop on Cetaceans in Papua New Guinea. Australia also provided funding support and attended the Pacific Islands Working Group on Whale and Dolphin Watching hosted by the Secretariat for the Pacific Regional Environment Programme (SPREP) in Auckland in April 2008.

Funding for projects has increased from AUD \$300,000 in 2004-05 to over AUD \$1 million in 2008-09. Earlier this month, the Australian Government announced that it will invest more than AUD \$6 million in 2008-09 to promote non-lethal whale research.

The Group noted that the Observer's report on the 2008 meeting of the IWC Scientific Committee (SCd15/Doc.7) suggested that the application of the highly precautionary Revised Management Procedure to contemplated management of the great whales to achieve sustainable exploitation could be construed as international Concerted Action for those species listed in CMS Appendix I; many IWC parties are also parties to CMS.

Agenda Item 5.2 Cooperative Action for Appendix II species

Schlatter reported that several NGO'S are pursuing research along the coast of Chile on the six species of South American dolphins designated by COP8 for Cooperative Actions.

Custodio (Philippines) reported that there is little new information on recent Coordinated Actions on the Southeast Asian populations of seven small cetacean species designated by COP8 for Cooperative Actions. He briefly summarized conservation status of the species, as follows:

Populations -- A situation common to all the populations within the region is the inadequate information on their population trends. There are indications of population decline in some of the species (*Neophocaena phocaenoides*, *Orcaella brevirostris*, *Sousa chinensis*) but there are also cases where the trend in population/s is unknown (*Lagenodelphis hosei*, *Stenella attenuata*, *Stenella longirostris*, *Tursiops aduncus*).

Threats: The threats to the group of dolphins can be broadly categorized as fisheries effects and habitat loss and modification including pollution and tourism development.

THREAT	SPECIES IMPACTED
Fisheries	
Tuna fisheries	<i>Lagenodelphis hosei</i> ; <i>Stenella attenuata</i> ; <i>Stenella longirostris</i>
Gill net	<i>Lagenodelphis hosei</i> ; <i>Neophocaena phocaenoides</i> ; <i>Orcaella brevirostris</i> ; <i>Sousa chinensis</i> ; <i>Stenella longirostris</i> ; <i>Tursiops aduncus</i>
Drive fisheries	<i>Lagenodelphis hosei</i> ; <i>Stenella attenuata</i> ; <i>Tursiops aduncus</i> ;
Directed take	<i>Lagenodelphis hosei</i> ; <i>Neophocaena phocaenoides</i> (in Pakistan); <i>Stenella attenuata</i> (by Japan)
Habitat loss and modification including pollution	
General	<i>Neophocaena phocaenoides</i> , <i>Orcaella brevirostris</i> , <i>Sousa chinensis</i> ; <i>Tursiops aduncus</i>
Dams	<i>Neophocaena phocaenoides</i> , <i>Orcaella brevirostris</i>
Pollution	<i>Orcaella brevirostris</i> ; <i>Neophocaena phocaenoides</i> ; <i>Sousa chilensis</i>
Tourism development	
Dolphin watching	<i>Stenella longirostris</i>
Anti-shark net	<i>Sousa chinensis</i> ; <i>Tursiops aduncus</i>
Oceanarium display	<i>Tursiops aduncus</i> (especially in the Solomon Islands)
Boat traffic	<i>Neophocaena phocaenoides</i> , <i>Orcaella brevirostris</i> ; <i>Sousa chilensis</i>

Item 5.3c *Draft Resolution 9.7 Climate Change Impacts on Migratory Species*

The Group discussed the potential impact of climate change on the narwhal *Monodon monoceros* and suggested that the Council recommend that a motion be concluded by the COP for the species given the rapid climate-change-related changes in its environment. This motion should seek to reduce anthropogenic pressures, including removals, of this species. It was suggested that a narwhal recommendation could be nested within the existing discussions of future priorities developed within Conf. 9.26: Migratory Marine Species, noting that this paper will develop into a resolution during the COP.

Quoting the IUCN Red List assessment, “Narwhals are well adapted to a life in the pack ice as indicated by the fact that there is very little open water in their winter habitat. They spend much of their time in heavy ice and are vulnerable to ice entrapments where hundreds can become trapped in a small opening in the sea ice (savssat) and die. This occurs when sudden changes in weather conditions (such as shifts in wind or quick drops in temperature) freeze shut leads and cracks they were using. When entrapped whales are discovered by hunters, they normally are killed. A recent assessment of the sensitivity of all Arctic marine mammals to climate change ranked the narwhal as one of the three most sensitive species, primarily due to its narrow geographic distribution, specialized feeding and habitat choice, and high site fidelity.” The frequency of frozen-over savssats may be increasing with arctic warming, a counter-intuitive result due to complex pack-ice dynamics.

The Group agreed that insertion of the following sentence into item 5 of the resolution after “technical advice” would be useful: “, including identification of species for priority action,”

Agenda Item 5.3e *Resolution 8.22 Adverse human influenced impact on cetaceans.*

The Group noted appreciatively the progress made in the implementation of Resolution 8.22 and endorsed the revised Secretariat program for implementation. The draft review will be circulated in early January to selected members of the Council for comments and to other expert bodies for additional input. Based on the comments received by March, the Secretariat will work with the Appointed Councillor for Aquatic Mammals to identify priority impacts and regions requiring urgent attention and develop the draft Programme of Work for Cetaceans by July. Parties will be given opportunity for comments before a revised draft will be submitted to the Standing Committee for approval.

Agenda Item 5.3f *Other Resolutions and Recommendations under development*

The Group welcomed Draft Resolution 9.19 and agreed with its major thrust and intent. However, it had suggestions for a few changes:

1. The summary of the ICES report was felt to not fully reflect the sense of the report; an alternate form of words is suggested: “Taking note of ICES report CM 2005/ACE:01 (Report of the Ad-hoc group on the Impact of Sonars on Cetaceans and Fish (AGSIC)) which recommends that further research should be conducted on this issue, including efforts to identify critical habitat, the development of techniques to detect beaked whales, further acoustic studies; and further research into the apparently non-auditory responses of deep-diving marine mammals to low- and mid-frequency sonars. “
2. It would be more effective if the sense of the various resolutions mentioned in the preamble were spelled out.

3. In the preamble, the 4th paragraph should read: “..and requests the CMS Secretariat and Scientific Council to review.....”
4. On page 2 in the preamble, it was suggested that an item be added: “Taking note of the draft research strategy developed by the European Science Foundation on the effects of anthropogenic sound on marine mammals;”
5. On page 4 in item 5, a bullet point could usefully be added: “Consider the draft research strategy developed by the European Science Foundation on The effects of anthropogenic sound on marine mammals, which is based on a risk assessment framework.
6. On page 4, in item 7, after “Committee”, the Group suggested adding “with the assistance of the Scientific Council.”
7. In the same sentence, after “this Resolution,” it is recommended that the following be added, “,including prioritization of research items,”
8. Paragraph 9 in the operational part should read “other relevant intergovernmental organizations and initiatives, such as...” Further, in the same paragraph, the reference to WATCH needs to be replaced by the following: “Small Cetaceans and Manatees of Western Africa MoU”

Agenda Item 6a&b Discussion and evaluation of proposals for amendments to Appendices I and II and recommendations concerning their adoption by COP9.

It was noted that the proposals for *Sousa teuszii*, *Phocoena phocoena* and *Stenella clymene* were discussed and endorsed by the Council at its 14th meeting; these were not further discussed, other than to note that since the current proposal for *Sousa teuszii* was submitted the species has been classified in the 2008 IUCN Red List as Vulnerable (at significant risk of extinction).

The Group discussed the remaining four proposals and recommended that they all be endorsed by the Council. It was noted that in the 2008 Red List, *Orcaella brevirostris* has changed from Data Deficient to Vulnerable, *Tursiops truncatus ponticus* (previously not classified) has been listed as Endangered, *Grampus griseus* is listed globally as Least Concern, and the West African manatee remains listed as Vulnerable. The purpose of the proposed listing of the Mediterranean population of *Grampus griseus* is to bring the CMS Appendices into harmony with those of ACCOBAMS.

The proposed emendation of the Appendix II listing of the western Mediterranean population of *Tursiops truncatus* is also for the purpose of harmonization with ACCOBAMS, and the Group recommended that this proposal be endorsed as well.

The Group noted that several of the listing proposals were developed in first draft by members of the Cetacean Liaison Group and suggested that the CLG should be encouraged to continue to provide such contributions in future.

Agenda Item 7.1 Potential new agreements

The Group agreed that efforts to pursue an agreement on cetaceans of Southeast Asia should continue, with consideration of possible inclusion of the great whales. It was also agreed that consideration of the agreement area should extend to the Indian Ocean, although questions of faunistic aspects of various potential boundaries should be reviewed.

Agenda Item 7.2.1 & 7.2.3 Taxonomic reference for aquatic mammals & harmonization with CITES

The Group discussed these two items together. Perrin provided a summary of the history of the issue in the ScC with regard to aquatic mammals. When the issue was first addressed a number of years ago, the then available edition of Wilson and Reeder was badly out of date for the aquatic mammals, and it was recommended that the more current Rice (1998) be used. The ScC took note of further taxonomic advances in following years and adopted appropriate changes in nomenclatural usage, for example for the right whales when they were divided up into three species (one of which is currently Critically Endangered and another in the Red List as Least Concern). A similar situation exists, as discussed at this meeting, for the genus *Orcaella*. There is now a new edition of Wilson and Reeder available (2005), but is was several years in production and is again out of date for the aquatic mammals. For example, it does not include some currently recognized species, such as *Orcaella heinsohni* and *Sotalia guianensis*, and does not include some recognized subspecies, such as *Stenella longirostris roseiventris* (described before the new edition went to press).

Rice (1998) is now of course also badly out of date; a large number of taxonomic advances have occurred in the last 10 years. The most current classification is that in the second edition of the *Encyclopedia of Marine Mammals*, edited by Perrin, Wursig and Thewissen and published by Academic Press. It will be released in the next two weeks. That classification incorporates all of the changes adopted by the ScC for aquatic mammals and is in harmony with usage by the International Whaling Commission and the IUCN Red List. It was agreed that it would be appropriate to now use this volume as a standard for taxonomic usage for the aquatic mammals, continuing the practice of keeping current with the taxonomy of the group, and the Working Group recommended that this be done.

While wishing to maintain current practice, the Group recognized the practical value of harmonization of the CITES and CMS lists and suggested some alternative means to achieve this. In the case of synonyms for species or subspecies (questions only of nomenclature), each convention could qualify its listing accordingly. E.g., CITES could list the sperm whale as “*Physeter catodon* (= *P. macrocephalus*)”, and CMS could list it as “*Physeter macrocephalus* (= *P. catodon*)”. Such is already the practice in some lists (e.g. the Red List). For new species and for species splits and lumpings, which deal more with taxonomy (science) than merely with nomenclature, either the listings could be similarly qualified (albeit with much more phraseology), or, as suggested by an intervention in plenary, an inter-convention panel of taxonomic experts could be convened periodically to review the lists and the relevant technical literature to decide on the best science to represent in the (harmonized) lists. The Group favored the latter alternative.

Agenda Item 7.2.2 Taxonomy of Orcaella

The recent split of *Orcaella brevirostris* into *O. brevirostris* and *O. heinsohni* was noted and the Group recommended that CMS adopt the nomenclature concordant with the split. Recognition of the existence of the two species is especially important in that one, *O. brevirostris*, is classified as Vulnerable in the IUCN Red List, with several populations listed as Critically Endangered. *O. heinsohni* is classified as Near Threatened; a strong recommendation is made in the Red List assessment that the data needed to clarify its status be collected.

REPORT OF THE WORKING GROUP ON TERRESTRIAL MAMMALS
to the 15th meeting of the CMS Scientific Council

Agenda item 5.1**Concerted Actions for selected Appendix I species/groups**

The group noted with great satisfaction the substantial progress made by Concerted Actions on Sahelo-Saharan Ungulates, Gorillas, South Andean deer, and Central Eurasian mammals. It recommended pursuing these actions and reinforcing them through two Recommendations (annex I and annex II). The possible extension of the range of the Sahelo-Saharan and Central Asian Concerted Actions was discussed and encouragement for it, conditioned by interest from the Parties concerned, is reflected in the wording of the two recommendations. The group also endorsed the proposal for new initiatives included in COP document UNEP/CMS/Conf.9.28 (Terrestrial Mammals and CMS). Attention was drawn to the need for further surveys on local populations of particularly threatened species within the scope of the Central Eurasian Concerted Action.

- **Sahelo-Saharan Concerted Action**

In the 2005-2008 triennium, many activities have taken place as part of the Sahelo-Saharan Ungulates Concerted Action, with the main focus on two poles of action, one in northern Sahara, (Tunisia and Morocco), the other in southern Sahara, (Niger), and with the highly appreciated support of France and the European Union.

In Tunisia, the main focus was on the constitution and the management of a metapopulation of all semi-captive populations of *Oryx dammah*, *Addax nasomaculatus* and *Gazella leptoceros* in the southern protected areas of Tunisia; on the in situ conservation of *Gazella leptoceros*; and on the preparation of the reintroduction of the Addax on the Oriental Great Erg. Activities included surveys, with the support of ZSL, translocation of *Oryx dammah* and *Addax nasomaculatus* to the southern protected areas (PA), capacity building for 12 professionals of the region (Tunisia, Morocco, Algeria, Senegal) management of these PAs, scientific monitoring of reintroduced populations, and a feasibility study on the reintroduction of *Addax nasomaculatus* in nature in the Oriental Great Erg.

In Morocco, two new reserves were established in southern Morocco, Safia and Mcissi reserves, where translocation of *Addax nasomaculatus*, *Oryx dammah* and *Gazella dama* and *G. dorcas* were undertaken, in partnership with NABU. A new NP “Khniouss NP” of 185.000 ha was established north of the city of Laayoune, in southern Morocco, for the restoration of the Sahelo-Saharan fauna. A national strategy for the conservation and restoration of Sahelo-Saharan ungulates was also undertaken in 2008, as part of the national implementation of the CMS SSA Action Plan.

In Niger, the main focus was put on a partnership approach with the Niger ME/LCD and NGO (Sahara Conservation Fund) in the development of the proposed Termit-TinToumma protected area, the last world viable population of Addax, and generally a hotspot for Saharan biodiversity. Main activities included ecological surveys,

development of a technical pre-classification dossier, the establishment and equipment of surveillance and protection community-brigades for the area, and identification of small local community development projects.

- **Central Eurasian Mammals Concerted Action**

A written report was submitted and is available as part of COP document (document 9.14).

In particular at this meeting, the Councillor for Syria stressed the fact that four protected areas (Talila, Al Thawra, Jabal Abdel Aziz, and Odemah) are in place in Syria and of particular importance for the reintroduction or conservation of the Arabian Oryx *Oryx leucoryx* and *Gazella subgutturosa*.

- **The Huemul or Southern Andean Deer Concerted Action**

In Chile, the species is still investigated with projects funded by International organisations. There are at least today 3 populations, one in central south (small <20 ind), one in south recently reintroduced and less than 5 individuals, and austral Chile, the main population. We still need to assess the population along the archipelagos. The species continues to be threatened officially (CONAMA) and CONAF has published booklets to reorient research action for the country. A bilateral meeting was held in the last years in Argentina for updating info and research in the species distributional range. No news has been recently given by Argentina on this species.

- **Gorillas**

The Secretariat and the Scientific Council helped the Range States negotiate and conclude an Agreement for the four Gorilla taxa in 2007. The Agreement came into force in June 2008, and 6 of the 10 Range States are already Parties to the Agreement. The first MoP will take place in Rome on the 29/11/2008.

The group on Terrestrial Mammals recommends that the Scientific Council advises the COP to empower the Secretariat and the Scientific Council to take all necessary measures to ensure the continued implementation of the Gorilla Concerted Action including servicing of the Agreement concluded to support it.

Agenda item 5.2

Cooperative Actions for Appendix II species

The group noted the evaluation of Cooperative actions included in COP document UNEP/CMS/Conf.16 (Operational instruments of the Convention on Migratory Species) and, until a decision is reached on possible changes of policy regarding them, proposes to continue existing efforts with the support of a recommendation (annex III), and to incorporate relevant species within the Concerted Action for Sahelo-Saharan Megafauna and Central Eurasian Mammals, on the model of recommendation 8.29.

The group also reviewed the progress in existing actions (annex IV)

- **West African Elephant Cooperative Action**

The WG noted the good progress made on the African Elephant Cooperative Action. Cooperative work is progressing among the 12 Parties of the MoU signed in Nairobi at last CoP. Wildlife migration corridors have been established between Togo, Burkina Faso and Ghana. Further corridors are being developed between Ghana and Côte d'Ivoire. Liberia and Guinea are currently working to finalize their National Conservation Strategy. Two meetings were held in Mali and Kenya in 2007 and 2008 to discuss the way forward for the African Elephant Coalition. A meeting is scheduled for Accra (Ghana) 2009.

The Councillor for Chad requested information on progress of Concerted Action planning for the central African populations of the Elephant and insisted on an extension of the West African instrument.

Agenda item 6a and 6b

Proposals to amend Appendices

The group fully supported the recommendation of inclusion of *Acinonyx jubatus* in Appendix I, and *Lycan pictus* and *Saiga tatarica s.l.* in Appendix II. It also recommends that *Acinonyx jubatus* be included in both the Concerted Action on Eurasian Mammals (Asiatic populations) and on Sahelo-Saharan megafauna (North African populations). It therefore proposed the placing of *Acinonyx jubatus* on the list of Concerted Action species. It further noted that *Saiga tatarica sensu lato* will be part of the Eurasian Mammals Concerted Action.

The group could not support the proposal to list *Ammotragus lervia* in Appendix I, as this would preclude conservation-favourable national actions that include wise use of the species. The group notes that the wording of the recommendation on Sahelo-Saharan megafauna, conceived to involve the entire megafauna of the Sahelo-Saharan region, will in any case insure that the measures that might be deemed necessary for the conservation of the species are taken, without excluding those that might entail wise use.

Agenda item 7.1

Potential new agreements

The group reviewed the proposed resolution 9.2, in the context of Terrestrial Mammals, and evaluated that it was satisfactory, with the following amendments:

1. Add the recommendation to develop a legally binding or non-binding instrument to support the Concerted Action on Central Eurasian Mammals (cfr recommendation in Annex II) and note that actions in favour of the Mongolian Gazelle will be included both in that instrument and in the Action Plan for the Concerted Action.

2. Insist on the importance of the current development of the proposed Protected Area for the Termit-TinToumma, in complete partnership between the Niger Government (MELCD),

CMS and its major partners (France through the FFEM, the European Union) and one NGO, the Sahara Conservation Fund.

3. Sub-Saharan African bats:

Note the need to in particular conduct preparatory studies in key Range States.

Agenda item 7.2.1 and 7.2.3

Taxonomic reference

The working group considers there is no reason to modify the Scientific Council recommendation to use Wilson and Reeder 2005 as a reference for Terrestrial Mammals. The group noted that nomenclature is only a communication tool, and felt that, for international conventions with legal implications at national level, stability and reference to a universally accessible standard were essential. It insisted on the fact that adherence to a fixed reference for regulatory purposes did in no way preclude the use of the best available and most recent taxonomic information in selection of populations to emphasize in conservation efforts, list on appendices or make the object of concerted actions and other initiatives.

Other items:

- A proposed recommendation on the conservation of Asian big Cats, some of which already on CMS Appendices, that NGOs have asked the Scientific Council to introduce to the COP, has been discussed, and its introduction is supported by the WG (and is listed as Annex IV to this report).
- The Group also discussed proposed small grant projects, and established a list of priorities that will be appended to the report and that includes in particular Gorillas (implementation of the Action Plan), the African Elephant, the preparation of new initiatives and the strengthening of the Central Eurasian mammals Concerted Action.

Annex 1

Draft Recommendation 9

CENTRAL EURASIAN ARIDLAND MAMMALS

(Submitted by the Scientific Council)

Recognising that the large mammal fauna of the arid lands of Eurasia and North Africa have many species with threatened populations that are in a profoundly unsatisfactory state of conservation;

Conscious that the arid lands, with their exceptional natural and cultural heritage and their unique migration phenomena, are a crucial area for the action of the Convention;

Grateful to the Republic of Mongolia for drawing attention to the particular plight of the fauna of the temperate arid lands of Eurasia;

Welcoming the support of the other Parties situated within the temperate desert, semi desert, steppe and associated mountains of Eurasia;

Recalling that several species found in that biome are on Appendix I of the Convention;

Recalling also that several more species are on Appendix II of the Convention;

Noting that recommendation 8.23 adopted by the Conference of the parties at its Eighth Meeting (Nairobi, 20-25 November 2005) requested that the Scientific Council, in cooperation with the Secretariat, the Republic of Mongolia and other concerned Parties initiate a CENTRAL EURASIAN ARIDLAND CONCERTED ACTION and associated Cooperative Action, that would in due course cover all threatened migratory large mammals of the temperate and cold deserts, semi-deserts, steppes and associated mountains of Eurasia.

Noting with satisfaction the progress made by this Central Eurasian Aridland Concerted Action;

Further noting with satisfaction the progress made by single-species Convention instruments operating in the region; and

Acknowledging the recommendation of the 14th and 15th meetings of the Scientific Council that CENTRAL EURASIAN ARIDLAND CONCERTED ACTION and associated Cooperative Action be continued and further reinforced;

The Conference of the Parties to the Convention on the Conservation of Migratory Species of Wild Animals

1. *Requests* the Scientific Council, in cooperation with the Secretariat, the Republic of Mongolia and other concerned Parties to pursue the CENTRAL EURASIAN ARIDLAND CONCERTED ACTION and associated Cooperative Action, that will in due course cover all threatened migratory large mammals of the temperate and cold deserts, semi-deserts, steppes and associated mountains of Central Asia, the Northern Indian sub-continent, Western Asia, the Caucasus and Eastern Europe. The Action will include an Action Plan and status reports for all species concerned, and will initially be centred on *Camelus bactrianus*, *Bos grunniens*, *Uncia uncia*, *Cervus elaphus bactrianus* and subject to its inclusion on Appendix I, *Acinonyx jubatus*, for the CONCERTED ACTION; and on *Equus hemionus* s.l., *Gazella subgutturosa*, *Procapra gutturosa*, and, subject to its inclusion on Appendix II, *Saiga tatarica* s.l. for the Cooperative Action. The action will also take into account, and link to, other existing Convention instruments as well as actions already taken by Range States and Convention partners;

2. *Encourages* Range States and other interested Parties to prepare, in cooperation with the Scientific Council and the Secretariat, the necessary proposals to include in Appendix I or Appendix II threatened species that would benefit from the Action;
3. *Encourages* the Secretariat to pursue efforts to bring into the Convention Range States of the Central Eurasian fauna that are not yet Parties, and to liaise with other concerned Conventions to enhance synergies;
4. *Urges* non-Party Range States to support the Action, in recognition of its global significance;
5. *Appeals* to Range States and other interested Parties to support the development of a Memorandum of Understanding or other binding or non binding instruments to comfort the CENTRAL EURASIAN ARIDLAND CONCERTED ACTION and its Action Plan;
6. *Encourages* the Scientific Council and the Secretariat to envisage, in consultation with the Parties concerned, an extension of the action area to the South-western Eurasian hot deserts and associated biomes;
7. *Requests* the Scientific Council and the Secretariat to report on the progress of the action to the next Conference of the Parties.

Annex 2

Draft Recommendation

SAHELO-SAHARAN MEGAFUNA

Adopted by the Conference of the Parties at its Ninth Meeting (Rome, 1-5 December 2009)

Recognising that the large mammal fauna of the arid lands of North Africa and Eurasia have many species with threatened populations that are in a profoundly unsatisfactory, and often critical, state of conservation;

Conscious that the arid lands, with their exceptional natural and cultural heritage and their unique migration phenomena, are a crucial area for the action of the Convention;

Recalling that several species found in that biome are on Appendix I of the Convention;

Noting that recommendation 4.5 adopted by the Conference of the parties at its Fourth meeting (Nairobi, 7-11 June 1994) requested that the Scientific Council, in cooperation with the Secretariat, establish a Concerted Action for Sahelo-Saharan Ungulates.

Noting with satisfaction the progress made by this Sahelo-Saharan Ungulates Concerted Action;

Acknowledging the recommendation of the 14th and 15th meetings of the Scientific Council that SAHELO-SAHARAN UNGULATES CONCERTED ACTION be continued and extended to other species of large mammals occurring within the area of the concerted action;

The Conference of the Parties to the Convention on the Conservation of Migratory Species of Wild Animals

1. *Requests* the Scientific Council, in cooperation with the Secretariat, and concerned Parties to pursue a SAHELO-SAHARAN MEGAFUNA CONCERTED ACTION that will in due course cover all threatened migratory large mammals of the temperate and cold deserts, semi-deserts, steppes and associated mountains of the Sahelo-Saharan region. The Action will include an Action Plan and status reports for all species concerned, and will be centred on *Oryx dammah*, *Addax nasomaculatus*, *Gazella dama*, *Gazella leptoceros*, *Gazella cuvieri* and *Gazella dorcas*, and subject to its inclusion on Appendix I, *Acinonyx jubatus*.

2. *Encourages* Range States and other interested Parties to prepare, in cooperation with the Scientific Council and the Secretariat, the necessary proposals to include in Appendix I or Appendix II threatened species that would benefit from the Action;

3. *Encourages* the Secretariat to pursue efforts to bring into the Convention Range States of the Sahelo-Saharan fauna that are not yet Parties, and to liaise with other concerned Conventions to enhance synergies;

4. *Urges* non-Party Range States to support the Action, in recognition of its global significance;

5. *Appeals* to Range States and other interested Parties to support the development of a Memorandum of Understanding or other binding or non binding instruments to comfort the SAHELO-SAHARAN CONCERTED ACTION and its Action Plan;

6. *Encourages* the Scientific Council and the Secretariat to envisage, in consultation with the Range States concerned, an extension of the action area to the deserts of the Horn of Africa and associated biomes;

7. *Requests* the Scientific Council and the Secretariat to report on the progress of the action to the next Conference of the Parties.

Annex 3

DRAFT RECOMMENDATION TO THE 9TH MEETING OF THE CONFERENCE OF PARTIES TO CMS

TIGERS and OTHER ASIAN BIG CATS

AWARE that wild populations of tigers and other Asian big cat species (snow leopard, *Uncia uncia*, clouded leopard, *Neofelis nebulosa*, all subspecies of leopard *Panthera pardus* within its Asian range, Asiatic cheetah *Acinonyx jubatus venaticus* and Asiatic lion, *Panthera leo persica*) are threatened by the combined effects of poaching and habitat loss (fragmentation and destruction) caused by anthropogenic disturbances;

CONSCIOUS that three subspecies of *Panthera tigris* have become extinct within the last 50 years;

CONCERNED that, despite actions taken by Range States, which have stemmed the decline of some sub-populations, overall, the populations of all sub-species of tiger, *Panthera tigris*, continue to decline in the wild;

FURTHER CONCERNED that tiger habitats throughout India, Indochina, and Southeast Asia are now 40 percent less than was estimated in 1995, and 90% less than was estimated at the beginning of the 20th century;

ACKNOWLEDGING that, where wild tigers still exist, their habitat often encompasses national borders, such as the Sundabans between India and Bangladesh, between the far east of Russia, north Korea and northeast China, between southern China and Laos, between Cambodia, Vietnam and Laos, between Myanmar and Thailand, between India and Bhutan and between India and Myanmar, but that little is known about their movements across such borders. However, the movement of wild tigers between Nepal and India is well documented in several locations;

ACKNOWLEDGING that tigers and other Asian big cat species depend on contiguous habitat with ample prey species to survive and that at the same time tigers and other Asian big cat species support the integrity of these ecosystems;

FURTHER ACKNOWLEDGING that tigers, other Asian big cat species, and the conservation of their habitat are adversely affected by differences between the policies, laws and regulations in adjacent countries;

RECOGNIZING that strengthened cooperation between Range States, together with financial support, is expected to contribute to more effective conservation of tigers and other Asian big cat species;

NOTING that one Asian big cat species, the snow leopard *Uncia uncia* is listed in Appendix I of CMS.

FURTHER NOTING that the Central Eurasian Aridland Concerted Action established by the Conference of the Parties at its Eighth Meeting (Nairobi, 20-25 November 2005) through RECOMMENDATION 8.23 includes five Asian big cat species, three, the snow leopard *Uncia uncia* the Asiatic lion *Panthera leo persica* and the Asiatic cheetah *Acinonyx jubatus*

venaticus over their entire range, and two, the tiger *Panthera tigris* and the leopard *Panthera pardus* over substantial parts of their range.

ALSO NOTING that all sub-species of *Panthera tigris* and other Asian big cat species have been listed in Appendix I of the Convention on International Trade in Endangered Species (CITES) since 1975 (with the exception of the Asiatic lion and the Amur tiger, *Panthera tigris altaica*, which were included in 1977 and 1987, respectively) prohibiting commercial international trade in the species and their parts and derivatives;

RECALLING Resolution Conf. 12.5, adopted by the Conference of the Parties to CITES at its 12th meeting, relating to conservation of and trade in tigers and other Asian big cat species listed in Appendix I of CITES;

FURTHER RECALLING that CITES Resolution Conf. 12.5 states that long-term solutions to the protection, conservation and management of tigers and other Asian big cat species and their habitats require the adoption of bold and innovative actions based on a sound base of information;

ACKNOWLEDGING the work of the Global Tiger Forum and the actions and reports of members of the Forum in reviewing the threats to the long-term survival of tigers in the wild and the recommended measures to address those threats;

COMMENDING the positive actions taken by some Range States to address tiger conservation issues and to facilitate cooperation with other Parties, but aware that much more far reaching measures are required;

CONVINCED that listing tigers and, as appropriate, other Asian big cat species in the CMS Appendices will elevate the profile of the species and promote international and regional collaboration for their protection;

The Conference of the Parties to the Convention on the Conservation of Migratory Species of Wild Animals

1. URGES Parties and Range States to enhance mutual transboundary cooperation for the conservation and management of tigers and other Asian big cat species throughout the species' range and increase financial outlay for conservation of Asian big cat species;
2. CALLS UPON the Scientific Council to review conservation and management of tigers and other Asian big cat species and to propose any appropriate urgent actions required to the Conference of the Parties at its Tenth Meeting, such as listing in the CMS Appendices and preparation of instrument(s) to enhance cooperation among Range States and, where necessary, action plan(s);
3. ASKS the Secretariat to explore the development of memoranda of understanding or other cooperation instruments with organizations active in tiger and other large felid conservation to further protection and conservation of wild tigers and Asian big wild cats in the wild

REPORT OF TAXONOMIC WORKING GROUP ON MARINE TURTLES
Rome, 27-28 November 2008

The Marine Turtle Working Group met during 27-28 November 2008. Councillors from Australia, Croatia, Kenya, Philippines, Senegal, Syria and the Appointed Councillor made the following observations and recommendations in relation to agenda items under discussion at the 15th Meeting of the Scientific Council:

Agenda item 4: Small scale projects

Small scale marine turtle projects previously funded by CMS, in addition to producing significant results at the time, have catalysed on going work beyond the initial projects.

It is strongly recommended that the CMS small scale project grants be continued.

Agenda item 5.1: Concerted actions for Appendix 1 species

Marine turtle agreements

- **Atlantic Coast of Africa:** This Agreement has been re-invigorated with a secretariat (URTOMA) established in Senegal:
 - 23 signatory states from entire Atlantic Coast of Africa from Morocco to South Africa.
 - 2nd Meeting of Signatory States in Dakar, 5-8 March 2008
 - Amendments of text of Agreement were proposed to allow joining of the Agreement by European countries and others involved in turtle conservation projects in the region.
 - Additions were made to the Terms of Reference to allow the appointment of Scientific Councillors.
 - Recommendation were made to CMS to support the continuing function of URTOMA.

- **Indian Ocean South East Asia:** This Agreement continues to be extremely active, now with 28 signatory states (Yemen being the most recent to sign) and active turtle conservation projects in many signatory states and growing engagement in collaborative projects across international boundaries.
 - 5th Meeting of Signatory States IOSEA Marine Turtle MoU was hosted in Bali, 20-23 August 2008 by the Indonesian Ministry of Marine Affairs and Fisheries and the Ministry of Forestry with support from WWF-Indonesia and the IOSEA Secretariat.
 - Strategic Planning meeting is being organised for 13-14 February 2009 in Brisbane, Australia in conjunction with the 29th International Sea Turtle Symposium.
 - UAE has offered to fund a co-ordination unit that will encompass the Western area of IOSEA as part of coordination of the MoU on Dugong and African Eurasian Raptors.

The Sulu-Sulawesi Marine Eco-region of Malaysia, Indonesia and Philippines supports the marine turtle breeding populations which are regarded as flagships for conservation in these countries.

- The broader Coral Triangle Initiative covering Malaysia, Indonesia, Philippines, Timor Leste, Papua New Guinea and Solomon Islands will further benefit marine turtle conservation in the region.

Agenda item 5.3: Other resolutions and recommendations

Sustainable use (Resolution 8.1), Climate change (Resolution 8.13) and Fisheries bycatch (Resolution 8.14) are being addressed currently by CMS within COP9.

Sustainable use

However, while the discussion continues on the issue of sustainable use,

- Commercial harvesting and utilisation of marine turtles in some Southeast Asian countries is re-emerging as a significant threat for their conservation.

There has been:

- Numerous examples of large foreign vessels specifically equipped for fishing for turtles to produce turtle products for the souvenir trade have been documented recently. Illegal foreign vessels fishing for turtles have been ceased in Philippines, Malaysia and Indonesia in recent years.
- TRAFFIC in recent years has documented a resurgence of substantive trade in turtle products in some Asian countries.

This issue warrants serious consideration by CMS signatory states in the region with respect to conservation of regional turtle population.

- Unsustainable directed harvest, often in the context of traditional use is wide spread particular across the continents of Africa, Asia, and Australia and across the island nations of the Indian Ocean and Pacific Oceans. The issue of sustainable take of turtles within the context of traditional use warrants immediate attention.
 - Technical advice derived from past management experience in many countries and population modelling of sustainable utilisation of marine turtles needs to be translated to “plain language” that can be understood by non-technically-skilled hunters.
 - Alternate activities for deriving a livelihood need to be considered when there is unsustainable take of turtles for local trading.

Fisheries bycatch

For foreign fishing vessels operating in developing countries, the view was expressed that they should be required to:

- implement effective bycatch reduction practices,
- provide financial and/or technical support to the conservation of marine turtles and mammals being negatively impacted by their fishing activities.

Agenda item 5.3f: other resolutions

CMS/Resolution 9.19. With respect to “other biota”, the Marine Turtle Working Group notes that this resolution has relevance to underwater noise negatively impacting on marine turtles.

Back ground information in support of this conclusion: Based on extrapolations from a small sample of caged *C. caretta* and *C. mydas* exposed to air-gun signals, it has been estimated that a seismic vessel operating 3D air-gun arrays in 100–120m water depth should impact marine turtles by producing behavioural changes at about 2km range and avoidance at around 1km range (McCauley *et al.* 2000). Limpus (2008) concluded that seismic surveys are not likely to cause direct mortality with marine turtles. However, the

above study provides a basis for recommending that a buffer zone of at least 2km radius should be maintained between seismic surveys and significant aggregations of marine turtles such as inter-nesting, courtship or dense foraging aggregations. The highest priority would be to avoid causing disruptive behaviour for the turtles during the time-limited reproductive period.

McCauley, R. D., Fewtrell, J., Duncan, A. J., Jenner, C., Jenner, M-N., Penrose, J. D., Prince, R. I. T., Adhitya, A., Murdoch, J. and McCabe, K. (2000). Marine seismic surveys: Analysis and propagation of air-gun signals; and effect of air-gun exposure on humpback whales, sea turtles, fishes and squid. In 'Environmental implications of offshore oil and gas development in Australia: further research.' (APPEA Secretariat.) pp. 364–521. (Australian Petroleum production and exploration Association Limited: Canberra.)

Limpus, C. (2008). A biological review of Australian marine turtles. 2. Green turtle, *Chelonia mydas* (Linnaeus). (Queensland Government Environmental Protection Agency: Brisbane.)

Agenda item 6.

IUCN red listing: The IUCN conservation status (Red list) of marine turtle species is being reviewed by the IUCN SSC Marine Turtle Specialist Group. It is expected that these reviews will be completed before CMS SC16.

Recently completed Red List status reviews:

- *Eretmochelys imbricata*: Critically endangered (no change)
- *Lepidochelys olivacea*: Vulnerable (down listed from endangered)

Currently being reviewed:

- *Natator depressus*
- *Lepidochelys kempii*

It is recommended that the consequences for CMS listings for marine turtles resulting from any changes in IUCN Red List status be considered at SC16.

Agenda item 7.1:

There is a need for CMS to engage in Marine Turtle conservation actions across all ocean basins.

- With respect to the Pacific Ocean basin (CMS/conf.9.26/Rev 1), an opportunity will occur for CMS secretariat and CMS party representatives to meet with representatives from SPREP countries who will gather for a 2-day SPREP Regional Meeting, 15-16 February 2008 in conjunction with the 29th International Sea Turtle Symposium, Brisbane during 17-19 February 2009.
- Marine turtle conservation in the Mediterranean would benefit from a formal link between CMS and the numerous other conservation initiatives within that Sea. This could improve the framework within which CMS member countries are implementing their turtle conservation initiatives.
 - For example, Croatia declared a special marine reserve in 2006 in Cres-Losinj Archipelago in Northern Adriatic. This reserve will function for 3 years and is supported by in-water turtle studies.

One marine turtle species, *Lepidochelys kempii*, is not addressed by any existing concerted action. This species primarily inhabits the Gulf of Mexico. Until recently, no range states for this species have been CMS members. No recommendation is made at this time for development of a concerted action for *L. kempii*, given that the species is in a favourable recovery mode in response to current management regimes in the region.

Agenda item 7.2.3: Harmonising the taxonomy between CMS and CITES Appendices

It is not considered necessary to make any nomenclature changes with respect to marine turtle.

Agenda item 7.5: other threats to migratory species and their habitats.

Marine debris

Marine debris is a significant issue with respect to marine turtle mortality and should be included in the list of “Impacts and threats to migratory species in the marine environment” (Section IV in CMS/Conf.9.26/Rev 1)

Turtle mortality resulting from interaction with marine debris increasingly is being recognised to pose multiple threats to turtle conservation that require international solutions. The international issues result from:

- international migratory behaviour of the turtles and
- dispersal by ocean currents of marine debris across national boundaries.

There are two broad categories of marine debris from different origins that act through different pathways to cause turtle mortality:

- entanglement in “ghost nets” (lost/discarded net from fisheries) and
- ingestion of synthetic debris.

Both of these mortality factors are difficult to quantify where mortality occurs in open seas in the absence of human presence. Each of these mortality factors has the potential to cause unsustainable mortality for multiple species/sub-population of marine turtles.

Marine debris warrants inclusion among the significant threatening process impacting the world’s marine turtles. Action is needed to reduce the impacts to sustainable levels. It is recommended that a resolution for action to reduce the impact of marine debris on marine turtles be developed for consideration at SC16.

**REPORT OF TAXONOMIC WORKING GROUP ON FISH
NOVEMBER 28, 2008**

The CMS Scientific Council Taxonomic Working Group on Fishes held its second formal meeting on November 27, 2008. The agenda for the Taxonomic Working Group on Fishes included agenda item 5.2 (Cooperative Actions for Appendix II species), and agenda item 6a (Discussion and evaluation of proposals for amendments to Appendices I and II of the Convention), agenda item 6b (Conclusions and Recommendations to the Conference of Parties), agenda item 7.1 (Potential new Agreements), and agenda item 7.2.3 (Harmonization of taxonomy between CMS and CITES).

Agenda item 5.2: Cooperative Actions for Appendix II species

The Taxonomic Working Group on Fish did not have any formal oral/written reports from species focal points. The Councilor for Norway, Oystein Storkersen, made a recommendation that CMS work more closely with CITES on the protection of sturgeon. He noted that CITES devotes substantial resources to sturgeon management and that the CMS Appendices include many species of sturgeon. Other councilors suggested that CMS begin a dialogue with CITES about possible options for collaboration regarding protection of sturgeon.

Agenda item 6a: Discussion and evaluation of proposals for amendments to Appendices I and II of the Convention.

Appendix II. *Isurus spp.*, *Lamna nasus*, and *Squalus acanthias*

The Taxonomic Working Group on Fish considered three proposals for 4 species of migratory sharks: the shortfin and longfin mako (combined into one proposal), the porbeagle (*Lamna nasus*) and the spiny dogfish (*Squalus acanthias*). These four migratory shark species are all categorized as Vulnerable by IUCN.

Croatia submitted the proposal for the shortfin and longfin mako proposal; the European Community submitted the proposals for the porbeagle and spiny dogfish. It should be noted that the proponent for the porbeagle and spiny dogfish proposals was not present in the Taxonomic Working Group on Fish. As a consequence, no one present at the ScC15 Taxonomic Working Group on Fish had worked directly on the development of the porbeagle or spiny dogfish proposals.

The shortfin and longfin mako (*Isurus spp.*)

The shortfin and longfin mako (*Isurus spp.*) are highly migratory shark species that occur throughout tropical and temperate seas worldwide. The species have been listed as Vulnerable by IUCN due to major declines in the abundance. Intensive and largely unregulated fisheries have lead to high rates of mortality throughout the sharks range.

The Taxonomic Working Group on Fish agreed that shortfin and longfin mako are migratory species of unfavorable conservation status that would benefit from international cooperation on their protection and recommended that the species be considered for inclusion on Appendix II of the Convention.

The porbeagle (*Lamna nasus*)

The porbeagle (*Lamna nasus*) is a large, highly migratory species that occurs in the temperate North Atlantic and Southern ocean waters. It is slow growing, long-lived, and has a generation period of 20-50 years. Abundance data is only available for the Northwest Atlantic population where the population size is estimated to be 21-24% of virgin numbers. The IUCN Red List Assessment for the Northeast Atlantic stock is Critically Endangered. The IUCN Red List assessment for Northwest Atlantic is Endangered; the IUCN Red List assessment for the southern hemisphere stock is Near Threatened.

The Taxonomic Working Group on Fish could not reach consensus regarding the conservation status of the porbeagle. Members of the Group were unanimous in their support of listing of the North Atlantic populations due to the unfavorable conservation status of these populations. Some councillors felt that there was not enough information on the conservation status of southern hemisphere populations to warrant the listing of southern stocks.

*The spiny dogfish (*Squalus acanthias*)*

The spiny dogfish (*Squalus acanthias*) is a small, migratory shark of the shelf seas of the northern and southern hemispheres. The distribution of the spiny dogfish is fragmented into distinct populations separated by deep ocean tropical waters. Although naturally one of the most abundant sharks in the world, it is also one of the most vulnerable due to heavy exploitation and the one of the lowest population growth rates for any sharks species. The IUCN Red List Assessment for the Northeast Atlantic stock is Critically Endangered due to reductions in population size of exceeding 80%. The IUCN Red List assessment for Northwest Atlantic is Endangered due to reductions in population size of exceeding 50%. The IUCN Red List assessment for the Northeast Atlantic is Vulnerable and the IUCN Red List assessment for Australasian and South African stocks is Least Concern.

The Taxonomic Working Group on Fish could not reach consensus regarding the conservation status of the spiny dogfish. Councilors were unanimous in their support of listing of the Northeast Atlantic population (as distinct and endangered) but some councilors felt that there was not enough information on the abundance and conservation status of spiny dogfish to warrant the listing of southern hemisphere stocks.

Following the discussions of the Taxonomic Working Group on Fish scientific councilors from Argentina, Chile, Costa Rica, Panama, Paraguay, and Uruguay submitted the following written comment on the proposed inclusion of spiny dogfish (*Squalus acanthias*) and porbeagle (*Lamna nasus*):

“There are no studies that support the inclusion of the Central and South American populations of these two shark species as indicated in the document UNEP/CMS/Conf.9.29. However we support and understand the arguments for the inclusion of the northern hemisphere populations of both species. We ask the CMS secretariat to promote future studies for southern hemisphere populations of both species”.

Agenda Item 7.1: Potential new Agreements (incl. MoU's and Actions Plans)

Re: Recommendation to COP9 concerning the further elaboration of draft Resolution 9.2 “Draft Resolution on Priorities for CMS Agreements”.

The Scientific Council for Australia requested changes to Resolution 9.2 “FISH”, specifically section (c) “Sharks” paragraph (iv) should be removed and paragraph (v) should be edited to read “Urges range states to work toward assuring the 2nd meeting on this key initiative achieves a strong framework upon which to finalize the instrument in the short term”.

Agenda Item 7.2.3: Harmonization of the taxonomy between CMS and CITES Appendices

Taxonomic Working Group on Fish members felt that harmonization of the taxonomy between CMS and CITES may not be practical.

Migratory Freshwater Fish Review for the Convention on Migratory Species

The CMS has requested a report on the conservation status of migratory freshwater fish to assess which species/populations are 1) threatened, 2) migratory, and 3) likely to benefit by listing under the Convention for Migratory Species. This report will cover all species of migratory freshwater fish, excluding sturgeon and salmon, which are already well covered under other management instruments. Assessments will concern entire species and/or their individual populations, as it might be appropriate. Assessments will be based on available knowledge from previous studies as well as consultation with members of the IUCN / WI Freshwater Fish Specialist Group.

The aims and objectives of the report/review include:

1. Carry out a review of freshwater fish to assess migratory status (with respect to CMS definition of migratory species), conservation status and distribution.
2. Determine which species/populations are most likely to benefit from listing under the Convention for Migratory Species.
3. Prepare a report that identifies which freshwater fish species/populations are, or are likely to be migratory according to the CMS definition of migratory species, and those among them, which are likely to benefit from inclusion in the appendices of the Convention.

I would like to express my appreciation to all those that participated in the Working Group. Barry Baker chaired the working group. Dr. Zeb Hogan, CMS Appointed Councillor for Fish, prepared this report.

Participants:

Zeb Hogan (Appointed Councillor – Fish)
Barry Baker (Appointed Councillor - Bycatch)
Oystein Storkersen (Norway)
James Williams (United Kingdom)
Jose Yanez (Chile)
Daniel Blanco (Argentina)
Jelena Kralj (Croatia)
Franco Alvarez (Australia)
Andreas Kruess (Germany)
Richard Bagine (Kenya)

Appendix I: Comments of the population status of southern populations of porbeagle (*Lamna nasus*) and spiny dogfish (*Squalus acanthias*)

Porbeagle (*Lamna nasus*)

Southern Ocean porbeagles are genetically distinct from those in the north Atlantic. The southern animals are much slower growing, longer lived (and smaller) than their northern cousins. Their slower growth and greater longevity makes them biologically even less resilient to overfishing than the northern stocks. We know how very vulnerable the northern stocks are and how seriously depleted they have been.

Longline tuna and swordfish fleets in the southern hemisphere take a significant partially utilised bycatch. Only limited trend data are available, including over 90% declines in landings by the Uruguayan longline fleet in the southwest Atlantic.

Porbeagle are an important bycatch of Japanese longliners and probably of the pelagic fishing fleets of other countries fishing in the southern Indian Ocean and elsewhere in the Southern Hemisphere, where information on catches is poor and may be little-utilized except for fins. The fishery is being exploited above the optimal yield/ effort which is believed to be sustainable in the long term, with no potential room for further expansion and a higher risk of stock depletion/collapse; Catches are well below historical optimal yields, irrespective of the amount of fishing effort exerted.

There is no management for shared migratory stocks of porbeagle in the southern oceans, and no obvious prospect of management being introduced. They are taken in various fisheries, primarily as a bycatch but also targeted. Their high value means that the bycatch is utilised.

Spiny Dogfish (*Squalus acanthias*)

Unregulated and expanding target and bycatch fisheries take spiny dogfish in South America, where population declines are reported. New Zealand manages the species, which is taken in target and bycatch fisheries, through its Quota Management System. There is only limited fishing pressure in Australia and South Africa, with most catches discarded.

South America *Squalus acanthias* is, together with the similar shortspine spurdog *S. mitsukurii* and shortnose spurdog *S. megalops*, one of the more important coastal commercial species in Brazil, where landings of the genus have declined considerably. It is also taken as bycatch in mixed demersal fisheries and the target fishery for *Lophius gastrophysus*. Unregulated and expanding target and bycatch fisheries take spiny dogfish in Uruguay and Argentina, where declines of ~50% have been reported (Massa et al. 2002). Patagonian trawlers fishing for hake and shrimp take a bycatch of spiny dogfish. Rising effort in these fisheries and a lack of bycatch control is considered to be a threat to this and other elasmobranch populations in the region (Van Der Molen et al. 1998). As in so many other regions, pregnant females are commonly targeted. The South American stocks are assessed as Vulnerable, but may prove to be Endangered when a more detailed regional review can be undertaken.

Recent information makes it clear that the small sharks that have made up a large proportion of Argentinean shark catches (originally *Galeorhinus galeus* and an endemic south American shark *Mustelus schmitti*) are now so seriously depleted that fishermen are now targeting and landing *Squalus acanthias*. However, these landings are often not recorded accurately by species, so it is extremely difficult to monitor trends.

BY-CATCH WORKING GROUP REPORT – ScC15

The Bycatch Working Group met to discuss progress on bycatch issues since ScC14, to agree possible recommendations to COP9 in relation to draft Resolution 9.18 on bycatch, and to discuss and agree further work on bycatch matters.

Progress on Bycatch Councillor Work Program

The Bycatch Councillor provided a report on progress in implementing the Bycatch Councillor's Work Program since ScC14, which is provided below:

As noted in the report of the BWG to ScC14 there is a high workload associated with addressing the bycatch issue, and the complexities associated with this threat. It noted at that time that the task was beyond the capacity of one person, and that the Appointed Councillor would need strong support from others if significant progress was to be made. Due to high workload by both the Scientific Officer and the Appointed Councillor since ScC14, progress has not been as rapid as hoped but, nonetheless, some significant advances have been made with respect to Work Program Items 3, 4, 5 and 6, in particular through working with CMS's daughter Agreement ACAP. As a result, most of my work has focussed on seabird bycatch issues.

Conduct a study to assess bycatch in global fisheries (Work Program Item 2)

At ScC14 it was agreed that CMS should conduct a study to assess bycatch in global fisheries. This study was to assess the available information on bycatch of seabirds, marine turtles, sharks and marine mammals, focusing particularly on CMS-listed species and the importance of bycatch as a threat to migratory species; it was also to provide an overview of priority fisheries, regions and species which will benefit from international action through CMS. Draft specifications for the review were submitted to the meeting for consideration as document CMS/ScC14/Doc.19. The United Kingdom kindly provided UK15,000 as a contribution toward this project.

Subsequent to ScC14, the Scientific Officer and I developed Terms of Reference for this study, and a suitable consultant was sought to carry out the study. Unfortunately, no suitable proposals received, and the study has not commenced. In discussions with the Scientific Officer, we now believe that it will be necessary to re-shape the Terms of Reference so that they reflect the resources available. Advice from members of the Bycatch Thematic Group of potential suitable candidates for this project would be appreciated.

Work with FAO and relevant RFMOs (Work Program Items 3, 10)

FAO and RFMOs have direct management responsibility for most of the global high seas fisheries. The Scientific Council agreed at ScC14 that attendance at key meetings of these bodies is essential to influence adoption of mitigation strategies and implementation of independent observer programs, which are considered necessary for improving knowledge of bycatch issues.

The FAO recently held an Expert Consultation (Bergen, Norway, 2-5 September 2008) to develop Best Practice Guidelines (BPG) for the International/National Plan of Action-Seabirds (IPOA/NPOA-Seabirds). I was invited as a technical expert to participate in the meeting, with other attendees including representatives from Australia, Brazil, Chile, China, EC, Japan, Norway, South Africa, USA, ACAP, CCAMLR and BirdLife International. The group of experts developed a strong set of guidelines that when implemented will greatly improve the delivery of IPOA-Seabirds through a suite of NPOA-Seabirds that should contain a mix of mandatory and voluntary measures. Importantly, the draft BPG are not confined to the longline fishing method, but include guidelines that will permit NPOAs to cover other relevant fishing gears such as trawls and gillnets. Due to FAO protocols I am unable to circulate

the document at this stage as it is now an official FAO draft. FAO are finalising the draft, which will then be tabled at the Commission on Fisheries (COFI) in March 2009 for approval.

Representing ACAP I attended meetings of the Indian Ocean Tuna Commission (IOTC) in July 2007 (Working Party on Ecosystems and Bycatch) and June 2008 (12th Meeting of the IOTC Commission), and the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR) in October 2007 and 2008 (Incidental Mortality Arising from Fishing Working Group).

CCAMLR has achieved stunning results in the virtual elimination of seabird bycatch in most of its fisheries since 2000, principally through seasonal closures at periods of high seabird activity, and adoption of strictly enforced conservation measures that require use of a combination of night-setting of longline gear, use of streamer lines, and line-weighting mitigation measures. Bycatch of marine mammals is also closely monitored and is not a significant problem at this stage, although seals are occasionally killed in trawl and longline fisheries. The focus of work by the IMAF Working Group over the last few years has been focussed on seabird bycatch in demersal longline fisheries within the French EEZ fisheries around the Kerguelen and Crozet Archipelagos. Around 1,400 seabirds were killed in these fisheries in 2008, with bycatch comprised almost entirely of CMS Appendix II species (southern and northern giant petrels, white-chinned petrel, grey petrel). The French government has been working closely with members of the IMAF Working Group to reduce the impact of their fisheries on seabirds. While bycatch has dropped by an order of magnitude, much work still remains to be done to ensure bycatch is reduced to levels achieved in other CCAMLR fisheries.

Considerable success was achieved at the IOTC meetings when *Resolution 08/03 On Reducing The Incidental Bycatch Of Seabirds in Longline Fisheries* was adopted by the Commission in June 2008. This resolution applies to the pelagic longline gear and replaced an earlier resolution that included measures considered to be ineffective. To encourage the IOTC to take this action, I worked closely with BirdLife International to provide best practice pelagic mitigation advice developed by ACAP's Seabird Bycatch Working Group (see below) to the IOTC WPEB. Resulting from our input, the WPEB provided advice to the Commission that interactions with pelagic fisheries constituted the largest conservation threat to seabirds in the southern oceans and, although several seabird avoidance measures have been trialled to varying degrees, proven and accepted seabird avoidance measures, including some of those included in IOTC's 2006 Resolution 06/04, required substantial improvement. The resolution now adopted requires fishers to select two measures, to be used in combination, from a set of best practice seabird mitigation measures and standards. The considerable support from Australia and the European Commission in promoting adoption of the resolution was greatly appreciated.

Work closely with CMS daughter agreements (Work Program Item 4)

I work with the ACAP Secretariat on a part time basis which has ensured frequent contact with a range of people actively working on seabird bycatch mitigation measures. I currently convene ACAP's Seabird Bycatch Working Group (SBWG), which has made significant progress since its formation in building relationships with relevant RFMOs and developing best scientific advice on technical mitigation for seabird bycatch. The ACAP Secretariat has been keen to work closely with CMS, particularly with a view to sharing the costs of representing both ACAP and CMS at relevant meetings of RFMOs and other organisations.

Review information on mitigation measures (Work Program Item 5)

Over the last decade a range of mitigation measures for reducing the incidental catch of seabirds in longline fisheries have been developed that can be employed according to circumstance. They include night setting; line weighting; seasonal and/or area closures; bird scaring lines; controlling offal discharge; and bait thawing. These measures focus on reducing bycatch during the critical period of setting. Each has different attributes, costs and potential to successfully reduce seabird catch. Some measures such as night-setting have been consistently successful in a number of longline fisheries, while the effectiveness of others has varied between vessels and seabird species.

While considerable progress has been made in mitigating bycatch in demersal longline fisheries, principally through the development of effective bird scaring lines, integrated weight line in autoline systems, night setting of gear and seasonal closures, proven and accepted seabird avoidance measures

in pelagic fisheries require substantial improvement. In 2007, ACAP's SBWG reviewed available research on seabird bycatch mitigation measures for pelagic longline fishing. The review found that development is currently underway on a number of mitigation measures for this gear type, with bird scaring lines, an underwater bait setting capsule and side setting assessed as being the highest priority for research. Other measures that were considered priorities for research include weighted branchlines, bait protections systems such as 'bait pods' and 'smart hooks', circle hooks and blue dyed squid. Night setting is currently the only mitigation measure proven to be widely effective with pelagic longline gear, but its widespread adoption is constrained because it is considered to reduce operational efficiency when targeting some pelagic fish species.

In 2008 the SBWG subsequently reviewed mitigation for the demersal longline and trawl gear types. Resulting from the 2007 and 2008 reviews, the SBWG has developing advice on current best scientific approaches to mitigating bycatch in these gear types to assist RFMOs and ACAP parties in managing bycatch in their fisheries. The advice, including descriptions of measures, current knowledge, implementation guidance and research needs, has been collated in a series of summary tables that are suitable for dissemination to relevant fisheries managers. This advice has already been provided to relevant meetings of the IOTC and CCAMLR. It will be progressively provided to other RFMOs and national fisheries managers, who will be encouraged to use the materials to guide the development of policy and practice within fisheries under their jurisdiction.

Database of relevant scientific literature on bycatch (Work Program Item 6)

A bibliographic database on published references to bycatch and mitigation research has been developed to assist the work of the Bycatch Working Group and the Scientific Council. The database uses the software EndNote, which is widely used and easily obtained at a reasonable cost. This product is continually updated and now includes over 2000 references relevant to bycatch of marine mammals, turtles, sharks and seabirds, together with references on the biology of some of these taxonomic groups. Most of the references contained in the database relate to seabirds and seals, reflecting my current work areas, and I would appreciate electronic transmission of relevant research papers on bycatch for other taxonomic groups to ensure the coverage is more comprehensive. As most Scientific Counsellors will be aware, keeping up with the currently literature on any particular topic can be very time-consuming. I would be delighted if members of the Scientific Council with a particular interest in bycatch of small cetaceans, turtles and sharks were prepared to cover the literature on these groups and contribute to building the database.

EndNote includes the facility to embed pdf files with the citation. For this reason, publication on the CMS website may be problematic because of reasons of copyright. However, the EndNote file will be lodged with the CMS Secretariat and regularly updated. It is also available for distribution to Scientific Councillors on request.

Review of Work Program for Bycatch Councillor

The Work Program was reviewed and updated by the Bycatch Thematic Group. A draft Work Program for 2009 and 2010 is attached for endorsement by the Scientific Council. It should be noted that the program is extremely ambitious and it is unlikely that all work items will be completed before the next meeting of the Scientific Council. Nonetheless, the work program is presented with this caveat, and in the hope that if additional resources become available intersessionally they can be directed toward some of the items identified.

A few issues were raised during the review of the work program.

Engagement with RFMOs

The Group supported the importance of engagement with Regional Fisheries Management Organisations, but noted that to do so imposed a significant workload, that could not be effectively carried out without full time staffing resources made available for this purpose. There are currently at least 17 RFMOs that manage high seas fisheries of the world, and each of these meets on average three times a year. Work carried out by the Bycatch Councillor to date had been supported by ACAP either by CMS or its daughter agreements.

Initiatives on bycatch in ACCOBAMS area

ACCOBAMS has a number of initiatives underway, and a report on these was provided by ACCOBAMS Executive Secretary:

- A project on “Assessment and mitigation of cetacean bycatch in the Black Sea, Mediterranean Sea and Atlantic contiguous waters.” (BYCBAMS project) is ongoing. This project is being developed in collaboration with the relevant international organisations and programmes and in particular with the General Fisheries Commission for the Mediterranean and Black Sea (GFCM).
- In the same spirit, a “Protocol for data collection on bycatch and depredation in the ACCOBAMS region” was finalized in collaboration with the GFCM as an example of guidelines for collecting data on by-catch. This will be presented to the ACCOBAMS Parties in 2010, with the intention of extending the protocol to other species and incorporating it into the GFCM database, so that Members can input data on bycatch in a standardised way.
- Pilot projects on the use of pingers are ongoing in Tunisia and Morocco. The results of these studies will be of relevance to other fisheries.
- Guidelines for technical measures to minimise cetacean-fishery conflicts in the Mediterranean and Black Seas are available, and two other documents are currently being prepared — “*The utility of acoustic devices in cetacean–fishery interactions*” and “*Technical specifications and conditions for the use of acoustic deterrent devices in the Agreement area*”

Improved Communication

It was clear from discussions that there was a significant body of work on bycatch matters being undertaken by some of the daughter agreements, but that general awareness of some of this work was unknown amongst the CMS family of agreements. It was agreed by the Group that better integration would be helpful between the bycatch-related activities of the daughter agreements and the work of the Bycatch Councillor. In particular, it was felt that someone who could facilitate information flow on marine mammal related aspects would be helpful.

It was noted that skill-sharing between those experts in bycatch should be facilitated globally. Mechanisms to do this could include the informal correspondence group to be set up by the Bycatch Councillor (Work Program item 1), the Cetacean Liaison Group, and other linkages yet to be developed between the daughter agreements.

Draft Resolution 9.18 on Bycatch

The Scientific Councillor from Australia introduced draft Resolution 9.18 on Bycatch. The draft Resolution has been submitted because Australia remains concerned about the continued threats associated with by-catch of migratory marine species listed on the appendices of the Convention, and because they believed that these threats will not be ameliorated without concerted action by international bodies such as the CMS.

The main thrust of the draft resolution is to, inter alia, focus the efforts of CMS Parties on priority activities such as trialling new mitigation measures, making progress on existing techniques known to effectively mitigate bycatch impacts, and for Parties to consider the feasibility of producing an assessment of the impact of bycatch on migratory and other species that may benefit from activities within the CMS mandate.

The Group reviewed the draft and suggested a few ways to strengthen the Resolution:

- (a) Two new paragraphs should be inserted as the first two paragraphs of the preamble:

Noting the work already completed or underway by CMS daughter agreements;

Noting the work to be undertaken through the implementation of Resolution 8.22 to identify gaps and overlaps between CMS and other relevant bodies with respect to their work on bycatch;

- (b) Two new paragraphs should be inserted as operand paragraphs 7 and 8:

7. *Requests improve cooperation and communication between CMS daughter agreements on by-catch-related issues;*

8. Requests the CMS Secretariat open lines of communication with, and consider the results of, other ongoing efforts to document by-catch in fisheries, for example Project GLOBAL, which attempts to document by-catch of birds, marine turtles, marine mammals or migratory sharks in artisanal fisheries;

The group agreed that these suggested changes be considered for insertion into the draft Resolution.

UNEP/CMS Thesis Award

The winner of the UNEP/CMS Thesis Award on Migratory Species Conservation sponsored by the National Geographic Deutschland and Deutsche Lufthansa is Dr. Samantha Petersen, a Biologist from South Africa. With her thesis on '*Understanding and Mitigating Vulnerable Bycatch in southern African Trawl and Longline Fisheries*', Dr. Samantha Petersen has made a significant contribution to improving the affected species' conservation status under the Convention. The relevance to the vision and goals of UNEP/CMS to protect and improve the conservation status of migratory animals made this thesis rank at the top. The Bycatch Group expressed their congratulations to Dr Petersen on her work and the award.

Over the past decade there has been global concern about the bycatch of seabirds, turtles and sharks in fishing operations, in particular longline and trawl fisheries, which have been widely held responsible for their declining populations and threatened conservation status. The FAO estimated that 75% of the global stocks are unsustainably exploited, approximately 25% of marine resources landed are dumped, ecosystems have been modified and catastrophic declines of vulnerable marine life reported, including the loss of up to 90% of the large predatory fish. Dr. Petersen's thesis addresses the issue of bycatch in a holistic manner, taking into account that species, be they target or non-target for fisheries, do not exist in isolation from each other and their environment.

Participants:

Barry Baker (Appointed Councillor - Bycatch/Chair)
Glen Ewers (Australia)
Heidrun Frisch (Secretariat)
Marie-Christine Grillo-Compulsione
Zeb Hogan (Appointed Councillor - Fish),
Andreas Kruess (Germany)
Bill Perrin (Appointed Councillor – Marine Mammals)
Mark Simmonds (WCDS)
Oystein Storkersen (Norway)

DRAFT WORK PROGRAM 2009-2010 FOR BYCATCH COUNCILLOR AND BYCATCH THEMATIC GROUP

	Topic/Task	Timeframe	Detail
1	Establish a small informal correspondence group of interested parties and technical experts to assist the Scientific Councillor	January 2009	<p>A small working group will be established to ensure thorough coverage of faunal groups and access to technical expertise on mitigation techniques and application.</p> <p>Membership of the correspondence group will be expertise based and may comprise members not directly involved with the CMS Scientific Council. The working group will assist the Scientific Councillor on Bycatch in implementing the Work Program.</p> <p>CMS daughter agreements will be asked to nominate a contact person for inclusion in the small informal correspondence group.</p>
2	Conduct a study to assess bycatch in global fisheries	<p>Revise Terms of Reference for study February 2009</p> <p>Commission study June 2009</p> <p>Complete study March 2010</p>	<p>Commission a consultant to carry out a comprehensive review of all global commercial and artisanal fisheries. Study will assess the available information on bycatch of seabirds, marine turtles, sharks and marine mammals, focusing particularly on CMS listed species. It will assess the importance of bycatch as a threat to migratory species and provides an overview of priority fisheries, regions and species which will benefit from international action through the CMS.</p> <p>The scope (spatial or taxonomic coverage) of the study will be modified, if necessary, to suit available funding.</p>
3	Work closely with other international competent bodies such as FAO and relevant RFMOs	<p>Ongoing</p> <p>Secretariat to request observer status at meetings of key RFMOs and FAO COFI — March 2009</p>	<p>Implementation dependent upon funding to attend meetings, and availability/willingness of Bycatch Thematic Group members or CMS daughter agreements to coordinate action for relevant RFMOs</p> <p>FAO and RFMOs have direct management responsibility for most of the global high seas fisheries. Attendance at key meetings of these bodies is essential to influence adoption of mitigation strategies and implementation of independent observer programs, necessary for improving knowledge of bycatch issues.</p> <p>Note that RFMO engagement imposes a significant workload, that cannot be</p>

	Topic/Task	Timeframe	Detail
			<p>effectively carried out without full time staffing resources made available for this purpose. Support of this work through collaborative arrangements with CMS daughter agreements is highly desirable.</p> <p>Priority RFMOs initially are CCAMLR, IOTC, WCPFC. Selection of these based on known seabird, turtle and shark bycatch issues, and the potential to influence change in fishing practices. <u>Travel & per diem costs \$5,000 per meeting</u></p> <p>Other RFMOs to be considered, dependent upon success in other fora, emerging issues, and availability of travelling funds, are: CCSBT, ICCAT, IATTC, General Fisheries Commission for the Mediterranean and Black Sea (GFCM).</p> <p>Adoption of mitigation strategies by RFMOs may lead to flow-on effects to EEZ fisheries of RFMO members.</p>
4	Work closely with CMS daughter agreements and other relevant conservation bodies	Ongoing Write to daughter agreements — March 2009	ACAP, ACCOBAMS, ASCOBANS, Waddensea Seals, Marine Turtles Africa, Marine Turtles IOSEA, Pacific Islands Cetaceans, IWC Bycatch Group
4	Risk assessments. Continuously review and utilise available information on the at-sea distribution of migratory species to assess overlap with fishing operations and hence the risk of bycatch in fishing regions	Ongoing	<p>Fishing regions include RFMO areas of competence, and national EEZs.</p> <p>Risk assessments carried out annually by the Commission for the Conservation of Antarctic Marine Living Resources provide an excellent model.</p>
5	Review information on mitigation measures for fishing methods known to impact migratory species	Ongoing. Highly desirable to work with CMS daughter agreements to achieve efficiencies.	<p>Concise reviews of current knowledge on mitigation measures to reduce seabird bycatch in longline and trawl fishing have been produced by ACAP, but do not exist for other faunal groups or fishing methods.</p> <p>Work with fishery managers and RFMOs is required to comprehensively assess fishing techniques and gear used in EEZ and high seas fisheries, to identify those elements that have been shown to reduce or eliminate by-catch mortality of</p>

	Topic/Task	Timeframe	Detail
			<p>migratory species.</p> <p>Products of review are described in Item 9 (below)</p> <p>Initial work should focus on pelagic longline methods for seabirds and turtles. Ensure mitigation methods developed for one taxonomic group do not lead to bycatch of other taxa.</p>
6	Maintain a database of relevant scientific literature on bycatch	Ongoing	Maintain the bibliographic database on published references to bycatch and mitigation research to assist the work of the Bycatch Working Group and the Scientific Council
7	Develop a bycatch webpage	By end 2009	<p>Develop a page for the CMS website providing information on CMS activities to ameliorate the impacts of bycatch on migratory species. <u>Implementation by the Secretariat required.</u></p> <p>The website could also provide a ‘toolbox’ of best practice species-specific techniques to reduce bycatch in fishing operations, such as FAO publications <i>Expert consultation on interactions between sea turtles and fisheries within an ecosystem context</i>, and <i>The Incidental catch of seabirds by longline fisheries: Worldwide review and technical guidelines for mitigation on the interactions between sea turtles and fisheries</i>.</p>
8	In consultation with CMS daughter agreements, develop products to assist RFMOs and other relevant international and national bodies in reducing bycatch.	Ongoing	These could include: observer programme designs including protocols for the collection of bycatch data, analytical methods for assessing bycatch, best-practice mitigation measures
9	Develop materials and guidelines to assist CMS representatives attending RFMO and other relevant meetings to maximise effective participation and consideration of issues relevant to the minimisation of bycatch	Ongoing	<p>These could include technical information to be delivered through:</p> <ul style="list-style-type: none"> — concise reports that are based on sound, scientifically supported peer-reviewed papers — presentations and submission of relevant papers to meetings to support the information being conveyed, together with active participation at meetings; — workshops with industry to progress uptake of mitigation in particular

	Topic/Task	Timeframe	Detail
			— building relations with fishers, national fisheries managers, RFMO Secretariats and UN FAO officials
10	Assist in the preparation, adoption and implementation of FAO NPOA-Seabirds and FAO NPOA-Sharks	Ongoing	This may include: — encourage adoption of best practice guidelines for IPOA-Seabirds by FAO COFI in March 2009 — providing assistance to Parties and Range States in the development of NPOA-Seabirds and FAO NPOA-Sharks.
11	Provide report to Scientific Council on Bycatch Councillor activities	SC 16	Provide a report to 16th meeting of the Scientific Council on the activities of the Bycatch Councillor during the inter-sessional period

REPORT FROM CLIMATE CHANGE AND MIGRATORY SPECIES WORKING GROUP

(28.11.2008, Pakistan room, ~11am – 12.30am)

Participants noted that the impact of climate change on migratory populations is being increasingly observed throughout continents and oceans. Draft resolution 9.7 submitted by Australia was highlighted as a vital step to address this global policy priority and to provide CMS Parties and the Secretariat with a focused mandate to tackle this issue. The draft climate change paper Conf. 9.24 was discussed and reviewed amongst participants. Recommendations in section VI of the paper were examined in detail. It was unanimously agreed by Australia and participants to include the recommendations of Conf. 9.24 in draft resolution 9.7.

The chair of the working group, Prof. Colin Galbraith, suggested that participants would form an inter-sessional working group. He recommended that a workshop should be convened during the forthcoming triennium (2009 - 2011) to bring together the scientists that are currently contributing towards the CMS mandate (e.g. ZSL, IUCN), policy makers and the inter-sessional working group.

Amongst other matters, participants discussed their climate change relevant activities and research, noted that capacity building of implementing bodies is vital to achieving the aims set out in Resolution 9.7, noted that wider habitat changes should also be considered, and highlighted the need to promote research that builds on the analysis of existing data.

As a result of the instructions of the working group a revised version of Resolution 9.7 was produced by the Secretariat and posted on 30th November 2008.

Name	Affiliation	Email
Fernando Spina	ISPRA, Environmental Ministry Italy	fernando.spina@infs.it
Colin Galbraith (chair)	SNH/UK	colin.galbraith@snh.gov.uk
Julia Latham	ZSL	julia.latham@ioz.ac.uk
Jean-Cristophe Vié	IUCN	jcv@iucn.org
Richard K. Bagine	NMK, Kenya	rkiomen@yahoo.com
Christina Morales	CMS Paraguay	cmoralespy@gmail.com
Franco Alvarez	Australia	franco.alvarez@environment.gov.au ; francopalvarez@gmail.com
Attila Bankovics	Hungary	bankovic@zool.nhmus.hu
Jelena Krag	Croatia	zzo@hazo.hr
Jini Flouek	Czech Republic	jflousek@kruap.cz
Abdellah El Mastour	Morocco	elmastourabdellah@yahoo.fr
Alfred A. Oteng-Yeboah	Ghana	otengyeboah@yahoo.co.uk
Wim J. Wolff	Netherlands	w.j.wolff@rug.nl
Andreas Kruess	Germany	-
Colin Limpus	Australia	-
Viviana Jimenez	CMS	washington@cms.int

**Report of the Working Group on Wildlife Disease
15th Meeting of the CMS Scientific Council, 28th November 2008
FAO, Rome**

Working Group chaired by Scott Newman (FAO) and Roberto Schlatter (CMS Councillor) and attended by 22 contracting parties, international organisations and NGO's (see Annex 1).

Presentations were given by Rebecca Lee (Co-ordinator of the CMS-FAO co-convened Scientific Task Force on Avian Influenza and Wild Birds) and Ruth Cromie (Wildfowl & Wetlands Trust) on the work of the Task Force and the issue of wildlife diseases respectively. The former presentation outlined the remit and functioning of the CMS-FAO Task Force and outlined progress made to date. The latter presentation outlined the importance of the broader issue of wildlife disease as an issue for conservation and called on the Scientific Council to expand the proposed draft resolution on avian influenza (Res 9.8) to one including the whole issue of wildlife diseases and moreover to create a new CMS-FAO co-convened Scientific Task Force on Wildlife Disease, which would have the CMS Working Group on Migratory Species as Vectors of Diseases as a member. A working group on wildlife diseases was convened and this report represents comments made following the presentations and the outcomes of that meeting.

Points arising following the presentations:

An important collaborative project between Wetlands International and Euring using extensive bird ringing datasets has produced a mapping tool which is of great value in terms of avian influenza research as it helps understand the connectivity of wild bird movements and migrations. This tool is available on-line.

The Scientific Council Chair congratulated Task Force on their excellent work. The importance of the link between CMS and FAO was highlighted and acceptance that establishment of the proposed Scientific Task Force on Wildlife Disease would be extremely valuable.

Points arising from the Working Group

One country, having dealt with many wildlife health projects, in particular important zoonoses such as Ebola virus, highlighted that such a new Task Force was proposed two years ago and its remit must be broad i.e. to focus on all wildlife taxa. How such a broad task force might be subdivided is open to debate but it sensibly could be subdivided by taxa and by geographical region.

The importance of integrating veterinary and environmental disciplines was required for tackling all aspects of human, and domestic and wild animal health. There was a call for these disciplines working together and for funding to facilitate this approach.

Emphasis was placed on the need to further encourage Ministries of Environment, Agriculture and Public Health to coordinate and collaborate on cross-cutting disease issues as some progress has been made with HPAI but to truly address infectious diseases will require further collaborations among disciplines.

Examples of good practice of veterinary services working with environmental services were provided with a clear understanding of the value and benefits of this approach.

As well as surveillance there was a call for further research in an attempt to fully understand the epidemiology of wildlife diseases.

There was a call for prioritisation of the diseases of greatest concern to conservation, and livestock and human health.

Procedural issues

Roberto Schlatter, coordinator of the CMS Working Group on Migratory Species as Vectors of Diseases, encouraged this working group to become part of a larger Task Force.

A short discussion took place regarding the members of the proposed Scientific Task Force on Wildlife Disease although this was seen as one of the first tasks of the Task Force to address.

It was also noted that translation of technical documents often leads to problems and misinterpretations and therefore, it would be necessary to have translations into French and Spanish, but to then ask a native speaker with technical expertise, to review and translated documents.

Conclusions

1. Draft resolution 9.8 should be broadened to incorporate the whole issue of wildlife disease – a mandate was given to proceed with this, to incorporate the terminology associated with the Scientific Council working paper UNEP/CMS/ScC15/Doc.13 Responding to the challenge of emerging and re-emergent diseases in migratory species: the development of enhanced processes of international co-ordination .
2. The link between FAO and CMS should be encouraged, maintained and strengthened as each organisation brings slightly different perspectives and expertise which are complimentary in addressing animal health and wildlife conservation.
3. The establishment of a new CMS-FAO co-convened Scientific Task Force on Wildlife Disease should proceed.

Prepared by

Ruth Cromie

Rebecca Lee

Scott Newman

1st December 2008

Annex 1 Representatives present at the Wildlife Disease Working Group

Argentina
Burkina Faso
Chad
Costa Rica
Cote D'Ivoire
Democratic Republic of Congo
Denmark
Madagascar
Netherlands
Panama
Peru
Philippines
Saudi Arabia
Senegal
Spain
Togo
United Kingdom

AEWA
CMS Secretariat
FAO
Wetlands International
Wildfowl & Wetlands Trust

LIST OF PARTICIPANTS / LISTE DES PARTICIPANTS / LISTA DE PARTICIPANTES

Chairman / Président / Presidente

Mr. John Hyelakuma Mshelbwala
 Assistant Director (Wildlife Management)
 Federal Ministry of Environment
 Plot 293/294
 Off Solomon Lar Way
 Utako District f
 PMB 468
 Abuja, FCT
 NIGERIA
 Tel.: (+234 9) 523 4119 / 8033287039
 Fax: (+234 9) 523 4014
 E-mail: johnmshelbwala2@yahoo.com

Vice-Chairmen / Vice-Présidents / Vicepresidentes

Prof. Dr. Colin A. Galbraith
 Director of Policy and Advice
 Scottish Natural Heritage
 Silvan House, 3rd Floor East
 231 Corstorphine Road
 Edinburgh EH12 7AT
 UNITED KINGDOM
 Tel: (+44 131) 316 2601
 Fax: (+44 131) 316 2690
 E-mail: colin.galbraith@snh.gov.uk

Dr. Pierre Devillers
 Head of Conservation, Biology Section
 Institut Royal des Sciences Naturelles de Belgique
 11, avenue de l'oiseau bleu (private)
 100 0 Bruxelles, Belgium
 EUROPEAN COMMUNITY
 Tel: (+32 2) 6274 354
 E-mail: pierre.devillers@naturalsciences.be

Members / Membres / Miembros

Mr. Franco Alvarez
 Task Force Leader
 Commonwealth Department of the Environment, Water,
 Heritage and the Arts
 GPO Box 787
 Canberra ACT 2601
 AUSTRALIA
 Tel: (+61 2) 6274 1273
 Fax: (+61 2) 6275 9374
 E-mail: franco.alvarez@environment.gov.au

Dr. Richard K. Bagine
 Chief Scientist
 National Museum of Kenya
 P.O. Box 40658 - 00100
 Nairobi
 KENYA
 Tel.: (+254 020) 374 2131/4, 374 2161/4
 Fax: (+254 020) 374 1424
 E-mail: rkiomen@yahoo.com;
 rkbagine@museums.or.ke

M. Dieudonné Ankara
 Directeur de la Conservation des Ecosystèmes Naturels
 Direction générale de l'environnement
 Ministère du Tourisme et de l'Environnement
 B.P. 958, 54, rue Bordeaux Oeunzé
 Brazzaville
 CONGO
 Tel.: (+242) 551 67 50
 Fax: (+242) 551 67 50
 E-mail: graspcongo@yahoo.fr

Dr. Attila Bankovics
 President of BirdLife Hungary
 Hungarian Ornithological Society (BirdLife Hungary)
 Baross u. 13
 H-1088 Budapest
 HUNGARY
 Tel.: (+36 20) 310 5414
 Fax:
 E-mail: bankovic@zool.nhms.hu

Dr. Lkhagvasuren Badamjav
 Institute of Biology
 Mongolian Academy of Science (MAS)
 Ulaanbaatar-51
 MONGOLIA
 Tel.: (+976 11) 453 583
 Fax: (+976 11) 342 080
 E-mail: ecolab@magicnet.mn
 lhagvabad@yahoo.com

Lic. Daniel Eduardo Blanco
 Coordinador de Programa para América del Sur
 Wetlands International
 25 de Mayo 758 Piso 10 I
 (1002) Buenos Aires
 ARGENTINA
 Tel.: (+54 11) 4312 0932 / 4313 4543
 Fax: (+54 11) 4312 0932
 E-mail: deblanco@wamani.apc.org

Lic. José Joaquín Calvo Domingo
Coordinador Vida Silvestre
Funcionarios del Sistema Nacional de Áreas de
Conservación (SINAC) del Ministerio de Ambiente y
Energía de Costa Rica
Apdo. Postal 10.104-1000
San José
COSTA RICA
Tel: (+506) 256 0917
Fax: (+506) 256 2456
E-mail: joaquin.calvo@sinac.go.cr

Dr. Preben Clausen
Senior Researcher
Department of Wildlife & Biodiversity
National Environmental Research Institute
University of Aarhus
Grenåvej 14
DK-8410 Rønne
DENMARK
Tel: (+45) 8920 1519
Fax: (+45) 8920 1514
E-mail: pc@dmu.dk; preben_clausen@hotmail.com

Mr. Carlo Custodio
Chief Ecosystems Management Specialist
Protected Areas and Wildlife Bureau (PAWB)
Department of Environment and Natural Resources
Quezon Avenue, Diliman
Quezon City 1100
PHILIPPINES
Tel.: (+6 32) 921 429 7676 / 924 6031
Fax: (+6 32) 925 8948 / 924 0109
E-mail: custodiocarlo@yahoo.com

Dr. Akram Eissa Darwich
Director of Biodiversity and Protected Areas
Ministry of Local Administration and Environment
- General Commission for Environmental Affairs
P.O. Box 3773, Kafar-Sousa
Damascus
SYRIAN ARAB REPUBLIC
Tel: (+963 11) 214 0759
Fax: (+963 11) 214 0759
E-mail: akramisa@scs-net.org
akram.eissa@gmail.com

M. Abdellah El Mastour
Chef du Service d'Aménagement des Parcs
et Réserves Naturelles
Haut Commissariat aux Eaux et Forêts et à la Lutte
contre la Désertification
3, rue Haroun Errachid
Rabat-Chellah
MOROCCO
Tel.: (+212 37) 67 4269
Fax: (+212 37) 67 2770
E-mail: elmastourabdellah@yahoo.fr
elmastour@athena.online.co.ma

Dr. Jirí Flousek
Deputy Director
Krkonose National Park & Biosphere Reserve
Dobrovskeho 3
543 11 Vrchlábí
CZECH REPUBLIC
Tel.: (+420 499) 456 212
Fax: (+420 499) 422 095
E-mail: jflousek@krnap.cz

Dr. Andreas Kruess
Head of Department
Federal Agency for Nature Conservation
Department for Ecology and the Conservation of Fauna
and Flora
Konstantinstrasse 110
53179 Bonn
GERMANY
Tel: (+49 228) 8491 1410
Fax: (+49 228) 8491 1409
E-mail: kruess@bfn.de

Dr. Zurab Gurielidze
Professor
Faculty of Life Sciences
Ilia Chavchavadze State University
0171.Ilia Chavchavadze ave 32
Tbilissi
GEORGIA
Tel.: (+995 32) 21 30 40
Fax: (+995 32) 21 30 50
E-mail: zgurielidze@zoo.ge, zgurielidze@hotmail.com

M. Mahamat Hassane Idriss
Chef de Service de Sensibilisation,
d'Information et de Formation
Direction de Conservation de la Faune et
des Aires Protégées
Ministère d'Environnement et de l'Eau
B.P. 905
N'Djamena
TCHAD
Tel.: (+235) 6219340, 9951126, 2522305
Fax: (+235) 2524412
E-mail: mhi1962@yahoo.fr; mhthassan@hotmail.com

Dr. Borja Heredia
Jefe de Area de Acciones de Conservación
Dirección General de Medio Natural y Política Forestal
Ministerio de Medio Ambiente, y Medio Rural y Marino
C/Rios Rosas 24
28003 Madrid
SPAIN
Tel.: (+34 91) 7493658
Fax: (+34 91) 7493873
E-mail: bheredia@mma.es

M. Abdou Malam Issa
Directeur Faune et Chasse
Direction de la faune et de la Chasse
Ministère de l'Environnement et de la Lutte Contre la
Désertification
B.P. 721
Niamey
NIGER
Tel.: (+227 21) 76 83 62
Fax: (+227 20) 73 60 12
E-mail: malam_ia@yahoo.fr

Dr. Jean Maharavo
Chercheur
Centre National de Recherche sur l'Environnement
(CNRE)
B.P 1739-Fiadanana,
(101) Antananarivo
MADAGASCAR
Tel: (+261 20) 2226469
Fax: (+261 20) 2240646
E-mail: maharavo@simicro.mg

Prof. Branko Micevski
President
Macedonian Bonn Committee (MBC)
Bird Study and Protection Society of Macedonia
(BSPSM)
Bul. ASNOM 58 - 2/4
Skopje, 1000
THE FORMER YUGOSLAV REPUBLIC OF MACEDONIA
Tel.: (+389 22) 432 071 / (+389 23) 249 614
Fax: (+389 22) 432 071
E-mail: brankom@ukim.edu.mk

Sra. María Cristina Morales Palarea
Coordinadora del Programa Especies
Asociación Guyra Paraguay
Gaetano Martino 215 c/ Tte. Ross,
Asunción
PARAGUAY
Tel: (+595 21) 227 777
Fax: (+595 21) 22 7777
E-mail: cristinam@guyra.org.py,
cmoralespy@gmail.com

M. Donatien Muembo Kabemba
Directeur de l'Audit Scientifique et Technique
Institut Congolais pour la Conservation de la Nature
13, avenue des Cliniques B.P. 868
Kinshasa 1
REPUBLIQUE DEMOCRATIQUE DU CONGO
Tel.: (+243 81) 5006 840
Fax: -
E-Mail: dmuembo2003@yahoo.fr

Dr. Victor Manuel Pulido
Consejero Científico
Instituto Nacional de Recursos Naturales (INRENA)
Paseo los Eucaliptos N° 285, Camacho, La Molina
Lima 12
PERU
Tel.: (+51 1) 9867 2369
Fax: (+51 1) 4351 570
E-Mail: wetperu@amauta.rcp.net.pe

Dr. Anatolii Poluda
Senior Scientific Associate
Schmalhausen Institute of Zoology
Bogdana Knmelnitskogo str. 15
01601 Kyiv 30
UKRAINE
Tel.: (+38 044) 235 0112
Fax: (+38 044) 235 0112
E-mail: polud@izan.kiev.ua

Ms. Bahareh Shahriari
Environmental Expert
Natural Environment and Biodiversity Division
Environmental Research Center
Pardisan Park
Hakim Highway
Tehran, 14155-73155
ISLAMIC REPUBLIC OF IRAN
Tel: (+98 21) 8824 1659
Fax: (+98 21) 8826 9912
E-mail: shahriarib@yahoo.com
b_sh_am@yahoo.com

M. Tano Sombo
Directeur de la Protection de la Nature
Ministère de l'Environnement, des Eaux et Forêts
B.P. 6648
Abidjan 06
CÔTE D'IVOIRE
Tel/Fax: (+225) 20 22 53 66
E-mail: sombotano@yahoo.fr

Dr. Fernando Spina
Senior Scientist, Head Italian Ringing Centre
ISPRA, SEDE Amministrativa Ex-Infos
Via Ca' Fornacetta 9
1-40064 Ozzano Emilia (BO)
ITALY
Tel: (+39 051) 6512 214 / 215 / 217
Fax: (+39 051) 7966 28
E-mail: fernando.spina@infs.it

Mr. Øystein Størkersen
Senior Advisor
Directorate for Nature Management
Tungasletta 2
N-7485 Trondheim
NORWAY
Tel.: (+47) 7358 0500
Fax: (+47) 7358 0501
E-mail: oystein.storkersen@dirnat.no

Mme. Ndèye Sene Thiam
Chef division études aménagement
Direction des Parcs Nationaux du Sénégal
Parc Zoologique et Forestier de Hann
B.P. 5135
Dakar Fann
SENEGAL
Tel.: (+221) 7765 34180
Fax: (+221) 3383 22309
E-mail: dpn@oran.ge.sn;
ndeyesenethiam2003@yahoo.fr

Prof. Wim J. Wolff
University of Groningen
Department of Marine Ecology & Evolution
Postbus 14
9750 AA Haren
THE NETHERLANDS
Tel.: (+31 50) 5350 361
Fax: (+31 50) 5350 737
E-mail: w.j.wolff@rug.nl

Sr. José Yáñez
Curador Jefe
Museo Nacional de Historia Natural
Casilla 787, Correo Central
Santiago
CHILE
Tel.: (+56 2) 6084661
Fax: (+56 2) 6804602
E-mail: jyanez@mnhn.cl

**Scientific Councillors appointed by the Conference of the Parties/
Conseillers Scientifiques nommés par la Conference des Parties/
Consejeros Científicos designados por la Conferencia de las Partes**

Mr. Barry G. Baker
CMS Appointed Councillor (By-Catch)
114 Watsons Road, Kettering
Tasmania 7155
AUSTRALIA
Tel.: (+61 3) 6267 4079 / (61) 418 626711 (M)
Fax:
E-mail: barry.baker@latitude42.com.au

Mr. John O'Sullivan
CMS Appointed Councillor (Birds)
International Treaties Adviser
BirdLife International
c/o RSPB The Lodge
Sandy, Bedfordshire SG19 2DL
UNITED KINGDOM
Tel.: (+44 1 767) 680 551
Fax: (+44 1 767) 683 211
E-mail: john.osullivan@rspb.org.uk

Dr. Zeb S. Hogan
CMS Appointed Councillor (Fish)
University of Nevada, Reno
2355 Camelot Way Reno
NV 89509
UNITED STATES OF AMERICA
Tel: (+1 530) 219 0942
E-mail: zebhogan@hotmail.com

Prof. Alfred Oteng-Yeboah
CMS Appointed Councillor (African Fauna)
Chairman National Biodiversity Committee
Council for Scientific and Industrial Research
CSIR-Ghana, P.O. Box M32
Accra
GHANA
Tel: (+233 24) 477 2256
Fax: (+233 21) 777 655
E-mail: otengyeboah@yahoo.co.uk

Dr. Colin J. Limpus
CMS Appointed Councillor (Marine Turtles)
Chief Scientist
Queensland Environmental Protection Agency
P. O. Box 15155, City East (Brisbane)
Queensland 4002
AUSTRALIA
Tel.: (+61 7) 3227 7718
E-mail: col.limpus@epa.qld.gov.au

Dr. William F. Perrin
Appointed Councillor (Aquatic Mammals)
Senior Scientist
U.S. National Marine Fisheries Service, NOAA
Southwest Fisheries Science Center
8604 La Jolla Shores Drive
La Jolla CA 92037
UNITED STATES OF AMERICA
Tel.: (+1 858) 546 7096
Fax: (+1 858) 546 7003
E-mail: william.perrin@noaa.gov

Dr. Taej Mundkur
CMS Appointed Councillor (Asiatic Fauna)
Flyway Programme Manager
Wetlands International
Swarankit, Plot No. 6
Mahatma Housing Society
Kotland
Pune City-411 038
INDIA
Tel: (+91 20) 2536 3372
Fax: (+39) 2536 3372
E-mail: taejmundkur@vsnl.net

Dr. Roberto P. Schlatter
CMS Appointed Councillor (Neotropical Fauna)
Director
Instituto de Zoología
Facultad de Ciencias
Universidad Austral de Chile
Casilla 567
Valdivia
CHILE
Tel.: (+56 63) 221 315
Fax: (+56 63) 221 315
E-mail: rschlatt@uach.cl

**Governmental Observers / Observateurs de Gouvernements /
Observadores Gubernamentales**

ANTIGUA AND BARBUDA

Mr. Clarence Pilgrim
Permanent Secretary
Ministry of Agriculture, Lands, Marine Affairs and Agro-
Industry
Independence Avenue
St. John's Antigua
Tel: (+ 268) 462 1213
Fax: (+1 268) 462 6104

AUSTRALIA

Mr. Glen Ewers
Senior Policy Officer
Commonwealth Department of the Environment, Water,
Heritage and the Arts
GPO Box 787
Canberra ACT 2601
Tel: (+61 2) 6274 2575
Fax: (+61 2) 6275 9374
E-mail: glen.ewers@environment.gov.au

BURKINA FASO

Ms. Mariam Douahba
Ministere de l'Environnement et du Cadre de Vie
Direction de la Faune et des Chasses
BP 7011 Ouaga 03
Tel: (+226) 80356971
E-mail: douzoumas@yahoo.fr

FRANCE

Ms. Marianne Courouble
Dossiers Internationaux et Communautaires
DNP, Ministère de l'Ecologie, de l'Energie, du
Développement Durable et de l'Amenagement du
Territoire
20, Avenue de Segur
75302 Paris 07 SP
France
Tel) (+33 1) 4219 1081
Fax: (+33 1) 4219 1979
E-mail: marianne.courouble@developpement-
durable.gouv.fr

Mr. Michel Perret
Chef de Bureau Faune et Flore Sauvages
DNP, Ministère de l'Ecologie, de l'Energie, du
Développement Durable et de l'Amenagement du
Territoire
20, Avenue de Segur
75302 Paris 07 SP
France
Tel) (+33 1) 4219 1869
Fax: (+33 1) 4219 1979
E-mail: michel-m.perret@developpement-
durable.gouv.fr

RÉPUBLIQUE DE GUINÉE

Mr. Oulare Aboubacar
Directeur
Centre National de Gestion des Aires Protegees
Ministère de l'Environnement
République du Guinée
Tel: (+224 60) 550260
E-mail: oulare_aboudcar@yahoo.fr

KENYA

Dr. Samuel Kasiki
Dy. Director, Biodiversity Research & Monitoring
Kenya Wildlife Service
P.O. Box 40241
Nairobi 00100
Tel: (+254) 72144 6729
Fax: (+254) 603792
E-mail: skasiki@kws.go.ke

Dr. James Njogu
Head Conventions, Biotechnology & information
Management
Kenya Wildlife Service
P.O. Box 40241
Nairobi 00100
Tel: (+254) 721221 6597
Fax: (+254) 20 603792
E-mail: jgichiah@kws.go.ke

PANAMA

Mr. Ibelice Anino
Tecnica Cientifice
Autoridad Nacional del Ambiente
Albrook, Edificio 804
Cuidad de Panama
Tel: (+507) 500 0855 ext: 1102
Fax: (+507) 500 0860
E-mail: j.anino@anam.gob.pa

TOGO

Mr. Okoumassou Kotchikpa
Chef Division Inventaire, Amenagement et Protection
Faunique
Direction Faune et Chasse (METRF)
Ministere Environnement, Tourisme et Ressources
Forestieres
BP 355 Lome
Tel: (+228) 912 5405
Fax: (+228) 221 4029
E-mail: okoumdfc@yahoo.fr / okoumdfc@hotmail.com

UGANDA

Mr. Aggrey Rwetsiba
Señor Monitoring and Research Coordinator
Uganda Wildlife Authority
P.O. Box 3530
Kampala
Tel: (+256 41) 355000
Fax: (+256 41) 346291
E-mail: Aggrey.rwetsiba@uwa.or.ug

UNITED KINGDOM

Dr. Michael James Williams
Reporting Standards Manager
Joint Nature Conservation Committee
Monkstone House
City Road, Peterborough
Pe1 1JY
Tel: (+44 1733) 86 6868
Fax: (+44 1733) 555 948
E-mail: james.Williams@jncc.gov.uk

Intergovernmental and Non-Governmental Organization Observers /
Observateurs d'Organisations Intergouvernementales et Non
Gouvernementales / Observadores de Organizaciones
Intergubernamentales y No Gubernamentales

ACCOBAMS Permanent Secretariat

Dr. Marie -Christine Grillo
ACCOBAMS Permanent Secretariat
Jardins de l'UNESCO 2
Terrasses de Frontvieille
98000 Monaco
Tel: (+377) 9898 4208
E-mail: megrillo@accobams.net

**Agreement on the Conservation of African-Eurasian
Migratory Waterbirds - AEWA**

Mr. Sergey Dereliev
Technical Officer
UNEP/AEWA
Hermann-Ehlers-Str.10
53113 Bonn
GERMANY
Tel.: (+49 228) 815 2415
Fax: (+49 228) 815 2450
E-Mail: sdereliev@unep.de

BirdLife International

Dr. Robert Clay
Conservation Manager, Americas Division
BirdLife International
Gaetano Martino esq. Tte. Ross
Asuncion
Paraguay
Tel: (+595 21) 223 567
Fax: (+595 21) 223 567
E-mail: rob.clay@birdlife.org

International Whaling Commission

Dr. William F. Perrin
Senior Scientist
US National Marine Fisheries Service, NOAA
8604 La Jolla Shores Drive
La Jolla CA 92037
U.S.A.
Tel: (+1 858) 546 7096
Fax: (+1 858) 546 7003
E-mail: william.perrin@noaa.gov

IRSNB

Ms. Marie-Odile Beudels
IRSNB
29 rue Vautier
1000 Brussels
Belgium
Tel: (+32) 6274360
E-mail:marie.odile.beudels@naturalsciences

Ms. Rene-marie Lafontaine
IRSNB
29 rue Vautier
1000 Brussels
Belgium
Tel: (+32) 6274360
E-mail:rene-marie.lafontaine@national.sciences

**Convention on International Trade in Endangered
Species of Wild Fauna and Flora - CITES**

Mr. David Morgan
Chief, Scientific Support Unit
CITES Secretariat
M.I.E. 11-13 Chemin des Anémones
1219 Châtelaine-Geneva
SWITZERLAND
Tel: (+41 22) 9178 123
Fax: (+41 22) 7973 417
E-mail: david.morgan@cites.org

UNEP World Conservation Monitoring Centre

Mr. Gerardo Fragoso
Head of Species Programme
UNEP World Conservation Monitoring Centre
219 Huntingdon Road
Cambridge CB3 0DL
UNITED KINGDOM
Tel.: (+44 1223) 277 314
Fax: (+44 1223) 277 136
E-Mail: gerardo.fragoso@unep-wcmc.org

Wetlands International

Dr. Tæj Mundkur
Flyway Programme Manager
Wetlands International
Swarankit, Plot No. 6
Mahatma Housing Society
Kotland,
Pune City-411 038
INDIA
Tel: (+91 20) 2536 3372
Fax: (+39) 2536 3372
E-mail: taejmundkur@vsnl.net

World Conservation Union - IUCN

Dr. Jean-Christophe Vié
Deputy Head, IUCN Species Programme
IUCN The World Conservation Union
Rue de Mauverney
CH 1196 Gland
Switzerland
Tel: (+41 22) 999 0208
Fax: (+41 22) 999 0002
E-mail: jean-christophe.vie@iucn.org

Whale and Dolphin Conservation Society - WDACS

Mr. Mark Simmonds
International Director of Science
Whale and Dolphin Conservation Society
Brookfield House, 38 St. Paul Street
Chippenham, Wiltshire SN15 1LJ
Tel: (+44 1249) 449 515 / 500
Fax: (+44 1249) 449 501
E-Mail: mark.simmonds@wdacs.org

Wildfowl & Wetlands Trust

Dr. Ruth Cromie
Head of Wildlife Health
Wildfowl & Wetlands Trust
WWT Slimbridge
Gloucestershire, GL2 7BT
United Kingdom
Tel: (+44 1453) 891254
Fax: (+41 1453) 890 827
E-mail: ruth.cromie@wwt.org.uk

Zoological Society of London

Indicators & Assessments Unit
Institute of Zoology
Regent's Park
London NW1 4RY
United Kingdom

Ms. Julia Latham
Tel: (+44 20) 7449 6356
Fax: (+44 20) 7586 2870
E-mail: julia.latham@ioz.ac.uk

Dr. Ben Collen
Tel: (+44 20) 7449 6642
Fax: (+44 20) 7586 2870
E-mail: ben.collen@ioz.c-c.uk

Secretariat/Secretaría

UNEP/CMS Secretariat

Hermann-Ehlers-Str.10
53113 Bonn
GERMANY
Tel: (+49 228) 815 2401
Fax: (+49 228) 815 2449
E-mail: secretariat@cms.int

Dr. Marco Barbieri
Acting Scientific & Technical Officer
Tel.: (+49 228) 815 2424
E-Mail: mbarbieri@cms.int

Mr. Moulay Lahcen El Kabiri
Deputy Executive Secretary
Tel.: (+49 228) 815 2407
E-Mail: lelkabiri@cms.int

Mr. Robert Hepworth
Executive Secretary
Tel.: (+49 228) 815 2410
E-Mail: rhepworth@cms.int

Dr. Francisco Rilla Manta
Information Officer
Tel.: (+49 228) 815 2460
E-Mail: frilla@cms.int

Ms. Heidrum Frisch
Tel.: (+49 228) 815 2460
E-Mail: hfrisch@cms.int

Dr. Aline Kuehl
Tel: (+49 228) 815 2462
E-mail: akuehl@cms.int

Ms. Viviana Jimenez
4401 North Fairfax Drive
Suite 100
Arlington, VA
22203 USA
Tel: (+1 703) 358 1946
E-mail: washington@cms.int