



# CONVENTION ON MIGRATORY SPECIES

Distribution: General

UNEP/CMS/Conf.10.40  
16 August 2011

Original: English

TENTH MEETING OF THE  
CONFERENCE OF THE PARTIES  
Bergen, 20-25 November 2011  
Agenda Item 19d

## IMPACT OF CLIMATE CHANGE ON MIGRATORY SPECIES: THE CURRENT STATUS AND AVENUES FOR ACTION

*(Prepared by the UNEP/CMS Secretariat)*

1. This document reports on progress in the implementation of CMS' climate change mandate, specifically Resolution 9.7 on climate change impacts on migratory species. Climate change is likely to become one of the primary threats to migratory species in the current century and is therefore a priority matter for CMS and its Parties.

### Relevant meetings and reports

2. The 16<sup>th</sup> Meeting of the Scientific Council (Bonn, 28-30 June 2010) and the Scientific Council Working Group on Climate Change assessed progress in the implementation of Resolution 9.7 up to June 2010 and identified a number of emerging issues, such as long-distance migrants being particularly threatened by climate change and the significant changes in human behaviour in response to climate change which in turn resulted in additional impacts on biodiversity (UNEP/CMS/ScC16/Doc.8 and UNEP/CMS/ScC16/REPORT).

3. As mandated by Resolution 9.7 a technical workshop on the "Impact of Climate Change on Migratory Species: the current Status and Avenues for Action" took place at the Tour du Valat research station near Arles, France, from 6-8 June 2011. The workshop was funded by a voluntary contribution from Germany and was attended by experts from the CMS Scientific Council, academia, NGOs, IGOs and government agencies specializing in the interactions of migratory species and climate change, as well as the legal and policy context (UNEP/ScC17/Inf.10). The proceedings from the workshop and the presentations provide a good overview of the current status of migratory species with regard to climate change as well as the rationale for the content of Resolution 10.19 (for further information and presentations see [www.cms.int/bodies/ScC/climate\\_change\\_wg/ccwg\\_mainpage.htm](http://www.cms.int/bodies/ScC/climate_change_wg/ccwg_mainpage.htm)). Workshop experts drafted Resolution 10.19 on climate change, taking into account specific recommendations for the Resolution from the Scientific Councillors for Costa Rica, Ecuador, Mauritius, Senegal and Uganda. The Resolution was subsequently circulated to the Scientific Council, members of the Biodiversity Liaison Group and a number of external experts for review.

### Implementation of Resolution 9.7

4. The need to identify which migratory species are most significantly threatened by climate change (see Resolutions 8.13 and 9.7) was addressed by a preliminary review of Appendix I species by the Zoological Society of London (ZSL). This literature-based survey

(UNEP/CMS/ScC17/Inf.9) covering 45 CMS-listed species was presented by the ZSL at the 15<sup>th</sup> meeting of the Scientific Council and was funded from the CMS Trust Fund. The assessment included the Appendix II listed Narwhal *Monodon monoceros* in response to the strong climate change vulnerability of this species identified at COP9. The review provides detailed information on specific species, with a focus on those covered by CMS agreements so that results could be directly applied within the CMS framework.

5. IUCN is currently engaged in a much wider assessment aimed at identifying those species on the IUCN Red List that are most threatened by climate change. The resultant “red flag” tool could assist CMS Parties and the Scientific Council in identifying those migratory species that are not included in the ZSL assessment, as well as those that are not listed on CMS Appendices. Both the ZSL and IUCN methodologies were presented and discussed at the abovementioned technical workshop in June 2011 (UNEP/ScC17/Inf.10). Experts recommended that both methodologies should be compared in more depth and that those migratory species identified by the IUCN “red flag” should be considered by Parties for listing on the CMS Appendices (see UNEP/ScC17/Inf.10 and Resolution 10.19).

6. Resolution 9.7 called for the establishment of an open-access database on scientific literature of relevance to climate change and migratory species. The authors of [www.bioclimate.org](http://www.bioclimate.org) from ZSL kindly included scientific literature on migratory species which was used in the above-mentioned project in their online bio-climate website. The development of this open-access database is currently stalled as it requires funds for further growth (see UNEP/CMS/ScC16/Doc.8).

7. Parties have reported a strong need for capacity building with regard to understanding the complex interactions between climate change and migratory species, as well as a need for an improved technical ability to design appropriate response activities (see Resolution 9.7). The outcomes of the abovementioned 2011 technical workshop provide a solid foundation for developing regional capacity building for Parties to address climate change adaptation and mitigation. However, funds are needed to compile specific guidance for applied Party action and for the dissemination thereof.

8. Resolution 9.7 called for increased capacity within the Secretariat to address climate change and for a workshop at the regional level. The workshop took place in 2011 as outlined above and the capacity within the Secretariat to effectively address climate change issues has been maintained with the creation of the Associate Scientific & Technical Officer position within the Science Unit, which was agreed by COP9.

9. The Secretariat has been actively assisting the Scientific Council and the working group dedicated to climate change by compiling updates on the scientific literature on climate change and migratory species (e.g. UNEP/CMS/ScC16/Doc.8), by liaising with external experts and conservation bodies to seek their input and by identifying cost-effective solutions to implementing Resolution 9.7. Raising awareness about the threat that climate change poses for migratory species has been high on the agenda of the Secretariat, with frequent presentations to a range of audiences and press briefings. The latter have included negotiations towards minimizing the negative impacts of measures taken to mitigate climate change, such as renewable energy, and finding effective compromise between conservation targets, industry and national stakeholders.

10. Cooperation with other bodies, such as the ZSL, IUCN and the British Trust for Ornithology, has been fruitful not only in implementing the climate change mandate of the

Convention, but also in obtaining feedback and information on emerging issues on the subject. The Secretariat has been liaising with other MEAs, such as CITES, CBD and Ramsar, in order to maximize efforts and keep these and other partners informed about climate change activities and policy developments under CMS. UNFCCC and CMS Secretariats have been discussing a closer collaboration and a stronger emphasis of UNFCCC instruments on migratory species. However the continuous negotiation required within the various processes exceeds the current capacity of the Secretariat. The Secretariat did however actively participate in UNFCCC COP15 and set up a popular booth with information on the interactions of climate change and migratory species for the duration of the Copenhagen Conference.

### **Reported activities by Parties in implementing Resolution 9.7**

11. Based on information from the national reports submitted to COP10, CMS Parties have undertaken a range of activities contributing to the implementation of Resolution 9.7, including research, capacity building, development of relevant strategic plans and monitoring.

12. Among those Parties that have implemented projects to increase resilience and/or mitigate climate change, the Netherlands has applied climate change adaptation measures, such as the National Ecological Network and the “Room for the River” project. Belgium has provided Morocco with financial support for the implementation of the project “Helping the cedar forest face climate change”, which benefits a number of migratory species. In Italy the Ministry of Environment has funded relevant projects in cooperation with ACCOBAMS, as well as a workshop of the International Whaling Commission on “Cetaceans and Climate Change” in 2009. In Belarus, within the framework of the GEF-UNDP Project 43201, there are plans to recover the natural conditions of wetlands of importance to migratory species. A number of Australian universities are engaging in improving the management of dugongs and marine turtles in response to climate change, taking into account recent extreme events.

13. Research projects have been reported from a number of Parties aimed at understanding the impact of climate change and guiding policy development. In the Netherlands there is work under way to identify which species are most likely to be threatened by climate change, and mitigation and adaptation measures are being developed based on the findings. Monaco reported collaborating with the Prince Albert II Foundation to study the effects of climate change on biodiversity. Research has been initiated to determine the sensitivity of marine turtle populations breeding in South Africa to climate change. Germany is implementing numerous research projects on the impact of climate change on species and habitats at the national level, many of which focus on the wider impact of climate change on biodiversity and landscape, such as the identification of changes in bird distributions. In Hungary a number of universities cooperate with national parks to carry out scientific research, studying for example the effect of urbanization and climate change on migratory waterbirds. The United Kingdom has in the past funded and contributed heavily to work on climate change and migratory species which has considered the strength of links between climate change and migratory species behaviour, abundance and distribution (e.g. UNEP/CMS/Conf. 8.22). In 2010 a report on climate change effect on migratory bird species was prepared in Poland. This report was presented at the abovementioned technical workshop, which was funded by Germany (UNEP/CMS/ScC17/Inf.8). The Ministry of Environment and Forests of India has supported studies in several eco-regions such as the Trans-Himalayan region, the Western Ghats and the Sunderbans, as well as in the ocean targeting fisheries, to examine the impact of climate on migratory species. The Islamic Republic of Iran reported research on the impact of climate change on biodiversity. Norway and Ecuador reported monitoring of climate change impacts, with a focus on the Arctic and the Galapagos respectively.

14. Many Parties are reporting that strategic plans are in place or being drafted to mitigate the effects of climate change on migratory species. These include Ethiopia, which is placing particular emphasis on the establishment of transboundary protected areas, Samoa and Denmark. Belgium is addressing climate change within its wider adaptation measures, including the national ecological network. South Africa is integrating climate change considerations, including ecological connectivity, into its Biodiversity Stewardship Programme. Germany adopted its National Strategy on Biological Diversity aimed at protecting biodiversity and reducing climate change. Hungary has adopted a National Climate Change Strategy for 2008-2025. The Islamic Republic of Iran is preparing a Climate Change Act, which addresses the impact of climate change on biodiversity, to be included in the fifth National Development Plan. The Philippines is reporting conservation and rehabilitation efforts targeting coastal wetlands. There are likely to be many more activities undertaken by CMS Parties which contribute towards the implementation of CMS's climate change mandate, but these were not reported to the Secretariat.

### **Climate change activities within the wider CMS Family**

15. A number of species-specific CMS Action Plans and Memoranda of Understanding include adaptation measures related to climate change, such as those for the White-tailed flufftail (*Sarothrura ayresi*), the Great Bustard (*Otis tarda*) and the Saiga Antelope (*Saiga* spp.). The African-Eurasian Waterbird Agreement launched its Conservation Guidelines No. 12 on measures needed to help waterbirds to adapt to climate change in 2011 ([http://www.unep-aewa.org/news/news\\_elements/2011/in\\_focus\\_cg12.htm](http://www.unep-aewa.org/news/news_elements/2011/in_focus_cg12.htm)). The Agreement on the Conservation of Seals in the Wadden Sea is actively addressing coastal protection and sea level rise, for example in the Sylt Declaration (2010) and through a trilateral working group.

16. There are a number of developments within the wider CMS Family aimed at reducing the negative consequences of climate change mitigation activities. EUROBATS has published its guidelines for consideration of bats in wind park projects (Publication Series No. 3; [http://www.eurobats.org/publications/publication\\_series.htm](http://www.eurobats.org/publications/publication_series.htm)) in five languages to date, with Polish being the latest addition in 2011. The 6<sup>th</sup> Meeting of the Parties to ASCOBANS adopted a comprehensive resolution aimed at reducing the negative impacts of offshore wind farms and other renewable energy (*Resolution 6.2 on adverse effects of underwater noise on marine mammals during offshore construction activities for renewable energy production*).

### **Action requested:**

The Conference of the Parties is invited to:

- a. take note of the proceedings of the Technical Workshop on the Impact of Climate Change on Migratory Species: the current Status and Avenues for Action (Arles, France, 6-8 June 2011);
- b. adopt Resolution 10.19 on migratory species conservation in the light of climate change; and
- c. provide funds for the implementation of CMS' climate change mandate, specifically for strengthening capacities at the regional level.