



# CONVENTION ON MIGRATORY SPECIES

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## SCIENTIFIC TASK FORCE ON WILDLIFE DISEASES: TERMS OF REFERENCE OF THE TASK FORCE ON WILDLIFE DISEASES







#### **Background:**

One of the greatest challenges of the 21st century is conducting sustainable natural resource management despite encroachment, expansion, and intensification of agricultural practices to meet the demands of food security for an exploding population. To date, a balanced approach has not been obtained; resulting in unhealthy ecological and agricultural systems worldwide. The health of wildlife, livestock, people, and the environment is negatively impacted by these practices as illustrated in examples outlined below.

The emergence of highly pathogenic avian influenza H5N1 resulted in the death of hundreds of people, caused millions of dollars worth of damage to trade and local livelihoods, and severely impacted the remaining population of the threatened Bar-Headed Goose. The H1N1 pandemic of 2009 was caused by a virus containing RNA segments from people, pigs and birds. These diseases among others pose a threat to both animals and humans, spread rapidly, affect global economies, and require coordinated and collaborative international response. Changing ecological, agricultural, and climatic conditions have the potential to increase health risks to wildlife, livestock and people by resulting in changing pathogen virulence, pathogens jumping into new species, or by facilitating the spread and shift in distribution of a number of pathogens.

In 2010 and 2011 the critically endangered Saiga antelope suffered mass mortalities reportedly due to an infectious disease. Outbreaks of Chytridiomycosis have decimated populations of amphibians worldwide and continue to occur. In addition to concerns about diseases impacting wildlife, food security issues are forcing people to utilize natural resources as a source of food through bush meat hunting, wildlife farming, and expand livestock production into protected areas. As food security deteriorates in some countries, illegal wildlife trade markets are growing in others due to high demand from the wealthy. In order to tackle these problems, biologists, public health professionals, and natural resource managers must work together to come up with novel solutions.

Building on the experiences of the successful Task Force on Avian Influenza, COP Resolution 9.8 (Rome, 2008) calls of United Nations Environment Programme- Convention on the Conservation of Migratory Species of Wild Animals (UNEP-CMS) and the United Nations Food and Agriculture Organization (FAO) - Animal Health Service to co-convene the Scientific Task Force on Wildlife Diseases, in the future to be known as the Scientific Task Force on Wildlife and Ecosystem Health, with the aim of identifying diseases that have an impact on both domestic and migratory wildlife, and that are of greatest concern with regard to food security, sustainable livelihoods, and conservation. Through the launching workshop in Beijing, PRC in June 2011, working areas other than disease-specific concerns were identified as high priorities for technical work and publications including; migration ecology, bush meat, wildlife farming, and disease transmission at the human-wildlife-livestock-ecosystem interface.

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### 1. Vision

Support an integrated approach to managing the health of ecosystems, wildlife, livestock and people within the "One Health" framework.

## 2. Purpose

To facilitate coordination, information-sharing, communication and understanding between relevant organizations, networks, administrations, and professional disciplines. The scope of work will include prioritized diseases at the human-wildlife-livestock-ecosystem interface in addition to biodiversity and ecosystem health concerns within the context of multilateral environmental agreements (MEAs) to better enable the integration of relevant work and decision-making by governments, agencies and other stakeholders. The Task Force will work to ensure that disease dynamics are considered in the broader context of sustainable natural resource management, agricultural production and food security, socio-economic development, environmental protection and conservation of migratory species, their habitats and migration routes.

### 3. Objectives

- A. Support CMS, FAO, and major conservation MEAs (Convention on Biological Diversity (CBD), Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), Convention on Wetlands (RAMSAR), etc.) and CMS related instruments (AEWA, EUROBATS), flyway arrangements (EAAFP, etc.) to integrate livestock-wildlifehuman-ecosystem health interface issues into their activities, approaches and resolutions.
- B. Encourage One Health multi-sectoral and transdisciplinary approaches including sciencebased information sharing among:
  - Relevant government sectors, *e.g.* ministries of forestry, environment, agriculture, public health, tourism, finance, information, etc.;
  - Protected area authorities and stakeholders, e.g. trans-frontier conservation areas, natural resource managers, park rangers, etc.;
  - Relevant UN agencies, e.g. UNEP, FAO, WHO; UNESCO, UNICEF, UN High Commission for Refugees, etc.;
  - International technical bodies and NGO's, e.g. AU IBAR, IUCN, OIE, Wetlands International, Conservation International, World Wildlife Fund, Wildlife Conservation Society, Ecohealth Alliance, etc;
  - Multinational economic development partnerships, e.g. EU, ASEAN, SAARC, ECOWAS, etc.;
  - One Health Consortia, Industry and farmers.
- C. Provide a mechanism for UNEP-CMS members, CMS Scientific Council, FAO ECTAD, regional representation and national staff or colleagues to report unofficial wildlife morbidity and mortality events that supports the FAO EMPRES I disease intelligence system, as well as practically and constructively responding to information of epidemiological significance and conservation.



SCIENTIFIC TASK FORCE **ON WILDLIFE DISEASES** 



- D. Promote and enact programme development, initiatives and projects that facilitate multidisciplinary One Health capacity development at academic, institutional, organisational, and community levels such that the local, national and regional capacity expands and can provide better informed inputs when jointly working on issues.
- E. Raise awareness and share science-based information on cross-cutting One Health, conservation and ecosystem-wildlife-animal disease issues at the human-wildlife-livestock-environment interface.

#### 4. Membership & Structure

**Philosophy:** The Scientific Task Force on Wildlife Diseases encourages connectivity and linkages to any organization interested in being associated with or linked into information exchange supporting the purpose of the Task Force. While there will be a smaller group of core affiliates, other membership categories have been established to allow for maximum participation.

**Co-conveners:** the co-conveners (FAO and CMS) will broadly oversee activities, facilitate coordination, and identify funding opportunities, as appropriate.

**Task Force Members:** a group of relevant science-based organizations, associations, or individuals representing applicable disciplines with particular interest in collaboration at the interface of human, wildlife, livestock, and ecosystem health.

#### • Core affiliates: 6-10 affiliates

Each core affiliate will participate in quarterly teleconferences, attend meetings, participate in web-based communication (wiki, list server, etc.), and act as a communication & information sharing conduits. Core members will determine the priority areas and activities in addition to developing and maintaining the work plan for the Task Force. This group can include one NGO, but will generally consist of international organizations and representation from multi-lateral environmental agreements. Core Affiliates will have the right to vote on issues that require clearance by the Task Force (i.e. work areas, topics, outputs). Links between the Task Force and Core Affiliate websites will be established.

#### • Observers: 2-3 affiliates

Each observer will be invited to participate in teleconferences and attend meetings but they will not have voting or decision-making rights.

#### • Partners: unlimited

Each partner will provide suggestions and inputs, identify needs, and serve as a conduit for information sharing from their respective expertise, geographic area, institution, readership, etc. to the Task Force, and they will also receive outputs, information and products developed by the Task Force. Links between Task Force and Partner websites are encouraged.





#### • National Associates: unlimited

Countries are welcome to identify representatives from ministries, departments, or other national structures, to serve as a conduit between the Task Force and the national counterpart. Multiple country organizations/representatives are welcome and the arrangement is non-binding. Inputs, suggestions, and ideas are welcome from any national associate, and outputs, information and products of the Task Force will be shared. Links between the country organization and the Task Force website are encouraged.

#### • Student Associates: unlimited

Students and student organizations from all disciplines are welcome to identify representatives to serve as a conduit between the Task Force and the student organizations. Inputs, suggestions, and ideas are welcome from student organizations, and outputs, information and products will be shared with the student organizations. Links between the Task Force website and the Student Association website are encouraged.

**Working Groups:** Working groups will be established on an as-needed basis, usually in response to important technical areas determined by the core affiliates on globally relevant current or real-time needs. Some working groups will have short-term mandates or activities, while others will be established as long-term groups whose responsibilities will be to provide inputs to the Core Affiliates on issues that need to be addressed either from a regional, taxonomic or technical perspective.

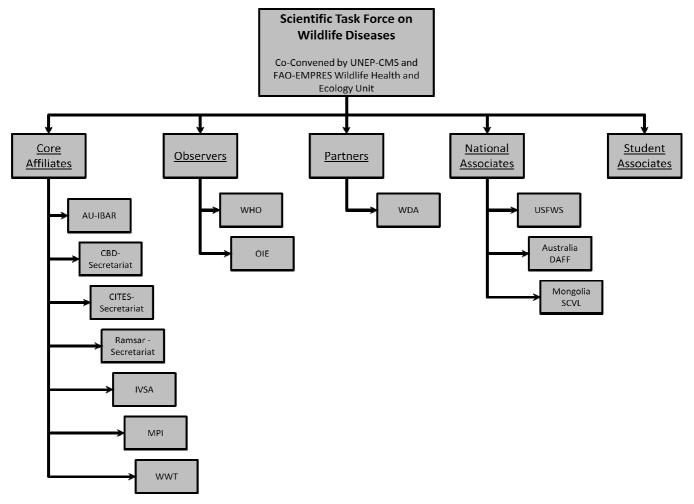
- **Technical Areas**: These are the areas within the work plan in which the Task Force has current projects.
  - **Wild Birds and Avian Influenza:** This is an incorporation of the highly successful Task Force on Avian Influenza. The work of this group will continue within the new TF framework. Updates will come out periodically about the status of AI as it relates to wild birds as well as press releases and clarifications as deemed necessary.
  - Identification of diseases of high priority: This work area is meant to identify diseases of concern to the Task Force Core Affiliates. Once identified, summaries of available data will be made available through the website and useful fact sheets will be created as gaps are identified. The specific areas of focus include diseases with importance to wildlife population health, zoonotic disease threats, and disease of concern to livestock production.
  - **Bridging the gap between natural resource professionals and public health professionals:** Characterizing the economic and social worth of wildlife and ecosystems.
  - Wildlife Morbidity and Mortality Event Monitoring: This work area is meant to serve as a method for members of the task force to encourage better reporting through official channels as well as the use of unofficial "rumour-tracking" reporting tools as deemed appropriate by Task Force members to improve international understanding of disease ecology in wildlife.





- Human-Wildlife-Livestock-Ecosystem Interface: Create useful products to address the various challenges associated with an expanding population and increased connectivity between groups. Specifically focusing on the below areas.
  - Trans-Frontier Conservation Areas
  - Wild Meat Harvest
  - Captive/Farmed Wildlife
- **Migration Ecology:** Specifically looking at the impact of migration ecology on disease dynamics, ecosystem health, and wildlife population changes.
- Other groups can be created as needed to respond to current events that can include Task Leads, Regional Representatives, Taxon Representatives, etc.

<u>Note</u>: One individual could be a member of more than one working group or technical area. The working group structure mainly serves to ensure that all main regions, taxa and thematic areas are represented.



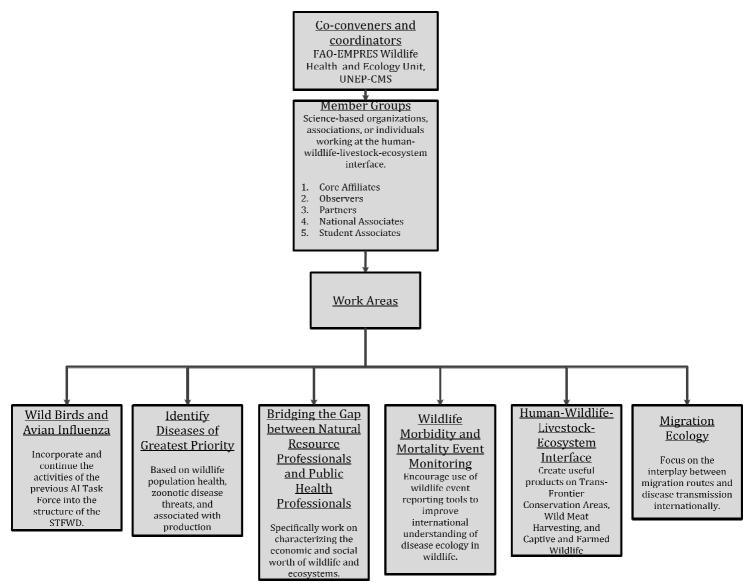
**Figure 1:** Membership organization of the Scientific Task Force on Wildlife Diseases as of 21 September 2011

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### Acronyms:

AEWA: The Agreement on the Conservation of African-Eurasian Migratory Waterbirds ASEAN: Association of Southeast Asian Nations AU-IBAR: African Union- InterAfrican Bureau for Animal Resources CBD: Convention on Biological Diversity CITES: Convention on International Trade in Endangered Species of Wild Fauna and Flora CMS: Convention on the Conservation of Migratory Species of Wild Animals DAFF: Department of Agriculture, Fisheries and Forestry ECOWAS: Economic Community of West African States EAAFP: East Asian-Australasian Flyway Partnership EU: European Union EUROBATS: The Agreement on the Conservation of Populations of European Bats FAO: Food and Agriculture Organization of the United Nations IUCN: International Union for Conservation of Nature **IVSA:** International Veterinary Student Association MPI: Max Planck Institute NGO: Non-governmental Organization OIE: World Organization for Animal Health Ramsar: Convention on Wetlands SAARC: South Asian Association for Regional Cooperation SCVL: State Central Veterinary Laboratory SFA: State Forestry Administration TF: Task Force UNEP: United Nations Environmental Program UNESCO: United Nations Educational, Scientific and Cultural Organization UNICEF: United Nations Children's Fund USFWS: United States Fish and Wildlife Service WDA: Wildlife Disease Association

WHO: World Health Organization

WWT: Wildfowl and Wetlands Trust