

77 SG/13/GT

Original: English  
January 2009

**REPORT OF THE MEETING OF THE OIE WORKING GROUP ON WILDLIFE DISEASES**  
**Paris, 26 – 29 January 2009**

---

The meeting of the OIE Working Group for Wildlife Diseases (WGWD) was held from the 26 to 29 January, 2009, at the OIE headquarters in Paris. The meeting was chaired by the WGWD President, Dr William Karesh, and Prof. Ted Leighton was appointed as rapporteur.

The agenda and list of participants in the WGWD meeting are provided in Appendices I and II.

**1. Purpose of the meeting**

Dr Bernard Vallat, Director General of the OIE, welcomed the reconstituted Working Group on Wildlife Diseases. He emphasised the constant concern of the OIE for wild animals and their diseases at international level. In this field, as for other OIE missions, the measures taken by the OIE were aimed at reinforcing the capacity of Member Countries and Territories to improve the surveillance and notification of wildlife diseases. Priority would therefore be given to the deployment of focal points responsible for assisting each delegate in this task.

General guidelines had been drawn up and the working group was invited to adapt them to specific wildlife monitoring tasks. The focal points of the Members would have three key tasks:

- First, to identify and notify wildlife diseases with an impact on human health and on domestic animal health, and, progressively, diseases that are a threat to wildlife conservation.
- Second, to ensure transparency relating to the world animal health situation by improving the standards used for disease surveillance,
- Finally, contributing to improved knowledge by collecting information and highlighting the needs to be satisfied.

In the five OIE regions a priority training programme will be set up for the focal points. The OIE working group on wildlife diseases was invited to assist the OIE in harmonising the training content and guaranteeing an adequate initial level of knowledge to achieve the stated objectives. Particular attention will be paid to the specific environmental conditions of each region, as well as to the level of development in Member Countries and Territories, in order to ensure the suitability of the training at the request of the Members.

Thanks to the expertise of the members of the working group, and with the help of the OIE Collaborating Centre for Wildlife Disease Surveillance and Monitoring, Epidemiology and Management, the focal points will be able to set up a worldwide animal health and wildlife disease monitoring network for the benefit of all.

Dr Vallat thanked the working group for its constant efforts in the field of wildlife diseases and the associated zoonoses. In response to questions posed by members of the working group on wildlife diseases, he stated that the animal health concerns of the OIE relating to the illegal traffic in wild animals and wildlife products were in step with the concerns of organisations working to reduce the trade in, and elimination of, wild species under threat.

In reply to another question, he stated that the OIE was asking the working group on wildlife diseases to propose methods to the OIE Scientific Commission for reinforcing the notification of zoonotic infections of wildlife, within the framework of the OIE mandate.

## **2. Discussion with Dr Karim Ben Jebara on the OIE wildlife disease reporting system**

Dr Ben Jebara reported to the WGWD on the development of the WAHIS system to incorporate reporting of diseases and infections in wild animal species. This has been done with input from the *ad hoc* Group on Wildlife Disease Notification, which met in July, 2008 at OIE headquarters and included four members of the WGWD. The annual Questionnaire of the WGWD has been adapted for direct reporting within the WAHIS system. 2008 is a transition year in which the Questionnaire has been distributed in the new format but without direct on-line submission. The same codes to identify different categories of the occurrence of infections used in the WAHIS system are used for reporting infections in wild animal species. The inclusion of wild animal species in WAHIS will make it possible for the first time clearly to distinguish, in the information on disease occurrence available on the OIE disease information website, reports of infections in wild animal species from reports of infections and disease in domestic animal species.

The WGWD applauded the work of Dr Ben Jebara and the Animal Health Information Department for excellent work in incorporating wildlife into the OIE disease and infection reporting system.

### Recommendations:

1. Wildlife Focal Points should be asked to identify the species of host animal infected only when this is known with reasonable certainty. When the species is uncertain, only the taxonomic family should be indicated. It is essential that correct taxonomic information about the host species be entered into WAHIS
2. Reporting of infection in wild animal species should also be incorporated into the reporting system for infections and diseases in aquatic animals
3. In some cases, the current OIE List of diseases inadvertently confuses the true interest of the OIE concerning reporting of infections in all species. For example, listing infection with *Mycobacterium bovis* as a "Disease of Cattle" implies that only infections in cattle are to be reported. Yet it is the OIE policy that such infection is to be reported in any animal species. The WGWD recommends that reference to disease names in the OIE List of Diseases be made without reference to particular domestic animal host species wherever possible.

### Next step for WGWD:

The WGWD will review the results of the 2008 Questionnaire at a mid-year teleconference and will work with the Animal Health Information Department to monitor and improve the reporting of wild animal diseases over time.

## **3. Review of Code and Manual Chapters for inclusions of Wildlife Issues**

The WGWD reviewed the following chapters of the OIE *Terrestrial Animal Health Code* (2008) and also the *Manual of Diagnostic Tests and Vaccines* (2008) to assess whether or not roles played by wild animals in these infections or diseases are taken into account: Bovine Tuberculosis, Avian Influenza, Newcastle Disease, Foot and Mouth Disease, Classical Swine Fever, African Swine Fever, Bluetongue, as well as the proposed chapter revisions for Animal Health Surveillance and several chapters related to animal transport. Complete comments for each are provided in [Appendix III](#).

#### 4. Wildlife disease issues of concern

The WGWD noted the following wildlife disease issues of interest or concern.

Philippine and Japanese researchers have been looking for **Ebola-Reston** virus in monkeys and fruit bats in the Philippines over the last decade or so. Pig mortalities in 2008 attributed to PRRS infection resulted in the detection of the Ebola Reston virus (ERV) in porcine samples sent to the FADLL, USDA as part of the investigation which were ultimately confirmed positive for ERV at the U.S. Centers for Disease Control. There had previously been several outbreaks in a primate facility in the same region as currently seen in pigs. The source of virus has yet to be determined.

In Democratic Republic of Congo, human outbreaks due to a new strain of **Ebola** virus were identified this year, but no link to wild or domestic animals was made during follow-up investigations.

**Yellow fever** in primates in South America has extended its range from Trinidad as far south as Argentina, with significant mortalities recorded in multiple species of primates.

A new **Arenavirus** was isolated in South Africa from a Nigerian patient seeking medical attention for a Lassa fever –type disease. Secondary cases occurred in medical staff at the health care facility. This virus is a rodent-associated virus.

In the Kruger National Park in South Africa, a mass mortality event involving more than 200 crocodiles occurred in the Olifants River. Necropsy and histopathology revealed generalized pansteatitis (necrosis and inflammation of adipose tissue) and depletion of antioxidants. A pollution event causing a fish die-off, followed by ingestion of the affected fish is suspected. The cause of the fish mortality was not determined. Chemical analyses of water and sediment samples as well as tissues from crocodile and fish failed to detect abnormal levels of organic pollutants or heavy metals. A similar die-off of Garial in Nepal also occurred last year, and pansteatitis was also confirmed on necropsy and histopathology.

A **blue-green algal bloom** in man-made dams in the Kruger National Park was responsible for significant mortalities of animals around affected lakes. It appears as though large resident hippo populations are a significant risk factor in causing eutrophication of these water bodies.

An outbreak of **Rift Valley fever** was first detected in privately owned African buffalo breeding facility adjoining the Kruger National Park. Secondary outbreaks of this vector-born disease then occurred in cattle and sheep, with some foci geographically far removed from the original focus. Mass vaccination was undertaken in domestic livestock in the affected areas. This is the first outbreak of Rift valley fever to be detected in South Africa since 1999. A climatic trigger appears to be linked with the emergence of dormant infected mosquito eggs.

Northern Europe – Infections and high mortality due to **Trichomonas sp.** in small passerine birds, especially Greenfinches (*Chloris chloris*), has been observed in several different localities in Scandinavia and in Great Britain. This type of infection has not been seen before in passerines.

The role of wildlife in the ongoing outbreak of **bluetongue** has been followed in 2008. In Belgium several seropositive red deer (*Cervus elaphus*) were discovered. In Sweden, Bluetongue in domestic sheep and cattle was observed in several farms in the southern part of the country. A large number of moose (*Alces alces*) and roe deer (*Capreolus capreolus*) were tested following the outbreak; only one moose was seropositive and it is not yet known whether or not this is a true positive or a false positive.

A hair-loss syndrome in moose associated with **deer keds** has been observed in Norway and Sweden in recent years. However, keds also are common in Finland but no hair loss has been reported in Finnish moose.

In the past few years, the **Raccoon dog** (*Nyctyrectes procyonides*) has been found in the northern part of Sweden as a result of dispersal from Finland. The invasion by this alien species is for many reasons unwanted since this species will have a great impact on the ecology. It will also pose a risk for the introduction of new diseases like *E. multilocularis* and rabies.

**Chronic wasting disease** continues to expand its range in wild cervids in Canada and the United States by animal movement, including that due to trade and transport. The WGWD is concerned about the potential risk of transport of infected animals and introduction of the disease to Asia, the Russian Far East or Europe. No new foci of wild cervid infection have been found, but existing foci are increasing in size, and CWD continues to be detected in low numbers of commercial white-tailed deer and wapiti (elk) facilities. There is now documented evidence of decline of a wild cervid populations associated with CWD. One recently published study by Miller et al., revealed that “prion infection dramatically lowered survival of free-ranging adult (>2-year-old) mule deer (*Odocoileus hemionus*): estimated average life expectancy was 5.2 additional years for uninfected deer but only 1.6 additional years for infected deer. Prion infection also increased nearly fourfold the rate of mountain lions (*Puma concolor*) preying on deer, suggesting that epidemics may alter predator–prey dynamics by facilitating hunting success. Despite selective predation, about one fourth of the adult deer sampled were infected. High prevalence and low survival of infected deer provided a plausible explanation for the marked decline in this deer population since the 1980s. Conclusion: Remarkably high infection rates sustained in the face of intense predation show that even seemingly complete ecosystems may offer little resistance to the spread and persistence of contagious prion diseases. Moreover, the depression of infected populations may lead to local imbalances in food webs and nutrient cycling in ecosystems in which deer are important herbivores”.

**Exotic orbiviruses** continue to be isolated from wild and captive deer with hemorrhagic disease in the United States. In 2008, Epizootic Hemorrhagic Disease Virus Serotype 6 was isolated for the third consecutive year. Since 2006 it has been recovered from deer in Illinois, Indiana, Kansas, Missouri, and Texas, and surveys are underway to evaluate the distribution of this new serotype. Bluetongue Virus (BTV) Serotype 3 was found in a wild deer from Arkansas not far from where it was found in 2006 in Mississippi just to the east. Also in 2008, BTV-12 was isolated for the first time in the United States when it was recovered from a deer in Texas. The detection of these non-endemic viruses highlights the importance of thorough diagnostic work-ups of wildlife mortality events.

**Bovine tuberculosis** continues to be a problem in wild white-tailed deer in the northeastern portion of Michigan’s Lower Peninsula and in northwestern Minnesota, as it does in some wild cervids and wild bison in Canada. Efforts to eliminate the disease from wildlife include reducing deer population densities and bans on deer feeding and baiting, as well as early detection and risk mitigation of domestic cattle herds.

**Newcastle disease** occurred in the summer months in double-crested cormorants (*Phalacrocorax auritus*) in central Canada and in the Upper Midwest of the United States. This was the heaviest ND-associated mortality seen in several years.

**Sub-prime mortgage** impact on disease: There was an increase of 276% in human cases of **West Nile virus** in 2007 in one city in California associated with neglected swimming pools on properties abandoned by persons unable to make their mortgage payments.

## 5. Wildlife trade

Dr Karesh discussed health issues related to the global trade in wildlife and wildlife products. The legal and illegal trade is of significant volumes with tens of billions of kilograms of wild mammals, birds and reptiles being captured and consumed annually. The trade in frogs is currently estimated to be over one billion animals a year. In some parts of the world, health regulations are applied to trade in wild animal products while in other parts of the world no health regulations for such trade exist. The trade presents a currently unquantified risk of the geographical spread of infectious diseases of concern such as Chytrid fungus (*Batrachochytrium dendrobatidis*) as well as enhanced opportunities for novel interspecies exchanges of infectious organisms such as the SARS coronavirus, Nipah virus, and filoviruses.

On the other hand, the legitimate trade in wildlife serves a role in captive breeding and zoological institutions, as well as potentially important sources of protein and income for many people.

The WGWD identified a possible role for OIE to bring various stakeholders together to discuss and evaluate wildlife trade and disease risk management, food security and livelihoods issues, sustainability and conservation impacts in order to objectively inform the global community.

## **6. Commodity-based trade**

Dr Alex Thierman and Dr William Karesh lead discussion of the concepts of commodity-based trade, and potential wildlife components and impacts. At its core, there are few immediate links to wildlife. The commodity-based approach is a new way to dealing with trade issues that helps to resolve country, zone, or compartment status issues by allowing trade in higher value products which are properly processed to reduce disease risks. For example, milk products are safe from BSE. Discussions are now taking place about other products that OIE could address, based on existing knowledge, what research is needed with respect to making commodities safe, and which are the priorities.

There are several issues that may relate to wildlife. 1) In some ways, broader acceptance of commodity-based trade could reduce pressure on wildlife that may serve as reservoirs for diseases, such as FMD in African Buffalo (*Syncerus caffer*), and may reduce the need for large scale cordon fencing which is also disruptive to wildlife migrations and human movement. 2) Commodity-based trade may change economic models to encourage livestock production in areas where it formerly was not economically viable or required large subsidies. This could expand the amount of land used for cattle production and reduce land availability for wildlife. Alternately, it may provide a mechanism to use the same land for both wildlife and livestock by reducing the disease impacts on the trade in the beef products. 3) Reducing disease concerns may inadvertently reduce investment on both livestock and wildlife disease management.

The WGWD decided to focus its attention on the review and recommendations with respect to particular disease chapters of the OIE *Code* and *Manual* to ensure wildlife issues are addressed, rather than to make generalized recommendations.

## **7. 2008 Report of WGWD and consideration of comments from the Scientific Commission and International Committee**

The WGWD reviewed the 2008 Report of the previous WGWD and some comments made about this report in the 2008 Report to the International Committee by the Scientific Commission. The WGWD noted the support of the Commission and fully agreed with the call for a closer integration with the priorities of the Commission.

## **8. One World – One Health**

Dr Karesh lead a discussion related to *One World – One Health*™. The Wildlife Conservation Society began organizing a series of symposia and meetings in 2004 under the name One World – One Health (OWOH) and operates a grant program to support multi-disciplinary health projects under this program name. “One World – One Health” is a registered trademark of WCS for the purposes of symposia, conferences and meetings as well as the grants program. The initiative engages a wide range of collaborators and partners from both the public sector and the private sector. Conferences have been held in Durban (2003), New York (2004), Bangkok (2004), Beijing (2005) and Brasilia (2007).

The next meeting is scheduled for October 2009 in Rome, to be held at the facilities of the Food and Agriculture Organization of the UN. OIE will be a sponsor of the meeting and help to organize meeting content. OIE is also interested in exploring the feasibility of hosting the next OWOH meeting in Paris in 2010. The WGWD could serve to help the organizing committee if this concept proceeds. Two possible themes for the meeting were presented: 1) Securing a Healthy Future for Wildlife (or Nature) and People. This meeting could bring together stakeholders in human, animal, and environmental health to discuss or provide examples of collaboration improving health outcomes. The value of protecting the health of ecosystems and wildlife would be highlighted in this meeting and OIE would provide the platform for drawing

attention to this important concept. 2) Implications of the Wildlife Trade. This theme would bring together experts in disease movement, trade and regulatory systems, anthropology and sociology, wildlife management, etc to discuss the complex subject of the global trade in wildlife and wildlife products. The meeting could also result in a Purithematic Issue of the *OIE Scientific and Technical Review* based on the participants contributions.

## **9. Collaborating Centre for Wildlife Diseases**

Prof. Leighton, Director of the Collaborating Centre on Wildlife Disease Monitoring and Surveillance, Epidemiology and Management, provided a written report to the WGWD on the Collaborating Centre's activities. The WGWD thanked the Centre for its work and encouraged it to continue to support the OIE through such activities.

## **10. Training for Wildlife focal points**

The Collaborating Centre has offered to collaborate with the OIE to develop a training seminar for OIE wildlife focal points. A general plan for such seminars was presented and discussed by the WGWD, taking into account comments on this topic made by Dr Vallat in his general discussion with the WGWD. The WGWD endorsed the general plan and the wildlife topics proposed for inclusion in this first training session for wildlife focal points. It was agreed that the first such seminar, tentatively planned for the Americas Region in the fall of 2009, should serve as a template that can be adapted to such seminars to be presented in each of the other OIE regions within the next few years.

## **11. Terms of Reference for Wildlife focal points**

The WGWD reviewed draft Terms of Reference for wildlife focal points and proposed some revisions and additions to this draft. The proposed revised terms of Reference are in [Appendix IV](#).

The WGWD also considered the qualities and qualification that would be most appropriate for persons appointed to serve as wildlife focal points.

Recommendations for background and competencies for persons appointed as wildlife focal points.

- Knowledge of wild animal diseases, in the country and in general
- Knowledge of vertebrate species and their basic biology relevant to the country
- Knowledge of and communication with all persons and agencies, ministries and/or authorities relevant to wildlife, wildlife diseases, zoonotic diseases and veterinary services within the country.
- Skill and experience in communication and networking
- Able to communicate in English, French or Spanish
- Is provided with a sufficient amount of salaried time to carry out the expected duties
- Is supported and assisted in his or her work by the Delegate

## **12. Communications**

### **• OIE Communication unit discussion**

Glaïeul Mamaghani (Deputy Head of Communication Unit) joined the meeting for an explanation on Communication Department activity for the media and the OIE members.

A very short summary on the WGWD meeting could be circulated internally within the OIE by the Communication Department, as are daily press summaries, to inform OIE Departments of the work of the WGWD. There also may be specific issues and messages the WGWD will want to publicize, and the Communication Department is willing to engage in this.

- **Website discussion**

Dr Daniel Chaisemartin and Mr Giuseppe Manzi joined the meeting to present the recent updates of the Web page of the WGWD.

The WGWD reviewed the current and proposed future website designs and content and was glad to see the improvement and simplification of the new WGWD Web page design. It was agreed that documents and content update can simply be submitted to the OIE Webmaster for further incorporation into the page content.

The WGWD expressed the need for a direct link from the OIE Web site home page to the WGWD page, and will send this request to the Director General.

### **13. Working Group on Wildlife Diseases: Terms of Reference**

The WGWD reviewed the terms of reference developed by the previous Working Group on Wildlife Diseases. The WGWD identified the following major themes as central to its activities:

- *Code and Manual* Review and Development
- Engagement with OIE staff and *ad hoc* Groups
- Assist OIE with thematic meetings
- Training focal points and building wildlife health capacity
- Represent OIE at meetings or conferences as requested

**The WGWD proposes the following Terms of Reference:**

1. Maintain global perspective and foresight on wildlife health and disease issues of importance to the OIE.
2. Assist the OIE to incorporate wildlife issues into OIE Standards, as appropriate
3. Assist OIE Members to build or improve their capacity to meet OIE standards and obligations with respect to diseases in wild animals
4. Assist the OIE to receive, record, and interpret information on wildlife disease occurrence from official sources through WAHIS, and to maintain an international network to provide information on wildlife disease occurrences from non-official sources.
5. Advise the OIE on risks, surveillance, responses and management with respect disease issues associated with wildlife.
6. Address specific issues brought to the WGWD by the OIE
7. Assist the OIE to communicate and disseminate information about wildlife disease issues, and represent OIE as requested.
8. Assist OIE to incorporate wildlife appropriately in its educational and scientific programs and publications
9. Assist OIE in supporting the activities of Collaborating Centres on wildlife diseases
10. The WGWD will report to the Scientific Commission of OIE.

## **Mode of operation for the Working Group on Wildlife Diseases**

1. The WGWD normally will hold one annual face-to-face mid-year meeting in Paris.
2. The WGWD will meet by teleconference two or more times each year. These teleconferences will include representation from the Scientific and Technical Department of the OIE.
3. The WGWD will establish a secure Internet forum through which to manage discussion, document reviews and related matters and through which OIE personnel also can access output from the WGWD's activities.
4. The WGWD President will maintain additional regular communication with the OIE Scientific and Technical Department, as appropriate.
5. The WGWD will revise its work plan annually.
6. The operating language of the WGWD will be English

## **14. SADC Workshop on TFCAs, Kasane Botswana, 11-14 November 2008**

The recent Southern Africa Development Community (SADC) workshop held in Kasane, Botswana, to develop methods of achieving compatibility between the Trans-Frontier Conservation Areas (TFCA) concept and international standards for the managing of transboundary animal diseases was discussed. TFCA are a relatively new development in Africa that joins public and private lands across international borders to create large wildlife conservation and management areas have the potential to be good for wildlife conservation and human livelihoods but raise many disease management issues.

Certain wildlife species are high risk for OIE list diseases. The proposed TFCA's would involve removing fixed barriers in parks between countries, thus extending the range of animals and, also, possibly, of pathogens and vectors.

A workshop was held by SADC to explore these issues. Many challenges and incompatibilities were identified at this meeting. Solutions will be long and difficult. Several important areas of focus were identified namely: 1) National and Regional Land Use Planning. This would assist with re-alignment of existing disease and animal control fences that was called for at the meeting. 2) Development of regionally appropriate and type-specific vaccines, to improve immune barriers and allow for co-existence of cattle and wildlife. 3) Commodity-based trading was also seen to be an avenue to explore as a potential solution to some disease management issues. Refocus from zones and areas to the commodity being traded and commodity-specific risks. A major motivator for the TFCAs was to create employment and improve development of rural communities. This has not happened yet. Conservation planning was done without early input from veterinary services personnel or sociologists/social issues consideration. One example of an effort to address this need is the AHEAD Program – Animal Health in the Environment and Development – [www.wcs-AHEAD.org](http://www.wcs-AHEAD.org) which has been endorsed by SADC as a mechanism to engage a more diverse array of stakeholders in TFCA planning.

Important points for OIE Members:

- 1) In future TFCA efforts, there needs to be consultation right from the start among veterinary services, conservation services, communities and private-sector investors/businesses.
- 2) The need was identified for training courses for veterinarians operating in and around these TFCAs to ensure they are informed about wildlife disease issues. The first training course will be given in April by University of Pretoria and the National Zoological Garden (Pretoria)

---

.../Appendices

## MEETING OF THE OIE WORKING GROUP ON WILDLIFE DISEASES

Paris, 26 – 29 January 2009

---

### Agenda

- 1) **Opening and welcome, household matters and analysis of Agenda time-frames** – *Dr William B. Karesh*
- 2) **Report from Karim Ben Jebara on situation of wildlife disease reporting systems**
- 3) **Newly emerging diseases or disease issues (infectious and non-infectious)**
- 4) **Review of current *Terrestrial Codes Chapters and Manual of Diagnostic Tests* with recommendations for integration of the role of wildlife considerations.** Review work will be completed prior to the January meeting and reported to the WGWD and discuss at the meeting.
  - a. Tuberculosis
  - b. Foot and Mouth Disease
  - c. Classical Swine Fever and African Swine Fever
  - d. Bluetongue, EHD
- 5) **Welcome address Dr Bernard Vallat** (Tuesday 9h30)
- 6) **Animal Transportation** - review of current *Codes Chapters* with recommendations for integration of the role of wildlife considerations. Review work will be completed prior to the January meeting and reported to the WGWD and discuss at the meeting.
- 7) **General discussions on the process of *Code and Manual* chapter review**
- 8) **Comments on the report of the WGWD meeting January 2008 and consideration of the comments of the Scientific Commission on the report**
- 9) **Terms of Reference and/or work plan for the WGWD**
- 10) **The Wildlife Trade** - discussion on how OIE might address disease issues related to wildlife.
- 11) **Commodity-based trade**, overview on the concept and discussion of wildlife components – Roy Bengis and Alex Thiermann.
- 12) **Conference on Training of OIE wildlife focal points** – Aims and objectives for OIE, the way forward
- 13) **One World - One Health** - discuss opportunities for the WDWG to assist the OIE in the integration of wildlife aspects, such as surveillance in wildlife to the OWOH strategy
- 14) **Report on Collaborating Center activities**
- 15) **SADC Workshop on TFCA's Kasane Botswana. 11-14 Nov 2008:** Achieving compatibility between the Transfrontier Conservation Area (TFCA) concept and international standards for the management of Transboundary Animal Diseases (TADs)
- 16) **Meet with OIE Communications Unit staff to**
  - a. discuss ways to communicate the work of the WGWD,
  - b. discuss process to collate and make available the products of the WGWD, and
  - c. discuss open access to OIE materials.

- 17) **Terms of Reference for OIE Focal Points on wildlife** (for information)
  - 18) **Planning of WGWD contributions to the OIE General Session May 2009**
  - 19) **New items arising during meeting** – discussion and next steps planning
  - 20) **Meeting report compilation**
-

## MEETING OF THE OIE WORKING GROUP ON WILDLIFE DISEASES

Paris, 26 - 29 January 2009

## List of participants

## MEMBERS

**Dr William B. Karesh** (*President*)

Vice President, Global Health Program  
Wildlife Conservation Society  
2300 Southern Blvd.  
Bronx, NY 10460  
USA  
Tel: 1-718-220-7100  
Fax: 1-718-220-7126  
E-mail: wkaresh@wcs.org

**Dr Roy Bengis**

Veterinary Investigation Centre  
P.O. Box 12, Skukuza 1350  
SOUTH AFRICA  
Tel: (27-13) 735 5641  
Fax: (27-13) 735 5155  
E-mail: royb@nda.agric.za

**Dr Marc Artois**

Unité SPV, santé publique vétérinaire  
Ecole nationale vétérinaire de Lyon  
1, av. Bourgelat  
69280 Marcy l'Etoile  
FRANCE  
Tel: (33-4) 78 87 27 74  
Fax: (33-4) 78 87 56 35  
E-mail: m.artois@vet-lyon.fr

**Dr Yasuhiro Yoshikawa**

Professor of Tokyo University  
Department of Biomedical Science  
Graduate School of Agricultural and Life  
Sciences  
The University of Tokyo  
1-1-1 Yayoi, Bunkyo-ku  
Tokyo 113-8657  
JAPAN  
Tel: 81 3-5841-5038  
Fax: 81-3-5841-8186  
E-mail: ayyoshi@mail.ecc.u-tokyo.ac.jp

**Dr John Fischer**

Southeastern Cooperative Wildlife Disease  
Study, College of Veterinary Medicine  
University of Georgia, Athens - GA 30602  
USA  
Tel: (1-706) 542 1741  
Fax: (1-706) 542 5865  
E-mail: jfischer@uga.edu

**Dr Torsten Mörner**

Department of Wildlife, Fish & Environment  
National Veterinary Institute  
751 89 Uppsala  
SWEDEN  
Tel: (46-18) 67 4214  
Fax: (46-18) 30 9162  
E-mail: torsten.morner@sva.se

**Dr F.A. Leighton**

Canadian Cooperative Wildlife Health  
Centre, Department of Veterinary  
Pathology, University of Saskatchewan  
Saskatoon, Saskatchewan S7N 5B4  
CANADA  
Tel: (1.306) 966 7281  
Fax: (1.306) 966 7387  
E-mail: ted.leighton@usask.ca

## OIE CENTRAL BUREAU

**Dr Bernard Vallat**

Director General  
12 rue de Prony  
75017 Paris, FRANCE  
Tel: 33 - (0)1 44 15 18 88  
Fax: 33 - (0)1 42 67 09 87  
E-mail: oie@oie.int

**Dr Gideon Brückner**

Deputy Director General  
E-mail: g.bruckner@oie.int

**Dr Elisabeth Erlacher-Vindel**

Deputy Head, Scientific and Technical Department  
E-mail: e.erlacher-vindel@oie.int

**Dr Karim Ben Jebara**

Head, Animal Health Information Department  
E-mail: k.benjebara@oie.int

**Dr Lea Knopf**

Recognition of countries' animal disease status  
Scientific and Technical Department  
E-mail: l.knopf@oie.int



**Review of Code and Manual Chapters for inclusions of Wildlife Issues**

**Bovine Tuberculosis**

**Terrestrial Animal Code (Chapter 11.7):**

**Comments:**

- 1) In the current form of this chapter, should permanently captive and owned free range African buffalo (*Syncerus caffer*) be included in the general provisions of this chapter? There are at least four sub-populations of African buffalo in sub-Saharan Africa that are infected with bovine tuberculosis. Some of these buffalo are privately owned but are also free range.
- 2) Should this chapter still limit its attention to bovines? There is increasing evidence that bovine TB is a multi-species disease.
- 3) A list of known wildlife BTB maintenance hosts includes African buffalo, Kafue lechwe and suricates in sub-Saharan Africa, Bison in North America, European badger in United Kingdom and brush-tailed possum and ferrets in New Zealand.
- 4) Potential wildlife maintenance hosts include cervids in North America, wild boar in Europe and greater kudu and warthogs in southern Africa.
- 5) Numerous wildlife incidental hosts of bovine tuberculosis have also been identified in regions of the globe where maintenance hosts occur.
- 6) In countries or zones that have infected wildlife species, freedom from bovine tuberculosis will probably require demonstration of freedom of disease in domestic bovines.

**Manual of Diagnostic Tests (Chapter 2.4.7)**

**Comments:**

- 1) In the introduction where necropsy examination is discussed, it should be emphasized that manual palpation of the lungs is the most sensitive technique for detecting early nodular pulmonary lesions. It should also be noted that TB lesions are generally non-odiferous.
- 2) In the introduction, the various true maintenance hosts, potential maintenance hosts and incidental hosts should again be listed.
- 3) In the microscopic examination paragraph 1a, it mentions that the lesions in bovines are frequently paucibacilliary. It should also mention that, in contrast, lesions in other species such as primates, felids, mustelids (badgers) and marsupials (brush-tailed possums) contain large numbers of acid fast organisms.
- 4) In paragraph 1b, culture of *M. bovis*, the use of pooled lymph node samples from the head, as well as pooled samples from thorax, abdomen and peripheral lymph nodes for culturing, especially when an animal is test positive, and has no visible lesions, should be advised.
- 5) In Section 2 dealing with delayed hypersensitivity tests, it should be mentioned that tuberculin skin tests have poor specificity (many false positives) in pachyderms.
- 6) Also in Section 2, it should be mentioned that the standard intra dermal tuberculin test has not been validated in most non bovid and non cervid species.

- 7) In section 3a – dealing with blood based laboratory tests, it needs to be mentioned that the gamma-interferon assay is available in three different commercial kits, one for bovines, one for cervids and one for primates. It also needs to be emphasized that these kits have only been validated in a few species of these taxa.
- 8) In section 3c dealing with eELISA assays, it should be mentioned that these laboratory tests may be useful as parallel tests to detect anergic animals.
- 9) Lastly with the exception of a multi antigen card test (with acceptable sensitivity and specificity for detecting *M. tuberculosis* in captive elephants) that has recently been released in the USA, no validated indirect ante mortem test for bovine tuberculosis in pachyderms is currently available.

## Avian Influenza

### **Terrestrial Animal Health Code (Chapter 10.4)**

**General comment:** AI is a disease closely related to both domestic and wild birds and the role of wild birds in the epidemiology of the disease, as well as other issues related to wild birds, is well covered in this chapter.

#### **Article 10.4.1; General provisions:**

**2:** The definition of poultry, and which sorts of birds are included, is not completely clear. For example, birds that are kept in game ranches for both show and meat production, like ostriches, may be regarded both as poultry and non-poultry.

#### **► 4: Text as present:**

For the purpose of international trade, a member should not impose immediate trade bans in response to a notification of infection with HPAI and LPAI virus in birds other than poultry according to Article 1.2.3 of the *Terrestrial Code*

#### **► 4: Proposed alternative:**

For the purpose of international trade, a member should not impose immediate trade bans in response to a notification of infection with HPAI and LPAI virus in birds, including wild birds, other than poultry according to Article 1.2.3 of the *Terrestrial Code*

**Rationale:** It is of importance to point out that findings of HPAI and LPAI in wild birds should not affect the trade of poultry.

### **OIE Terrestrial Manual (Chapter 2.3.4)**

The text in this chapter covers well the diagnostic procedures in poultry and other birds, including wild birds, and also points out the problem that both direct and indirect tests are used in several different species of wild birds, and that these tests have not been validated for each species.

## Newcastle Disease

### **Terrestrial Animal Health Code (Chapter 10.13)**

#### A. Article 10.13.1.

#### **► Current text:**

#### **General provisions**

1. For the purposes of *international trade*, Newcastle disease (ND) is defined as an *infection of poultry* caused by a virus (NDV) of avian paramyxovirus serotype 1 (APMV-1) that meets one of the following criteria for virulence:

Issue: This General provision restricts this entire Chapter to “poultry” as defined in the *Code*. However, there is commercial trade in birds that do not meet the OIE definition of “poultry”, for example birds in the pet bird trade, that sometimes are infected with NDV. There also are products, such as feather down harvested from wild bird nests, which are traded internationally. Racing pigeons can carry strains of PPMV which meet the definition of NDV. Some other wild bird species, notably cormorants, also may carry velogenic strains of ND virus. Members may wish to include such species in their national surveillance programs and may expect their trading partners to do the same and to report the results.

Recommendation: that the words “of poultry” in this section of Section 10.13.1 be removed.

► **Proposed new text:**

**General provisions:**

1. For the purposes of *international trade*, Newcastle disease (ND) is defined as an *infection of poultry* caused by a virus (NDV) of avian paramyxovirus serotype 1 (APMV-1) that meets one of the following criteria for virulence:

B. Article 10.13.3.

It is proposed that the words “in poultry” be inserted into this section to correctly specify the host species to which this section applies and account for the proposed change 10.13.1 above.

► **Current Text:**

**ND free country, zone or compartment**

A country, *zone* or *compartment* may be considered free from ND when it has been shown that NDV *infection* has not been present in the country, *zone* or *compartment* for the past 12 months, based on *surveillance* in accordance with Articles 10.13.20. to 10.13.24.

If *infection* has occurred in a previously free country, *zone* or *compartment*, ND free status can be regained three months after a *stamping-out policy* (including *disinfection* of all affected *establishments*) is applied, providing that *surveillance* in accordance with Articles 10.13.20. to 10.13.24. has been carried out during that three-month period.

► **Proposed new text:**

**ND free country, zone or compartment**

A country, *zone* or *compartment* may be considered free from ND when it has been shown that NDV *infection in poultry* has not been present in the country, *zone* or *compartment* for the past 12 months, based on *surveillance* in accordance with Articles 10.13.20. to 10.13.24.

If *infection in poultry* has occurred in a previously free country, *zone* or *compartment*, ND free status can be regained three months after a *stamping-out policy* (including *disinfection* of all affected *establishments*) is applied, providing that *surveillance* in accordance with Articles 10.13.20. to 10.13.24. has been carried out during that three-month period.

C. Article 10.13.20.

It is recommended that this section alert Members to the widespread occurrence of velogenic strains of NDV in two groups of wild birds.

► **Current Text:**

**Surveillance: introduction**

Articles 10.13.20. to 10.13.24. define the principles and provide a guide on the *surveillance* for ND as defined in Article 10.13.1. and is complementary to Chapter 1.4. It is applicable to Members seeking to determine their ND status. This may be for the entire country, *zone* or *compartment*. Guidance for Members seeking free status following an *outbreak* and for the maintenance of ND status is also provided.

*Surveillance* for ND is complicated by the known prevalence of avian paramyxovirus serotype 1 (APMV-1) infections in many bird species, both domestic and wild, and the widespread utilization of ND vaccines in domestic poultry.

The impact and epidemiology of ND differ widely in different regions of the world and therefore it is not possible to provide specific recommendations for all situations. Therefore, *surveillance* strategies employed for demonstrating freedom from ND at an acceptable level of confidence will need to be adapted to the local situation. Variables such as the frequency of contacts of poultry with wild birds, different biosecurity levels, production systems and the commingling of different susceptible species require specific *surveillance* strategies to address each specific situation. It is incumbent upon the Member to provide scientific data that explains the epidemiology of ND in the region concerned and also demonstrates how all the risk factors are managed. There is, therefore, considerable latitude available to Members to provide a well-reasoned argument to prove freedom from NDV *infection*.

*Surveillance* for ND should be in the form of a continuing programme designed to establish that the country, *zone* or *compartment*, for which application is made, is free from NDV *infection*.

► **Proposed New Text:**

**Surveillance: introduction**

Articles 10.13.20. to 10.13.24. define the principles and provide a guide on the *surveillance* for ND as defined in Article 10.13.1. and is complementary to Chapter 1.4. It is applicable to Members seeking to determine their ND status. This may be for the entire country, *zone* or *compartment*. Guidance for Members seeking free status following an *outbreak* and for the maintenance of ND status is also provided.

*Surveillance* for ND is complicated by the known prevalence of avian paramyxovirus serotype 1 (APMV-1) infections in many bird species, both domestic and wild, and the widespread utilization of ND vaccines in domestic poultry.

The impact and epidemiology of ND differ widely in different regions of the world and therefore it is not possible to provide specific recommendations for all situations. Therefore, *surveillance* strategies employed for demonstrating freedom from ND at an acceptable level of confidence will need to be adapted to the local situation. Variables such as the frequency of contacts of poultry with wild birds, different biosecurity levels, production systems and the commingling of different susceptible species require specific *surveillance* strategies to address each specific situation. Member countries should be aware that, among wild bird species, velogenic strains of NDV have been associated particularly with the Rock Pigeon (*Columba livia*) and species of cormorant (Genus *Phalacrocorax*). It is incumbent upon the Member to provide scientific data that explains the epidemiology of ND in the region concerned and also demonstrates how all the risk factors are managed. There is, therefore, considerable latitude available to Members to provide a well-reasoned argument to prove freedom from NDV *infection*.

*Surveillance* for ND should be in the form of a continuing programme designed to establish that the country, *zone* or *compartment*, for which application is made, is free from NDV *infection*.

#### D. Article 10.13.22.

The use of the word “disease” in paragraph 3 of this section is inconsistent with the rest of the Chapter and should be changed to “infection”.

#### ► **Current Text:**

##### **Surveillance strategies**

###### 1. Introduction

The principles involved in *surveillance* for *disease / infection* are technically well defined. Any *surveillance* programme requires inputs from professionals competent and experienced in this field and should be thoroughly documented. The design of *surveillance* programmes to prove the absence of NDV *infection / circulation* needs to be carefully followed to avoid producing results that are either unreliable, or excessively costly and logistically complicated.

If a Member wishes to declare freedom from NDV *infection* in a country, *zone* or *compartment*, the subpopulation used for *surveillance* of the *disease / infection* should be representative of all poultry within the country, *zone* or *compartment*. Multiple *surveillance* methods should be used concurrently to accurately define the true ND status of poultry populations. Active and passive *surveillance* for ND should be ongoing with the frequency of active *surveillance* being appropriate to the disease situation in the country. *Surveillance* should be composed of random and/or targeted approaches, dependent on the local epidemiological situation and using clinical, virological and serological methods as described in the *Terrestrial Manual*. If alternative tests are used they must have been validated as fit-for-purpose in accordance with OIE standards. A Member should justify the *surveillance* strategy chosen as adequate to detect the presence of NDV *infection* in accordance with Chapter 1.4. and the prevailing epidemiological situation.

In surveys, the sample size selected for testing should be statistically justified to detect *infection* at a predetermined target prevalence. The sample size and expected *disease* prevalence determine the level of confidence in the results of the survey. The survey design and frequency of sampling should be dependent on the historical and current local epidemiological situation. The Member should justify the choice of survey design and confidence level based on the objectives of *surveillance* and the epidemiological situation, in accordance with Chapter 1.4.

#### ► **Proposed New Text:**

##### **Surveillance strategies**

###### 1. Introduction

The principles involved in *surveillance* for *disease / infection* are technically well defined. Any *surveillance* programme requires inputs from professionals competent and experienced in this field and should be thoroughly documented. The design of *surveillance* programmes to prove the absence of NDV *infection / circulation* needs to be carefully followed to avoid producing results that are either unreliable, or excessively costly and logistically complicated.

If a Member wishes to declare freedom from NDV *infection* in a country, *zone* or *compartment*, the subpopulation used for *surveillance* of the *disease / infection* should be representative of all poultry within the country, *zone* or *compartment*. Multiple *surveillance* methods should be used concurrently to accurately define the true ND status of poultry populations. Active and passive *surveillance* for ND should be ongoing with the frequency of active *surveillance* being appropriate to the disease situation in the country. *Surveillance* should be composed of random and/or targeted approaches, dependent on the local epidemiological situation and using clinical, virological and serological methods as described in the

*Terrestrial Manual*. If alternative tests are used they must have been validated as fit-for-purpose in accordance with OIE standards. A Member should justify the *surveillance* strategy chosen as adequate to detect the presence of NDV *infection* in accordance with Chapter 1.4. and the prevailing epidemiological situation.

In surveys, the sample size selected for testing should be statistically justified to detect *infection* at a predetermined target prevalence. The sample size and expected *disease infection* prevalence determine the level of confidence in the results of the survey. The survey design and frequency of sampling should be dependent on the historical and current local epidemiological situation. The Member should justify the choice of survey design and confidence level based on the objectives of *surveillance* and the epidemiological situation, in accordance with Chapter 1.4.

Articles 10.13.15, 16 17,18 and 19 cover only meat and products, including feathers, from “poultry” as defined by OIE. However, there is or may be commercial international trade in such meat, products or feathers from wild species. There is commercial sale of wild bird meat. There is international trade in down feathers gathered from nests of wild ducks. These are potential sources of NDV to which poultry may become exposed.

Recommendation: That the Code Commission consider adding some additional sections that address trade in wild birds, meat, feathers and other products, following similar considerations of wild species in the chapter on African Swine Fever.

### **Foot and Mouth Disease**

The WGWD commented that the *Code* and *Manual* chapters covered wildlife issues adequately. However, The WGWD felt that the summary paragraph at the beginning of the *Manual* (2.1.5) should give more explicit information on the two epidemiological cycles involved in the maintenance of this disease, namely:

- 1) The cycle of mainly SAT type viruses in permanently infected buffalo in sub-Saharan Africa, with periodic spill over of infection into livestock, or sympatric cloven hoofed wildlife.
- 2) The cycle involving mainly the European and Asiatic strains of virus that are circulating and maintained by domestic ruminants in Asia , South America and the Middle East

The WGWD also noted that commodity-based trade issues had been addressed to some degree in the current version of the *Code* etc.

The serological tests for FMD are well developed and several of the indirect tests can be applied to many different host species.

Definition and use of the term “buffer zones” was not an area of agreement among WGWD members.

The WGWD also recommended that the OIE *Code* state explicitly that an outbreak of FMD in a Quarantine Station should not affect the disease status of a country (so long as it is retained within the Quarantine Station).

### **Classical Swine Fever**

The WGWD reviewed the chapters on Classical Swine Fever in the *Code* and in the *Manual*. No deficiencies were noted the the chapter in the OIE *Manual of Diagnostic Tests*. The WGWD suggested some modifications in *Code* chapter 15. 3.

#### **Terrestrial Animal Health Code (Chapter 15.3)**

These changes are as follow:

**Article 15.2.1 – General Provisions:**

- “Pig” as defined (domestic, feral and wild forms of the *Sus scrofa* species) is not the only host species for Classical Swine Fever virus; other species in the families *Suidae* (Old World pigs) and *Tayassuidae* (New World pigs) are susceptible to infection in Africa, America and Asia. This article should mention wild susceptible species in the same way as is done in the *Code* Chapter on African Swine Fever.
- Article 15.3.4 – the WGWD agrees with most changes recommended by the *ad hoc* Group on Epidemiology (Paris 3-5 September 2008) but suggest to add, in paragraph 1: “natural **and artificial** boundaries, ...”

Actually, natural barriers can only slowdown the spread of CSF in wild boar populations but artificial barriers, such as fenced highways in Europe, have been proven efficient in stopping the spatial spread of a CSF epizootic.

**Article 15.3.30**

- In section 2 (Compartment free of CSF), the first (a) provision for biosecurity listed should be modified as follows: “proper containment of domestic pigs *to prevent exchange of viruses with wild pigs*”
- last paragraph: it should be stressed that **sources of information** should include *government wildlife authorities* as the first source, even if other, non official sources can be consulted.

**Article 15.3.31 – Section 2 – “Surveillance for CSF in wild pigs”**

As this Section is very specific and important, and as it is relevant for several aims of surveillance, it should be made a separate article (15.3.32) and not part of “Recovery of free status: additional surveillance procedures” (15.3.31).

The paragraph on “Estimates of wild pig populations” is inappropriate for the *Code* because of its fine level of detail and because the most appropriate method will be different in different situations. This statement can be replaced with “*Wild pig populations should be estimated by the most accurate biological methods that can be applied*”

In the list of risk criteria following the last paragraph, criterion b) should be replaced with “*sub-regions with large wild pig populations*”. This change is recommended because it is the actual number of pigs, rather than population density, that affects virus persistence.

**African Swine Fever**

The WGWD found that wildlife generally is well integrated into the *Code* and *Manual* chapters on ASF. Two issues were identified:

- 1) The range of host species: The Iowa State University Fact Sheet on ASF, to which the OIE makes reference, states that some New World Pigs (peccaries, family *Tayassuidae*) can be infected and carry ASF virus. The complete list of susceptible species should be listed in the *Code* and *Manual* chapters, and both susceptible families, *Suidae* and *Tayassuidae*, should be mentioned.
- 2) OIE Reference Laboratories should indicate which serological tests are valid for wild species other than *Sus scrofa*. The WGWD noted that several of the recommended serological tests use Protein A or anti-pig (*Sus scrofa*) IgG to bind to antibodies in the test sera. These reagents may or may not bind to the antibodies of all pig species in the families *Suidae* and *Tayassuidae*. The *Manual* should clarify the species for which each of these serological tests has been validated.

<b>Bluetongue</b>
-------------------

### **Terrestrial Animal Health Code (Chapter 8.3)**

**General Comments** – Consideration should be given to the inclusion/mention of epizootic hemorrhagic disease (EHD) virus throughout the chapter wherever BT virus appears because EHD is an OIE-notifiable disease, has been associated with morbidity and mortality in cattle in northern Africa since 2006, and it would be unfortunate if EHDV were introduced into new regions through animal movement. In addition, diagnostic tests for EHDV, clinical disease signs and lesions, and the epidemiology of EHDV are similar, if not identical, to those of BT with the involvement of *Culicoides* spp. vectors, seasonal appearance, etc. (See Yadin, Brenner, Gelman *et al.* 2007; A Large-Scale Outbreak of Bovine Hemorrhagic Disease in Israel. Web site [www.isrvma.org](http://www.isrvma.org))

#### **Article 8.3.1 General Provisions**

3<sup>rd</sup> paragraph:

► **Text as presented:** In the absence of clinical disease in a county...

► **Proposed alternative:** In the absence of clinical disease due to BTV or EHDV in a county...

**Rationale:** See General Comments above.

#### **Article 8.3.16 Surveillance: introduction**

3<sup>rd</sup> paragraph:

► **Text as presented:** Susceptible wild ruminant populations should be included in surveillance when these animals are intended for trade.

► **Proposed alternative:** Susceptible wild ruminant populations should be included in surveillance.

**Rationale:** The stated purpose of surveillance (Article 8.3.17) is “detection of virus circulation in a country or zone and not determination of the status of an individual animal or herd.” There may be wild ruminant populations that are not intended for trade that are susceptible to BTV/EHDV and would serve as sentinel animals, particularly if infected wild ruminants develop severe clinical disease or fatal infections, facilitating enhanced passive or scanning surveillance.

### **Manual of Diagnostic Tests (2.1.3.)**

**General Comments** – Consideration should be given to the inclusion/mention of epizootic hemorrhagic disease (EHD) virus throughout the chapter wherever BT virus appears because EHD is an OIE-notifiable disease, has been associated with morbidity and mortality in cattle in northern Africa since 2006, and it would be unfortunate if EHDV were introduced into new regions through animal movement. In addition, diagnostic tests for EHDV, clinical disease signs and lesions, and the epidemiology of EHDV are similar, if not identical, to those of BT with the involvement of *Culicoides* spp. vectors, seasonal appearance, etc. (See Yadin, Brenner, Gelman *et al.* 2007; A Large-Scale Outbreak of Bovine Hemorrhagic Disease in Israel. Web site [www.isrvma.org](http://www.isrvma.org)).

#### **Introduction, 2<sup>nd</sup> paragraph, last sentence**

► **Text as presented:** Epizootic hemorrhagic disease virus (EHDV) can produce a disease in wild ruminants with clinical manifestations identical to those observed in response to BTV infection.

► **Proposed alternative:** Epizootic hemorrhagic disease virus (EHDV) can produce a disease in wild ruminants with clinical manifestations identical to those observed in response to BTV infection. In 2006, EHDV-7 was associated with a large-scale outbreak of hemorrhagic disease in Israel that involved more than 100 cattle herds with morbidity rates in herds from 5-80% of milking cows and very low mortality rates. There were no reports of similar disease in sheep or goats during this outbreak.

**Rationale:** Confirmed clinical disease in cattle due to EHDV infection is important to document because it has been suspected in some natural infections of cattle with EHDV in the past, although it has not been produced experimentally.

## Animal Health Surveillance

### Chapter 1.4.

#### Article 1.4.1. Introduction and Objectives, #2, last two sentences

► **Text as currently proposed:** Wildlife may be included because these can serve as reservoirs and as sensitive indicators of important human and domestic animal diseases. Wildlife disease surveillance presents specific challenges that may differ importantly from disease surveillance in livestock.

► **Text as proposed by OIE WGWD:** Wildlife may be included because these can serve as reservoirs and as sensitive indicators of important human, domestic animal, and wildlife diseases. Wildlife infection/disease surveillance presents specific challenges that may differ importantly from infection/disease surveillance in livestock.

**Rationale:** The OIE has expressed its interest in wildlife health because of the value of wildlife, as well as its potential role in the epidemiology of human and domestic animal diseases.

#### Article 1.4.2. Definitions, wildlife

► **Text as currently proposed:** Mammals and birds which are not permanently captive or owned free range. This definition includes the categories of “wild animal” (wild animal genotype living outside of controlling human influence) and “feral animal” (domestic animal genotype living outside of controlling human interest).

► **Text as proposed by OIE WGWD:** Mammals and birds (amphibians and reptiles are regarded for OIE purposes as “aquatic animals”) that live outside of controlling human influence.

**Rationale:** As originally proposed, the definition of wildlife does not include captive wildlife species, nor owned animals on free-range. The OIE WGWD adheres to the 2X2 matrix that defines animals as wild, domestic, feral, or captive (see 1999 Report of WGWD). For the purposes of animal health surveillance, it may be necessary or helpful to survey any of the three categories not defined as domestic animals.

#### Article 1.4.3. Principles of Surveillance, 1. Types of surveillance, b)

► **Text as presented:** In this Chapter, surveillance activities are classified as being based on:

Either

- i) structured population-based surveys, such as:
  - systematic sampling at slaughter;
  - random surveys;

OR

- ii) structured non-random surveillance activities, such as:

► **Text as proposed:** In this Chapter, surveillance activities are classified as being based on:

Either

- ii) structured population-based surveys, such as:
  - systematic sampling at slaughter;
  - random surveys;
  - surveys for infection in clinically normal animals, including wildlife

OR

- ii) structured non-random surveillance activities, such as:

**Rationale:** As presented, it appears that surveillance of wildlife may only be conducted as a structured non-random surveillance activity, whereas this is the case only when wildlife suffers clinical disease due to infection. Actually, wildlife aspects are included in the section of structured population-based surveys. It is important to note that clinically normal wild or domestic animals are included in surveillance programs for significant pathogens because they may be inapparent carriers or there is a long incubation period before clinical disease develops after infection. In addition, statistically significant sample sizes may not be reached when relying only on surveillance of clinically diseased animals.

**Article 1.4.4. Structured population-based surveys, #3 should remain as presented.** However, a second paragraph regarding wildlife should be added:

Specimens from wildlife for infection/disease surveillance may be available from sources such as hunters and trappers, road-kills, wild animal meat markets, sanitary inspection of hunted animals, morbidity-mortality observations by the general public, wildlife rehabilitation centres, wildlife biologists and wildlife agency field personnel, farmers, and other landholders, naturalists and conservationists. Wildlife data such as census data, trends over time, and reproductive success can be used in a manner similar to farm production records for epidemiological purposes.

**Rationale:** As presented, this paragraph only appears in the section on Structured non-random surveillance. However, clearly there is value in obtaining wildlife specimens from the same sources for testing in Structured population-based surveys (with the possible exception of morbidity-mortality observations and wildlife rehabilitators, depending on the disease or infection the surveillance is designed to detect).

**Article 1.4.5. Structured non-random surveillance, 1. j.**

► **Text as currently proposed:** Specimens from wild animals for disease surveillance may be available from sources...

► **Text proposed by the OIE WGWD:** Specimens from wild animals for infection/disease surveillance may be available from sources...

**Rationale:** Surveillance may be designed to detect disease agents that do not cause clinical disease in certain host species or pathogens with a long incubation period before the development of clinical disease.

<b>Transport of Animals Sections of the Code (7.2, 7.3 and 7.4)</b>
---

Transport by Sea (7.2), and Transport by Land (7.3) were reviewed. These sections begin with a preamble that specifically excludes species other than a few listed domestic species. Thus, adding wildlife to these sections is not appropriate. Instead we should look at some other way of addressing wild animal transport issues in the *Code*. On the contrary, Transport by Air (7.4) is not species limited and allows for more comprehensive guidance. This section can accept additions specifically for wildlife.

**Recommendation:** That Sections 7.2 and 7.3 be re-written to conform to the format of Section 7.4 in which it is possible to address transportation issues for all animal species.

*Code* chapters for several diseases also were reviewed to assess whether or not each adequately considered transportation issues with respect to wild animals. The current chapters on Newcastle Disease, Classical Swine Fever, Bluetongue Virus, and African Swine Fever **do** adequately consider these transportation issues with respect to wild animals. Chapters on Foot and Mouth Disease, Bluetongue, Bovine tuberculosis, Avian Tuberculosis and Avian Influenza **do not**.

The international transportation of wild animals is undertaken for a wide variety of reasons and the epidemiological conditions may be very different in each particular situation.

Recommendation: The WGWD recommends that the OIE encourage Members to assess the health risks associated with the transportation of wild animals separately for each situation, following the health risk analysis guidelines developed for the OIE by the WGWD. These Guidelines are available on line from the WGWD web page on the OIE website or directly at < [http://www.cwhc.ca/wildlife\\_health\\_topics/risk\\_analysis/rskguidintro.php](http://www.cwhc.ca/wildlife_health_topics/risk_analysis/rskguidintro.php)>. These Guidelines include approaches to reducing the health risks when wild animals are transported internationally.

---



### **Proposed Terms of Reference for OIE Focal Points on Wildlife**

To ensure the optimal collection and submission of information on animal diseases, Members were requested to nominate a national focal point to assist the OIE Delegate and act as a direct contact point with the OIE Animal Health Information Department on matters related to information on animal diseases. This system has now been successfully in operation for several years. During the 76<sup>th</sup> General Session in May 2008, the importance of the focal point for information on animal diseases was re-iterated and Delegates also were requested to nominate additional focal points for wildlife, veterinary products, food safety, animal welfare and aquatic animal diseases.

As detailed in the final report of the 76<sup>th</sup> OIE General Session in May 2008, the responsibilities of the focal points are under the authority of the OIE Delegate. Any information transmitted to the OIE from the different focal points needs to be transmitted under the designated authority of the OIE Delegate. This practice would equally apply, if focal points are located in other Departments or Ministries not under jurisdiction of the Veterinary Authority, because the OIE considers the official OIE Delegate, as the unique representative of the country.

#### ***Details on proposed tasks of focal point for wildlife:***

1. to establish a network of wildlife and wildlife disease experts within their country or to communicate with existing networks;
2. to establish and maintain a dialogue with the competent authorities for wildlife and for wildlife diseases, including zoonoses, in their country, and to facilitate cooperation and communication among several authorities where responsibility is shared;
3. on behalf of the OIE Delegate of their country, to ensure the optimal collection and submission of wildlife disease information to the OIE through WAHIS (immediate notifications and follow-up reports, six-monthly reports, and annual questionnaires) to enable the OIE Delegate to more efficiently manage his OIE Member obligations;
4. act as a direct contact point with the OIE Animal Health Information Department and the Scientific and Technical Department on matters related to information on wildlife including wildlife diseases;
5. to receive from the OIE Central Bureau copies of the reports of the Working Group on Wildlife Diseases, selected reports of *ad hoc* Groups and the Scientific Commission for Animal Diseases when these address discussion points on wildlife or the livestock-wildlife interface;
6. conduct the in-country consultation process with wildlife and animal health experts on draft texts of standards proposed in those reports as well as draft standards proposed by the Code Commission when dealing with wildlife diseases; and
7. then to prepare comments for the Delegate on each of the relevant meeting reports reflecting the scientific view and position of the individual OIE Member and/or the region, including comments on the proposals for new OIE standards and guidelines related to wildlife.
8. To participate in organized training sessions provided to focal points for Wildlife by the OIE.



### **Working Group on Wildlife Diseases: Terms of Reference**

1. Maintain global perspective and foresight on wildlife health and disease issues of importance to the OIE.
2. Assist the OIE to incorporate wildlife issues into OIE Standards, as appropriate
3. Assist OIE Members to build or improve their capacity to meet OIE standards and obligations with respect to diseases in wild animals
4. Assist the OIE to receive, record, and interpret information on wildlife disease occurrence from official sources through WAHIS, and maintain an international network to provide information on wildlife disease occurrences from non-official sources.
5. Advise the OIE on risks, surveillance, responses and management with respect disease issues associated with wildlife.
6. Address specific issues brought to the WGWD by the OIE
7. Assist the OIE to communicate and disseminate information about wildlife disease issues, and represent OIE as requested.
8. Assist OIE to incorporate wildlife appropriately in its educational and scientific programs and publications
9. Assist OIE in supporting the activities of Collaborating Centres on wildlife diseases
10. The WGWD will report to the Scientific Commission of OIE.

### **Mode of Operation for the Working Group on Wildlife Diseases**

1. The WGWD normally will hold annual one face-to-face mid-year meeting in Paris.
  2. The WGWD will meet by teleconference two or more times each year. These teleconferences will include representation from the Scientific and Technical Department of the OIE.
  3. The WGWD will establish a secure Internet forum through which to manage discussion, document reviews and related matters and through which OIE personnel also can access output from the WGWD's activities.
  4. The WGWD President will maintain additional regular communication with the OIE Scientific and Technical Department, as appropriate.
  5. The WGWD will revise its work plan annually.
  6. The operating language of the WGWD will be English
-



---

© **World Organisation for Animal Health (OIE), 2009**

This document has been prepared by specialists convened by the OIE. Pending adoption by the International Committee of the OIE, the views expressed herein can only be construed as those of these specialists.

All OIE publications are protected by international copyright law. Extracts may be copied, reproduced, translated, adapted or published in journals, documents, books, electronic media and any other medium destined for the public, for information, educational or commercial purposes, provided prior written permission has been granted by the OIE.

The designations and denominations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the OIE concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers and boundaries.

The views expressed in signed articles are solely the responsibility of the authors. The mention of specific companies or products of manufacturers, whether or not these have been patented, does not imply that these have been endorsed or recommended by the OIE in preference to others of a similar nature that are not mentioned.