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REPORT OF THE MEETING OF THE OIE WORKING GROUP ON WILDLIFE

Paris (France), 29 September–2 October 2015

1. Opening

The meeting of the OIE Working Group on Wildlife (the Working Group) was held from 29 September to 2 October 2015 at the OIE Headquarters, in Paris, France. The meeting was chaired by Dr William Karesh.

Dr Bernard Vallat, Director General of the OIE, welcomed the members on behalf of the OIE Member Countries including Prof. Koichi Murata who was a new member appointed in May 2015. He introduced the new elected Director General (May 2015), Dr Monique Eloit (current Deputy Director General of the OIE), who would start her mandate in January 2016.

Dr Vallat emphasised the growing interest of the Member Countries in wildlife as it has an impact on human and animal health. He pointed out three priority items from the agenda for this meeting:

1. Evaluation of African buffalo migratory patterns and populations in the Kavango - Zambezi Transfrontier Area related to foot and mouth disease (FMD), as the chapter of the *Terrestrial Animal Health Code* on FMD is being revised (in particular, the part on disease status) and should be proposed for adoption to the World Assembly of Delegates in May 2016;
2. OIE standards on reptiles: OIE has received requests to provide standards for reptile welfare. Dr Vallat mentioned that a proposal will be presented at the next General Session to all the OIE Member Countries to extend the mandate of the Terrestrial Animal Health Standards Commission to reptiles so that this Commission can develop standards for these species and for different issues (not only animal welfare);
3. Expert Meeting on alien species in wildlife trade, experiences in the use of biological control agents and development of decision support tools for management of invasive alien species, Montreal, Canada, 28 – 30 October 2015: Dr Vallat informed the Group that invasive alien species are not included explicitly in the OIE mandate. However, as the definition of alien species could apply to some animal pathogens, the OIE decided to work on this issue. Dr Vallat reminded the Working Group that 2 volumes of the Scientific and Technical Review have been published on Invasive Alien Species and that guidelines for assessing the risk of non-native animals becoming invasive have also been developed and published on the OIE website. He pointed out that the OIE will continue to be involved in this area to make sure that the relevant OIE standards are followed with respect to animal pathogens and the OIE mandate is respected in that field.

Dr Vallat thanked the Working Group for its important contribution in writing an article on “rabies as a threat to biodiversity”. He pointed out that the three intergovernmental organisations, FAO¹/OIE/WHO², are working together on rabies and have the same vision, i.e. massive vaccination of dogs to control rabies worldwide for the benefit of human and animal health, including wildlife. He informed the Working Group that a FAO/OIE/WHO Global Conference on rabies: “Global elimination of dog-mediated human rabies - The time is now” was being planned for 10 to 11 December 2015 in Geneva, Switzerland.

Finally, Dr Vallat mentioned the support of the OIE for the creation of a global training Centre for hunters for the surveillance and early detection of diseases in wildlife, to be managed by the International Council for Game and Wildlife Conservation. Once created, the OIE will work closely with this Centre regarding scientific aspects.

Dr Eloit welcomed the members of the Working Group and highlighted that the request to work on reptiles came from several OIE Member Countries and therefore would be presented at the next General Session as a major issue to all the OIE Member Countries.

Dr Brian Evans, Deputy Director General of the OIE, congratulated Dr Roy Bengis for his OIE gold medal received at the last General Session. He pointed out that the change of the name of the Working Group from “Working Group on Wildlife Diseases” to “Working Group on Wildlife” implies that the Working Group mandate goes beyond wildlife diseases. He mentioned that wildlife was a topic of discussion for all three of the OIE Specialist Commissions, has been taken into consideration in the official recognition of disease status by the OIE, and has been a factor in some WTO³ dispute settlements. Considering that the OIE is a standard setting organisation and the importance of having standards that are based on science, he thanked the members for their contributions of their expertise. He also thanked them for their contribution to the training seminars of the OIE National Focal Points for Wildlife and for their support in general to the OIE activities on wildlife.

2. Adoption of agenda and designation of rapporteur

Prof. Ted Leighton was appointed as rapporteur for the meeting. The agenda and the list of participants are provided in Appendices I and II, respectively.

3. Feedback from the meetings of the Scientific Commission for Animal Diseases and Biological Standards Commission

3.1. Feedback from the meeting of the Scientific Commission (February & September 2015)

On behalf of the Scientific Commission for Animal Diseases (Scientific Commission), Dr Juan Antonio Montaña Hirose acknowledged and thanked the Working Group for its contribution to the work of the Scientific Commission.

3.2. Feedback from the meeting of the Biological Standards Commission (September 2015)

Comments had been submitted by the Working Group on Chapter 2.9.12. “Zoonoses transmissible from non-human primates” further its last meeting. The Commission expressed its gratitude for the constructive proposals and mentioned that experts would be identified to further develop the text. The Working Group would be pleased to review the developed text, if needed.

4. Disease reporting

4.1. Feedback on the use of the list of wildlife diseases (non OIE-listed diseases) through the new WAHIS-Wild Interface

Dr Paula Cáceres, Head of the World Animal Health Information and Analysis Department, summarised disease reporting in wildlife through *WAHIS-Wild* in 2014; only 36 Member Countries submitted the voluntary annual report on non OIE-listed diseases in wildlife for 2014, and the number of countries reporting has been decreasing since 2011. She emphasised that the current strategy of the OIE is to encourage reporting and acknowledge and praise reporting when it occurs in order to increase the

1 The Food and Agriculture Organization of the United Nations
2 World Health Organization
3 World Trade Organisation

number of reports received. She mentioned as well that the World Animal Health Information and Analysis Department will send out a survey in November to assess activities of different National Focal Points involved in the notification of diseases, and the interaction among these Focal Points within each country; the results might clarify some aspects of this reporting issue. In total, 25 diseases were reported in 80 wildlife species in 2014.

The Working Group suggested that, during the OIE General Session, a brief summary of wildlife disease reporting be given during the presentation of the Scientific Commission for Animal Diseases on the activities of the Working Group, aiming to encourage countries to report the non OIE-listed diseases in wildlife. It also recommended that, at each General Session, the global reporting of one of the wildlife non OIE-listed diseases be presented during the same report, as that could motivate countries to report by acknowledging their contributions to the presented information.

The Working Group offered to assist in the preparation of a letter to be sent, on its behalf by the OIE, to all National Focal Points for Wildlife, urging them to make the annual report via *WAHIS-Wild*. The Working Group also suggested sending the National Focal Points for Wildlife the guidelines on the use of the *WAHIS-Wild* system together with this letter.

Finally the Working Group encouraged the World Animal Health Information and Analysis Department to work on the increasing of the visibility of the *WAHIS-Wild* Interface and harmonisation of the logo of this page.

The Working Group also supported the recommendation from the World Animal Health Information and Analysis Department that it would be important to have a highlighted statement when users access this section explaining that the information displayed by the *WAHIS-Wild* Interface should not influence the trade issues between the countries.

4.2. Review the taxonomy of the pathogens on the specific list of wildlife diseases

The Working Group reviewed the taxonomy of the wildlife host species and pathogens proposed for addition to *WAHIS-Wild* by OIE Member Countries, to ensure these are correct and up to date.

4.3. Update on OIE- listed diseases that are not notifiable in infected wildlife: equine influenza; *Chlamydia abortus* (infection with) [enzootic abortion of ewes, ovine chlamydiosis]; Equine arteritis virus (infection with); Newcastle disease and theileriosis.

The Working Group was informed about recent modifications made in the World Animal Health Information System (WAHIS) to bring WAHIS into complete harmony with the Animal Health Codes.

The Working Group recommended that the removal of a requirement to notify infection with Newcastle disease virus (strains of avian paramyxovirus-1 that are highly pathogenic for domestic chickens) in wild birds should be reconsidered and included in reporting. The Working Group considered that any of these five pathogens should be reported in wildlife on a voluntary basis through the annual report through *WAHIS-Wild*, and concluded that Equine Influenza viruses and Newcastle Disease viruses should be added to the non-List pathogens to be reported on a voluntary basis each year via *WAHIS-Wild*. The Working Group also agreed that it could make an annual review of all pathogens added to or removed from the OIE List.

4.4. Share information about upcoming events on wildlife diseases

The Working Group agreed to provide Internet links and announcements of relevant wildlife health conferences and events for display on the *WAHIS-Wild* Interface, and appointed a coordinator of this activity within the Working Group.

4.5. Notification procedures linked with the six-monthly report of OIE Listed diseases and the Terrestrial Animal Health Code

Dr Caceres informed the Working Group about the work done on the overall harmonisation between the *Codes* and Notification procedures for WAHIS. The Working Group offered to assist by the reviewing notification procedures for the disease reporting in wildlife.

4.6. Additional Information

The Working Group was informed that all issues of the OIE publication “World Animal Health” are now on-line, and that the OIE is revising its corporate image for the WAHIS Interface and its components, including *World Animal Health* and the *WAHIS-Wild* Interface.

5. Rabies: Scientific paper on rabies and its impact on biodiversity

At the suggestion of Dr. Vallat, the Working Group prepared a scientific review paper on the detrimental impact of rabies on wildlife. The paper highlights how the control of canine rabies could protect susceptible species and contribute to wildlife conservation efforts. The Working Group noted that the paper could be used to create a poster for presentation at the Global Conference: “Global elimination of dog-mediated human rabies - The time is now”, to be held in Geneva, Switzerland, from 10 to 11 December 2015. The Working Group thanked especially Catherine Machalaba and the staff of the OIE World Animal Health Information and Analysis Department for their contributions to the paper.

6. Emerging and noteworthy wildlife disease occurrences: reports from members of the Working Group on Wildlife

El Nino Southern Oscillation event: Climate forecasts have indicated a high probability of a significant El Nino Southern Oscillation (ENSO) in late 2015 and 2016. ENSO events have climate effects worldwide and these are associated with changes in animal and human health. Most notable are a dramatic decline in fish stocks along the southern coast of South America with concomitant mass mortality events in sea birds and marine mammals, an increase in risk of Rift Valley Fever outbreaks in animals and humans in the Horn of Africa, and a decrease in risk of Rift Valley Fever outbreaks in southern Africa.

Salamander disease: The recently-discovered fungal pathogen of wild salamanders, *Batrachochytrium salamandrivorans*, is a new global threat to salamander (Order Urodela) populations. Salamander species that have evolved outside the natural range of this fungus in Asia risk extreme mortality from infection, as has been seen recently in Europe. Globally, North America has the greatest diversity of salamander species, but they are of world-wide distribution and there is an urgent need to ensure that human activities, including legal and illegal trade in animals and animal products, do not contribute to the further geographic spread of this pathogen, which has the potential to cause population declines and extinction of many salamander species, as has been the case with the related chytrid fungus, *B. dendrobatidis*, in frogs.

Wild bees: For the last 15 years, domestic honeybees (*Apis* sp.) have suffered high mortality and population reductions. This mortality is considered to be due to several factors acting together, including chronic intoxication, parasites, changing management practices and nutritional aspects of domestic bees. While these severe effects have been observed in domestic bees, their wild congeners, which include many species and are also important for pollination and human food production, are exposed to the same threats and appear to be suffering similar population declines in some locations. The Working Group recommends that health of wild bees deserves and requires the attention by national veterinary services and that the health of wild bees should be included within the mandate of the Working Group.

AFRICA

African Swine Fever (ASF): African Swine Fever is an endemic and silent infection in most native wild suids (pigs) in sub-Saharan Africa. Two significant outbreaks of ASF in domestic pigs were reported from Zimbabwe. There is no effective vaccine for ASF. There is currently some research in progress to breed genetically ASF-resistant pigs. This research does not require transfer or insertion of genetic material from other species and only involves genetically modifying an existing locus of the pig genome which codes for ASF virus attachment receptors.

American Foulbrood: An outbreak of American foulbrood in honey bees in the Western Cape Province of South Africa is threatening both honey and fruit production in this important agricultural region. Farmers fear that the scale of the outbreak may threaten the pollination of fruit trees, other agricultural crops and native plants.

Anthrax: Sporadic cases of anthrax in wildlife and livestock were reported from South Africa, Zimbabwe, Zambia, Morocco, Lesotho, Namibia, Botswana and Kenya. In Kenya, Morocco and Zimbabwe, human cases were also reported after people slaughtered infected cattle. In South Africa's Kruger National Park, two outbreaks of anthrax were reported. The first outbreak occurred early in 2015 in the far north of the Park (Pafuri area), and mortalities were reported in impala (*Aepyceros melampus*), greater kudu (*Tragelaphus strepsiceros*), nyala (*Tragelaphus angasi*), Burchell's zebra (*Equus burchelli*) and African elephants (*Loxodonta Africana*). The second outbreak was detected in the central district of the Park (Nwanetsi area) in July, and is currently ongoing. Mortalities have been reported in hippopotami (*Hippopotamus amphibius*), greater kudu and white rhinoceros (*Ceratotherium simum*).

Bovine brucellosis: In South Africa, several outbreaks of bovine brucellosis were detected in farmed African buffalo (*Syncerus caffer*).

Bovine tuberculosis: During 2013, a new outbreak of bovine tuberculosis (BTB) was detected in African buffalo in the Madikwe Provincial Park in the Northwest Province of South Africa. The disease appears to have been unknowingly introduced with infected kudu. Prior to the detection of infection in buffalo, several buffalo from Madikwe were sold to private wildlife ranches with secondary spread of BTB occurring.

Promising research is underway in the Kruger National Park to evaluate and validate a panel of TB diagnostic tests in white rhino and warthogs.

Bubonic Plague: Multiple outbreaks of bubonic plague have occurred on the island of Madagascar. To date, 224 human cases have been reported with 54 deaths. A single outbreak of bubonic plague was also reported from Nyimba district in the Eastern Province of Zambia, resulting in at least 3 human deaths.

Chytrid fungus: The Chytrid fungus (*Batrachochytrium dendrobatidis*) has been detected for the first time on the island of Madagascar. Madagascar is home to more than 500 frog species, many of which are endemic to the island.

Congo Crimean Haemorrhagic Fever (CCHF): Six cases of CCHF were confirmed in South Africa in 2014. Four of these cases were reported from the Northern Cape Province and two from the Free State Province. One of these reported cases had a fatal outcome. The CCHF virus is transmitted by ticks of the genus *Hyalomma*, which prefer the arid central and western regions of South Africa. People may also become infected while slaughtering viraemic wild or domestic animals, which are generally asymptomatic.

Ebola Virus Disease: Ebola virus disease (EVD) is a zoonotic infection in humans, and is usually initiated by transfer of the virus from a sylvatic reservoir host or by handling / utilising the carcasses of sylvatic wildlife victims such as primates or duikers. Once the zoonotic transfer has occurred, EVD becomes a directly contagious disease amongst humans, transmission occurring by means of infectious body fluids. In a rural setting, the disease spread is usually limited to isolated settlements, but should the infection enter a high density urban setting, the scale of the disease may reach epidemic proportions.

Situation update: West Africa

The outbreak of EVD in West Africa still persists in the affected countries, however the case incidence continues to decline in Guinea and Sierra Leone. In Liberia, no new cases have been reported since the 12th July, 2015. Nonetheless, still of concern is the detection of new cases from unknown chains of transmission in Guinea and Sierra Leone.

As of 9 August 2015, a cumulative total of 27,929 cases (laboratory-confirmed, probable and suspected) including 11,283 deaths with a case fatality rate (CFR) of 40% has been reported to the World Health Organization for the current EVD outbreak in West Africa.

Imported cases with or without localised transmission have been reported in Nigeria, Senegal, Mali, Spain, United States of America and the United Kingdom.

Situation update: Democratic Republic of Congo (DRC)

The recent outbreak in of EVD in a rural setting in the DRC is unrelated to the current outbreak in West Africa.

This is the seventh confirmed EVD outbreak in DRC, close to where the virus was first identified in 1976 in Yambuku near the Ebola River. As of 21 October 2014, a cumulative total of 67 EVD cases (38 confirmed, 28 probable and 1 suspected), including eight healthcare workers, has been reported. A total of 49 deaths (CFR 73%), including the eight healthcare workers, were also reported.

Some recent research shows that risk of Ebola virus transmission from sylvatic host(s) to humans increases with forest fragmentation, which is currently occurring in West Africa.

Foot and Mouth Disease (FMD): Multiple outbreaks of FMD were reported in cattle in northwest Botswana, Southeast Angola, the Kavango east and Kavango west districts of Namibia, and in Zimbabwe. These outbreaks are mostly within or in close proximity to the Kavango Zambezi Transfrontier Park, and are probably indicative of increase contact rates with persistently infected African buffalo.

Multifocal FMD outbreaks in cattle in Uganda were also reported and buffalo were probably the ultimate source of infection, followed by cattle to cattle transfer.

Focal outbreaks of FMD in cattle were also reported from Mozambique and Malawi, and once again, buffalo were probably the initial source of infection.

Multifocal outbreaks of FMD in livestock were also reported from Algeria, but in this case ultimate source of infection was probably movement of infected cattle.

Peste des Petits Ruminants (PPR): Outbreaks of PPR in small livestock (sheep and goats) were reported from Liberia in West Africa and Morocco in North Africa. Cause for concern has been the recent detection of PPR for the first time in the SADEC region, with outbreaks reported from Angola and Zambia. These countries have a large diversity of wild ruminants, and there is concern that PPR may cross over into wild ruminants at the interface.

Rabies: Rabies is endemic in many African countries where domestic and feral dogs are the most important vectors. During 2014/2015, South Africa also reported sporadic cases of rabies in bat eared fox (*Otocyon megalotis*), black backed jackal (*Canis mesomelas*), aardwolf (*Proteles cristata*), Cape fox (*Vulpes chama*), large grey mongoose (*Herpestes ichneumon*), slender mongoose (*Galeella sanguinea*), small grey mongoose (*Galeella pulverulenta*), yellow mongoose (*Cynictus pennicilata*), and common duiker (*Sylvicapra grimmia*).

At least 300 cases of dog rabies were reported in South Africa during 2014 / 2015, with five laboratory-confirmed fatal human cases recorded for the year.

An entire pack of rare wild dogs (*Lycaon pictus*) are reported to have died of rabies in the Blue Canyon Conservancy in Limpopo Province in South Africa.

There is an on-going epidemic of rabies in greater kudu in certain regions of Namibia, and the disease is starting to impact this species at the population level in some areas. The disease appears to be circulating and maintained independently in kudu.

ASIA

High Pathogenic Avian Influenza (HPAI): HPAI occurrence in poultry farms was reported from Korea (H5N8) and Taiwan (multiple strains) in 2015. In Taiwan, 952 cases were found in poultry farms, slaughter houses and poultry markets. Eight wild birds belonging to 6 species also were found infected. In Japan, 14 positive samples of HPAIV (H5N8) subtype were reported from 4 migratory birds' fecal samples, 8 dead wild birds, and 1 water sample, which was collected from the roost of migratory birds during the winter season from 2014 to 2015. Active surveillance of HPAI/LPAI in wild birds throughout Japan has been conducted during water birds' migratory season since 2011. From 2014 to 2015, a total of 14,643 samples from feces of mainly water birds, dead birds and water from birds' migratory area were collected for detecting HPAI/LPAI virus or virus genes. HPAI/LPAI virus/virus genes were found in 35 samples from feces, 9 samples from dead birds and one water sample.

Middle East Respiratory Syndrome Corona Virus (MERS-CoV): An outbreak of MERS-CoV in humans, a zoonotic virus associated with camels, occurred in Korea (Rep. of) from May 2015 to July 2015; there were a total of 186 human cases, 36 of them fatal. The Japanese Society of Zoos and Aquariums (JAZA) worked cooperatively with National Institute of Infectious Diseases (NIID) to undertake surveillance for infection in captive camels in Japan soon after infection was reported in Korea. No evidence of infection of MERS-Cov has been found in 20 camels, which is almost 90% of the camels in Japan. In addition, dromedaries camels were tested in Thailand and were all found negative.

Severe fever with thrombocytopenia syndrome (SFTS): SFTS, an infectious virus disease of humans transmitted by ixodid ticks, was found in China in 2009 and Korea in 2011. The first Japanese case was reported from Japan in 2013, and 151 cases including 41 fatalities, have been reported since then. SFTS is spreading gradually to northern parts of Japan. Antibodies against SFTS virus were detected in wild sika deers (*Cervus nippon*) and wild boars (*Sus scrofa*), and it is suggested that the population growth of wild deer could correlate to the spreading of human cases.

EUROPE

African swine fever (ASF): ASF was introduced into Eastern Europe and Georgia in 2007 and, in January 2014, it was discovered in Lithuania with two notifications of ASF cases in wild boar. Since then, ASF has been spreading in the Baltic countries (Estonia, Latvia and Lithuania) and was sporadically found in wild boar. The disease seems to be spreading in Poland (in Podlaskie region near the border with Belarus) where it is only found in wild boar.

Bovine tuberculosis: Bovine tuberculosis is reported in European bison (*Bison bonasus*) and wild boar in the south-east of Poland.

Brucella melitensis: *Brucella melitensis* infection and clinical brucellosis was confirmed in 2013, in an ibex (*Capra ibex*) population from the Bargy Mountain, Haute-Savoie (France), after a diagnosis of a single human case of brucellosis associated with consumption of raw cow milk in the area. It was soon recognised that the ibex have become carriers creating a silent link between the last local domestic outbreak in 1999 and the recent cases.

This discovery led to the decision to cull ibex over 5 years of age, as a precautionary measure to avoid further contamination of dairy cattle. Following the control operation, surveillance results indicated a significant jump in prevalence of the agent in young individuals, growing from 15 up to 50%. Experts from the French Agency for Food, Environmental and Occupational Health & Safety did not recommend that the culling be continued, and the National Council for Nature Conservation recommended banning further slaughters. Nevertheless, in the absence of other methods to control the disease in the ibex population, the authorities are under pressure from professionals to reduce the wild animal risk.

Canine distemper: Although an outbreak of distemper has been ongoing in Jutland in Denmark since 2011 in wildlife and farmed mink (*Neovison vison*), the epizootic appears now to be declining. Among wildlife, red foxes (*Vulpes vulpes*) have been the main species affected, but the disease has also been diagnosed in raccoon dog (*Nyctereutes procyonoides*), stone marten (*Martes foina*), polecat (*Mustela putorius*) and badger (*Meles meles*). So far pet dogs (*Canis familiaris*) have been spared.

Echinococcus multilocularis: During the past few years several thousand faecal samples from red foxes have been collected in Sweden to find out the distribution of this parasite. *Echinococcus multilocularis* was discovered in 2014 in a new area in southern Sweden and has up to now been demonstrated in five different areas. *E. multilocularis* continue to be found in red foxes and now also in raccoon dogs in Denmark. The origin of the infested animals has increased from one to two different locations in Jutland (south-west Jutland and Mid-Jutland).

Expansion and burden of oestrid flies in cervids: The moose throat bot fly (*Cephenemyia ulrichii*) has recently been found in several moose (*Alces alces*) in southern Norway ; previously it had only been described from the Arctic part of the country. It has also been spreading southwards in Sweden during the past years and is today found in almost all parts of the country. The reason for the extended distribution remains unclear. However, it is believed that this parasite has been present for some time without being detected, since the first instar larvae is tiny and inconspicuous during hunting season in the autumn, the time of the year when most moose are being examined by humans. The throat bot fly (*Cephenemyia stimulator*) was observed for the first time in Sweden in 2015 in two roe deer (*Capreolus capreolus*) from the southern part of the country.

Reindeer nose bot fly (*Cephenemyia trompe*) and reindeer warble fly (*Hypoderma tarandi*) seem to increasingly affect the wild reindeer (*Rangifer tarandus*) population in Norway and a project is underway to elucidate this further.

Influenza in birds: Highly pathogenic avian influenza (HPAI) H5N8 outbreaks in poultry farms have been reported in Asia, Europe, and the USA in 2014. Early in 2015, cases were also reported in wild birds (anatids, swans and storks) in Germany, Netherlands and Sweden. There is no clear indication of the source of the virus, and in Europe, events were considered resolved in March 2015.

Independently, three outbreaks of HPAI H5N1 were recorded in March 2015 in neighbouring parts of Bulgaria and Romania in Dalmatian pelicans (*Pelecanus crispus*).

In Denmark, low pathogenic AI of the types H5 and H7 has been detected in wild bird during active surveillance.

Myxomatosis: A major outbreak of myxomatosis in rabbits (*Oryctolagus cuniculi*) with high mortality has been observed since 2014 in southern Sweden and on the island of Gotland in the Baltic Sea.

Rabbit haemorrhagic disease (RHD): RHD of the newly discovered virus type 2 has been found in 2014/2015 in wild rabbits in the western part of Sweden and in two domestic rabbits in Denmark. This virus has been reported to also be able to infect hares, which distinguished it from RHD virus type 1. Therefore several European brown hares, with European brown hare Syndrome-lesions, were tested in Denmark for RHD virus type 2 to be sure that it was not RHDV2. The results indicated that all animals were negative.

Rabies: Rabies is still reported to occur in the south-east of Poland, mainly in foxes.

Trichomonosis in small birds: The ongoing epizootic with *Trichomonas gallinae* continues to be a major mortality factor for passerine birds and especially greenfinch (*Chloris chloris*) in the Nordic countries and this is believed to be the major reason for the decline of the greenfinch population.

Tularemia: Several scientific reports were published in 2015 showing that clusters of human cases of tularemia followed records of infection in wildlife in central Europe. Surveillance of wildlife should be considered as important to help to predict further outbreaks in humans.

A large outbreak of tularemia with increased mortality of hares (*Lepus timidus*, *L. europaeus*) has been observed in Finland, Norway and Sweden during the summer and autumn of 2015. The outbreak in Finland and in Sweden started in mid-July 2015 in the coastal regions of the northern most part of Bothnian Bay. The outbreak in Norway occurred in the southern part of Norway, isolated from the outbreaks in Finland and Sweden.

An outbreak in European brown hares has also been noted in the North of the Netherlands where a cluster of 11 hares died of tularemia in the Friesland province within an area of about 10 km diameter (12 dead hares were submitted from that area between February and May 2015 of which 11 were infected with tularemia). The first two confirmed cases occurred mid-February 2015, followed by seven cases in March, one in April and one in early May 2015.

Tularemia was also reported from Poland in the European hare in the Podkarpackie region.

Usutu virus in black birds: Early in August 2015, the SAGIR network⁴ recorded abnormal mortality in blackbirds (*Turdus merula*) in the department of Haut-Rhin (Eastern part of France, at the border of Germany). Two birds were analysed by Reverse Transcriptase – Polymerase Chain Reaction (RT-PCR) at the ANSES⁵ Reference laboratory, in Maisons-Alfort, and tested positive for a Flavivirus. The sequencing of this virus confirmed the presence of the Usutu virus and the first detection of this virus in France. This virus was identified in Europe for the first time in Italy in 1996 and was observed later in Central Europe, particularly in: Hungary (2005), Switzerland (2006), Germany (2011) Czech Republic (2011) and Belgium (2012). The Usutu virus appears to be of low pathogenicity to mammals, namely humans (non-zoonotic); poultry appears weakly susceptible to infection with the Usutu virus.

4 SAGIR network was founded in 1986 by the French National Office for Hunting and Wildlife (ONCFS). This network monitors wildlife deaths and attempts to identify their causes. It is based on a network of field observers, mainly hunters, veterinary laboratories and ONCFS workers.

5 ANSES: Agence nationale de sécurité sanitaire de l'alimentation, de l'environnement et du travail / French governmental agency dealing with sanitary safety in food, the environment and at work

NORTH AMERICA

Chronic wasting disease: Chronic wasting disease (CWD) continues to be detected at new locations in free-ranging and captive cervids in the U.S. In Michigan, CWD was confirmed in a wild white-tailed deer (WTD, *Odocoileus virginianus*) for the first time in May 2015. Since then, two more positive WTD have been found during culling operations in the immediate vicinity. All three deer are related genetically. In Missouri, CWD was found in early 2015 in a wild white-tailed deer 120 KM from the core affected area.

In captive cervids, CWD was found for the first time in captive elk (*Cervus canadensis*) in Utah in early 2015. An affected bull was among 11 elk transported in October 2014 from another Utah herd. In Ohio, CWD was detected in a male WTD killed in a Holmes County shooting facility in October 2014. The herd had been under quarantine since April 2014 due to trace out from CWD-positive captive herds in Pennsylvania. In autumn 2014, six escaped, ear-tagged WTD, including two from the affected facility, were killed by hunters in the county: CWD was not detected in any of the deer. The 224 deer in the herd were killed in April with no other CWD-positive deer detected. On March 31, 2015, CWD was confirmed in a 5-year-old doe in a captive WTD breeding herd owned by the same individual with the affected shooting facility. The index animal was received from a Wisconsin deer farm in January 2013. This herd had been under quarantine since April 2014 due to links with trace-back positive and exposed deer herds in Pennsylvania. The Ohio herd was depopulated and CWD was confirmed in 16 deer: one born at the facility, 11 deer purchased from Pennsylvania, and four purchased from other Ohio herds in 2013.

In Texas, CWD was confirmed for the first time in captive WTD in a Medina County breeding herd of 236 deer and 20 elks. Destruction and testing of 43 deer resulted in three more CWD detections. All four affected animals were 2-year old males originating from the same sire via artificial insemination. The source of infection is unknown. Within the last five years, the facility transferred 835 deer to 147 separate sites including 96 breeding facilities and 46 release sites in Texas, as well as two destinations in Mexico. In September, CWD was confirmed in a 2-year-old male deer (unrelated to the four affected males in the index herd) in a trace-out breeding facility in Lavaca County.

In Wisconsin, CWD was confirmed in a 7-year-old female WTD that died in June on a breeding farm in Eau Claire County, distant from the area in which CWD is known to be endemic in wild deer. Since May, multiple escapes have been reported from the affected facility; five escaped deer remain unrecovered.

***Cryptococcus gattii* VGIIb in eastern Canada:** In January 2015, laboratory investigation identified *C. gattii* VGIIb as the fungal pathogen causing multi-organ infection in a WTD that died in the eastern Canadian province of Nova Scotia (NS) and was examined by autopsy in 2014. This is the first evidence of the presence of this pathogen in eastern Canada. Since the WTD is not a migratory species, the fungal infection must have been acquired, locally, in NS. This implies that *Cryptococcus gattii* VGIIb is endemic in the province, residing, as it does elsewhere, in the soil and/or on trees in some suitable habitats. *C. gattii* has a wide host range that includes several wild and domestic animal species and humans. It was first found in North America in 1999 in a multi-species outbreak in the western province of British Columbia. All animal hosts become infected by air-borne spores emanating from fungal growth on soil and vegetation. Wild and domestic animals have served as sentinels for the spread of this largely tropical fungus across North America.

***Erysipelothrix rhusiopathiae* in arctic ungulates:** Further investigations into mortality in Muskoxen (*Ovibos moschatus*) in arctic Canada associated with septicemia caused by *E. rhusiopathiae*, noted in the 2014 report, suggest mortality on a larger scale than previously thought. One major herd that numbered almost 40,000 animals in 2010 has been reduced by 64%, and there is evidence that this bacterium is associated with at least some of this extreme decline. Infection in at least a few caribou has also been detected. Only a few strains of the bacterium have been found in these outbreaks, compared with wide strain variation elsewhere. It seems likely that recent mortality events associated with this bacterium result from a combination of environmental and nutritional factors together with infection with the bacterium. Further assessments are underway to better understand the causal factors leading to such serious population declines.

Highly pathogenic avian influenza: Highly pathogenic avian influenza (HPAI) virus was detected in wild birds in the United States for the first time when Eurasian (EU) H5 – North American (NA) N2 infection was confirmed in a northern pintail (*Anas acuta*) and a mallard (*A. platyrhynchos*) in the state of Washington in December 2014. Eurasian H5N8 infection was confirmed in a captive gyrfalcon (*Falco rusticolus*) that was fed ducks from the affected site. Since then, HPAI H5 viruses have been detected in 84 more wild birds and 3 more captive raptors in the western and Midwestern United States. In addition to the H5N2 and H5N8 viruses, a EU H5 – NA N1 was also detected in two wild American widgeon (*A. americana*) and one green-winged teal (*A. crecca*). Although the epidemiological picture remains unclear, the viruses that have been detected do not appear to affect ducks clinically; however they do appear to cause disease and death in wild geese and captive raptors, and a single black-capped chickadee (*Poecile atricapillus*). The last infections were detected in wild birds on June 17 in the Midwest and 31 July in the West.

An unprecedented HPAI outbreak in domestic poultry occurred in the first six months of 2015. The first domestic birds, in which HPAI was found, were in a backyard flock of mixed species in Oregon. A total of 211 production and 21 backyard flocks were affected in 15 states, primarily in the Midwest, with the last detection on 17 June. More than 48,000,000 birds were killed by the virus or in disease control efforts. Wild birds are suspected in the introduction of HPAI into the country and its spread from the western to the Midwestern U.S., but there has not been substantial or significant evidence to point to specific pathway(s) associated with viral transmission between domestic poultry facilities. However, airborne spread and biosecurity lapses are believed to have aided the rapid spread of HPAI between farms.

An interagency HPAI surveillance plan for wild birds has been implemented. The goals are to: 1) Identify the distribution of influenzas of interest by flyways and through select, high priority watershed; 2) detect spread of influenzas of interest to new areas of concern; and 3) provide a flexible surveillance framework to monitor wild waterfowl populations for re-assortments of influenzas, introductions of new viruses, and to estimate apparent prevalence of important influenzas. The goal is to sample 48,540 dabbling ducks of 10 species in a minimum of 136 watersheds within the four North American flyways during summer, autumn, and winter.

New herpesvirus in beluga whales (*Delphinapterus leucas*): A novel Herpesvirus has been discovered in Beluga whales in the St Lawrence River in eastern Canada. This virus, which has been tentatively named Beluga Whale Herpesvirus, has been associated with genital proliferative lesions in male and female Beluga. This novel virus, believed to be in the alphaherpesvirus group, shares high identity with several other marine mammal herpesviruses. The lesions associated with this virus were not believed to have caused death in the affected animals. Nevertheless, fatalities caused by systemic herpesvirus infections have been documented in Beluga. The relationship between the genital herpesvirus and the fatal herpesvirus infections remains to be determined.

Sarcocystis in grey seals (*Halichoerus grypus*): In the winter of 2012, as reported previously to OIE, 400 young grey seals, about 16% of young seals from the affected population, died from systemic infection with a mysterious protozoal infection on an island close to the Atlantic coast of Canada. Laboratory studies now have determined that the causal organism was a newly-described species of *Sarcocystis*, *Sarcocystis pinnipedi* n. sp., first found in arctic Ringed Seals (*Phoca hispida*). *S. pinnipedi* is closely related to *S. canis*; its life cycle and host species range have yet to be determined.

White-nose syndrome: White-nose syndrome (WNS), the disease of insectivorous, cave-hibernating bats caused by infection with the fungus *Pseudogymnoascus destructans*, was detected in Canada about 300 km further west in western Ontario than in previous years, very close to the border with the United States. In the United States, WNS was detected for the first time in Iowa in the Upper Midwest.

7. Update on 2015 Saiga antelope die-off in Kazakhstan

A massive die-off that began in early May 2015 killed more than 134,000 Saiga antelope (*Saiga tatarica tatarica*) in Central Kazakhstan according to an official report submitted by the country's Ministry of Agriculture to the World Organisation for Animal Health (OIE). Mortality began on May 5, grew in intensity until it peaked on May 15 and 16, and subsided by early June 2015. The report documented four separate outbreaks, with mortality ranging from 10,294 to 61,203 antelopes per population, and the overall morbidity/mortality rate was 88%. Total losses are close to 25% of the world's Saiga population.

The Saiga antelope is regarded as critically endangered, the category at highest risk for extinction, and the recent mortality event is feared to represent a significant threat to the future of this species. Female Saiga antelope gather in large herds each year in early May to calve. Conservationists were on-site in Central Kazakhstan by May 10 this year to observe calving success, as well as the condition of the calves and adults, and this put them in position to observe the mortality event. They reported animals with weakness, depression, ataxia, diarrhea, hypersalivation, and dyspnea. Affected antelope often collapsed and remained recumbent until death, which occurred within hours of the first clinical signs.

The mortality event was investigated by local, regional, and national veterinary services of Kazakhstan as well as the Royal Veterinary College in London, the Food and Agriculture Organization of the United Nations, the Research Institute for Problems of Biological Safety, and others. Sample analysis by the National Reference Centre of Kazakhstan's Ministry of Agriculture resulted in isolation and identification of *Pasteurella multocida*, the causative agent of hemorrhagic septicemia. However, the possible roles of other factors, including weather conditions and co-infections with viruses or other pathogens, are pending further identification. Collaboration by international reference centres have been delayed by the requirement for obtaining CITES⁶ import/export permits (see also recommendation in Agenda item 17 of this report).

8. An evaluation of buffalo demographics, movements and genetics, in connection with the multiple Foot and Mouth Disease outbreaks in the vicinity of Kavango - Zambezi Transfrontier Conservation Area

Dr Philippe Chardonnet, Director of the International Foundation for the Conservation of Wildlife, and Dr Laure Weber-Vintzel, Officer in charge of the recognition of countries' animal disease status, OIE Scientific and Technical Department, participated to the discussion on this item.

In 2015, multiple outbreaks of FMD in cattle have been detected in southern Africa. Countries of the sub-region (Angola, Namibia Botswana, Zambia and Zimbabwe), permanently under threat of FMD incursion, have reported a higher number of outbreaks, including in areas that had been free from FMD for the past 40 years.

The OIE Scientific Commission, considering all possible hypothesis of this apparent recrudescence of FMD in southern Africa, noted that the outbreak areas were all in close proximity to the Kavango - Zambezi (KAZA) Transfrontier Conservation Area (TFCA) and wondered whether changes were recently reported on the buffalo population and movement patterns in the KAZA TFCA. It was therefore important to look at buffalo demographics, genetics and movements to assess buffalo / cattle interactions.

Analysis of historical and recent gene flow in African buffalo in the vicinity of KAZA indicated that, historically, buffalo roamed freely throughout this region, whereas recent gene flow had been more restricted, due to fragmentation of these buffalo populations. However, with the formation of the KAZA TFCA, this fragmentation appeared to be reversing, and studies on buffalo movements using satellite tracking collars indicated that buffalo home ranges, including their seasonal resource-driven migrations, were remaining fairly constant. However, as herd sizes increased, long range dispersals start occurring, with buffalo colonizing new areas or joining other distant herds (Robin Naidoo R., Du Preez P., Stuart-Hill G., Beytell P., Taylor R. (2015), Movements of African buffalo (*Syncerus caffer*) in the Kavango-Zambezi Transfrontier Conservation area, Gnusletter Special issue number 1, pp. 29-32, IUCN/SSC Antelope Specialist Group Report).

The KAZA TFCA consists of a mosaic of land use practices, including subsistence agriculture, nomadic pastoralism and wildlife conservation. It is therefore quite predictable that, in this type of situation, buffalo population in the TFCA and contact rates between buffalo and cattle will increase, posing a greater risk for FMD transmission. However, the Group was not aware of any change to date in the buffalo population or movement patterns in the KAZA TFCA and considered that the TFCA was too recently established to already have such a significant impact.

6 The Convention on International Trade in Endangered Species of Wild Fauna and Flora

In addition, the Working Group emphasised that fence maintenance in a multispecies environment (including elephants) was difficult, and human opening of fences to access grazing for cattle in the conservation areas during droughts was not uncommon.

The Working Group also noted that while the original source of FMD outbreaks in sub-Saharan Africa was from African buffalo persistently infected with SAT viruses, cattle-to-cattle transmission was the main source of domestic cattle infection. The Working Group highlighted that illegal movement of cattle across borders was common in the sub-region and that vaccine efficacy and vaccination frequency could currently be considered sub-optimal, resulting in decreased cattle herd immunity.

The Working Group concluded that the probability that the change in FMD situation around the KAZA TFCA was related to the TFCA establishment was low but could not be excluded, and that all above-mentioned factors should be considered as predisposing to the establishment of new FMD outbreak foci, and may, together with cattle-to-cattle transmission, facilitate the maintenance cycle of outbreaks.

9. Avian influenza: wild bird surveillance – update from OFFLU⁷

Dr Gounalan Pavade, Chargé de mission, OIE Scientific and Technical Department, updated the Working Group about the progress of activities under the newly formed OFFLU wild bird influenza surveillance technical activity.

He informed the Working Group that a first teleconference was held on 9 July 2015 among the group members to finalise the objectives, mode of operation, data usage and data submission of this technical activity. He mentioned in particular that:

- The group would work mainly through email communication and teleconferences and in-person meetings would be conducted if appropriate funding sources were identified;
- The group would develop a platform for discussion, coordination, and data sharing between key wildlife experts involved in influenza surveillance and research;
- Selected members of the group would work towards coordinating a low-cost targeted wild bird surveillance strategy at a global level accounting for existing surveillance programmes and would document it through publications;
- Efforts would be made by the group to regularly update the OFFLU research priorities and surveillance section on wild birds and the group would provide technical expertise on influenzas in wild animals;
- The outputs from the group activities would be published on OFFLU, FAO, and OIE websites;
- Finally, the group recognised the need to find a sustainable database where the genetic information provided by the group members could be published. Databases like Influenza Research Database (IRD) and the Canadian Wildlife Health Cooperative (CWHC) database would be appropriate to consider in the future.

10. Animal welfare: reptiles in the skin trade

Due to the growth in reptile farming and trade for food, pets and skins, the OIE is currently considering options for providing guidance on various aspects of health, food safety and animal welfare issues related to reptiles. The Working Group was informed by Dr Derek Belton, Head of the International Trade Department, and Dr Leopoldo Stuardo, Chargé de mission, OIE International Trade Department, that it might be requested to provide support for the future development of OIE standards applicable to reptiles.

The Working Group strongly supported OIE's involvement in reptile health, welfare and also food safety and would contribute to OIE's efforts as requested.

An early draft of a potential new chapter of the *Terrestrial Code*, "killing methods for reptiles in the skin trade", was provided to the Group as a working document for this meeting. The Group was of the opinion that animal welfare for reptiles could be addressed either by updating the current chapters (especially the Chapter 7.5. on "Slaughter of animals") or by developing a new chapter.

⁷ OIE-FAO global network of expertise on animal influenza

For the first option, the Working Group referred to the suggested changes and comments made during its last meeting on Chapter 7.5. of the *Terrestrial Code* so as to include reptiles in the species addressed in the chapter.

For the second option, due to the unique nature of reptile physiology and brain anatomy, the Group pointed out that special consideration should be given when considering euthanasia techniques. Tolerance of reptiles to anoxic conditions allows for brain activity and survival for hours after decapitation, spinal cord severance, or exsanguination. Thus, the Group highlighted that destruction of the brain (brain stem) is essential to ensure loss of consciousness and rapid death. This point was included in the Working Group's previous recommendations for Chapter 7.5.

The Group made the following recommendations and comments:

- The updated chapter 7.5. or a new chapter, should include electrical stunning as one technique for stunning prior to euthanasia;
- Free bullet method should be further defined to ensure that the bullets used are expanding loads that will destroy the brain fully and will not be a hazard to operators, as is the case with metal-jacketed bullets. This is currently included in Article 7.6.2 of the *Terrestrial Code*;
- In summary, the Working Group would support expanding the current Code Chapter 7.5., to include reptiles, or creating a new Chapter for reptiles. However, if the option to develop a new chapter is chosen, the Group is of the opinion that the new chapter would have to include considerable repetition of the content currently found in the *Terrestrial Code* Chapters 7.5. and 7.6.;
- The Working Group would be willing to review any new draft provisions of the *Terrestrial Code* on reptile animal welfare in collaboration with the OIE Working Group on animal welfare.

11. Collaborative Partnership on Sustainable Wildlife Management: update on the factsheets and other activities

The Collaborative Partnership on Sustainable Wildlife Management (CPW), of which the OIE is a member, was created in late 2012 and comprises 14 international organisations, with a Secretariat hosted by FAO.

The Working Group has been asked to support the OIE in this initiative. To date, the CPW has held several meetings with representatives from the partner organisations, has produced a number of "fact sheets" related to the subject, and has organised a half-day forum at the 2015 World Forestry Congress, held in Durban, South Africa in September. OIE staff or an expert from the Working Group has attended the several meetings to represent the OIE. The Working Group provided technical guidance and comments for the factsheets on animal health and on human-wildlife conflict.

The Working Group reiterated its continued support to represent the OIE in the CPW meetings and contribute to the CPW's activities.

12. International Council for Game and Wildlife Conservation and OIE joint project

In June 2014, the OIE, together with the International Council for Game and Wildlife Conservation (CIC), arranged a joint international meeting on early detection and prevention of African swine fever and other animal health issues at the wildlife-livestock-human interface. The meeting recommended that veterinary services and national bodies and organisations responsible for hunting and wildlife management agree upon and enhance official cooperation in all activities related to the detection, surveillance, control and eradication of African swine fever and other specified wildlife diseases, establish training programs for hunters and other persons related to game and wildlife management, develop a training centre on wildlife diseases for hunters, to be managed by CIC with scientific support from the OIE, and that CIC with the support of the OIE and the OIE Working Group on Wildlife, develop and publish a practical fact sheet on African swine fever for hunters and other persons involved in game and wildlife management.

The Working Group expressed its concerns about the spreading of African swine fever (ASF) in the eastern part of Europe and the risk this could pose for pig production and wild boar populations in Europe. The Working Group supported the recommendations from the joint international meeting that OIE liaise more with hunting groups and encourage them to contribute to wildlife disease surveillance. The Working Group also supported the development of closer relationships between OIE and CIC and other relevant hunter organisations.

A project plan that has been developed between OIE and CIC for a “CIC-OIE Center for Wildlife Diseases” was briefly presented and discussed. The Working Group supported the establishment of a network to connect hunters with veterinary services, and agreed with the utility of training of hunters to participate in disease surveillance and avoid potential contribution to epidemic disease spread.

The Working Group confirmed its willingness to provide input and assistance toward these OIE-CIC objectives and to assist in producing a fact sheet about ASF to be distributed among hunters and hunting organisations.

13. OIE Collaborating Centres for Wildlife

Collaborating Centre for Research, Diagnosis and Surveillance of Wildlife Pathogens (Canada/USA): The annual report from 2014, sent to the OIE, was reviewed.

Collaborating Centre for Training in Integrated Livestock and Wildlife Health and Management (South Africa): The annual report from 2014, sent to the OIE, was reviewed.

The Working Group noted that both Collaborating Centres were very active in meeting the needs of OIE Member Countries and in supporting OIE programmes.

14. Training of Wildlife Focal Points

With representatives of the Scientific Department, the Working Group reviewed the three training workshops for OIE National Focal Points for Wildlife that have been developed and presented thus far: the first a general introduction to the various roles of wild animals in the health and disease issues within the OIE mandate, the second on wildlife disease surveillance and the third on wildlife health risk assessment and multi-criterion decision analysis (MCDA) in support of policy and decisions. For each, there was a self-teaching training manual with which individuals or groups could work through the content of each workshop.

The Working Group was informed that:

- The training manual for the first workshop is available on line in English, French and Spanish: <http://www.oie.int/international-standard-setting/specialists-commissions-groups/working-groups-reports/working-group-on-wildlife-diseases/>.
- The training manual for the second workshop also now is available on line at the same site in English, and French and Spanish versions are to be added as soon as possible. This manual includes an Excel file of surveillance data used in the training exercises.
- The third training manual (Risk assessment and MCDA) is to be prepared for on-line publication in January 2016.

The Working Group considered these training workshops to have been highly successful, both in delivering important information and skills to OIE National Focal Points and in helping to establish regional networks among the National Focal Points and others with relevant skills and interests. The presentation of these workshops in each OIE region every two years would provide a good level of continuous education and would also provide the opportunity to inform and assist newly-appointed focal points.

The Working Group was informed that continuation of these workshops into a 4th round would depend on funding that had not yet been confirmed. The Canada/US Collaborating Centre on wildlife, which developed and presented the topic content of the first three training workshops, has offered to develop a 4th training workshop.

The Working Group encouraged the OIE to continue its highly-successful programme of training workshops for OIE National Focal Points for Wildlife.

15. Past and upcoming Conferences (feedback from members and the OIE Headquarters)

15.1. OIE Global Conference on Biological Threat, Paris, France, 30 June – 2 July 2015

The World Organisation for Animal Health (OIE) hosted the first Global Conference on Biological Threat Reduction in Paris, 30 June – 2 July 2015. The Conference, which was held in collaboration with the World Health Organization (WHO), brought together world leading scientists, educators, and key decision makers from international organisations and national governments. The participants who represented the public health, animal health, ecosystem health, and security sectors came from more than 80 countries. The chair of the OIE Working Group on Wildlife was invited to provide one of the opening plenary presentations on “The Nature of Disease Emergence.”

15.2. Expert Meeting on alien species in wildlife trade, experiences in the use of biological control agents and development of decision support tools for management of invasive alien species, Montreal, Canada, 28 – 30 October 2015

The Working Group was informed that Dr Ted Leighton, member of the Working Group, would represent the OIE at the *Expert Meeting on alien species in wildlife trade, experiences in the use of biological control agents and development of decision support tools for management of invasive alien species*, to be held in Montreal, Canada 28-30 October 2015. This meeting is being organised by the Convention on Biological Diversity (CBD) secretariat.

The Working Group took note of comments, made by Dr Vallat at the opening of the meeting, about the role of OIE in the global issue of invasive alien species (IAS) and further discussed this with Dr Belton, Dr Tomoko Ishibashi and Dr Jae Myong Lee (OIE International Trade Department).

The Working Group noted that, according to the CBD, animal pathogens could also meet the definition of IAS. Although some have suggested that the OIE expand its mandate to include non-pathogen IAS, using the structure and methods of the OIE to create a global regulatory framework for all IAS, the OIE will not extend, for the moment, its role and mandate beyond the regulations and standards for animal pathogens and related issues of animal health, welfare and food safety. However the Working Group was informed that the OIE is willing to share its experience and approaches to managing IAS pathogens, including the *Terrestrial or Aquatic Codes* and generic guidelines for surveillance and risk assessment, with other organisations who may seek to develop mechanisms to address the threats posed by IAS in general.

The Working Group also noted that the OIE uses evidence-based risk assessment approaches to establishing regulatory standards while the CBD applies the precautionary principle that avoids, rather than quantifies, risk. The evidence-based risk assessment approach might be helpful in some aspects of IAS regulation.

15.3. Global Conference: “Global elimination of dog-mediated human rabies - The time is now”, Geneva, Switzerland, 10-11 December 2015

See item 5.

16. Work programme and priority setting for 2015/2016

The Working Group discussed potential activities for the coming year pending Scientific Commission review and approval. These included:

- to communicate with the Scientific Commission regularly to ensure the Working Group responds to new and on-going priorities and needs of the Scientific Commission;
- to continue to inform the OIE about emerging issues of wildlife;
- to provide science-based and technical support for OIE efforts related to wild bee health as needed;
- to publish a scientific paper on rabies in wildlife and use the information gathered to support other OIE activities related to rabies control;

- to support OFFLU in its efforts to gather information on surveillance for avian influenza viruses in wildlife;
- to provide science-based and technical support for OIE efforts related to health, food safety and welfare issues related to reptiles;
- to support OIE in its work with the Collaborative Partnership on Sustainable Wildlife Management;
- to support the joint efforts of OIE and the International Council for Game and Wildlife Conservation in the development of training materials for hunters, as well as an educational fact sheet on African swine fever and wild boar;
- to recommend the publication of the training manual for the third cycle of the training workshop for the OIE National Focal Points for wildlife on the OIE website in 2016;
- to support OIE in its collaboration with the secretariat for the Convention on International Trade in Endangered Species (CITES);
- to represent OIE at the *Expert meeting on alien species in wildlife trade, experiences in the use of biological control agents and development of decision support tools for management of invasive alien species*, organised by the Convention on Biological Diversity in October 2015, in Montreal, Canada;
- to assist the OIE to contribute to World Wildlife Day (March 2016), <http://www.un.org/en/events/wildlifeday/>, by providing written materials and photographs as requested;
- To support the development of the program for the future 4th cycle of training of OIE National Focal Points for Wildlife that will be developed with the relevant OIE Collaborating Centres.

17. Other business

17.1. Pathogen Tolerance

There is a growing interest within the health community to understand the mechanisms underlying host pathogen tolerance. This differs from both natural and acquired resistance in that the host becomes infected but does not display clinical signs of disease or, in some cases, mild disease. Examples of these host – pathogen relationships are warthogs and African swine fever, filoviruses and certain bat species, and Nipah virus and Pteropid bats. Research into tolerance mechanisms may provide alternative approaches to disease control where antimicrobial use or vaccination programs are facing challenges.

17.2. CITES Exemption for Emergency Diagnostic Specimens

Given current technical and practical challenges in establishing advanced diagnostic capacity for wild animals in many countries, shipment of diagnostic samples to international reference laboratories often is required for emergency diagnostics. Under the Convention on the International Trade in Endangered Species (CITES), diagnostic samples are considered trade products, and health professionals responding to disease events in threatened and endangered species commonly encounter extensive delays acquiring the necessary CITES import and/or export permits. For example, permits for sending diagnostic samples from the Saiga Antelope die-off in 2015 to an international reference laboratory required an approximately five month process. The Chief of Scientific Services for CITES noted that CITES hopes to establish closer collaboration with OIE, and indicated that the OIE reference laboratory agreements could serve as a model for CITES and OIE National Focal Points for Wildlife could be engaged in liaising with CITES authorities in member countries. A formal CITES amendment that would exempt diagnostic samples going to internationally certified reference laboratories such as OIE Reference Laboratories from permit requirements could possibly be proposed for the next CITES Conference of the Parties. The OIE Working Group on Wildlife strongly supports any effort that OIE might be able to make in amending the current CITES regulations to facilitate rapid diagnosis of important disease outbreaks in endangered and threatened wildlife.

17.3. Awareness activities

The Working Group discussed the global celebration: International Wildlife Day, March 3, 2016, and agreed to develop some ideas for possible OIE participation or communication, including a statement about the importance of wildlife on the OIE website.

The Working Group also suggested a dedicated issue of the OIE *Bulletin* on wildlife with a focus on WAHIS-Wild, OIE Training seminars for OIE National Focal Points for Wildlife, Collaborating Centres for Wildlife, etc.

18. Date of next meeting

The Working Group noted the proposed week for its next meeting: 7 November–10 November 2016.

19. Adoption of report

The report was adopted by the Working Group.

.../Appendices

**MEETING OF THE OIE WORKING GROUP ON WILDLIFE
Paris (France), 29 September–2 October 2015**

Agenda

- 1. Opening**
- 2. Adoption of agenda and designation of rapporteur**
- 3. Feedback from the meetings of the Scientific Commission for Animal Diseases and Biological Standards Commission**
 - 3.1. Feedback from the meeting of the Scientific Commission (February & September 2015)
 - 3.2. Feedback from the meeting of the Biological Standards Commission (September 2015)
- 4. Disease reporting**
 - 4.1. Feedback on the use of the list of wildlife diseases (non OIE listed diseases) through the new *WAHIS-Wild* Interface;
 - 4.2. Review the taxonomy of the pathogens on the specific list of wildlife diseases;
 - 4.3. Update on OIE- listed diseases that are not notifiable in wildlife (equine influenza; *Chlamydia abortus* (infection with) [enzootic abortion of ewes, ovine chlamydiosis]; Equine arteritis virus (infection with); Newcastle disease and theileriosis);
 - 4.4. Share information about upcoming events on wildlife diseases;
 - 4.5. Notification procedures linked with the six-monthly report and the *Terrestrial Animal Health Code*.
 - 4.6. Additional Information
- 5. Rabies: Scientific paper on rabies and its impact on biodiversity**
- 6. Emerging and noteworthy wildlife disease occurrences: reports from members of Working Group on Wildlife Diseases**
- 7. Update on 2015 Saiga antelope die-off in Kazakhstan**
- 8. An evaluation of buffalo migratory patterns and population in the Kavango - Zambezi Transfrontier Area related to Foot and Mouth Disease**
- 9. Avian influenza: wild bird surveillance – update from OFFLU**
- 10. Animal welfare: reptiles in the skin trade**
- 11. Collaborative Partnership on Sustainable Wildlife Management: update on the factsheets and other activities**
- 12. International Council for Game and Wildlife Conservation and OIE joint project**
- 13. OIE Collaborating Centres for Wildlife**
 - a) Report from the Collaborating Centre for Research, Diagnosis and Surveillance of Wildlife Pathogens (Canada/USA)
 - b) Report from the Collaborating Centre for Surveillance and Control of Animal Diseases in Africa (South Africa)

14. Training of Wildlife Focal points

- a) 4th Round of Workshops
- b) Publication of Training Manual

15. Past and upcoming Conferences (feedback from members and OIE Headquarters)

- a) OIE Global Conference on Biological Threat, Paris, France, 30 June – 2 July 2015
- b) Expert Meeting on alien species in wildlife trade, experiences in the use of biological control agents and development of decision support tools for management of invasive alien species, Montreal, Canada, 28 – 30 October 2015

16. Work program and priority setting for 2015/2016

17. Other business

18. Date of next meeting

19. Adoption of report

**MEETING OF THE OIE WORKING GROUP ON WILDLIFE
Paris (France), 29 September–2 October 2015**

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