Welcome to the first WDA AME newsletter. It is a very exciting time for the chapter and in 2015 we will have more members than ever before.

The need to understand wildlife diseases in the Africa/Middle East region has never been more important. This is highlighted by the ongoing ebola viral disease outbreak in west Africa and the MERS-CoV outbreak in the middle east. A greater understanding of these pathogens in their natural hosts could help control efforts in the future.

It is not just the OneHealth aspects of wildlife disease that we should focus on. The recent death of two of the last seven northern white rhinos is a striking reminder of the many threats to wildlife in the region. The region needs a group of professionals with the expertise to face these challenges. The WDA AME chapter can be that group.

In order to be a success we need your help. We urge you to get involved with the new chapter, encourage new members, organize a local meeting in your area.

We look forward to working together. Please contact the committee if you have any suggestions—wdaamenews@gmail.com

Ebola virus disease and wildlife surveillance in Nigeria

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The introduction and subsequent transmission of Ebola virus disease (EVD) in Nigeria clearly had nothing to do with animals. Instead, the virus came through Mr. Sawyer, who was previously exposed in Liberia prior to coming to Lagos.

Fortunately the infection was contained in humans but animals were ignorantly criminalised in the campaign against EVD. Considering the putative reservoir role of bats and susceptibility of primates, it is sensible to encourage surveillance and monitoring of wildlife in Nigeria’s ecosystem.

Earlier and current outbreaks of EVD had roots in the Central and West African rain forest belt. Specifically, the first case in DR Congo was localised to an area around river Ebola, which became the name of the virus. Hence EVD may be found in all the countries in this region including Nigeria. Therefore, investigating the putative reservoir hosts of EVD in the country is important. The risk factors for EVD transmission from the reservoir hosts and consequent spread to susceptible primates including humans are strongly indicated.

The country’s biodiversity (fauna and flora) and its numerous wetlands make it a haven for diverse species including migratory birds. Furthermore, the penchants for hunting bush meat in addition to incessant habitat encroachment are potential EVD risks. Though bats are not usually hunted for food in Nigeria, they are nevertheless eaten. These different species of bats including Eidolon and Rousettus dot the landscape at dusk or hang on tree(s) (photo insert).

Their large scale distribution in the country in the context of Ebola virus infection is a good justification for conducting surveillance on possible reservoir hosts of EVD in Nigeria. Such investigation would without doubt provide baseline data on risk factors of EVD transmission and bring to light, control measures that can serve to prevent future transmission and promote ecohealth/onehealth.
STUDIES ON THE PATHOLOGY OF GORILLAS

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Members of the Africa Middle East (AME) Section of the Wildlife Disease Association (WDA) may be interested to know about an ongoing project on the pathology of gorillas (Gorilla gorilla and G. beringei).

The available information on gorilla pathology is scattered and disparate. Much of it relates to only the one species, G. gorilla, and this is largely based on studies in zoos. Relatively few data are from free-living gorillas, and these tend to be limited in scope because of the difficulties of necropsy and sampling under field conditions. Furthermore, there is a marked variation in the training and background of those doing such work and some of their findings are published (in various languages) in scientific journals, theses and books, while others remain unpublished.

Despite the relative paucity of reliable information on the pathology of gorillas, there are opportunities to learn more. Collecting and collating the available data (see above) is one route. The other is to make better use of the tissues from gorillas available in museums and elsewhere in many parts of the world. The most prevalent material is skeletal (in museums) but zoos and, in Africa, primate centres and sanctuaries should be a good source of histological samples and archived necropsy reports.

The need to bring together information about gorilla pathology and the whereabouts of reference material has led to the signing of a Contract with Elsevier Inc., the American-based publishing company, to produce a book and an accompanying catalogue (GPR). The publication is provisionally entitled Gorilla Pathology: with a Catalogue of Archival Biological Material and will be published under Elsevier’s Academic Press imprint. The book will be a monograph on the pathology of gorillas and its relevant implications for their health, both in the wild and in captivity. It is aimed at primatologists, veterinarians, comparative pathologists, biologists, osteologists and conservationists. The Catalogue of Archival Biological Material is largely the responsibility of Gordon Hull who is updating his existing list of Gorilla specimens; at present this comprises more than 4,600 specimens in 424 institutions, chiefly museums and university departments, in 47 countries, but it is expected to grow to more than 5,000 specimens by the time of publication. The final catalogue will include information about the whereabouts of skulls, skeletons and skins, fluid-preserved specimens, casts, histological sections and relevant paraffin blocks, cytological preparations, blood smears, material prepared for transmission (TEM) or scanning (SEM) electron-microscopy, samples for DNA and for toxicological and virological studies, radiographs, ultrasonographs and other images and clinical, post-mortem and laboratory records.

The book and catalogue will be prepared by John Cooper and Gordon Hull (pictured), with contributions by Margaret Cooper and by colleagues in Africa. Colleagues are encouraged to contact me if they have any comments or suggestions about the project or might be able to assist us in any way, including the sharing of data, in the production of the publication. All contributions will be acknowledged.

Member Profile

Dr. Thomas Nyariki, Chair of the WDA AME Chapter

Dr. Nyariki is Kenyan and is a Wildlife Expert at the African Union Inter-African Bureau for Animal Resources (AU-IBAR). Dr Nyariki is a veterinarian with a PhD and MSc degree in Veterinary Pathology and Diagnostics. He is currently studying a Masters in Project Planning and Management. Dr Nyariki previously worked for the Kenya Wildlife Service (KWS) for 12 years.