Health of wildlife, domestic species and human beings, and the environments that support them (One Health), has been a focus of the Wildlife Disease Association for more than 55 years. The Journal of Wildlife Diseases (JWD) issue 55(1) has several articles with particular conservation and wildlife management significance that we would like to make you aware of.

Much of what is known about rabies is based on historic studies of the disease in dogs and indicate saliva is the primary source of infection to humans. But canine rabies has nearly been eliminated from the US and more than 90% of the cases now being reported are in wild animals. Scientists from Cornell University, Colorado State University and USDA-APHIS-WS, led by Isabel Jimenez and Amy Gilbert, attempted isolation of rabies virus from salivary glands of 51 confirmed rabid striped skunks and 7 other wild and domestic carnivores collected from 2013–2015 in northern Colorado. They were successful in approximately 80% of animals indicating wildlife are equally likely to shed the virus and pose a risk to humans and other animals. Full findings are in their article Isolation of Rabies Virus from the Salivary Glands of Wild and Domestic Carnivores during a Skunk Rabies Epizootic.

Mountain gorillas are one of the most critically endangered great apes in the world and the most common cause of illness and death in mountain gorillas is injury by other gorillas or from snare entrapment. Marlene Haggblade, Kirsten Gilardi and a team of researchers from University of California, Davis, the Mountain Gorilla Veterinary Project, and Rwanda Tourism and Conservation analyzed Outcomes of Snare-Related Injuries to Endangered Mountain Gorillas (Gorilla beringei beringei) in Rwanda. Gorilla doctors treated 37 gorillas entrapped in snares and 95 gorillas for other clinical conditions (including trauma and respiratory illness). Young gorillas were more likely than older gorillas to become snared and severity of wounds were associated with increased risk of lasting impairment.

Recent Changes in Infectious Diseases in European Wildlife is a very large work by 20 authors from 15 institutions that provides an update on changes in the epidemiology of 25 selected infectious, wildlife-related diseases in Europe from 2010–2016. Many of the pathogens enter Europe from other continents while others are expanding their ranges inside and beyond Europe. Surveillance for these wildlife diseases at a continental scale is important for planet-wide assessment, awareness of, and preparedness for, the risks they may pose to the health of wildlife, livestock, and humans.

Veterinary epidemiologists consider the most likely mechanism for emerging avian influenza viruses from Asia and Europe to enter North America, including those that may be virulent for humans and domestic species, to be via Artic movements of migratory birds and waterfowl. In Survey of Arctic Alaskan Wildlife for Influenza A Antibodies: Limited Evidence For Exposure of Mammals, Caroline Van Hemert and 11 colleagues from USGS-Alaska Science
Center, USDA-APHIS-WS and Mississippi State University tested a wide variety of birds and mammals from 2012–2016 for exposure to influenza A viruses. Results provide evidence that a relatively high proportion of waterbirds breeding on the Arctic Coastal Plain are exposed to those viruses, although it is unknown whether such exposure occurs locally or on staging or wintering grounds. In contrast, exposure to influenza A in concomitant mammals is apparently low.

Two papers on testing wild African carnivores, the lion and the wild dog, for exposure to bovine tuberculosis, a cause of significant conservation concern, by Michelle Miller from Stellenbosch University, and various colleagues, can be found in the current issue of Journal of Wildlife Diseases.

Abstracts of these and other articles in JWD 55(1) are available at: http://www.wildlifedisease.org/wda/PUBLICATIONS/JournalofWildlifeDiseases/OnlineJournal.aspx If you are interested in getting access to the full article, contact wda.manager@gmail.com