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All Wildlife Diseases, All Conservation, All One Health, All the Time!

NEWS RELEASE ON ARTICLES FROM JOURNAL OF WILDLIFE DISEASES 55(2)

The health of wildlife, domestic animals, and human beings, and the environments that support them (One Health), has been a focus of the Wildlife Disease Association for more than 60 years. The Journal of Wildlife Diseases (JWD) issue 55(2) has several articles with particular conservation and wildlife management significance that we would like to make you aware of.

Finding ways to assess the health of wild animals without having to use invasive techniques that may increase stress and injury is extremely important for health as well as welfare reasons. In **Sea Turtle Tears: A Novel, Minimally Invasive Sampling Method for 1H-NMR Metabolomics Investigations with Cold Stun Syndrome as a Case Study** a group from **North Carolina State University** led by **Jennifer Niemuth** studied loggerhead (*Caretta caretta*), green (*Chelonia mydas*), and Kemp's ridley (*Lepidochelys kempii*) sea turtles. Five tear biomarkers (propylene glycol, glycerol, lactate, formate, and an unidentified metabolite) distinguished unaffected sea turtles from those with cold stun syndrome. Tear sample collection from sea turtles was easy to perform and well tolerated by the animals

The role of livestock and dogs in the cycle and accidental cystic echinococcosis infections of humans are widely documented. However, the role of wild herbivores like deer in the potential transmission of echinococcus from livestock is still unknown in Chile and the rest of South America. **Felipe Hernández** and a research group from **Universidad Austral de Chile** and government agriculture and forestry agencies investigated ***Echinococcus granulosus* in the Endangered Patagonian Huemul (*Hippocamelus bisulcus*)**. They found that geographic overlap between sheep and huemul populations in the Cerro Castillo National Reserve (Aysén region, Chile) likely facilitates parasite spillover into wild deer populations, with shepherd or stray dogs and wild foxes potentially acting as bridging hosts between livestock and the endangered huemul deer.

Respiratory tract disease and pneumonia has devastated many bighorn sheep populations in the US and Canada. Domestic sheep and goats were the primary known hosts for one of the most important causal agents, *Mycoplasma ovipneumoniae*. **Emma Rovani** and co-authors from **Alaska Department of Fish and Game** and **Washington State University** report ***Mycoplasma ovipneumoniae* Associated with Polymicrobial Pneumonia in a Free-Ranging Yearling Barren Ground Caribou (*Rangifer tarandus granti*) from Alaska, USA**

Mexican wolves, classified as probably extinct in the wild in Mexico and endangered in the US, were reintroduced into Arizona in 1998. **Anne Justice-Allen** and **Matthew Clement** of **Arizona Game and Fish Department** used data from 108 wolves and known survival data from 118 wolves born from 2003 to 2014 to evaluate whether exposure to two diseases was associated with a greater risk of mortality before 2 years of age. In the **Effect of Canine Parvovirus and Canine Distemper Virus on the Mexican Wolf (*Canis lupus baileyi*) Population in the USA** they detected no effect on mortality before age 2, but canine distemper was later identified as the cause of mortality in two individuals in 2017.

Human beings are fascinated with other primates but it is well known that we may share diseases and parasites with them, some of which can be serious. **Ai-Mei Chang** and colleagues from **National Pingtung University of Science and Technology** and **Kyoto University** report on just such a situation in *Entamoeba spp.* in Wild Formosan Rock Macaques (*Macaca cyclopis*) in an Area With Frequent Human-Macaque Contact.

Abstracts of these and other articles in JWD 55(2) 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

