

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

## NEWS RELEASE ON ARTICLES FROM JOURNAL OF WILDLIFE DISEASES 53(1)

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 53(1) has several articles with particular conservation and wildlife management significance that we would like to make you aware of.

WILDLIFE HEALTH 2.0: BRIDGING THE KNOWLEDGE-TO-ACTION GAP, by Craig Stephen of the Canadian Wildlife Health Cooperative argues we must improve connections between research expertise and policies or practices to protect wildlife health, and that two imperatives drive this: 1) growing frustrations that research is inadequately being used to inform management decisions and 2) the realization that scientific certainty is context specific for complex issues like wildlife health. Perhaps more simply stated, if wildlife health professionals want to have more influence on wildlife health and conservation decision making, they need to focus on questions relevant to decision makers and the public, and recognize that scientific certainly is seen as somewhat malleable, not absolute.

**DIAGNOSIS AND IMPLICATIONS OF MYCOBACTERIUM BOVIS INFECTION IN BANDED MONGOOSES (MUNGOS MUNGO) IN THE KRUGER NATIONAL PARK, SOUTH AFRICA** addresses questions about sources of tuberculosis infection and their significance to humans and wildlife in and around Skukuza, the headquarters of that park (KNP). **Angela Brüns** and eight co-authors from **seven South African and European institutions** provide evidence of bovine TB infection in banded mongooses in the KNP, demonstrate that they shed *M. bovis*, and propose possible antemortem diagnostic procedures.

Brian Cyphe and seven co-authors from five California organizations report on SARCOPTIC MANGE IN ENDANGERED KIT FOXES (VULPES MACROTIS MUTICA): CASE HISTORIES, DIAGNOSES, AND IMPLICATIONS FOR CONSERVATION. Six of 15 infested foxes were found dead, 6 died during care and rehabilitation, and 3 were successfully treated. Untreated kit foxes are unlikely to recover from mange, which is a significant threat to the Bakersfield population, and maybe a greater threat to kit foxes in nearby natural lands.

Bats known as 'flying foxes' are the natural reservoir of Hendra virus, a zoonotic paramyxovirus responsible for mortality in horses and humans. Lee McMichael and a research group from four Australian agencies and Ecohealth Alliance examined PHYSIOLOGIC BIOMARKERS AND HENDRA VIRUS INFECTION IN AUSTRALIAN BLACK FLYING FOXES (PTEROPUS ALECTO). Although they found no association between Hendra virus infection and biomarkers for nutritional or reproductive stress, or extreme metabolic demand, they did identify associations between several other biomarkers and infection. This provides insights for future research of Hendra and related viruses in bats.

## In HOW RESPIRATORY PATHOGENS CONTRIBUTE TO LAMB MORTALITY IN A POORLY PERFORMING BIGHORN SHEEP (OVIS CANADENSIS) HERD a team of

Colorado and Wyoming researchers led by Mary Wood found Mycoplasma ovipneumoniae, leukotoxigenic Mannheimia spp., leukotoxigenic Bibersteinia trehalosi, and Pasteurella multocida all contributed to lamb pneumonia. A continuum of disease was seen, with lesions typical of pasteurellosis predominating in younger lambs and lesions typical of mycoplasmosis predominating in older lambs. Evidence suggests all 13 ewes in their study were persistently infected and chronically shedding the bacteria that contributed to summer lamb mortality.

Abstracts of these and other articles in JWD 53(1) are available at: <a href="http://www.wildlifedisease.org/wda/PUBLICATIONS/JournalofWildlifeDiseases/OnlineJournal.aspx">http://www.wildlifedisease.org/wda/PUBLICATIONS/JournalofWildlifeDiseases/OnlineJournal.aspx</a>
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