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

NEWS ON ARTICLES FROM JOURNAL OF WILDLIFE DISEASES 52(2)

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 50 years. The Journal of Wildlife Diseases (JWD) issue 52(2) has several articles with particular conservation and wildlife management significance that we would like to make you aware of.

When one thinks of the iconic animals of Australia, the koala (*Phascolarctos cinereus*) is among the most prominent. Three articles in the present edition of JWD highlight the plight of koalas and threats posed by infectious diseases, primarily chlamydia.

K. Natasha Speight and nine co-workers from **University of Adelaide** and **University of Sunshine Coast** investigated **Prevalence and Pathologic Features of *Chlamydia pecorum* Infections in South Australian Koalas**. They found that infection was common in this sub-population, but overt disease less common, with lesions mostly microscopic. This markedly differs from Queensland populations where overt chlamydia is widespread and threatens population survival.

Koalas were established on French Island southeast of Melbourne around 1898, just prior to a rapid decline in Victorian populations, and have long been considered chlamydia-free. **Alistair Legione** and colleagues from five institutions investigated ***Chlamydia pecorum* Infections in Free-ranging Koalas (*Phascolarctos cinereus*) on French Island, Victoria, Australia**. They found that although only 1.4% of 142 koala were infected with *C. pecorum*, which may indicate recent disease introduction, the gene sequence is similar to that of livestock species that are farmed on the island. This study contributes to a small, but growing body of evidence that some chlamydia infections of koalas may have livestock origins.

In Serum Antibody Response to Koala Retrovirus Antigens Varies in Free-Ranging Koalas (*Phascolarctos cinereus*) in Australia: Implications for Vaccine Design and group of scientists lead by **Courtney Waugh** from **University of the Sunshine Coast** and **Australia Zoo Wildlife Hospital** studied a koala retrovirus (KoRV) (of the same family of virus as human AIDS virus) that has become widespread in koalas in Queensland. Disease impacts of KoRV currently appear to be minimal, but linkages with neoplasia and chlamydial disease have been reported. An anti-KoRV recombinant protein-based vaccine was safe to administer and has the potential to induce immune control of this infection in koala.

Claude Miaud lead investigations involving five French institutions that concluded that ***Ranavirus* Causes Mass Die-offs of Alpine Amphibians in the Southwestern Alps (France)**. . This is the first report of common midwife toad virus (CMTV) associated with mass mortality in wild amphibians in France. They describe lesions observed, discuss the ecologic factors of mountain amphibians that may contribute to increasing their risk of exposure, and summarize amphibian populations affected by *Ranaviruses* in Europe.

Infections with *Ophidiomyces spp.* fungi are a serious new wildlife disease threat to reptiles. **Matthew Allender** and colleagues from the **University of Illinois, Urbana** and **Illinois Natural History Survey**, examined **Hematology in an Eastern Massasauga (*Sistrurus catenatus*) Populations and the Emergence of Ophidiomycosis in Illinois, USA.**

Three Persian leopards (*Panthera pardus saxicolor*) that died from car accidents in Golestan National Park, Iran, were examined for *Toxoplasma gondii* and rabies virus infection. Acute *T. gondii* infection was diagnosed in two leopards but no rabies virus was detected. This led **Somayeh Namroodi** and colleagues to conclude **Toxoplasmosis May Lead to Road Kills of Persian Leopards (*Panthera pardus saxicolor*).**

Abstracts of these and other articles in JWD 52(2) are available at the WDA website under Publications. If are interested in getting access to the full article contact wda.manager@gmail.com

