

In This Issue

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NOVEL CORONAVIRUSES IN ESWATINI BATS

Understanding of bat coronavirus diversity is limited in Africa. Using metagenomic analysis, **Shapiro** et al. detected coronaviruses in fecal samples from bats captured in or near human settlements in Eswatini. They recovered full or nearly full-length genomes from *Chaerephon pumilus* and *Afronycteris nana* and additional coronavirus genome fragments from *C. pumilus*, *Epomophorus wahlbergi*, *Mops condylurus*, and *Scotophilus dinganii*. Their results highlight the need for continued surveillance of bat coronaviruses in Southern Africa.

NO SARS-CoV-2 IN BRAZIL PRIMATES

In 2019, SARS-CoV-2 was first detected and rapidly spread across the planet. It proved capable of infecting domestic and captive mammals. **Abreu** et al. sampled 51 neotropical primates of four species in Brazil to investigate whether they were infected by SARS-CoV-2. No positive samples were detected.

CAUSES OF MORBIDITY AND MORTALITY IN VULTURES

Vultures are a critical part of ecosystem health. According to the IUCN, more than half of vulture species are endangered. **Ives** et al. performed a systematic review of the causes of clinical disease and death in free-living vultures. Toxic agents and traumatic injuries accounted for most free-living vulture disease and death. They identified several areas of neglected research including infectious diseases and several geographic and species gaps in South America, Sub-Saharan Africa, and the respective endemic vulture species.

AKODON-BORNE ORTHOHANTAVIRUS IN ARGENTINA

No reports exist of Orthohantavirus activity in the Montane grass mouse (*Akodon montensis*) in Argentina. **Burgos** et al. analyzed how infection could be related to environmental and rodent characteristics. This information can contribute to the prevention, surveillance, and control of emerging diseases in Northeastern Argentina.

HERPESVIRUS AND CLOSTRIDIUM IN BADGERS

Clostridium perfringens is one of the most important food borne zoonotic bacterial pathogens that can cause necrotic enteritis in humans and animals. **Tsai** et al. investigated *C. perfringens* in one of the most common Carnivora species in Europe, the European badgers. Their results showed a positive association between stress-related herpesvirus reactivation and *C. perfringens* shedding from intestine. The authors argue that increased stress in wildlife caused by human disturbance may enhance exposure to zoonotic pathogens for both humans and domestic animals.

DECLINING AMPHIBIAN POPULATIONS AND SURINAME REDOUBT

Batrachochytrium dendrobatidis (Bd), *Ranavirus* (Rv), and *Perkinsea* (Pr) are three pathogens causing infectious diseases and declines in amphibians. Amphibian disease research has largely focused on water-breeding species, but terrestrial species can also be affected. **Urgiles** et al. characterized prevalence and infection intensity of Bd, Rv, and Pr in *Pristimantis* frogs, terrestrial amphibians in the highland Ecuadorean Andes. They reported new records of

Bd in *Pristimantis*, provided the first detection of Ranavirus in Ecuador, and of Perkinsea in both the tropical Andes and in terrestrial-breeding amphibians. Suriname is one of the only remaining countries in South America where Bd has not been documented. **d'Orgeix** et al. sampled frogs in Suriname, including near the borders of Brazil and French Guiana, countries where infected frogs have been documented. None of the 347 frogs sampled tested positive for Bd. Their results support one of the last opportunities in South America to mitigate the potential impact on amphibian species against presumed eventual incursion of Bd into Suriname.

RED CEDAR AS FOCI OF MOSQUITO-BORNE PATHOGENS

Noden et al. tested the hypotheses that mosquito communities and their likelihood of West Nile virus infection differ between Eastern Red cedar and other habitats. They

collected significantly more *Culex tarsalis* in Eastern Red cedar than deciduous and grass habitats and significantly more *Culex tarsalis* and *Culex pipiens* in Eastern Red cedar than other habitats in urban areas. Additionally, West Nile virus infected *Culex* were more likely collected in Eastern Red cedar than other habitats. This connection implies that land management initiatives could affect human health.

HUMAN-MACAQUE INTERFACES IN BANGLADESH

Shano et al. explored the significant anthropogenic landscape transformations that led to increased human-macaque contact in Bangladesh. Disappearance of forestland increases dependence of macaques on backyard fruit trees. Local environmental changes, deforestation, urban expansion, construction, and disappearing water bodies enhance human-macaque interactions that pose a zoonotic disease spillover risk from macaques to humans in Bangladesh.