

**INVESTIGATING INFECTIOUS DISEASES AT THE WILDLIFE LIVESTOCK INTERFACE
OF TWO PROTECTED AREAS OF BOTSWANA:
THE OKAVANGO DELTA AND CHOBE NATIONAL PARK.**

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The transfer of pathogens at the wildlife-livestock interface is a topical issue in the development of Transfrontier Conservation Areas (TFCA). In this context, we performed a serological survey for selected diseases common to buffalo and livestock in the Botswana component of the Kavango-Zambezi (KAZA) TFCA: a total of 85 buffalo and 500 cattle were sampled along the western boundary of the Delta. In addition, 85 additional buffalo were sampled in Chobe National Park. Samples were screened for the presence of antibodies against brucellosis, bovine tuberculosis, Rift Valley fever (RVF) and Theileriosis between April and December 2010. Brucellosis antibodies were detected in buffalo (prevalence: 8%) in both study areas, but not in cattle. Antibodies against RVF virus (IgM and IgG) were found at similar prevalence levels in buffalo and in cattle (17% and 17.5%, respectively), but no clinical disease was observed in cattle. Buffalo seroprevalence against RVFV was significantly higher in Ngamiland than in the Chobe ($p > 0.001$). Antibodies against *Mycobacterium bovis* were detected in a minor proportion of samples in both species in the Ngamiland area (1.4% and 0.7%, respectively). These findings provide baseline data on the circulation of diseases at the wildlife-livestock interface with possible environmental and public health implications and justify further comprehensive studies in the region.