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Abstract: In Namibia, most of the free-ranging cheetahs live on farmlands where they can present problems to the farmers. As a part of the disease surveillance programme all captured animals are tested for the presence of antibodies to feline viruses as well as having DNA RFLP pattern assayed. To date 134 animals have been tested for antibodies to feline herpes, calici, panleukopenia, leukaemia, immunodeficiency and corona viruses. The tests employed include commercially available ELISA kits, immunofluorescent antibodies assays (IFA) and western blotting. The animals have been shown to be positive for herpes, calici, panleukopenia, leukaemia and coronaviruses as well as toxoplasmosis. Two individuals tested positive for feline immunodeficiency virus antibodies by IFA but were negative on western blotting.

Title

SEROEPIDEMIOLOGY OF ANTIBODIES TO VIRUSES IN FREE-RANGING NAMIBIAN CHEETAHS

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Namibia has the world's largest free-ranging cheetah population. Most of these animals are living on farmlands where they can present problems to the farmers. Many animals end up being trapped and killed or handed over to game handlers where they are kept under appalling conditions. In 1991 the Cheetah Conservation Fund was established in Namibia to help in the long term conservation of the species. The aims of the Fund are three-fold; education of farmers, re-habilitation or translocation of captured animals and disease surveillance. As part of the disease surveillance programme all captured animals are tested for the presence of antibodies to feline viruses as well as having DNA RFLP patterns assayed. This programme is multi-national involving researchers from Namibia, South Africa and the United States of America. To date 134 animals have been tested for antibodies to feline herpes, calici, panleukopenia, leukemia, immunodeficiency and corona viruses. The tests employed include commercially available ELISA kits, immunofluorescent antibody assays (IFA) and western blotting. The animals have been shown to be positive for herpes, calici, panleukopenia, leukemia and coronaviruses as well as toxoplasmosis. Two animals tested positive for feline immunodeficiency virus antibodies by IFA but were negative on western blotting. The presence of leukemia and coronaviruses in the population are cause for concern as the species is considered endangered and these two viruses are potentially life-threatening due to their immunosuppression abilities as well as the ability of coronavirus to cause feline infectious peritonitis. Antibodies to the other organisms assayed have been found in other free-ranging felid species and are not life-threatening.