

Poster Presentation

Aflatoxicosis in a Kakapo (*Strigops habroptilus*)

Kerri Morgan BVSc, MACVSc (Avian Health), PGDipVCS

Maurice Alley BVSc, PhD

Brett Gartrell BVSc, MACVSc (Avian Health), PhD

New Zealand Wildlife Health Centre, Institute of Veterinary, Animal and Biomedical Sciences, Massey University, Palmerston North, NZ

Kate McInnes BVSc

Department of Conservation, Wellington, NZ

An adult male kakapo, *Strigops habroptilus*, from Codfish Island was presented for necropsy in May 2005. The bird had been found dead when the mortality function of its radiotransmitter activated. There had been no prior signs of illness. Gross post mortem examination revealed a firm, enlarged and rounded liver with multifocal to coalescing cream lesions throughout the parenchyma. Histopathological examination showed a severe necrosis with inflammation. Mycotoxin analysis on the crop contents revealed an extremely high level of aflatoxins. Analysis of supplementary food offered to the kakapo at feed stations showed high levels of aflatoxins were present in walnuts offered, and trace levels in almonds and old food from the hoppers in the bush. In other avian species, aflatoxicosis has been associated with a variety of clinical signs and pathological changes. These include poor growth rates in chicks, immunosuppression, a reduction in egg laying, infertility, hepatitis, hepatocellular carcinoma, cholangiocarcinoma and death. Based on these findings, we recommended the withdrawal of nuts from the kakapo supplementary diet, and the implementation of regular screening of supplemented foods for aflatoxins.