Toxic neuropathy in Australasian Harriers (*Circus approximans*) in New Zealand

Jennifer Youl

Australasian Harriers are ubiquitous throughout the New Zealand environment and are commonly presented to the New Zealand Wildlife Health Centre at Massey University. Full clinical and neurological examination, complete blood counts, biochemistry and blood lead levels are carried out on all harriers admitted. The most common reasons for presentation include trauma (such as hit by car) and hind-limb dysfunction. Harriers presenting with hind-limb dysfunction typically have clenched claw paralysis and weakness in the hock, with pressure injury of variable severity on the toes and hocks. Birds are often in poor body condition and are found on the side of roads scavenging road kill. Blood lead levels (performed on whole blood in EDTA) in birds presenting with these clinical sign are greater than 0.3mg/ml, some as high as 3mg/ml. Conversely, birds presenting for other problems such as trauma have lead levels consistently lower than 0.1mg/ml. Routine treatment for lead poisoning (chelation with CaEDTA at 50mcg/kg and fluid therapy) reduces lead levels to acceptable levels. However, no improvement in leg function has been seen. Electromyelography, nerve conduction studies and necropsy have been performed on all harriers that are non-recoverable in an attempt to establish the pathogenesis of the hind-limb neuropathy. The findings of this investigation to date will be presented.