

### ***Harry Taylor – Toxoplasmosis in kiwi***

*Toxoplasma gondii* has been reported as a cause of morbidity and mortality in New Zealand's native avifauna, including the ground dwelling kiwi (*Apteryx* spp.) and several cases of toxoplasmosis have occurred in kiwi at Zealandia Te Māra a Tāne in recent years. To better understand the extent of *T. gondii* infection in little spotted kiwi (*Apteryx owenii*), a prevalence survey of kiwi living inside a 200ha predator-proof mainland ecosanctuary (Zealandia Te Māra a Tāne, Wellington, New Zealand) was undertaken. In conjunction with Zealandia staff and DOC rangers, in February 2021 kiwi dogs were used to find kiwi and a small blood sample was collected from 19 individuals. These blood samples were used to test the kiwi for the presence of the parasite (via PCR), as well as for previous exposure to the parasite (via antibody serology). The results showed that most of the kiwi had been exposed to *T. gondii* and many had active infections. These higher than expected prevalence results suggest widespread exposure of *T. gondii* in this population of little spotted kiwi and, in conjunction with earlier reports of toxoplasmosis causing mortality in kiwi, raise important questions as to the effect this parasite may be having on this rare endemic species. These results are particularly interesting given Zealandia's predator free status prevents direct contact with cats, the definitive host of *T. gondii*. Further information on the epidemiology of *T. gondii* infections within free-living and managed kiwi populations is urgently needed. This work could not have happened without the Birds NZ Project Assistance Fund, and I am very grateful for this financial support.

*Below Left; Rua the kiwi dog watches on from a distance while Kate McInnes (DOC) prepares to blood sample a kiwi held by Jo Sims. Below Right; A little spotted kiwi at Zealandia Te Māra a Tāne.*

