

Self-resetting traps for controlling stoats to protect North Island Brown Kiwi at Trounson Kauri Park.

Dr Craig Gillies¹, James McLaughlin², Alana McLeod², Daniel Arnold²

¹*Department Of Conservation, Science & Policy Group*, ²*Department Of Conservation, Kauri Coast Office*

We will be reporting on a field trial of Goodnature Ltd. A24 self-resetting traps for controlling stoats (*Mustela erminea*) to protect North Island Brown Kiwi (*Apteryx mantelli*) chicks. In August 2015 we established a network of 168 A24 self-resetting traps in and around Trounson Kauri Park in Northland New Zealand. The A24s were lured with Connovation's Erayz™ dried rabbit blocks and were serviced every 3 weeks. The fates of 37 wild caught kiwi chicks from the 2015-16 breeding season were monitored at Trounson Kauri Park using radio telemetry.

Tracking tunnel indices of mustelid relative abundances indicate that the A24 self-resetting traps have successfully suppressed populations of these pests to very low levels at Trounson Kauri Park. At the time of writing, 12 (32%) of the monitored kiwi chicks were still alive; five had reached, or exceeded the target weight of 1000g (at which size they can be considered safe from stoat depredation) and the remainder were all above 825g. The minimum annual chick survival (to 1000g) required to ensure kiwi population survival is around 19%. When stoats were controlled using conventional single-set traps in previous years at Trounson Kauri Park, the mean annual kiwi chick survival was 29%. Our current field trial does not finish until spring 2016, however these interim results indicate that the Goodnature Ltd. A24s can control stoats in order to protect kiwi chicks.