

## Low kill rate for mice in Goodnature A24 traps

(first published July 2017, the data noted in this report has not been updated)

From December 2016 to May 2017 a pest monitoring programme on the Kapiti Coast recorded over 80 video clips of mice and rats interacting with Goodnature A24 automatic resetting gas powered traps. On only two occasions did the trap kill the visiting rodent, one mouse and one rat, despite any cases of animals - mostly mice but also a rat - being inside the kill chamber of the trap and then leaving alive. In other cases, mice and rats came very close to the trap entrance but did not go in so could not be killed.

The videos were taken of multiple traps at multiple sites on Whareroa Farm on the Kapiti Coast, 40 kilometres northwest of Wellington. The trap locations were large distances apart, so the filmed animal trap interactions did not always involve the same animals nor the same traps. The traps had new gas bottles, were checked regularly and always fired whenever tested by the team conducting the research. As shown in two of the videos, the traps did kill. (\*See below for un-filmed kill data for the A24 traps). However, in the overwhelming majority of rodent visits to and into the traps, nothing happened.

The camera appeared to record any movement, whether of animals such as mice, rats, cats, possums, birds or humans, or leaves being blown by the wind, so it seems unlikely that there were kills which were not recorded. If there were unrecorded kills it is also likely that there were unrecorded non-fatal interactions, which would mean the ratio of fatal to non-fatal interactions would not change.

There are now (July 2017) 46 A24 traps deployed at Whareroa Farm. The first of these were deployed in mid-2015 and the remainder over the next year although some have been stolen or damaged. This means that figures below are not the result of all the traps having been deployed since mid-2015.

-----

\* Each of the 46 traps has a counter recording each time the trap fires. The counter does not usually record a rodent interacting with the trap if the trap does not fire. According to the counters the traps have fired 346 times. However, that is not a completely accurate record of the number of animals that have been killed as occasionally corpses of rats and mice have been found under traps on which the counter has failed to register, so there may have been more kills than 346. In a small number of other cases there are video recordings of possums climbing over the outside of the A24 traps and setting them off without any possibility of being killed, so some of the counter records may not reflect actual kills.

Video camera recordings of the traps have shown cats eating rodent corpses from under the traps, so it is not possible to confirm trap kills with corpses. This is consistent with Goodnature's advice with many more kills than corpses.

The team using the traps has found that, as recommended by the manufacturers, regular squeezing of the bulbs of lure in the traps ensures that the lure remains exposed enough to the air to attract pest animals. The initial lure used was the peanut butter supplied by Goodnature. The traps have recently been equipped with Goodnature's new chocolate lure, some of which is in automatic dispensing pouches, but it is too soon to identify any effect from use of the new lure and automatic pouches.

The A24 trap is primarily targeted at rats and stoats, not mice. While Goodnature describe the A24 traps as "Rat & Stoat" traps, their chocolate lure is sold as "Rat and Mouse toxin free lure" (see photo). The company website also shows videos of the trap killing mice as well as rats and stoats so presumably the traps are intended to be seen as capable of killing mice as well as rats and mustelids.

The Whareroa pest team has over 100 DoC 150 box traps which have killed 3,097 animals since April 2013, of which 1,698 were rats. In that time only 116 mustelids were caught (86 weasels, 30 stoats) with no particular pattern as to where mustelids were most common. With so few mustelids, compared to rats and mice, the A24s have not been fitted with the Goodnature stoat and cat lure.

A small sample of the videos, including the only two kills recorded, can be found on the YouTube channel of Whareroa Guardians [https://www.youtube.com/channel/UCFM00GyrL0ghyuJONfuW\\_jA](https://www.youtube.com/channel/UCFM00GyrL0ghyuJONfuW_jA)

In all we recorded more than 80 rodent visits to and into the trap without the trap being activated. Goodnature were provided with a much more extensive range of the video clips in May 2017, have been provided with this report and were invited to provide a response to accompany this article but have not done so.

The video clips were collected by the Whareroa Farm volunteer pest control team.

END

<https://www.youtube.com/watch?v=TenHelAKGoA&list=PL-le-yQSjb4KT0WyYvXHDA9u1yAV1WAqk>

Video1: mouse surviving (1), April 2017  
Video2: mouse surviving (2), April 2017  
Video3: mouse surviving (3), May 2017  
Video4: rat surviving, April 2017  
Video5: rat death, January 2017  
Video6: mouse death, April 2017