

Preliminary findings of the Felixer™ grooming traps ‘toxic’ trial

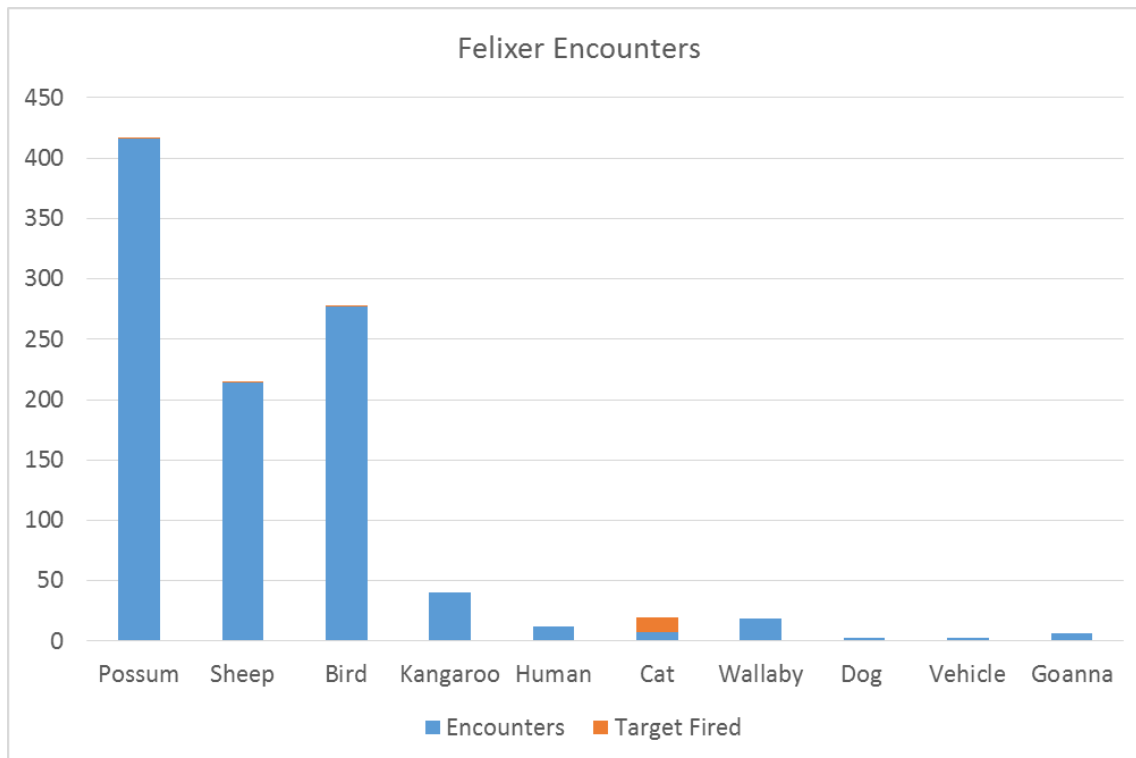
Background

- The Felixer™ Grooming Traps, which have been tested extensively in photo-only mode on Kangaroo Island, work by identifying cats from their size, shape and gait as they cross in front of the machines.
- When the traps identify a cat, the machine administers a single dose of a toxic gel to the animal’s coat, which is ingested when the cat grooms itself.
- The use of the Felixer™ Grooming Traps in toxic mode for this trial was highly regulated, and required permits for both using 1080 and animal welfare.

The trial

- Over a six week period the Felixer™ grooming traps were trialled in ‘toxic’ mode using *sodium fluoroacetate* (1080). The trial was undertaken across 12 square kilometres on a single farm with the full cooperation of the landholder and neighbouring properties.
- Prior to the commencement of the trial, warning signs were placed around the trial property, neighbouring properties were consulted, both in writing and in person, and notices were also placed in public places around the Dudley Peninsula to make the community aware of the use of 1080.
- During the course of the trial, neighbouring landholders were contacted and shown the best ways to set up and place cage traps to catch feral cats – another of the tools that the eradication program will use.
- Before activating the grooming traps the feral cats on the property were trapped and fitted with radio collars in order to track their movements before and after being targeted by the Felixers™.
- The Felixers™ are specifically engineered to target feral cats’ grooming behaviour by squirting a measured dose of *sodium fluoroacetate* (1080) onto them as they pass in front of the devices, which is then ingested when they groom themselves.
- Regardless of whether the traps activate, they photograph what passes in front of them. These images are then downloaded and analysed by the eradication team to assess target accuracy.
- The six grooming traps used in the trial accurately identified and fired at 13 out of the 20 feral cats that crossed in front of them (encountered).
- More than 1,300 encounters were recorded with animals other than cats, which were correctly identified as non-target (traps did not fire).
- The 1,300 encounters with these animals included 216 farm animals, 417 visits by brushtail possums and 12 dog encounters.
- All 12 dog encounters were correctly identified as non-targets by the grooming traps and they **did not fire**.
- The devices incorrectly fired at two farm animals (from 216 encounters, a target rate of 0.9%). These two animals were later observed unharmed as they did not groom themselves and ingest the poison.
- A grooming trap also fired at one of the possums (from 417 encounters, a target rate of 0.24%), which could not be found to verify if it survived unharmed, although on reviewing the photos taken by the grooming trap it would appear that the toxin missed the possum.
- The radio collars allowed the feral cat team to locate and remove the cat carcasses, to calculate the length of time to death after being targeted and established that the cats remained within their home range.





*Encounters are when an animal has walked across the front of the Felixer™ Grooming Trap and activated its sensors, where a photo is taken, this could be the same animal multiple times. Grooming traps have only fired where indicated in orange.

Further reading

- The Kangaroo Island Feral Cat Eradication project is a joint initiative of Natural Resources Kangaroo Island and the Kangaroo Island Council. Funded by the Australian Government with in-kind support from DEW, the program is run in collaboration with the Department of Primary Industries and Regions South Australia (PIRSA) and is partnered with the Invasive Animal Cooperative Research Centre and Ecological Horizons.
- For more information on the wider Kangaroo Island Feral Cat Eradication Program visit our website at: www.naturalresources.sa.gov.au/kangarooisland/plants-and-animals/pest-animals/Kangaroo-Island-Feral-Cat-Eradication-Program
- Further information about the use of *sodium fluoroacetate* (1080) in the Feral Cat Eradication Program is available on the NRKI website, including answers to the questions posed by community members at the recent 1080 meeting, available at: www.naturalresources.sa.gov.au/kangarooisland/plants-and-animals/pest-animals/Kangaroo-Island-Feral-Cat-Eradication-Program

A full report of the trial is being compiled and will be released to the public later this year.

