



Aiming for Achilles – Feral cat grooming traps

Feral cats are the greatest threat to native wildlife in Australia. They have been implicated in at least 27 mammal extinctions across Australia and currently threaten more than 100 native species, including mammals, lizards and ground nesting birds.

Feral cats are notoriously difficult to control as they are reluctant to take baits or enter traps, particularly when prey, such as small native mammals, are abundant. We need to develop new methods and tools to tackle the problem; we need to target their Achilles heel.

The Achilles Heel

All cats are fastidious cleaners that groom regularly. Ecological Horizons have developed the first ever feral cat trap that targets this natural grooming behaviour of the cat - their Achilles heel.



The Ecological Horizons grooming trap uses sensors to detect the presence of a feral cat and sprays a lethal dose of toxic gel onto its fur from up to 4 metres away as it is walking past. The feral cat instinctively grooms the gel and in doing so ingests the lethal dose of the poison and dies. The 'trap' automatically resets a total of 20 times before the sealed individual cartridges need to be replaced. A recent review of potential feral cat control initiatives in Australia nominated continued development of grooming traps as a very high priority.



Feral cat walking along fenceline seconds before being sprayed by grooming trap set on the other side of the road. Activation beams are invisible to the cat but are visible as bright spots on the infrared camera. Gel is visible on the rump of the cat in the second photo.

Cats are sprayed as they walk along tracks, dune crests, creeks or fencelines without needing to change their behaviour or even slow down. In addition, feral cats may also be attracted by a variety of programmable intermittent audiolures.

Prototype features:

- Inbuilt blocking sensors to ensure only feral cats are sprayed
- Able to painlessly administer 20 measured doses of toxin at 60m/second to walking cats
- Completely solar powered - able to be left unattended in the field for several months
- All activations recorded by inbuilt camera

This trap will provide a completely new method to control cats. It will reduce the effort and cost associated with controlling feral cats in selected areas whilst improving the efficiency of control programs. Grooming traps also eliminate exposing other animals to traps or poisons because of their unique integrated blocking sensors that can distinguish a feral cat from other species.

Enhancing the Feral Cat Grooming Trap

The prototype has been proven to work. Further work is now required to fine tune and enhance the durability and reliability and utility of grooming traps.

Necessary advancements before full scale field trials can commence include:

- Design & production of specialised parts to improve performance and reduce production costs
- Creation of fox suitable gel, laboratory and pen trials



If you can catch a cat on camera, you can control it with a grooming trap

Budget

Engineering design & manufacture improvements	\$70,000
Developing mass production tooling	\$165,000
Approvals, licensing and project management	\$80,000
Laboratory and Pen trials	\$45,000
Field trials (per site)	\$70,000
TOTAL	\$430,000

The Threatened Species Commissioner strongly supports the continued development and trial of the feral cat grooming trap. They offer another tool in the toolbox for controlling feral cats and are likely to be suitable in situations where other techniques are culturally or ecologically inappropriate or ineffective.

In excess of \$300,000 spent to-date has been sourced from SA Government Innovation Vouchers and DEWNR, Ecological Horizons, The Australian Government, Sporting Shooters Association of Australia, the Foundation for Australia's Most Endangered Species, Bush Heritage Australia and Electranet.