

Extending the use of humane, low residue, pest control tools PAPP

Steve Hix, Charles Eason, Elaine
Murphy, Ray Henderson, Lee
Shapiro and Duncan MacMorran

Contents

- Scene setting
- Why PAPP
- Animal Studies
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New Zealand's birdlife evolved in the absence of land mammals

Introduction of mustelids and cats has had a massive impact on our birdlife

Stoats and feral cats are two of the major threats



Why PAPP

- Current predator control relies largely on labour-intensive trapping
- Humane
- Does not bio-accumulate
- Effective
- Relatively target specific
- Our committment is to develop low residue/humane tools to improve on existing technologies

Cage Studies

- Testing began with PAPP in cages in 2005
- Initial results were promising and further studies were undertaken
- In total 63 cats in cages have been exposed to PAPP and 58 (92%) have died with an average time to death of 151 minutes
- 15 Stoats were presented with PAPP and 15 died with an average time to death of 44 minutes



Animal Studies

Regulatory Requirements

- **Animal Ethics Committee approval**
- **ERMA approval**

HS1 Import or manufacture a hazardous substance for release

HS3 Import or manufacture a hazardous substance in containment

- **ACVM provisional registration for field use**

Our requirement

- **Trial Protocol**



Field Studies

- Site selection
- Field work
Protocol
- Monitoring
- Results

Site Selection

Key Attributes

- A lot of cats
- Suitable topography
- Closed to the public
- Easily accessible
- Willing land owners and neighbours





Site Selection (cont)

Three sites were selected

One in Northland

- Hakuru Landfill

Two in North Canterbury

- Kate Valley Landfill
- Pig Farm near Culverden

Protocol

- Site Description
- Personnel contact details
- Description of the toxin
- Risk Analysis and Mitigation
- Control and Monitoring Methodology
- List of approvals required
- Materials List

Catching and collaring cats



Catching and collaring

Standard live capture possum traps were used to catch cats

Cats were transferred to a crush cage

A crush restrained the cat in the bottom corner of the cage to enable the Injection of anaesthetic

Six cats were collared at the pig farm and five cats were collared at Kate Valley Landfill



Pre-feeding

- Cats were pre fed using “submarine” bait stations to minimise non-target interference
- Cats were pre-fed for three weeks



Monitoring

- Radio Collars
- Tracking Cards

Cards were placed in the feeding station pre and post poison

Cards were scored 0 to 3

0=no activity 1 = little activity 2 = moderate activity 3 = high use

- Live Trap Catch

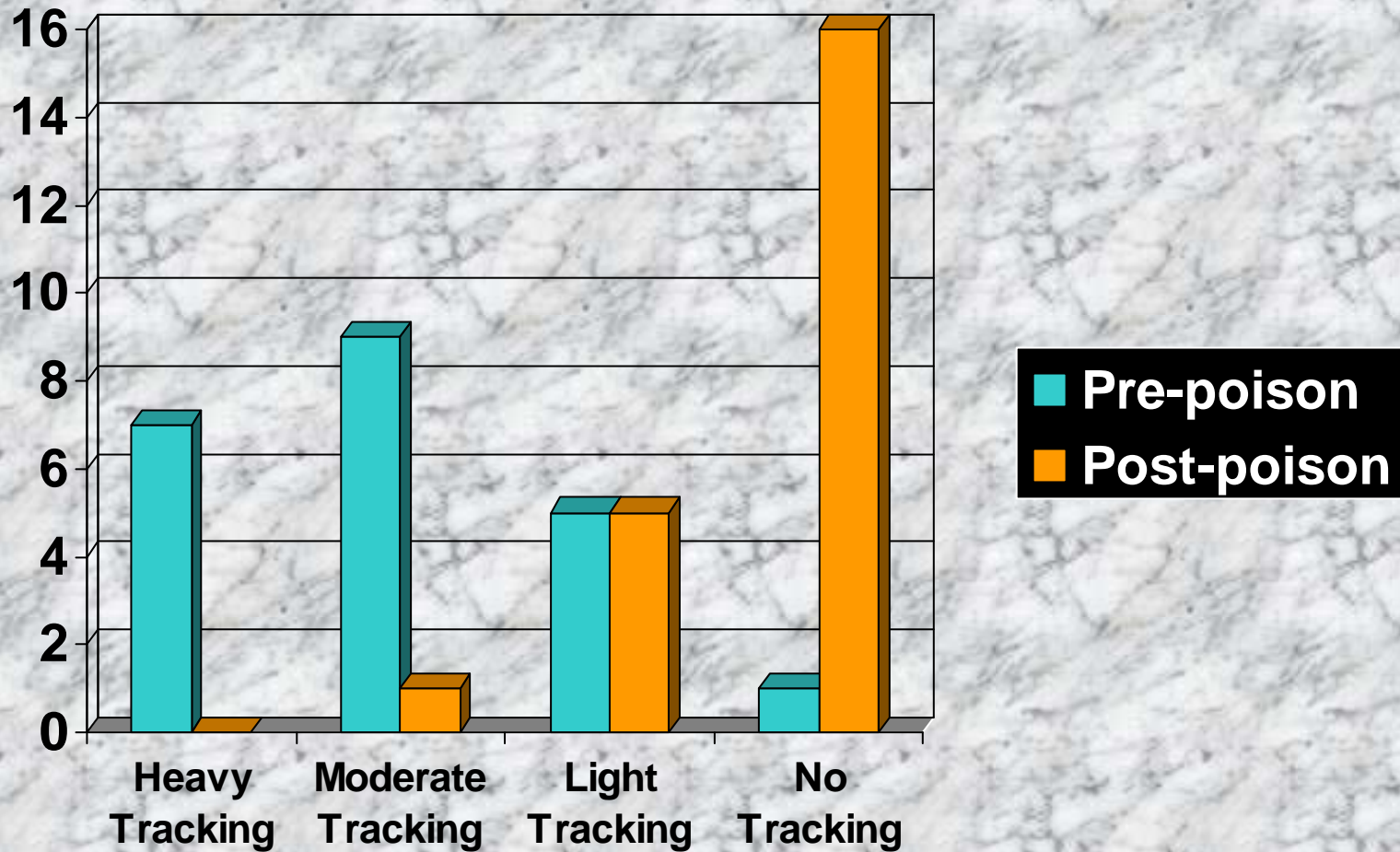
Results

- Radio Collars (Kate Valley)
- 2 cats dead before poisoning (crushed by machinery)
- 1 out of the remaining 3 collared cats was found dead on the first morning. Two other cats were picked up over three days.

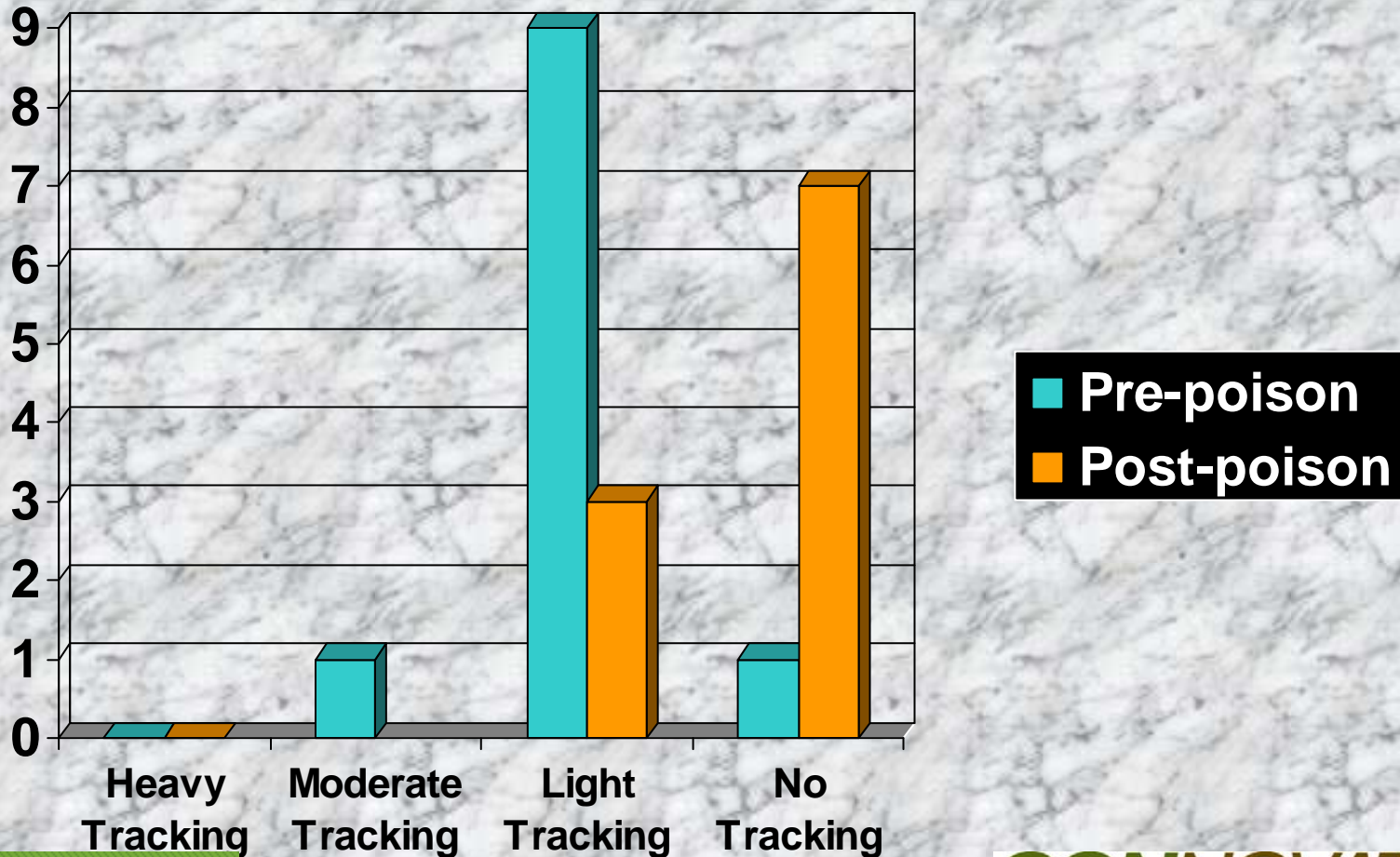
Results

- Radio Collars (Pig Farm)
- 1 cat was never tracked again within the poison zone.
- 4 out of the remaining 5 collared cats were found dead on the first morning. Four other cats were picked up over three days.

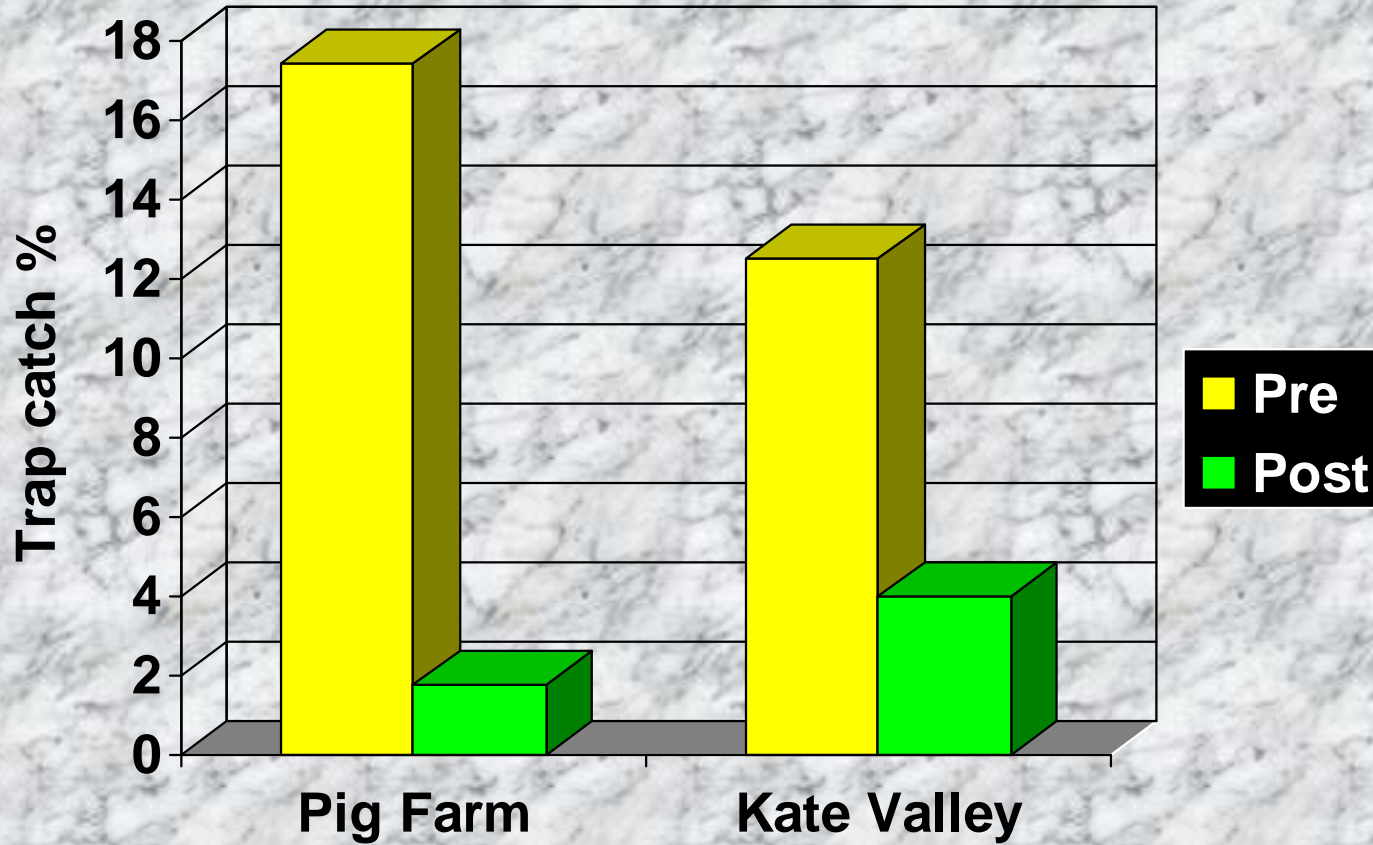
Tracking Cards (Pig Farm)



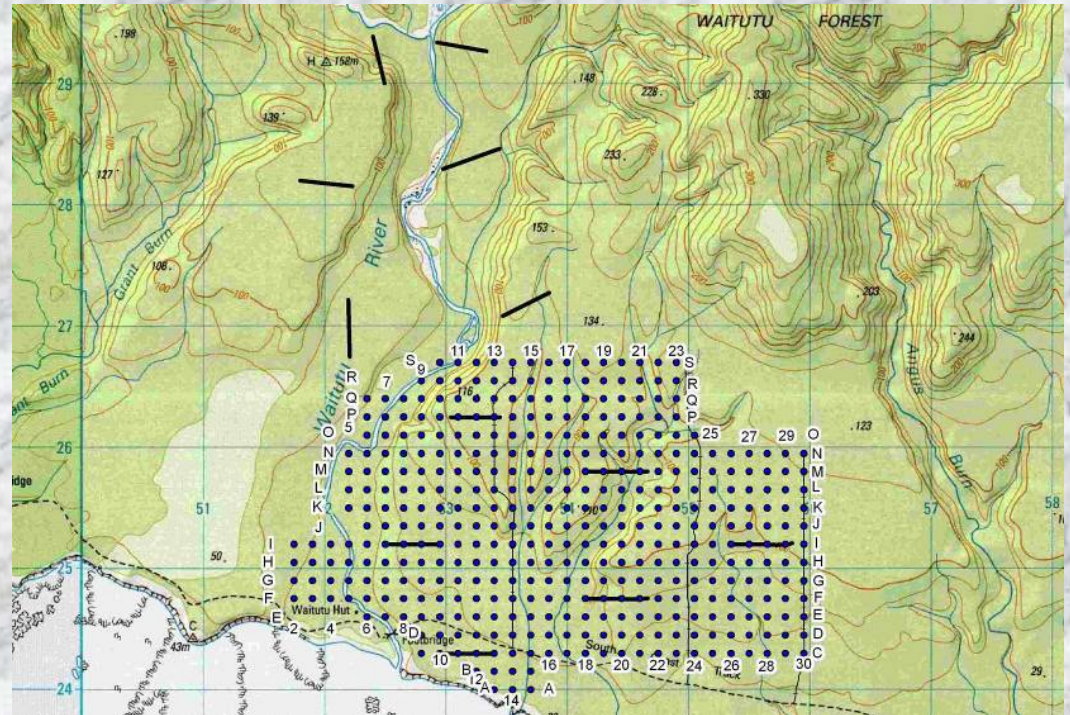
Tracking Cards (Kate Valley)



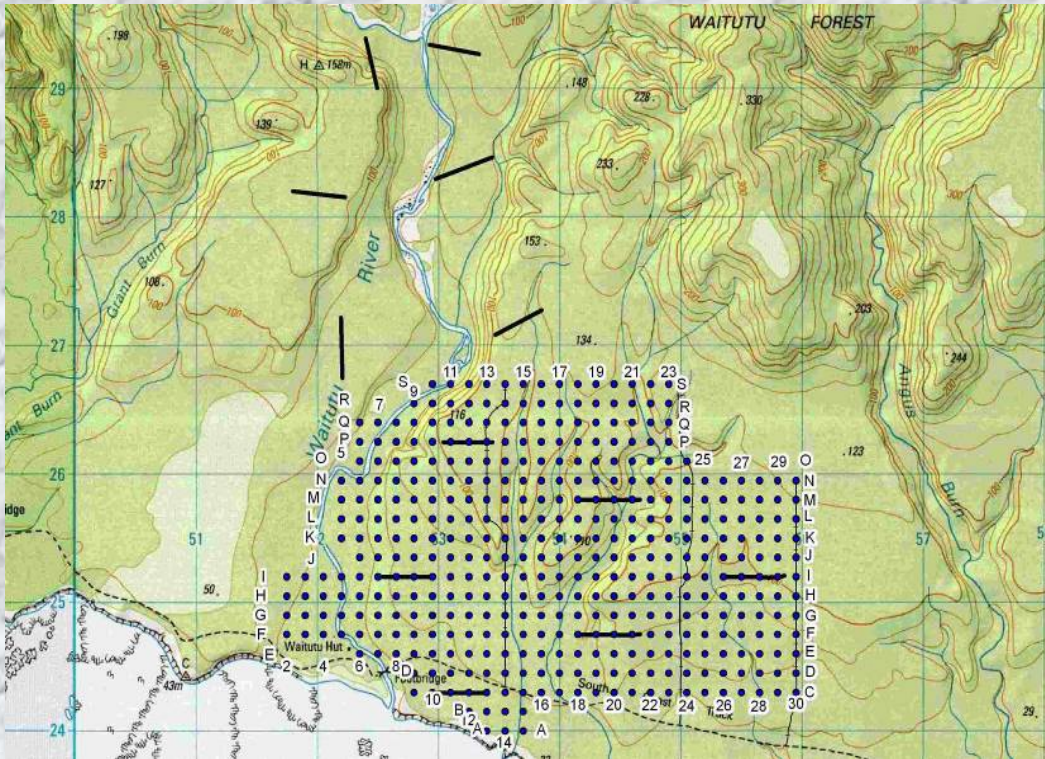
Live Capture



Stoats - Waitutu



Stoats - Waitutu



Preliminary Results

Pre control 100% tracking

Post Control 17% tracking

Control Plots 97% tracking

Conclusions

Promising mortality in early cat and stoat trials

Cats are “different” animals to work with

Further field trials are needed with larger sample sizes

Submit registration 2009