Managing feral cats in northern New South Wales

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Acknowledgement of Country

▶ We thank the Wiradjuri people for hosting us on their lands and acknowledge the many Traditional Owners we work with across Australia, and their continuing connection to and stewardship of land, sea and community.

▶ All members of our research team pay our respects to Traditional Owners, their cultures and to their Ancestors and Elders.

▶ Our Indigenous research partnerships are a valued and respected component of National Environmental Science Program research, as well as those of the NSW State Government and the University of New England.

Context: Feral cats in Australia

▶ Feral cats occupy >99.8% of the continent

▶ 2.1 - 6.3 million feral cats in Australia

▶ Predation by feral cats was a factor in 22 mammal extinctions in Australia

▶ Predation by feral cats a KTP in NSW + nationally

▶ Currently there is no effective broadscale control tool for feral cats in NSW

The NSW Feral Cat Project

A five year project (2020 – 2025) to develop effective strategies for managing feral cats.

▶ Operate in 3 eco-regions – North (Armidale), West (Orange), South (Merimbula)

▶ Three to four x 20,000 ha sites in each eco-region, including treatment and nil-treatment sites.
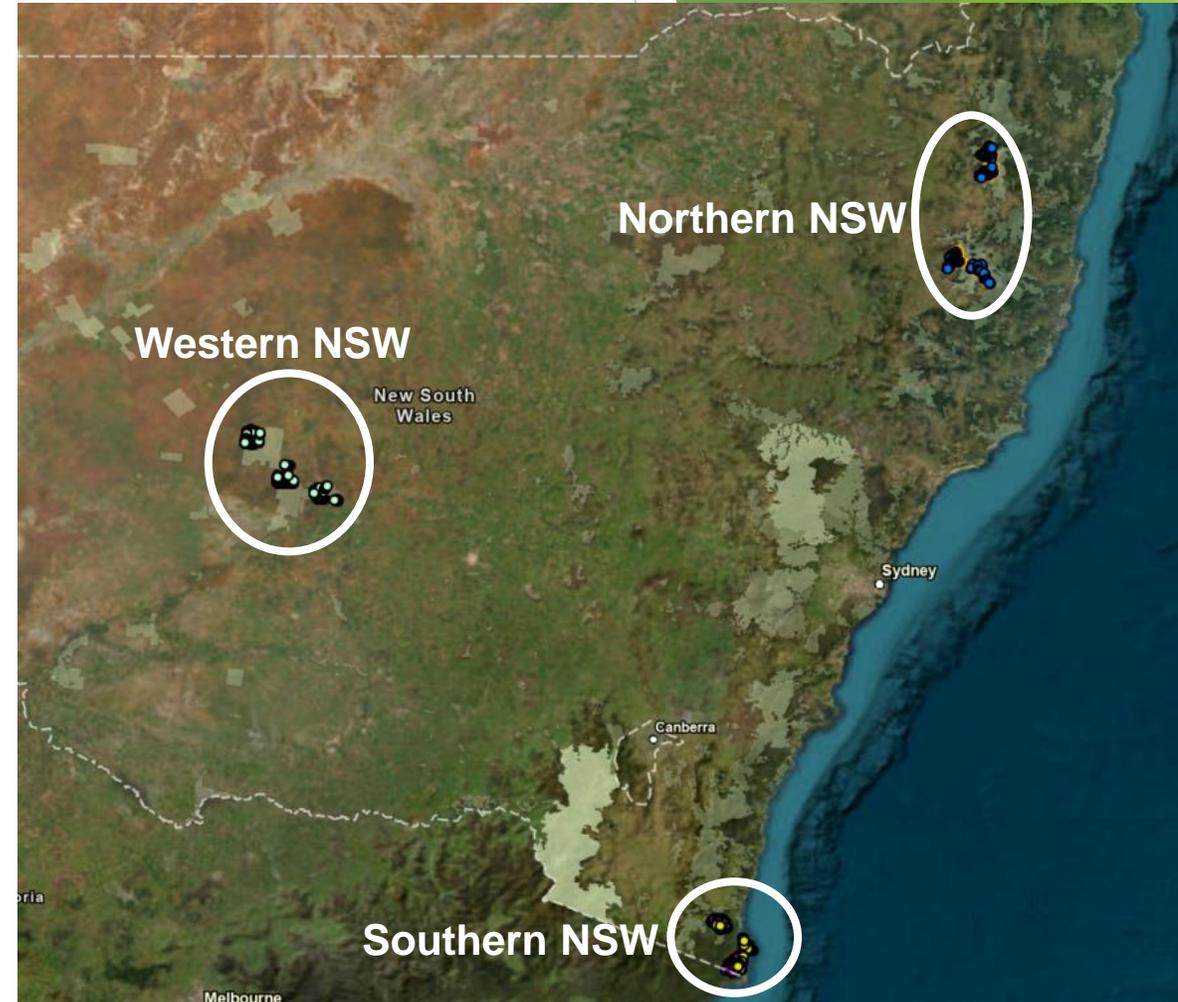
Project design

Before-after-control-impact experimental design

- ▶ Apply an additional aerial baiting program each year in winter

- ▶ Assess safety for native fauna

- ▶ Assess efficacy 'against' feral cats (and red foxes)

2020
Baseline

2021
Local baits

2022
Wild dog baits

2023
Fox Baits

2024
Eradicat?

Monitoring in the North

▶ Camera trap arrays monitor predator and prey populations at each site

   ▶ 30 on-trail predator cameras – year round

   ▶ 25 lured quoll cameras – year round

   ▶ 75 lured prey cameras – 2 surveys per year

▶ Live trapping

   ▶ Abundance

   ▶ GPS collars
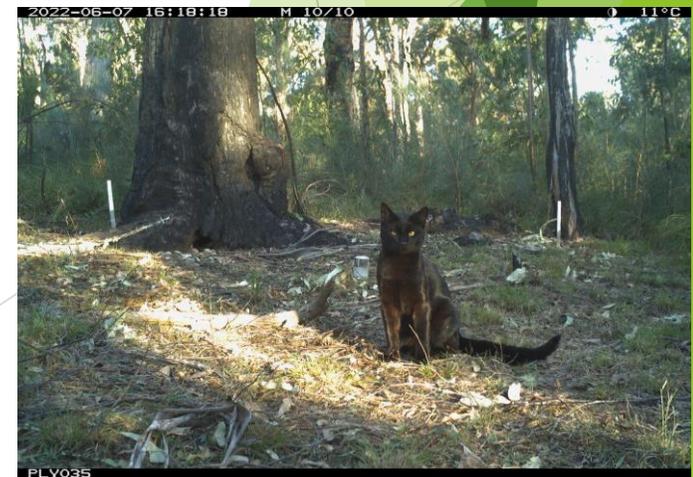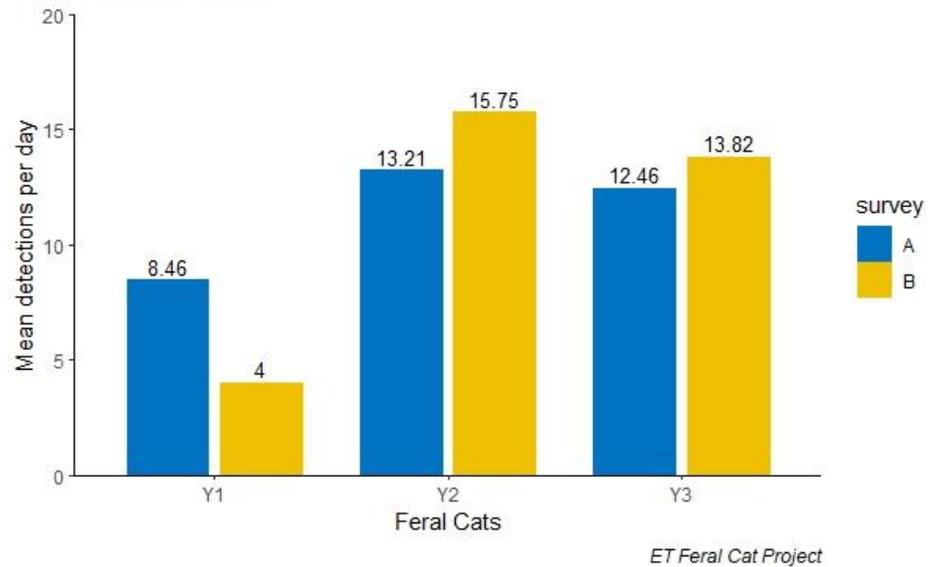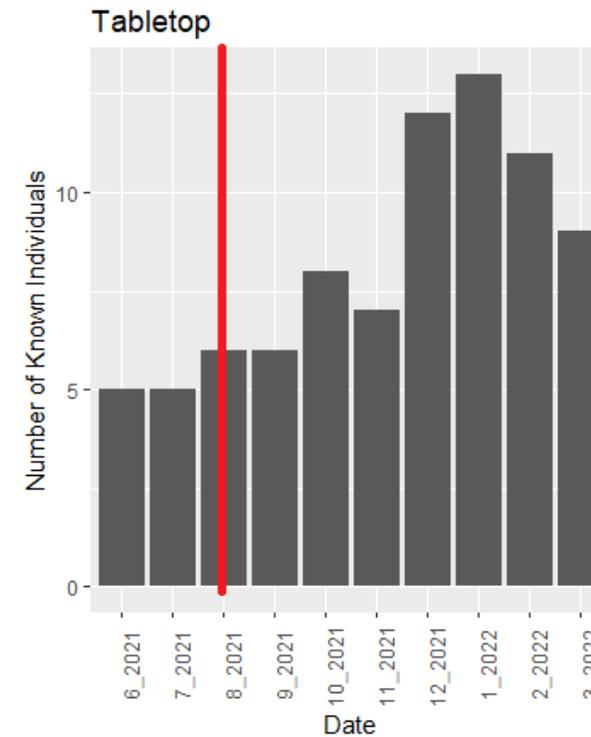
Preliminary results: feral cats

Front Tableland — ET Feral Cat Project
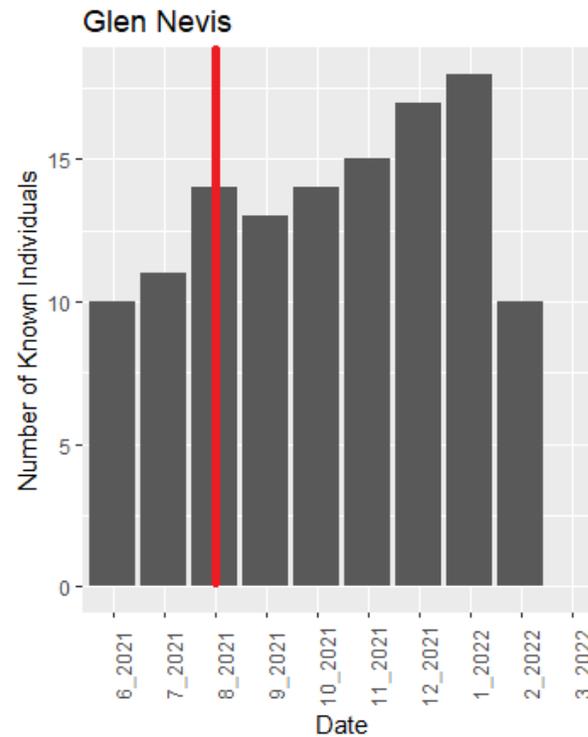

Paddysland — ET Feral Cat Project

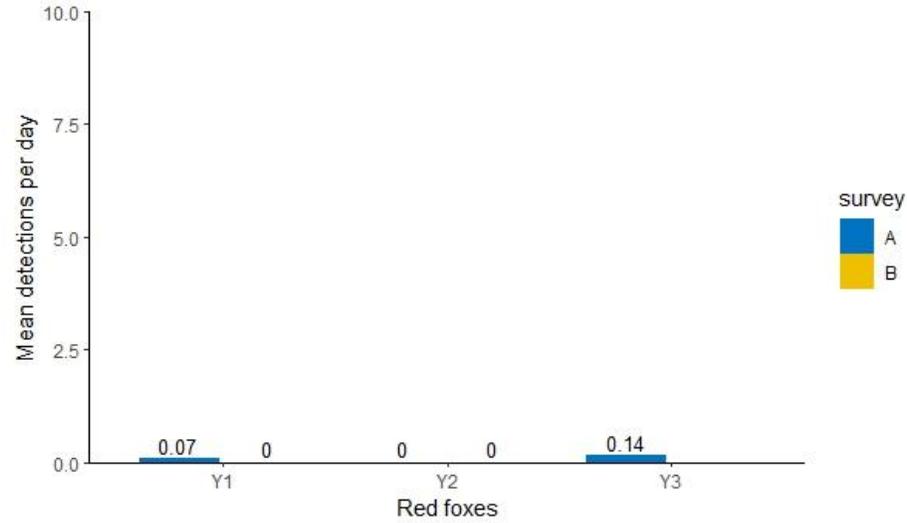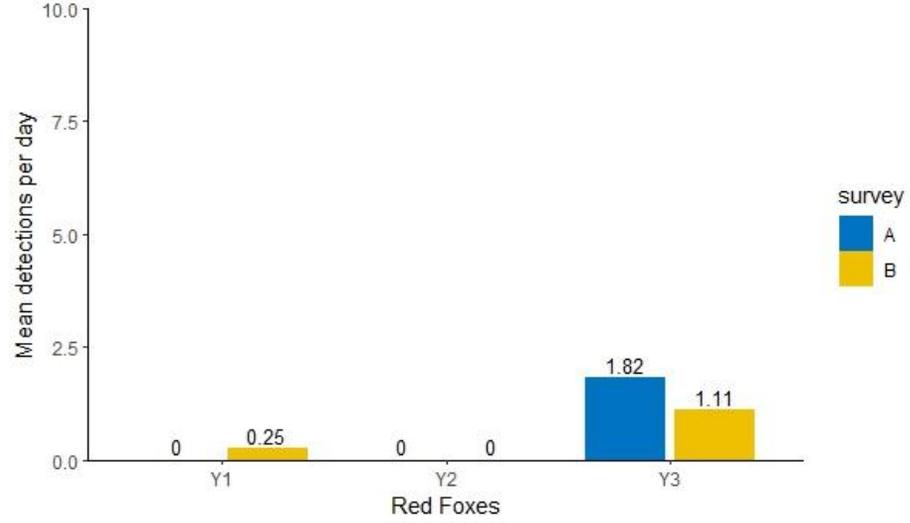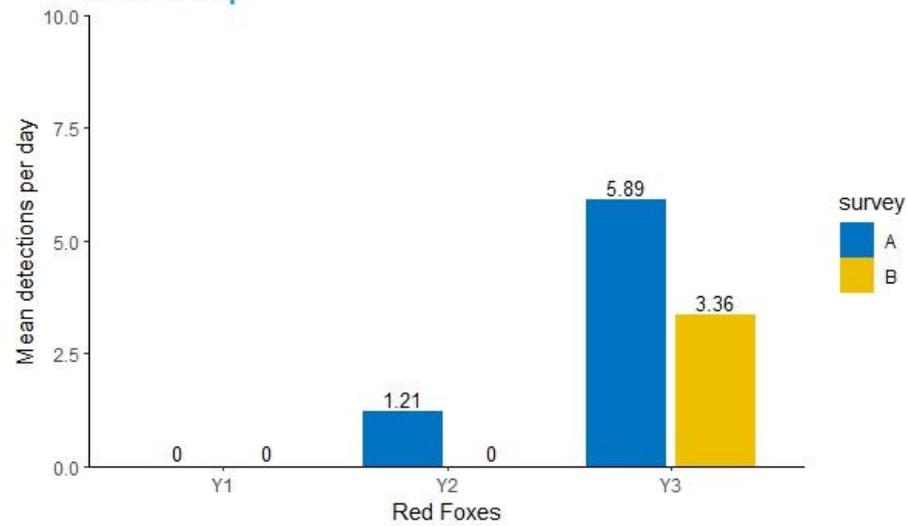Tabletop — ET Feral Cat Project
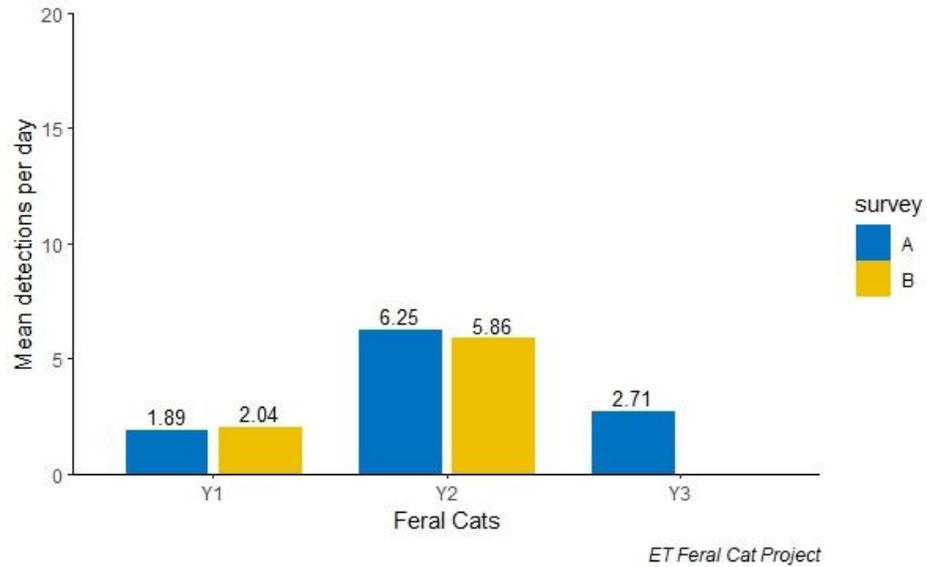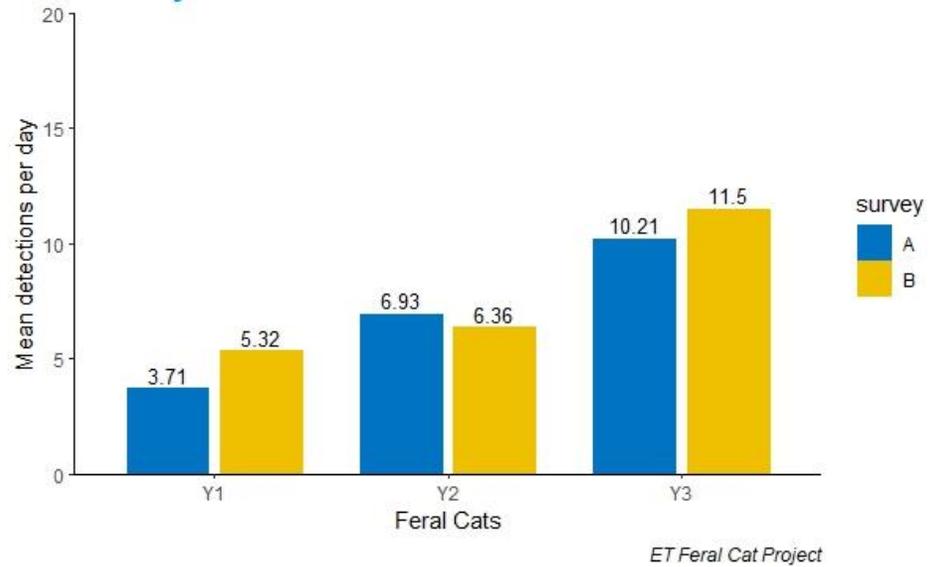
Glen Nevis — ET Feral Cat Project
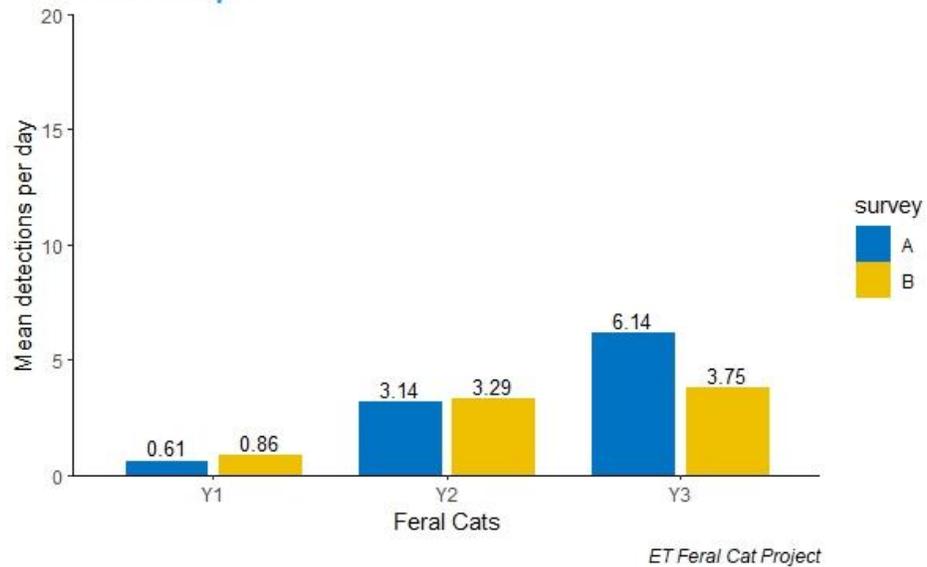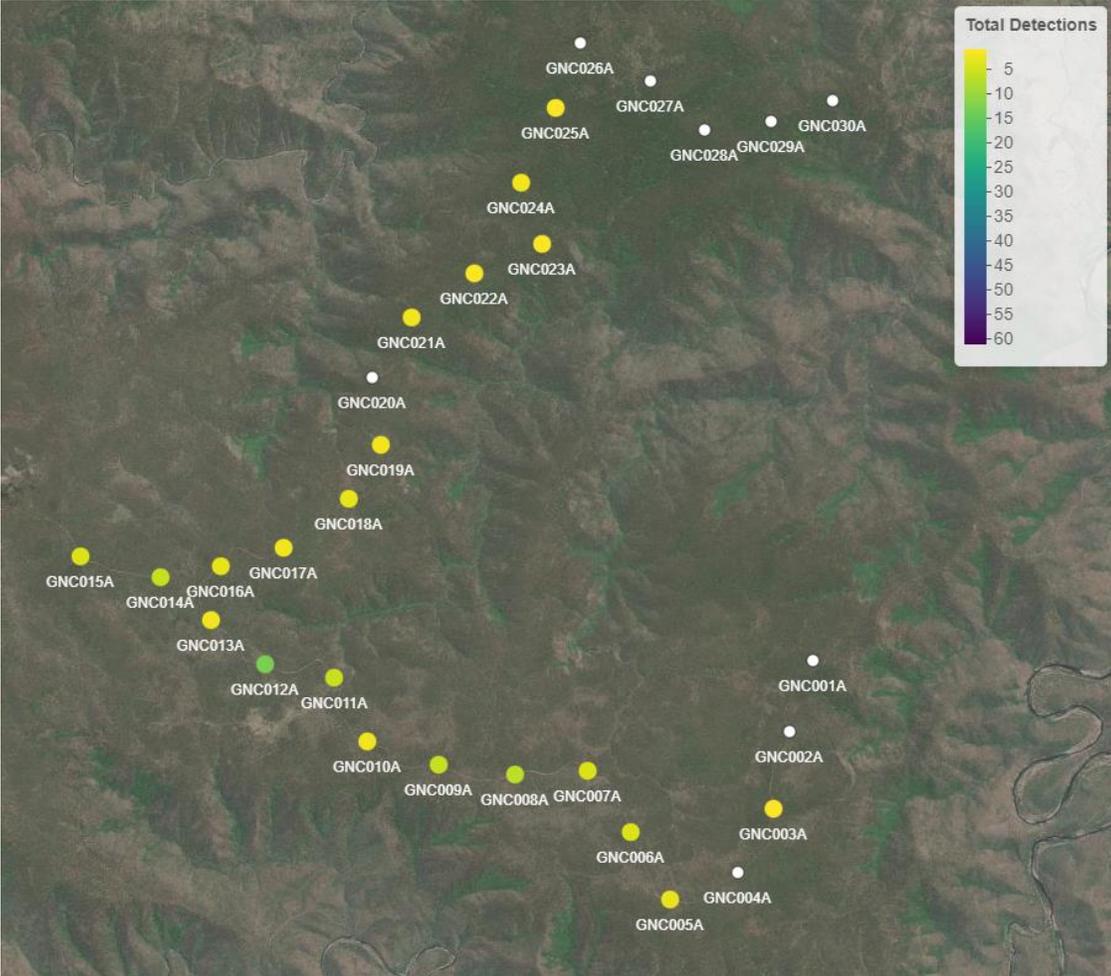
Individual ID of cats

▶ Paddysland – 28 individuals

▶ Glen Nevis – 26 Individuals

▶ Tabletop – 28 individuals

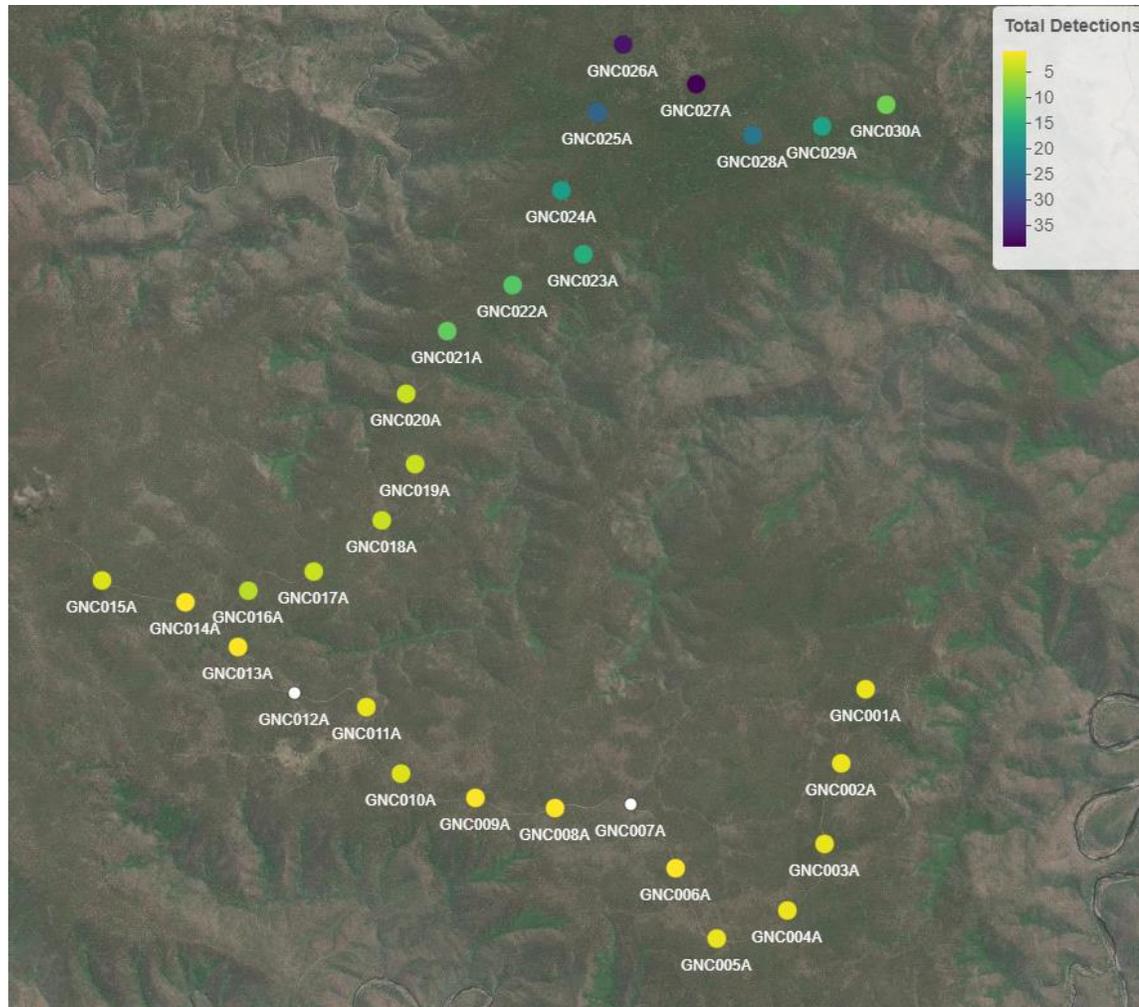# Red foxes
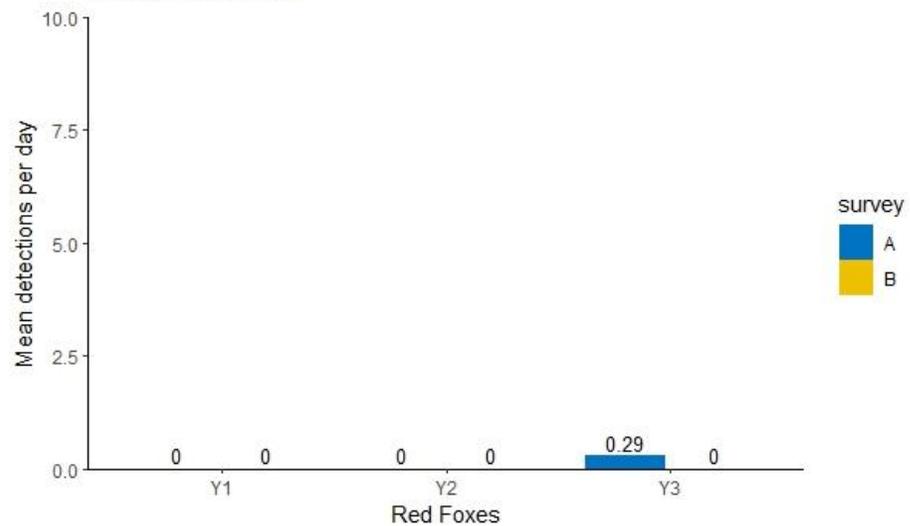
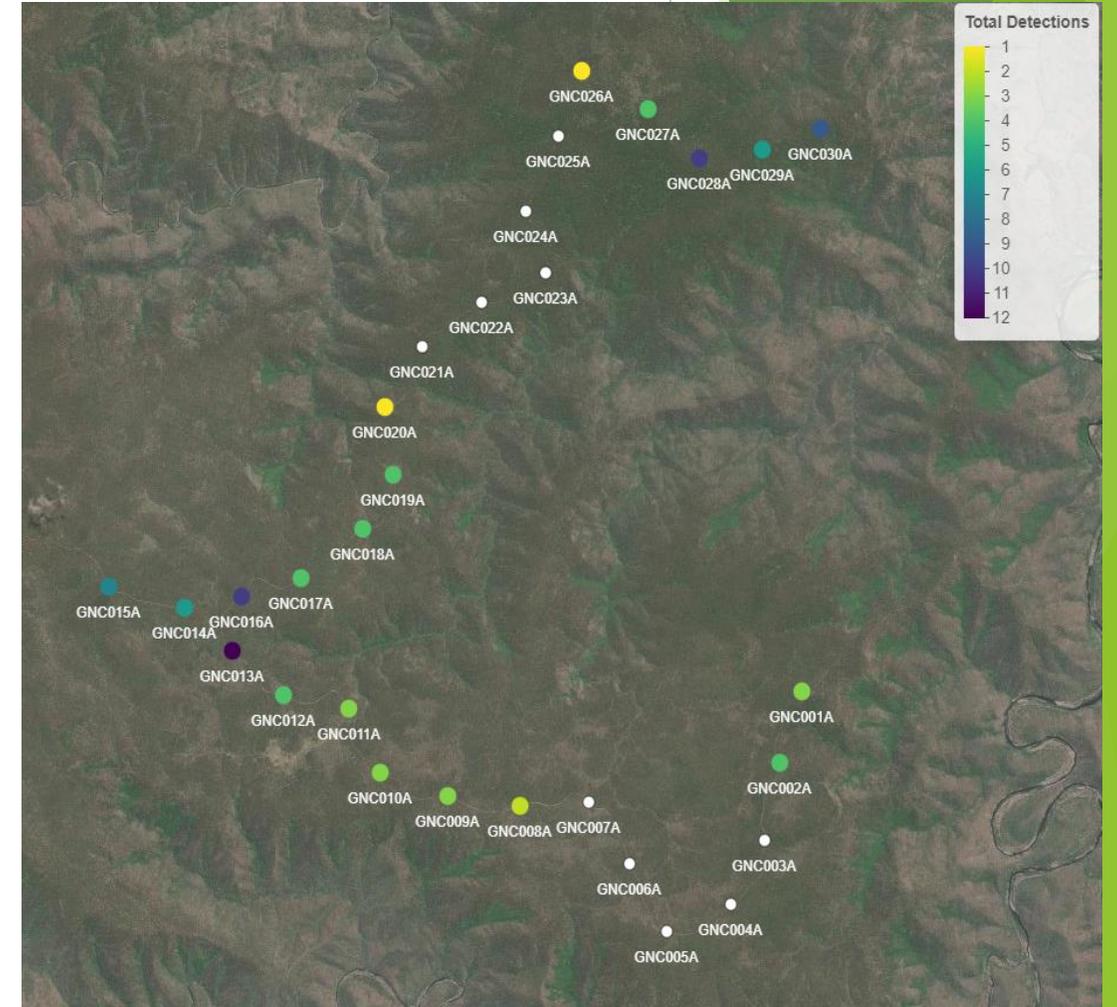# Foxes – Glen Nevis London Bridge
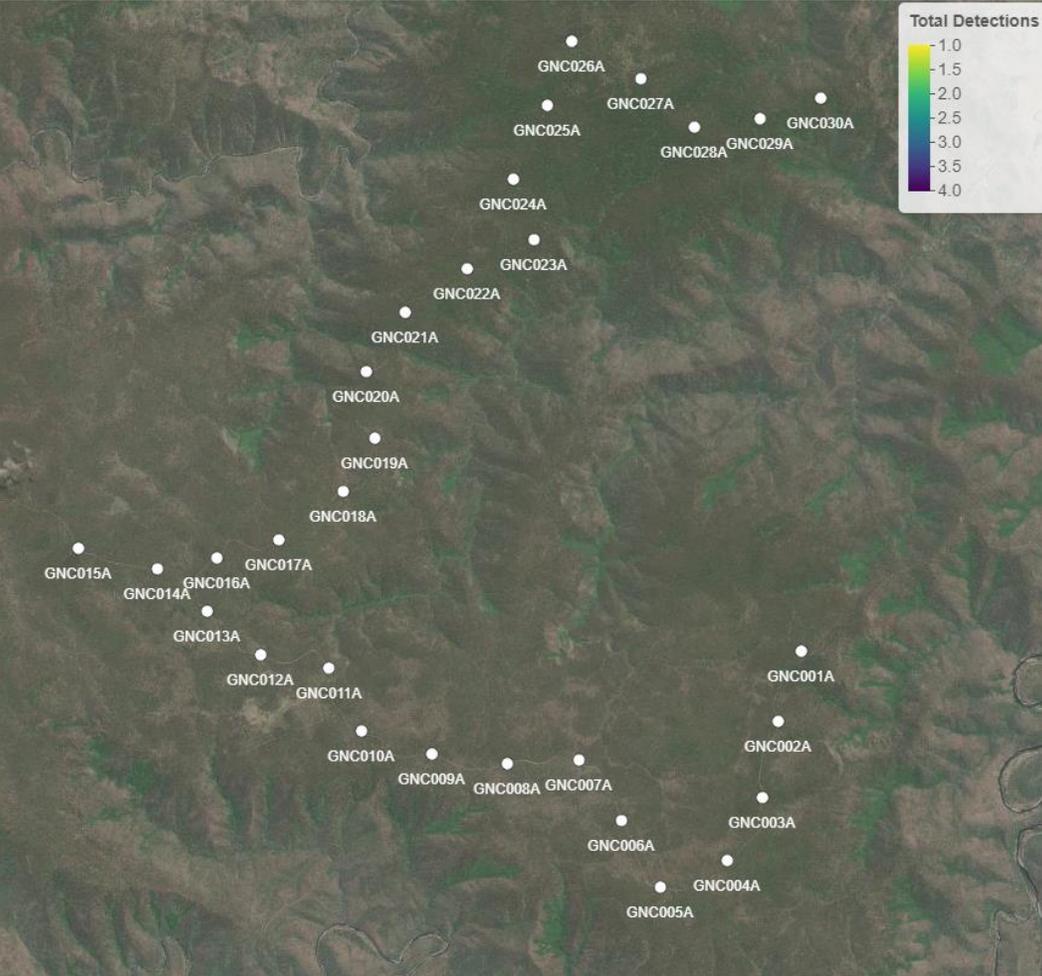
2020

2022

Wild dogs – Glen Nevis London Bridge

2020
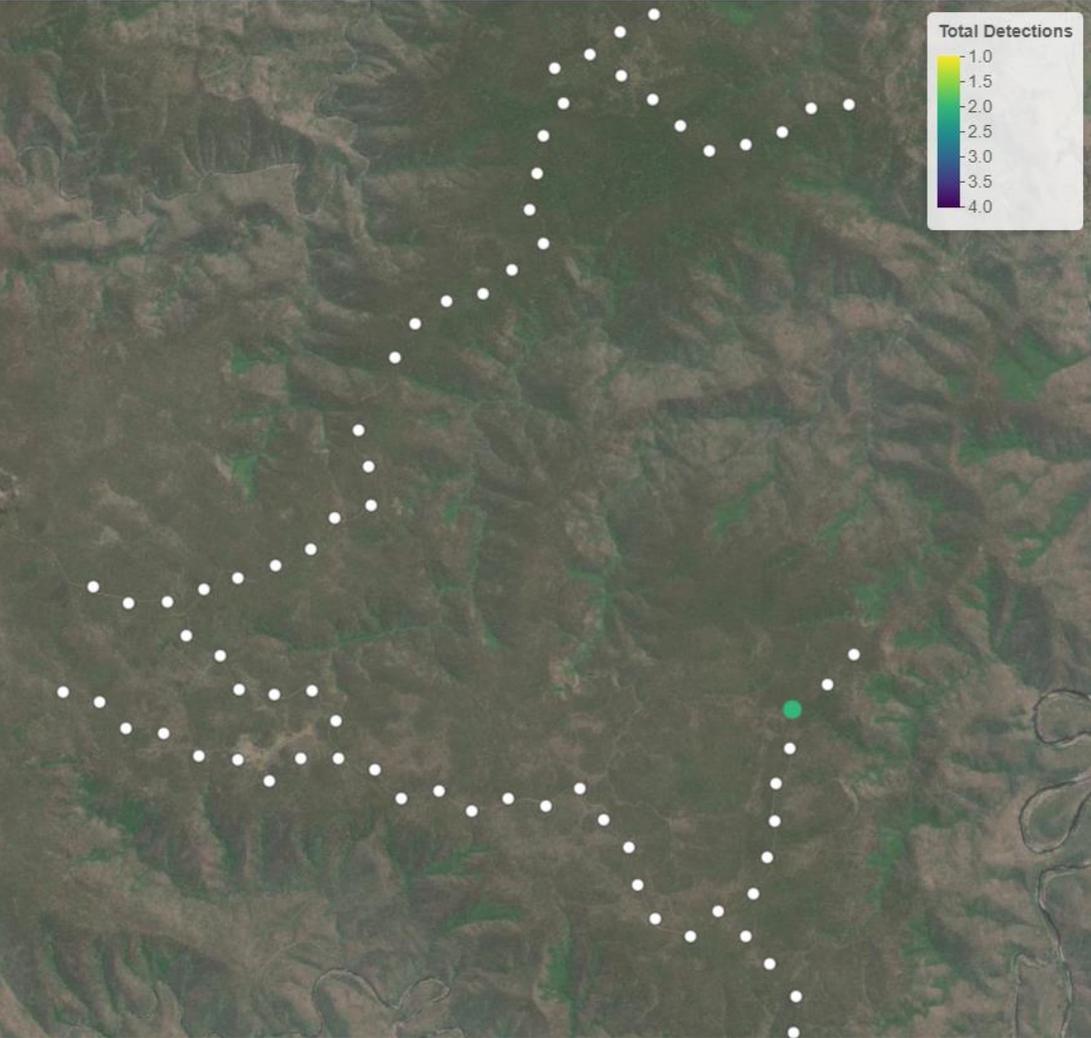
2022

Why are cats hard to control?

- ► Wrong baits?
- ► High prey densities?

Northern NSW

rainfall: 1100, 900, 700, 500

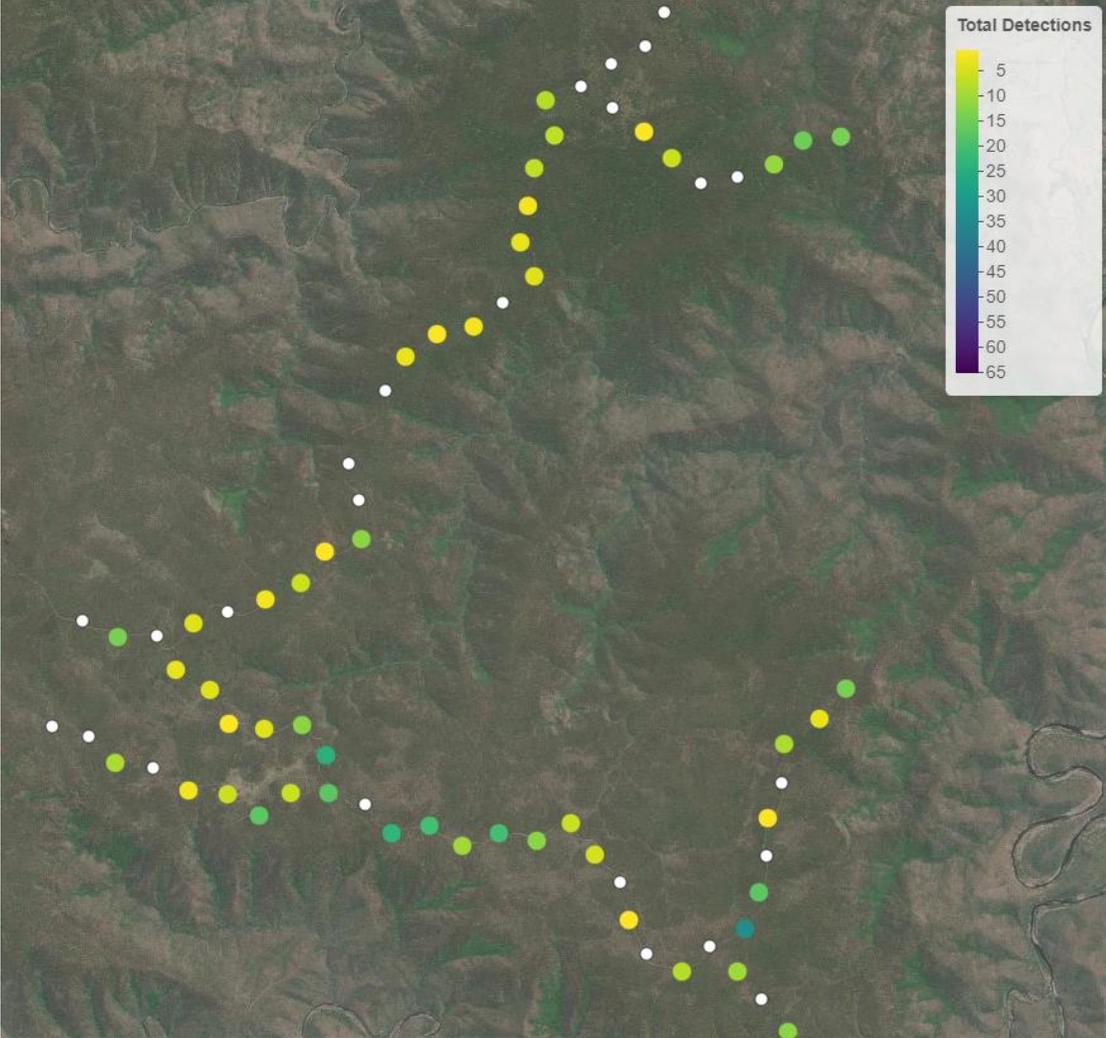| Year	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Annual rainfall (mm)	682	550	654	899	818	638	315	1063	1126	982
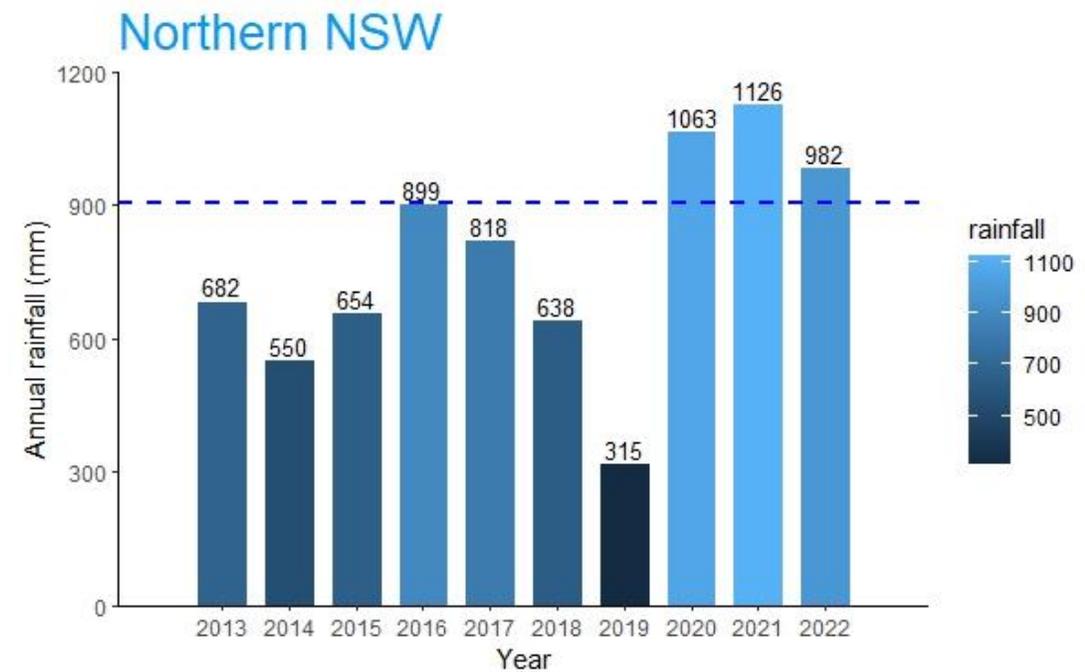
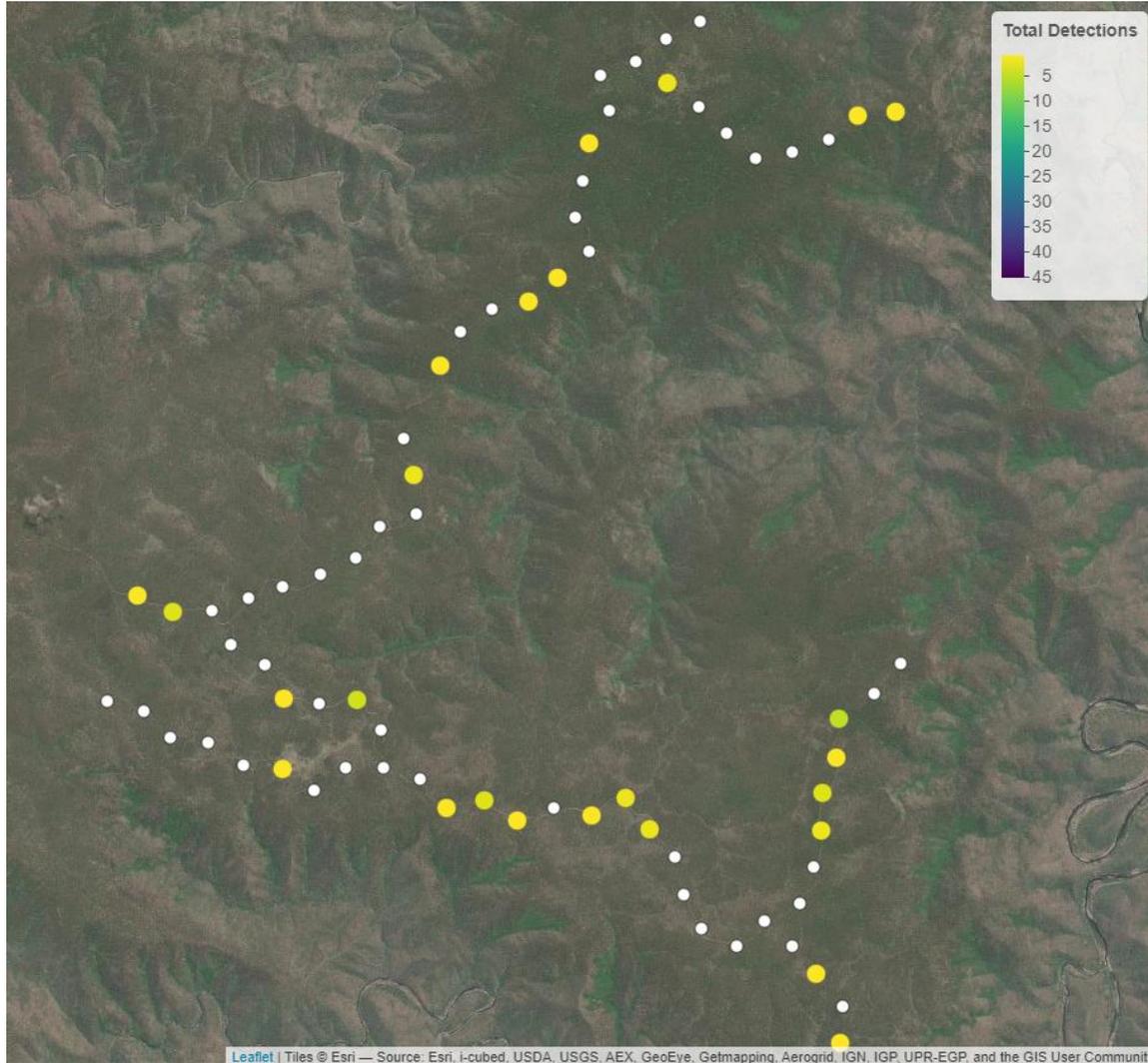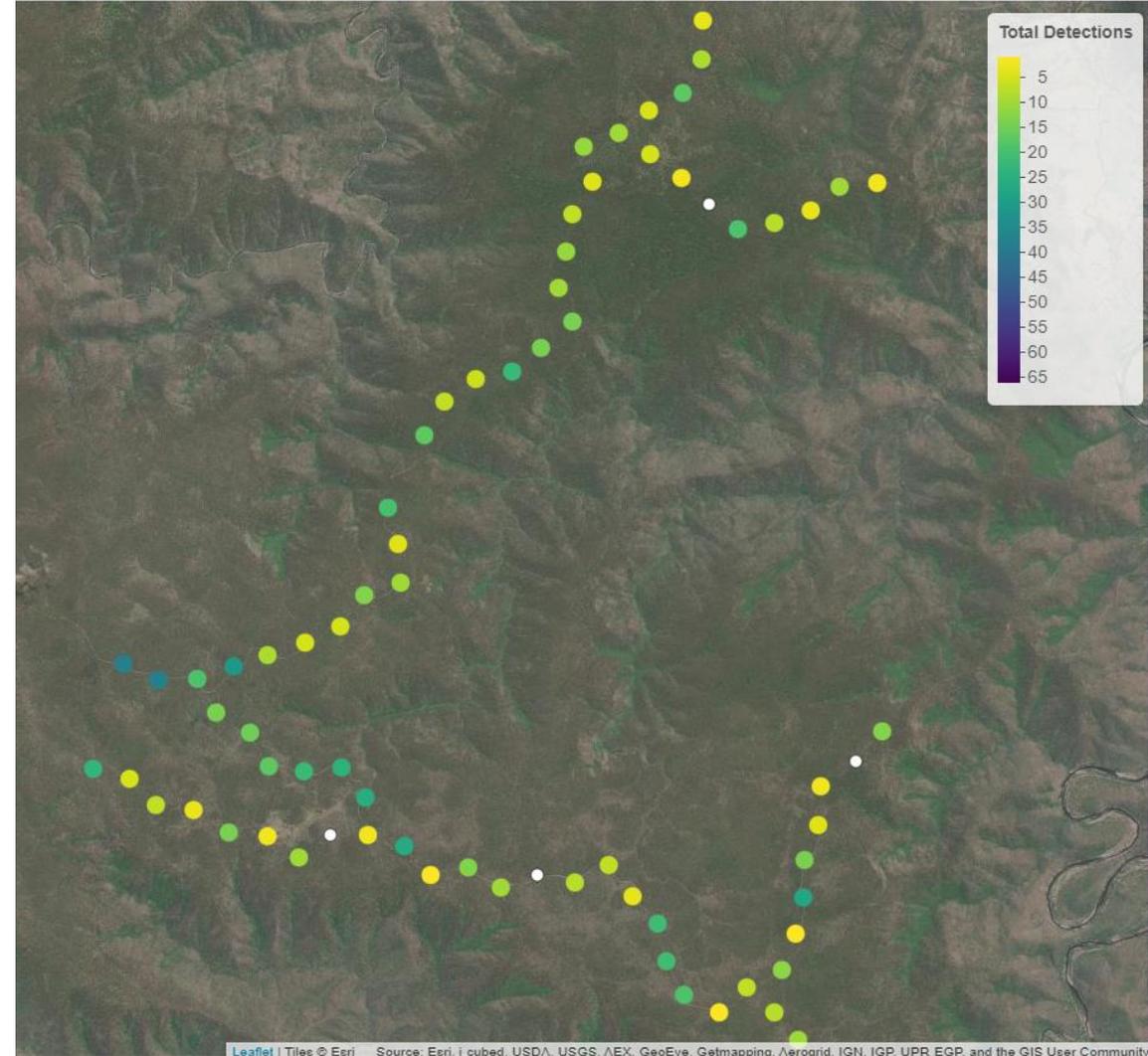# Long nosed bandicoots – Glen Nevis London Bridge

2020

2022

Small mammals– Glen Nevis London Bridge

2020
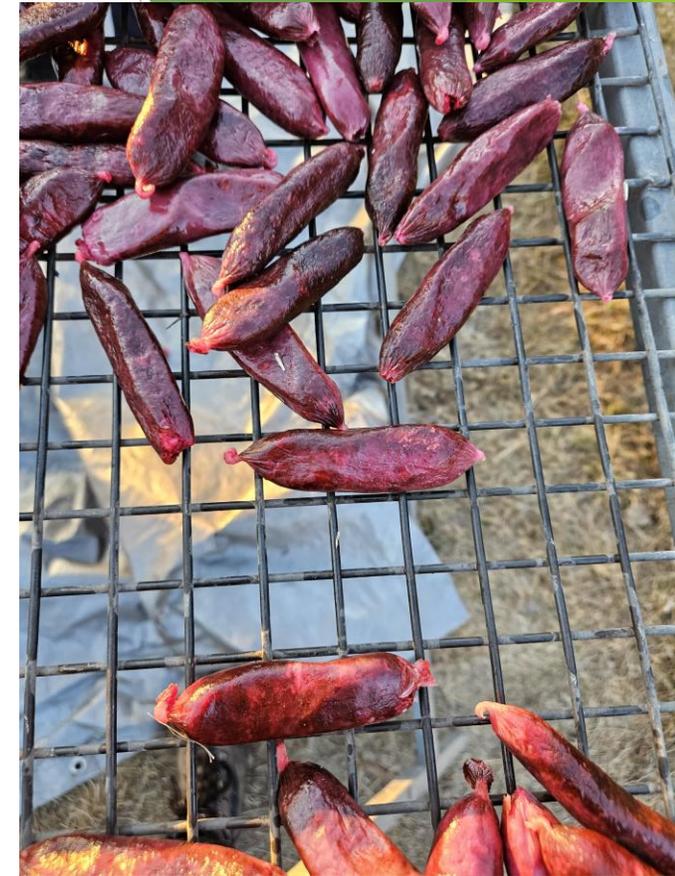
2022

What next?

► Eradicat baiting trials

   ► Feral cat specific bait from WA

   ► 20g bait with 4.5mg of 1080

   ► 3,871 non-toxic baits were dropped at our Tabletop study site on 1 August 2023

   ► 120 baits were monitored using camera traps

   ► 96 whisker samples were taken from target species to understand uptake

   ► Can we safely attempt a toxic trial next year?

Acknowledgements

- NSW Environmental Trust

- NSW National Parks and Wildlife Service

- NSW Department of Primary Industries

- Resilient Landscapes NESP Hub

- Local Land Services NSW

- University of New England

- Technical staff and research students

- Neighbours, collaborators and community research partners