

# PRIORITY ACTIONS FOR EASTERN QUOLLS ON NORTH BRUNY ISLAND

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## PROJECT UPDATE AUGUST 2021



Welcome to the first project update on cat management on north Bruny Island for the NRM South managed project '*Priority actions for eastern quolls on north Bruny Island*'.

This project is working to protect eastern quolls and other wildlife on north Bruny by managing domestic, stray and feral cats. This is a partnership project between NRM South, Kingborough Council, Biosecurity Tasmania, Bruny Farming, weetaoona Aboriginal Corporation and the Ten Lives Cat Centre.

Over the course of the project, feral cat control will be carried out north of the Neck, and stray cat control will be taking place around the hotspots of Alonnah and Simpsons Bay. These target areas are home to high numbers of eastern quolls, and therefore likely to be where management actions will bring the greatest benefit to threatened species.

### ANNUAL SUMMARY

This financial year (July 20-June 2021) the focus has been on the groundwork required to kick start the project.

On-ground cat control has commenced in key areas and the community has been re-engaged around issues of domestic and stray cats.



*Conrad Daniels from Bruny Farming setting a feral cat trap on the Neck.*

### HIGHLIGHTS

- 40 cats (23 feral and 17 stray) removed from the project area.
- Feral cat control activities underway in the seabird colonies of north Bruny Island.
- Camera monitoring to estimate cat densities across north Bruny.
- Bruny Cat By-Law compliance rates above 70% for registered cat owners on Bruny Island.
- Opening of the Bruny Island Cat Management Facility in Alonnah, funded jointly through Ten Lives Cat Centre and Kingborough Council.
- 14 stray cats taken to the Alonnah Cat Facility. Most were rehomed through the Ten Lives Cat Centre, one domestic cat was returned to its owner.
- Camera monitoring by members of the Bruny Environment Network on private properties at Apollo Bay, Dennes Point and Barnes Bay.
- 11 community members assisting with cat trapping on their properties.
- A non-lethal trial of thermal shooting undertaken in the shearwater colonies.
- GPS tracking of feral cats to better understand their movement patterns and impacts on eastern quolls.

## DOMESTIC CATS UPDATE



*Community members from the Men's shed in Alonnah building a cat enclosure.*

There are currently 63 confirmed domestic pet cats living across 43 households on Bruny Island. All of these households were contacted last financial year and 86% have registered their cats with Kingborough Council.

Six households received practical assistance in the form of enclosures, netting and enrichment - which also included work by the Alonnah Men's Shed. Free desexing of six cats was undertaken by the Ten Lives Cat Centre.

Cat containment remains the most challenging issue for many cat owners. The experiences and stories of seven Bruny cat owners were documented to promote the benefits of containment ([several are available to read here](#)).

Most cat owners use a combination of methods to prevent their cats from roaming. Of the registered households:

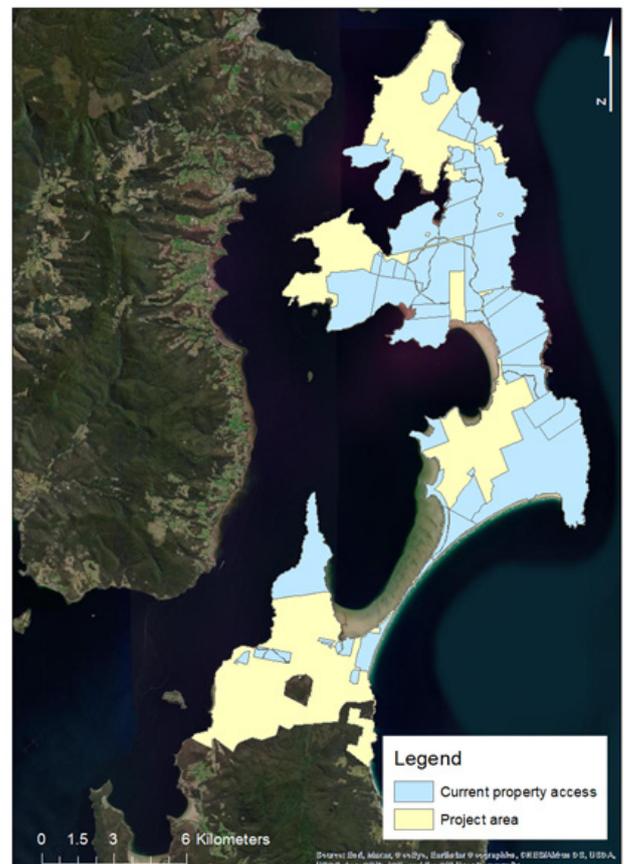
- 65% provide access to the house and an enclosure/enclosed deck;
- 14% keep their cats inside permanently;
- 11% use a harness and lead to walk or restrain their cat when outside with them; and
- 5% allow their cat to be outside and unrestrained on occasion, under watch and control.

## FERAL AND STRAY CAT TRAPPING UPDATE

Feral cat trapping is underway across north Bruny Island, led by Conrad Daniels from Bruny Farming. Currently there are property access agreements in place with 10 landholders on north Bruny Island, equating to 54 % of the project area. In May 2021, permits were obtained for feral cat trapping in north Bruny reserves including The Neck Game Reserve, Chuckle Head Conservation Area, Quarantine Station Reserve, and Dennes Hill Reserve.

This is an important milestone for the project as the shearwater colonies within The Neck Game Reserve, support high densities of feral cats, and accessing these areas is critical.

This year, 23 feral cats and 17 stray cats were removed from the project zone. There have been several challenges including high numbers of eastern quolls entering the traps (which were then immediately released), which decreases the availability of open traps for cats. Likewise in the shearwater colonies high numbers of rats entering traps and eating baits has decreased cage trapping success. We have been trailing different baits, and other bait containment devices to find solutions to these issues.



*Map of landholder areas where feral cat control activities are underway.*

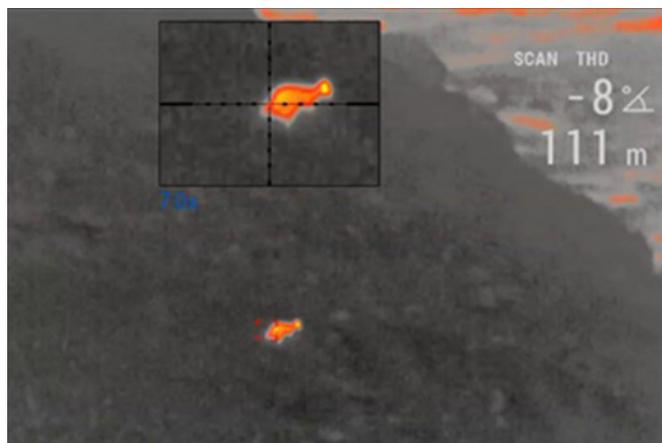
## THERMAL SHOOTING TRIAL UPDATE

In June 2021, a trial of the new 'thermal shooting' feral cat control technique was run on north Bruny by Biosecurity Tasmania. The large numbers of shearwaters that breed in the colonies of Cape Queen Elizabeth and The Neck attract high numbers of feral cats. Due to the risk of collapsing shearwater burrows, cage trapping of cats can only occur in the colonies when the birds are not present between May and September.

Thermal shooting may offer a solution to this obstacle. The technique involves the operation of a rifle with the attachment of a heat sensitive scope, which picks up the heat signatures of warm-blooded animals within the field of view. In the trial, we wanted to test if cats could be easily identified from other native species in the area, particularly quolls.

For eight nights, trained personnel from Biosecurity Tasmania attempted to sight cats with the thermal monocular within the shearwater colony. Cats were

sighted on three of the eight nights, and were easily discernible from other native animals including quolls and possums, both from their movement patterns and body shape. As a result of the trial, it was recommended that thermal shooting be used as control technique in the future.



*Image of a Bennett's wallaby showing the clear heat signature taken through the scope.*

## OTHER RESEARCH: CAT BORNE LIVESTOCK PARASITES

Cats are the primary host of two parasites: toxoplasmosis and sarcocystosis. Across Australia these parasites cost an estimated \$6 billion per year due to their impacts on livestock production and human health.

Toxoplasmosis can cause premature lamb losses in sheep, while sarcocystosis adversely impacts on the quality of sheep meat. These parasites can infect livestock if the animals feed on pasture contaminated with infected cat faeces.

In 2020, Honors student Mahalia Kingsley from the University of Tasmania compared the prevalence of these diseases among sheep on Bruny Island and the Midlands. Mahalia used blood samples and abattoir data to compare parasite prevalence in sheep at six farms in the Midlands and four farms on Bruny Island.

Mahalia found that the prevalence of both these diseases was variable. For the Midland properties, the prevalence of toxoplasmosis and sarcocystosis was on average 31.7% and 17.7% respectively. For the Bruny properties the prevalence of toxoplasmosis was 4.5% and no cases of sarcocystosis were detected. Despite low detection rates, toxoplasmosis prevalence on Bruny could still impact sheep farmers, and may be higher in unsampled sites on south Bruny where cat population densities are higher.

Farmers can help reduce the spread of these diseases by burying or burning sheep carcasses and trimmings; securely covering offal pits; and keeping livestock feed secure from cats.

*We would like to thank Mahalia Kingsley from the University of Tasmania for undertaking this research. We are hoping that that the results will be presented at a forum on Bruny later this year.*

## HOW YOU CAN HELP



- Record sightings of feral cats on Bruny Island via FeralCatScan. [Visit the website](#) or download the free smart phone App.
- Trap for feral cats on your property. Contact Kingborough Council's Cat Management Officer on 03 6211 8284 or [kallan@kingborough.tas.gov.au](mailto:kallan@kingborough.tas.gov.au) for more information.
- Protect domestic cats, livestock and wildlife by complying with the Bruny Island Cat By-Law.
- Find out more about [the project here](#).