

KANGAROO ISLAND ACHIEVEMENTS 2022–23

Feral Cat Eradication Program



205 feral cats caught with cage and soft-jaw foothold traps over 20,224 trap nights

47 feral cats targeted with Felixer™ Grooming Traps

4,300 ha of public and private lands baited with Curiosity® poison bait



96% of the community supports the eradication of feral cats

Real-time monitoring of feral cats and native animals, including threatened species, across the Dudley Peninsula through an array of 200 4G-connected remote cameras and AI-based image processing.



Eradication front now extends across 85% of the Dudley Peninsula over 31,888 ha.

KEY

- Trap locations
- Active eradication area
- Feral cat fence



Kangaroo Island Feral Cat Eradication Program Achievements 2022-23

A report from the Kangaroo Island Landscape Board

Funding received has formed an important component of the Kangaroo Island Landscape Board's Dudley Peninsula Feral Cat Eradication Program in 2022-23. This program is well underway to eradicating feral cats from 100% of the Dudley Peninsula. The program has employed a rolling eradication front starting at the most eastern point of the Peninsula and progressing west towards the feral cat exclusion fence across the narrowest point of the Pelican Lagoon isthmus. The program continually looks to improve practices through adaptive management, and trialling and incorporating new technology. This report summarises the achievements of the Dudley Peninsula Feral Cat Eradication Program from July 2022-June 2023.

1. Feral cat control

Over the past 12 months this program controlled feral cats across 31,888 ha of the Dudley Peninsula. The eradication front progressed from covering 65% of the Dudley Peninsula to 85%. A suite of control tools were used:

- 205 feral cats were trapped with cage and soft-jaw foothold traps across 20,224 trap nights.
- 47 feral cats were targeted with Felixer™ Grooming Traps.
- 4,300 ha of woodlands across public and private lands were baited with Curiosity® poison bait.

Over 400 cage and soft-jaw foothold traps were deployed across the Dudley Peninsula in 2022-23. To date the number of traps used was limited by the time taken to physically access and check traps each morning. During 2022-23 the program began retrofitting traps with Celium Trap Alert technology. This system notifies staff when a trap is closed, negating the need to check open traps, resulting in a reduction in staff workload of up to 60%. In 2022-23 70 traps were retrofitted with this technology, with an aim to retrofit all remaining traps as soon as possible.

2. Monitoring feral cats and their impact of native animals

An array of 200 4G-connected remote cameras have been installed across the Dudley Peninsula to monitor feral cats and native animals. Cameras send images to an AI-based image processing software package which has been trained in conjunction with Kangaroo Island Landscape Board staff to recognise feral cats and native animals in the photographs. The system can now identify specific animals from dark and blurry images, and images where only a small part of the animal is visible. A key piece of this work has been undertaking daily training of the system. To this end staff have improved the accuracy of the program, providing a valuable tool for research and control on feral cats. These refinements to the system are made available to all eVorta users and as such, will prove useful to any pest animal control programs going forward.

This network is used to provide real-time information on where feral cats are active. Camera information enables us to continually evaluate the likely success of capturing a feral cat in our trap network and to adjust the locations of our traps to better target specific individuals. We have been able to use this array to track the movements of individual feral cats behind the eradication front and target treatments to control them. This video gives a short demonstration of how we are able to follow feral cats using this technology:

https://www.youtube.com/watch?v=R2Uriq99_jM

The network covers public and private land and is also used to monitor the presence of native animals, including threatened species, such as the KI echidna, bush stone curlews, southern brown bandicoots and hooded plovers.

3. Community support

Community support is vital for the success of the Dudley Peninsula Feral Cat Eradication Program. The Dudley Peninsula community was engaged in a large scale trapping program (the Blitz) from 24 June until 4 July 2022. 31 landholders participated and 61 feral cats (35 females and 22 males) were caught over the 10 nights of the Blitz.

The Kangaroo Island Landscape Board assisted a local landholder to build and install 12 owl nest boxes across the Dudley Peninsula. This was undertaken to address community concerns that removing feral cats would cause an increase in rodent numbers. Within two months barn owls were recorded visiting over half of the nest boxes. Watch this video for more information:

<https://www.youtube.com/watch?v=plk5YJxiVK4>

In June 2023 an online survey was conducted to gauge the level of community support for the eradication of feral cats on the Dudley Peninsula and the whole of Kangaroo Island. 204 people completed the survey. The results showed there is still overwhelming community support for the project, with 96.57% (197 respondents) in favour of eradicating feral cats on the Dudley Peninsula and 96.08% (196 respondents) in favour of eradicating feral cats from Kangaroo Island as a whole.

The high level of support is mirrored by Kangaroo Island Landscape Board staff levels of access to properties on the Dudley Peninsula, with 94% of properties approached permitting access. The areas that we cannot access account for 2.31% of the land area and should not impact our ability to complete the program.

4. Future plans

The eradication of feral cats from the Dudley Peninsula is now scheduled for completion in 2025, before the remainder of Kangaroo Island is attempted. Support is needed to continue this vital work, including for the following activities:

4.1 Conservation detector dog pilot project

Detector dogs (scent detector dogs) are increasingly being used to assist with conservation monitoring work. Their acute sense of smell provides an excellent means in detecting their target, in this case cats, and acts as a quality control on other monitoring methods. Detector dogs have been used successfully in eradication projects in Australia, including on Dirk Hartog, Tasman and Macquarie Islands, to confirm that cats had been removed. Dogs are known to cover twice as much area when compared to humans and can search areas which are difficult to access or monitor using other techniques. A combination of monitoring techniques will be needed to provide a high level of confidence that the Dudley Peninsula on Kangaroo Island is cat-free. The project already has established a comprehensive camera monitoring array across the peninsula to detect and measure changes in cat densities as well as the response of native wildlife following cat removal and eradication. The detector dog pilot project will seek to complement the existing camera array and provide vital information to the program on ensuring no cats are missed, providing a rigorous methodology to confirm proof of freedom to declare the eradication a success.

4.2 Support our team to continue to deliver critical on-ground management

On-going support for our field team to continue monitoring and managing feral cats across the Dudley Peninsula is required. This support will go towards funding, or part-funding, a staff member to manage our extensive camera monitoring array to detect remaining feral cats, or in active on-ground control.

4.3 Support to apply innovative control tools increasing the efficiency of operations

The Felixer™ Grooming Trap is a recently registered tool for feral cat management. The Dudley Peninsula feral cat eradication program's Felixer™ Grooming Traps were purchased more than five years ago and in this time there has been major upgrades in both the hardware and software to increase target specificity and reliability in the field. To optimise control in remote and difficult to access areas on the Dudley Peninsula, new Felixer™ Grooming Traps are needed to replace our outdated machines which are nearing the end of their serviceable life. Support to purchase/lease additional Felixer™ Grooming Traps will ensure the program is applying the most up to date, best practice management tools towards eradication of feral cats from the Dudley Peninsula.

For more information:

Paul Jennings

Project Leader — Kangaroo Island Feral Cat Eradication

Kangaroo Island Landscape Board

M 0407 555 606

E paul.jennings@sa.gov.au

website: <https://www.landscape.sa.gov.au/ki/>

facebook: <https://www.facebook.com/KILandscapeSA> and
<https://www.facebook.com/FeralFreeKI/>

Instagram: <https://www.instagram.com/kilandscapesa/>

Youtube: https://www.youtube.com/channel/UCdfEauH_fqWyJlvuAF0fD4w