# Abstract Submission to the State (September 20-22) Landcare Conferences 2022

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## **Presentation Title\***

Testing the use of Felixer<sup>™</sup> grooming traps to control cats in the jarrah forest of Western Australia.

#### **Brief Summary\* (50 words)**

We tested the effectiveness of Felixer<sup>™</sup> grooming traps for controlling feral cats in the southern jarrah forest of Western Australia. Initial trials have achieved reductions in feral cat activity of up to 24% which can be sustained for at least five months. Further trials are ongoing to improve the efficiency of deployment methods.

# Presentation details (max 500 words total) Description of the initiative / topic\*

Predation by feral cats is a major threat to over 120 species of native fauna in Australia. Controlling feral cats to reduce this impact has proven to be a significant challenge. The South West Catchment Council, Department of Biodiversity Conservation and Attractions and the Blackwood Basin Group are testing how Felixer<sup>™</sup> grooming traps can be used to control feral cats and protect native fauna in the forests of south-west WA. Felixers<sup>™</sup> use an array of LIDAR sensors and a proprietary algorithm to determine if an animal walking past is a cat or fox. If a cat or fox is identified a 1080 infused gel is sprayed onto the animal which cats will groom off thereby receiving a lethal dose of poison.

#### **Objectives\***

The objective of our trials is to determine the most efficient and effective methods for deploying Felixer<sup>™</sup> grooming traps in the southern jarrah forest of Western Australia with the goal of significantly reducing feral cat numbers and activity to protect our vulnerable native fauna.

#### Method / approach\*

Using available data on feral cat densities and movement in the Upper Warren area in south-west WA we modelled multiple deployment scenarios to determine the most appropriate way to deploy the Felixer™ grooming traps. Based on this analysis we deployed eight Felixer traps over two, 14,000 ha sites for an average of eight weeks each. Cat activity before, during and after the deployment of the traps was monitored by an array of 50 remote cameras to determine the number of individual cats present and the total cat activity and to determine how successful the Felixers<sup>™</sup> were at reducing feral cat activity.

#### Key findings\*

We were able to reduce feral cat activity by up to 24% through the use of the Felixer<sup>™</sup> traps when compared with a site without Felixers<sup>™</sup> where activity increased by 25% over the same period. This reduction in feral cat activity was sustained for five months after the traps were removed. Our second trial currently underway is testing whether highly specific targeting of Felixer deployment locations can improve this outcome, based on placing Felixers<sup>™</sup> near landscape features known to be used by feral cats and using data from the remote camera arrays to target areas of high cat activity.

#### What was the impact on the environment, people and community? \*

The Upper Warren area is home to 10 threatened or priority mammal species of which seven have suffered significant declines over the last 20 years with feral cat predation implicated as a major threatening process. Felixer™ grooming traps have the potential to reduce this impact and help protect these unique native fauna.

# What practical call to action can be used by landcare groups and other environmental community groups?\*

Engaging with new technologies for controlling introduced predators has great potential to protect our native fauna and reduce losses to agriculture.

## **Conclusions\***

Felixer<sup>™</sup> grooming traps are an exciting new addition to the feral cat control toolbox. Our work is helping to maximise the effectiveness of this new tool for the greatest environmental benefit.