# Dryandra Woylie/Numbat Project – an example of successful feral cat control with community support

Supported and funded by:









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Department of **Biodiversity**, **Conservation and Attractions** 



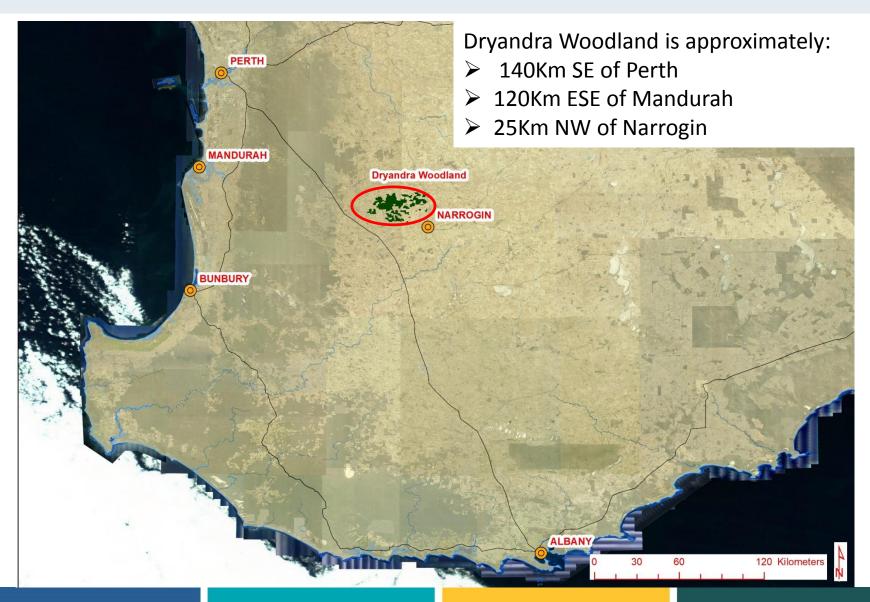






Community in particular Dryandra's neighbouring landholders







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Day-time at Dryandra Woodland







## Night-time at Dryandra Woodland



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## Initially foxes were identified as the main driver of fauna decline in Dryandra. To reduce fox predation a 1080 baiting program called Western Shield was introduced.





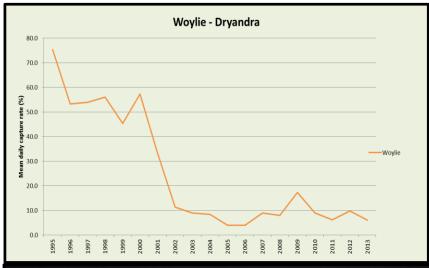








This baiting program was highly effective however over the next couple of decades fauna populations again started to rapidly decline and cat numbers significantly increased.













## Critically Endangered: Woylie

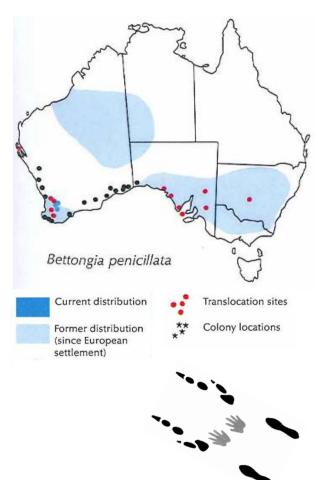
Bettongia penicillata ogilbyi



#### Dryandra

- Approximately 65% of woylies collared in Dryandra Woodland died from predation.
- Of those animals, 66% were killed by cats.

Marlow et al 2015



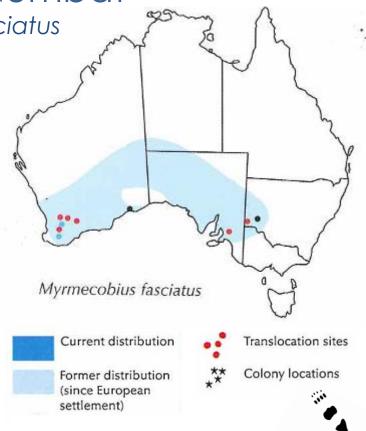




Endangered: Numbat







#### Dryandra

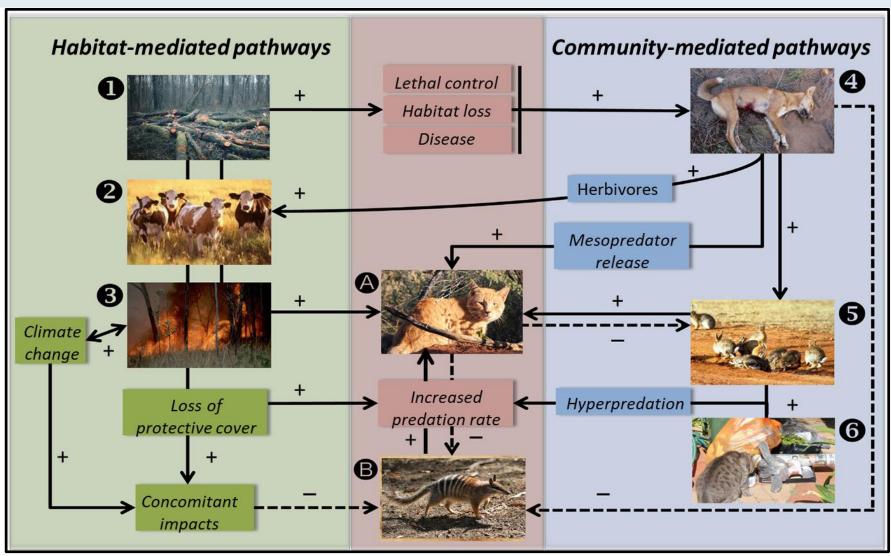
50% of the collared numbats in the Dryandra Woodland's main block killed in 2011/12 and 2012/13, were attributed to cat predation.

Unpublished data by Dr Tony Friend, Department of Biodiversity, Conservation and Attractions.







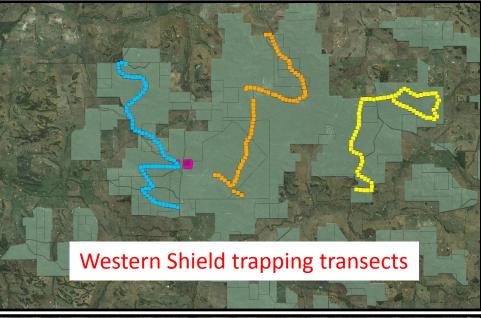


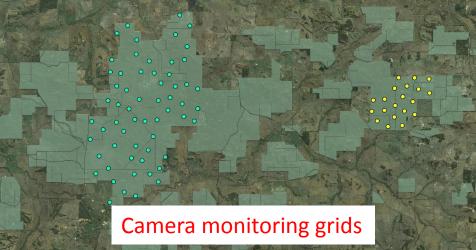
Doherty 2015.



### Monitoring













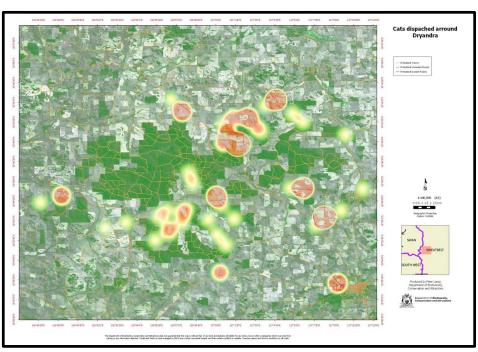


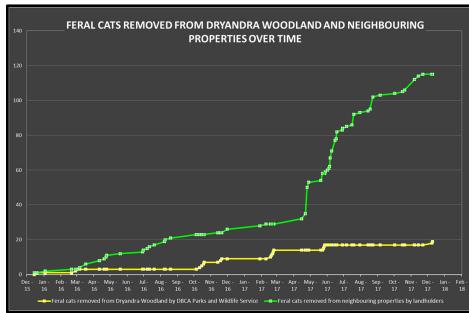






 Trapping feral predators on and off reserve.











# Population augmentation and DNA sampling.











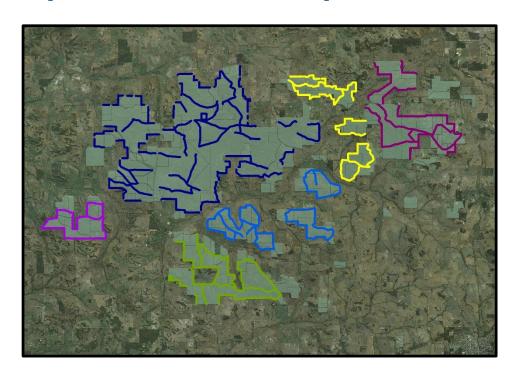
### Radio tracking.







Baiting of introduced predators and feral prey species on and off reserve (Probait® & Eradicat®).





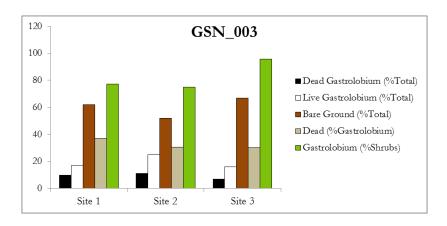


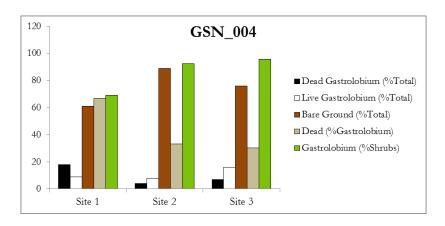






# Habitat enhancement and reconstruction.





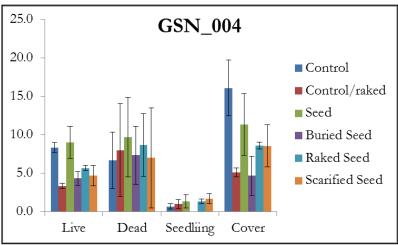






### Research.















Predator free breeding enclosures.







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 Trialling cat detection by dogs.

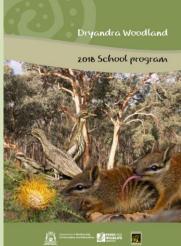




### Education.

















### Community engagement, support and participation







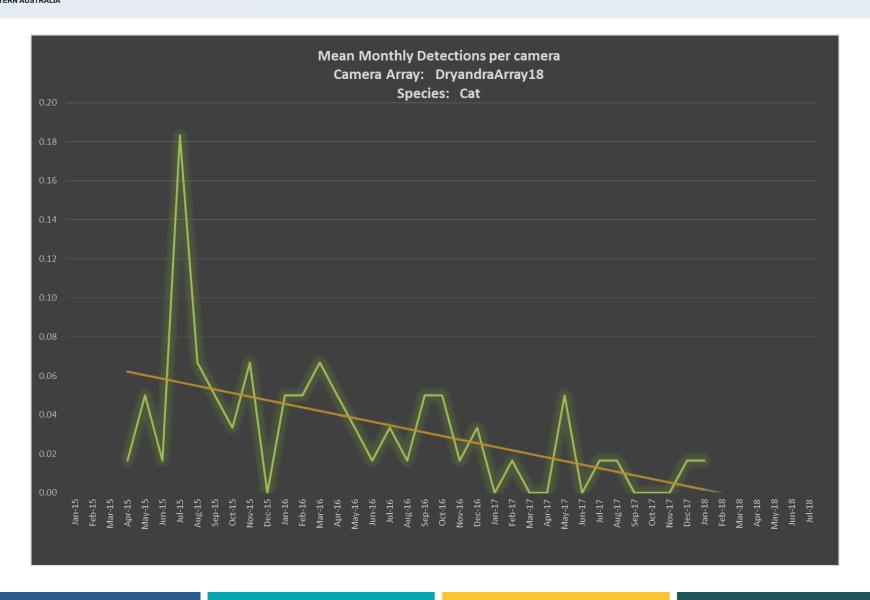






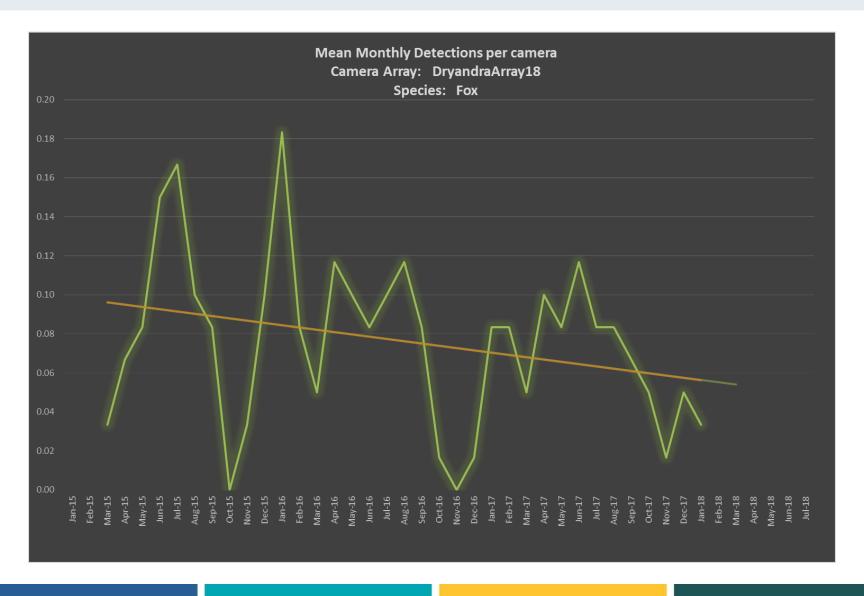






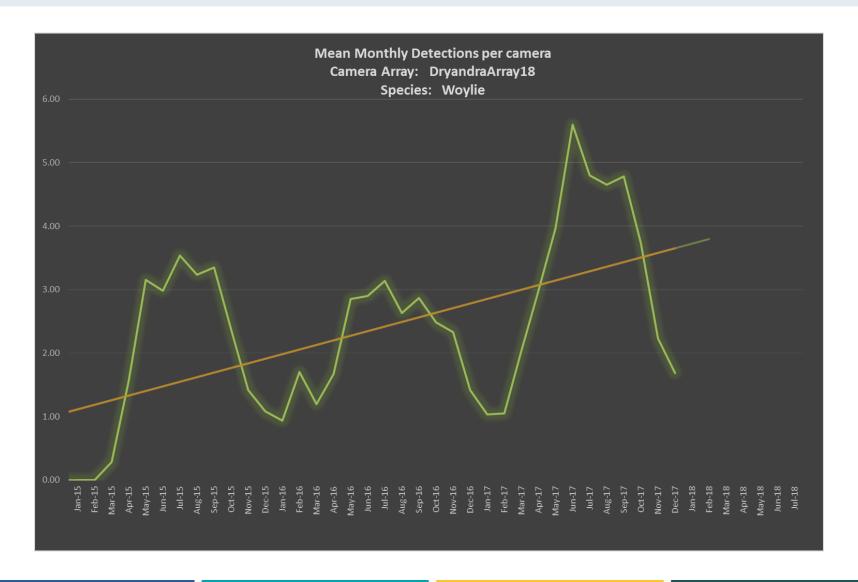






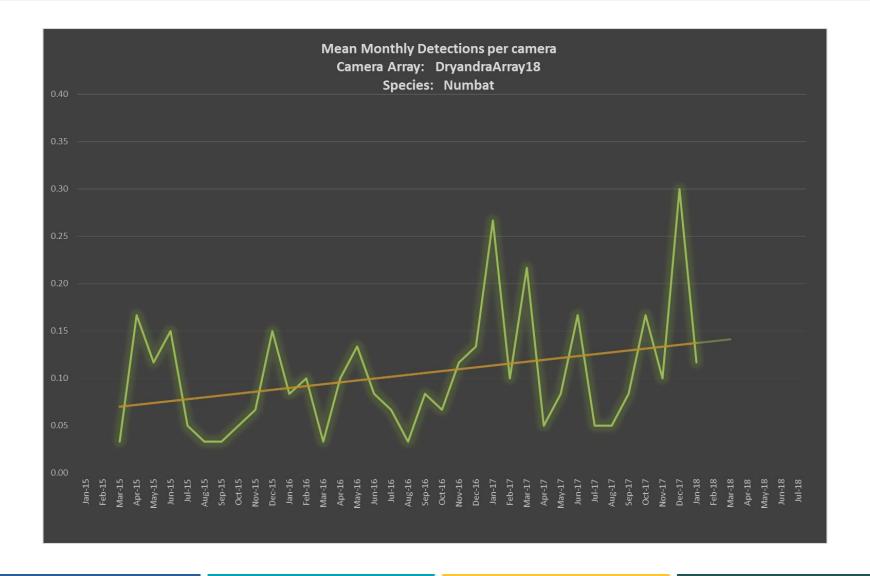










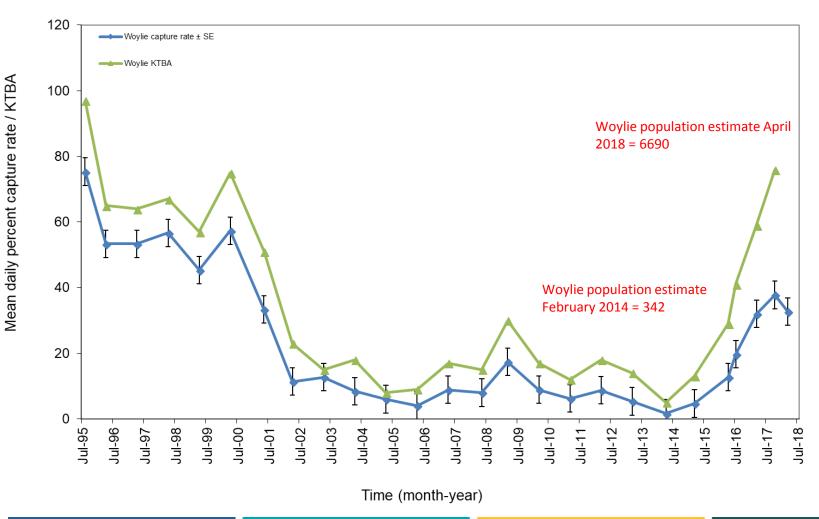




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#### Western Shield transect monitoring **Dryandra Woylies**





Thank you to all the people who have participated in this project – the landholders and DBCA staff who have undertaken feral pest control actions, the staff from DBCA, Peel - Harvey Catchment Council, Project Numbat and DPIRD who have collected photographs, classified camera data, collected and analyzed other monitoring data, staffed displays and presented information.



#### References

Marlow, N. J., Thomas, N. D., Williams, A. A. E., Macmahon, B., Lawson, J., Hitchen, Y., Angus, J., Berry, O. (2015) Cats (*Felis catus*) are more abundant and are the dominant predator of woylies (*Bettongia penicillata*) after sustained fox (*Vulpes vulpes*) control. *Australian Journal of Zoology* **63**, 18-27.

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Doherty, T. S., Dickman, C. R., Nimmo, D. G., Ritchie, E. G. (2015) Multiple threats, or multiplying the threats? Interactions between invasive predators and other ecological disturbances, *Biological Conservation* 190:60-68 https://doi.org/10.1016/j.biocon.2015.05.013 http://www.sciencedirect.com/science/article/pii/S0006320715002086







# Thank you







