

# NGO Response to protect the KI dunnart in wake of the black summer bushfires

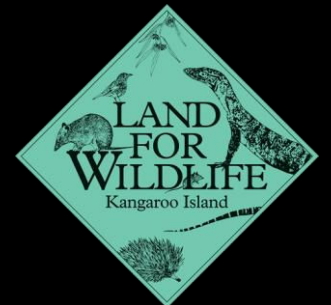
Terrain Ecology, Australian Wildlife Conservancy and Kangaroo Island Land for Wildlife

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Terrain  
ECOLOG<sup>Y</sup>

Australian  
Wildlife  
Conservancy



ENDURO

NW34 038F 03C 04/10/2021 19:47:34





- KI LfW – small NGO working on KI dunnarts and cats on private conservation land
- Conservation Action Plan developed
- Monitoring KI dunnarts and controlling cats since 2017





Pre and post Black Summer Bushfires – continued to focus on 3 high conservation areas





Black Summer bushfires – burnt  
over 96% of KI dunnarts known  
and predicted range



TN22 064F 17C 03/01/2016 21:42:48



Small unburnt patches of bush found at Western River







Camera driftlines  
set within days in  
remnant  
vegetation



# KI dunnarts and other threatened species survived in the small unburnt patches at Western River Refuge





### Surviving KI dunnarts:

- Intense competition for food
- Intense predation pressure (native predators and feral cats)
- Cat numbers quickly boomed after the fire



- Cage traps, felixer grooming traps on site within days of the fire – high success rate
- Rapid reinvasion after cat removal



2020-01-19\_00-30-43\_TARGET\_FIRED\_103cm



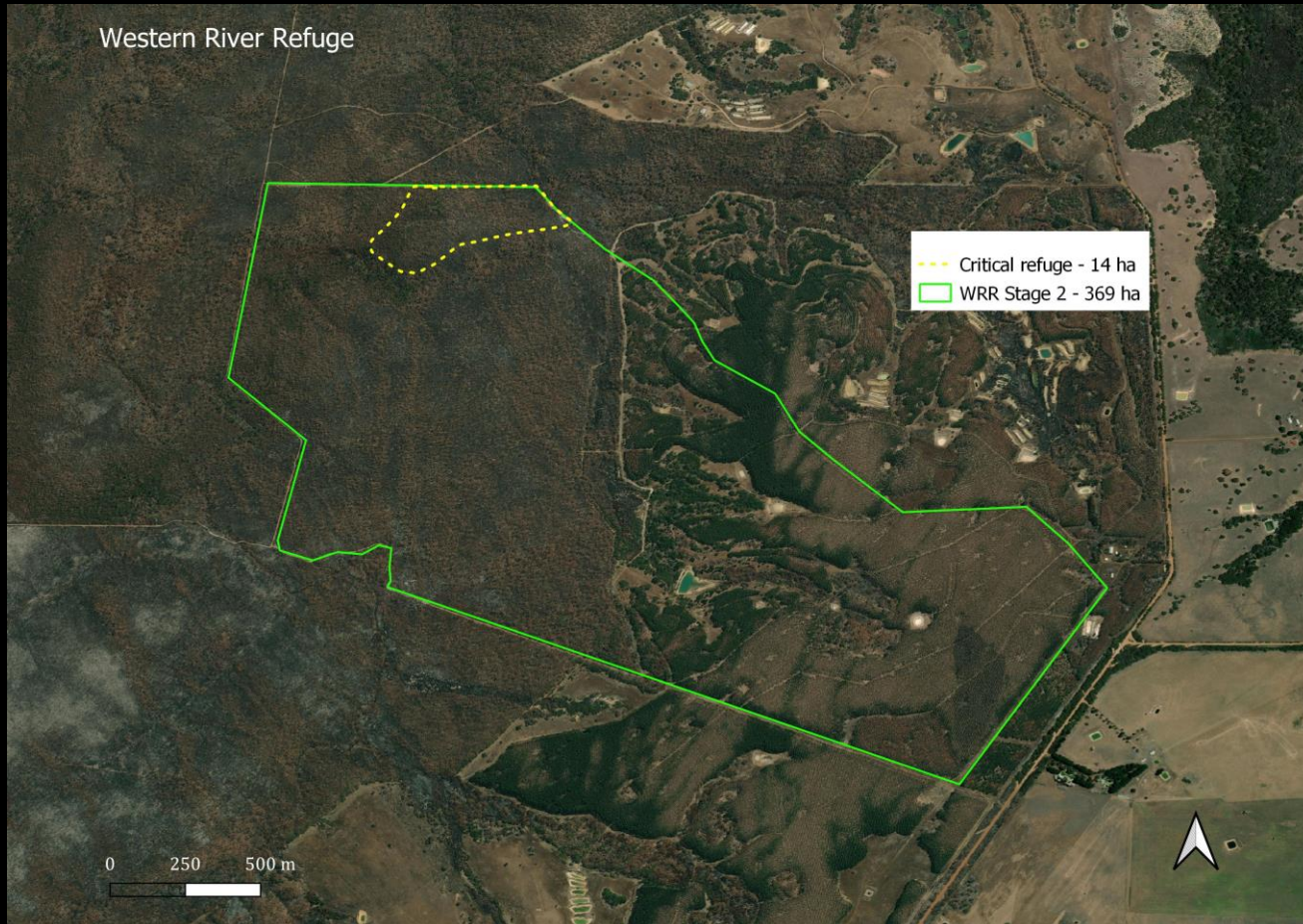


- Conservation Action Plan already identified the need for a fenced safehaven at Western River
- Negotiations were underway with AWC and private landholders
- Fast tracked fence construction 3 weeks after fires





- AWC collaboration - Western River Refuge dunnart habitat to protect KI dunnarts from feral cats
- Stage1 14ha - 6 weeks post fire
- Stage2 369ha - < 6 months post fire







Additional NGO support within weeks of fire:

- AWC – field ecologists
- AWC – feral animal control officer
- FAME – operational funds – fuel – cameras
- WWF – shelter tunnels
- ZooSSA – field staff – equipment – fauna surveys
- WIRES – operational funds-equipment



# Kangaroo Island post fire: we have a **BIG CAT** problem....

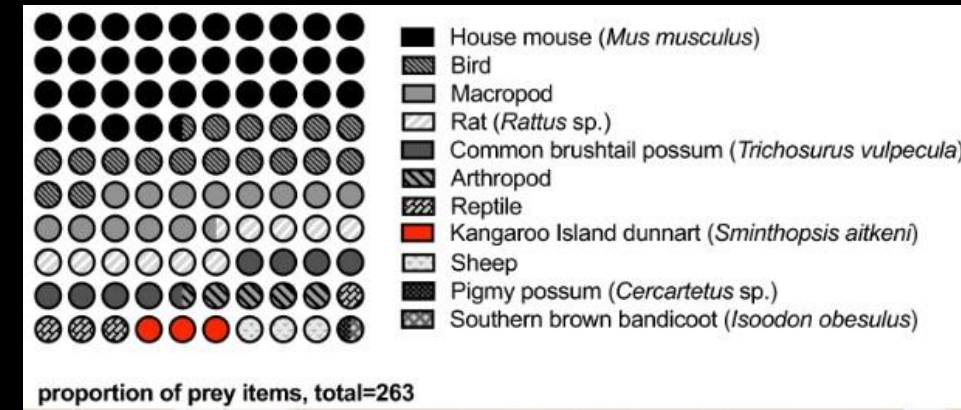
- Feral cats took advantage of the post fire landscape





- Hodgens et al (2022) Cat predation of KI dunnarts in aftermath of bushfire  
[www.nature.com/scientificreports](http://www.nature.com/scientificreports)

8.1% of cat digestive tracts contained KI dunnart remains





- Elevated soft jaw leg holds to reduce off target risk on threatened species





- Thermal shooting transects – driving and walking



- AI Felixer development, testing and deployments





### Multiple Tools:

- Cage trap = X
- Felixer = X
- Leghold trap = ✓

3.5 kg male KI dunnart killer removed on fence with soft jaw leghold when other methods failed





## Multiple tools

- 4G camera = X
- Thermal Shooting = X
- Leg hold trap = X
- Cage trap = X
- Felixer = ✓

New cat detected  
29/11/22



Thermal shooter  
22/12/22



SP030223\_2022-12-16\_02-09-24\_RIGHT\_266cm

51 mins



Felixer targeted



SP030223\_2022-12-16\_03-00-04\_TARGET\_PHOTO\_134cm





The job isn't done yet:

- 31<sup>st</sup> Jan 2023 – Endangered Southern brown bandicoot killed by feral cat
- We aim to continue to protect core conservation areas on Western KI into the future until cats can hopefully be eradicated





**FAME**



**Wildlife Recovery Grants Program**

GRANTS OPEN

Re-establishing habitat for wildlife in SA's bushfire affected landscapes



Terrain  
ECOLOG<sup>Y</sup>



**PRAGUE ZOO**

