

NATUREWATCH

LIFE AFTER FIRE CITIZEN SCIENCE PROJECT

Dr Sera Blair, NatureWatch Coordinator





Victorian National Parks Association

Our vision is for a diverse and healthy natural environment protected, respected and enjoyed by all.



NatureWatch

Land-based citizen science projects

Wildlife monitoring, threatened flora surveys

Community connection to nature

Conservation campaign support



EXAMPLES of NATUREWATCH PROJECTS

- Caught on Camera
- Communities Listening for Nature
- Backyard Bandicoots
- Great Forest Guardians
- Spotlight on Wombat —————→
- Life After Fire – East Gippsland



LIFE AFTER FIRE -

East Gippsland after Black
Summer Fires

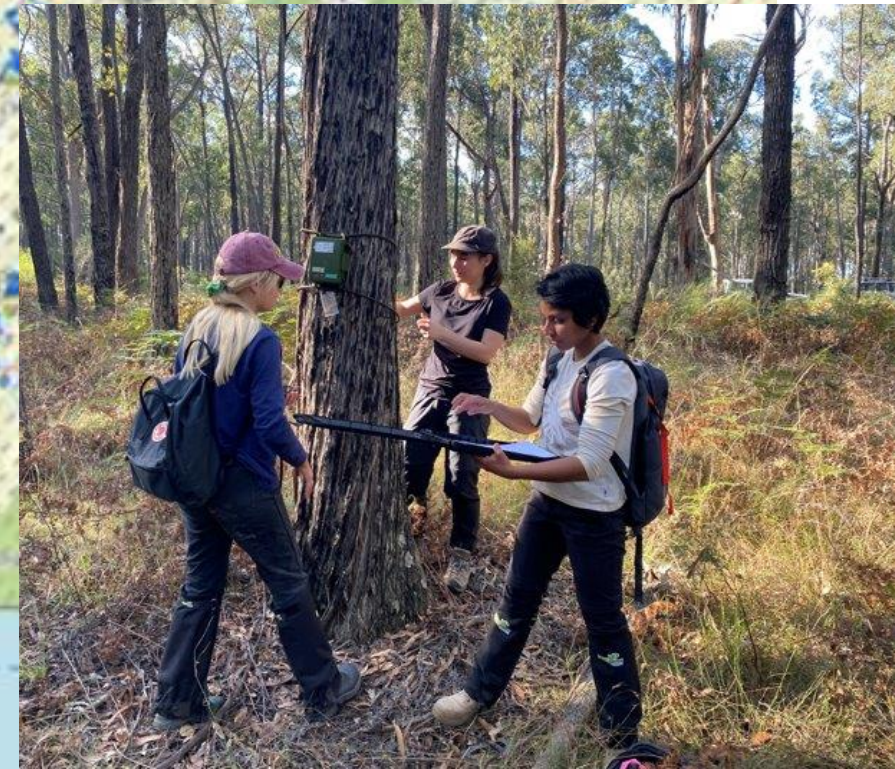
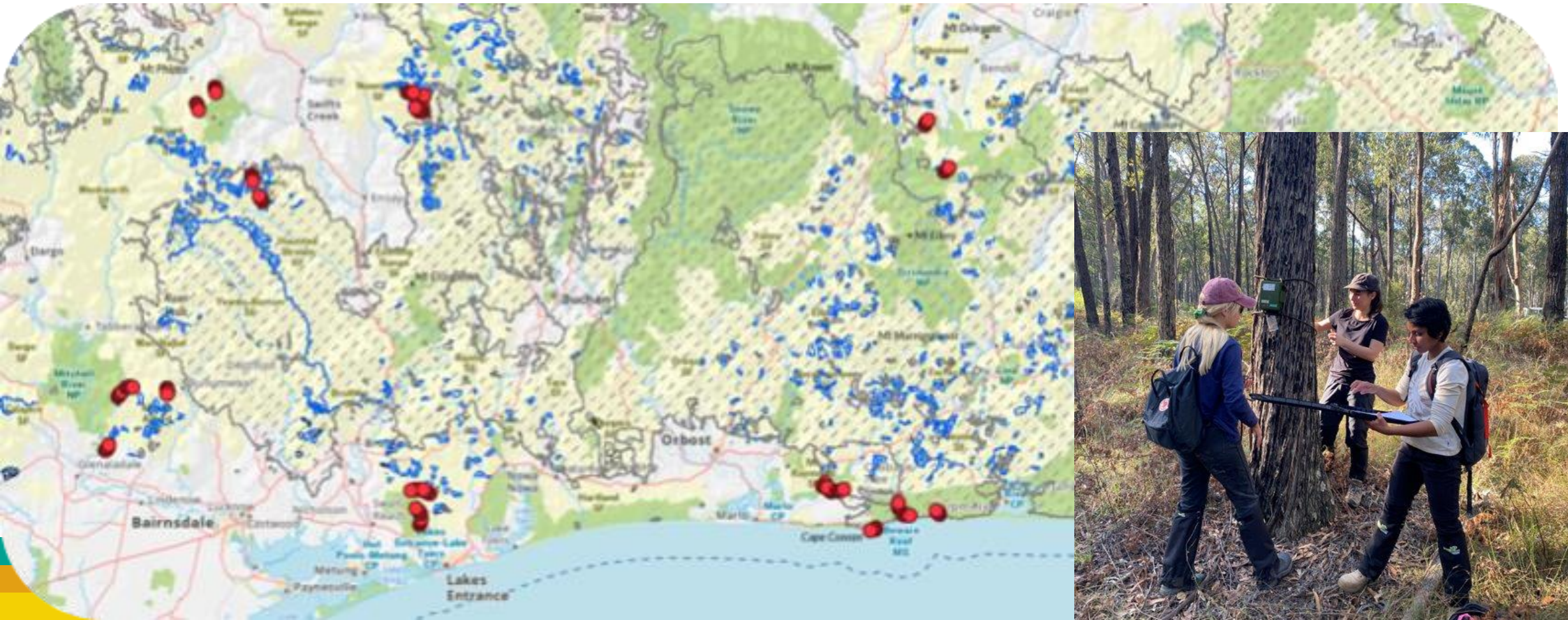
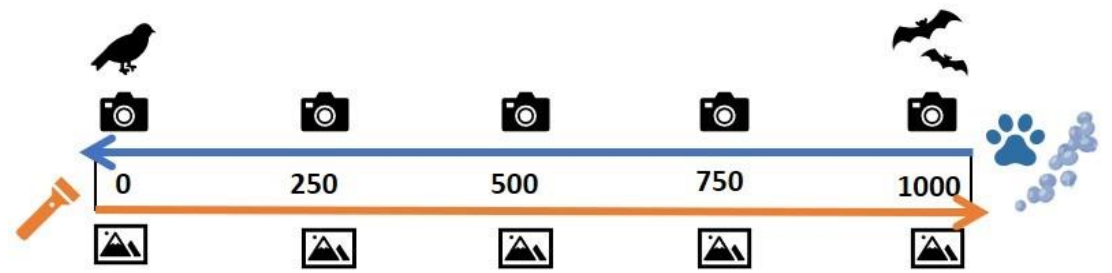
A: PRIVATE LAND

- Landowner knowledge & online data
- Training on monitoring equipment
- Landowners maintain equipment
- Habitat restoration plans
- VNPA data support



B: PUBLIC LAND

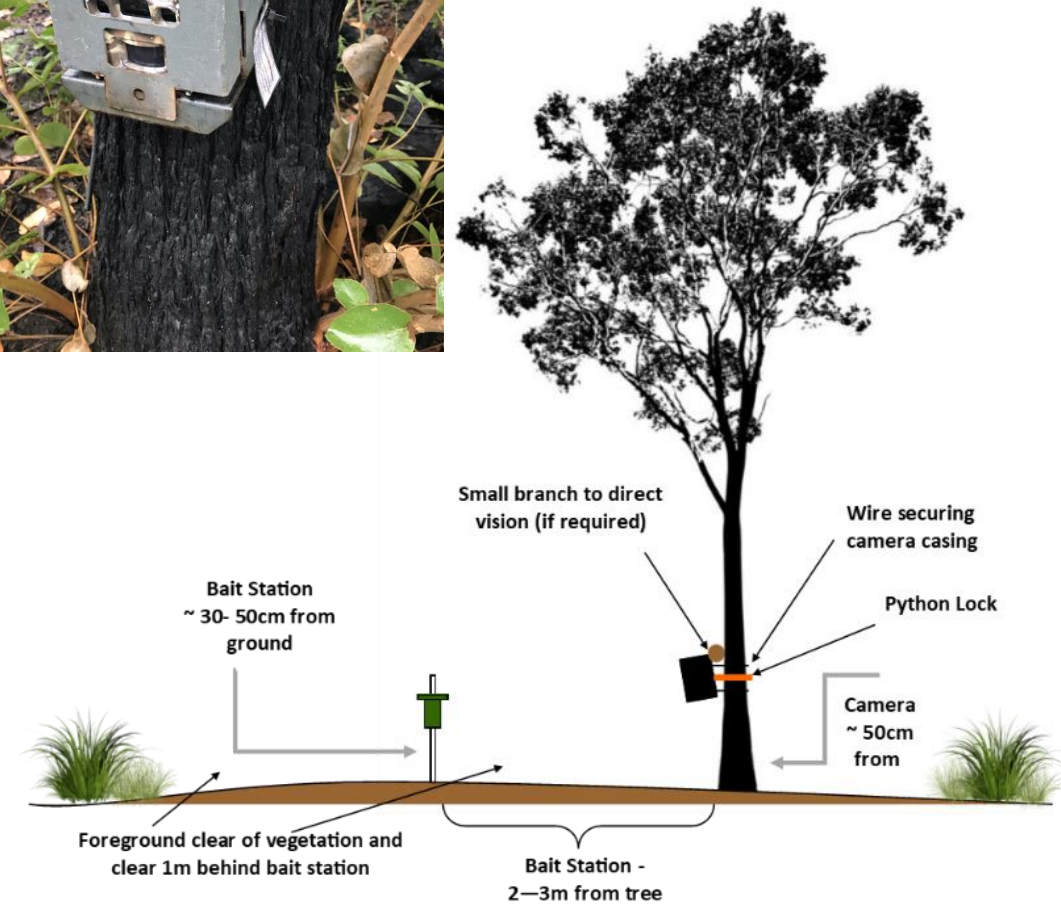
3-day expeditions, burnt, edge, at risk
1km transects, 5 methods



METHODS

MOTION DETECTION CAMERAS

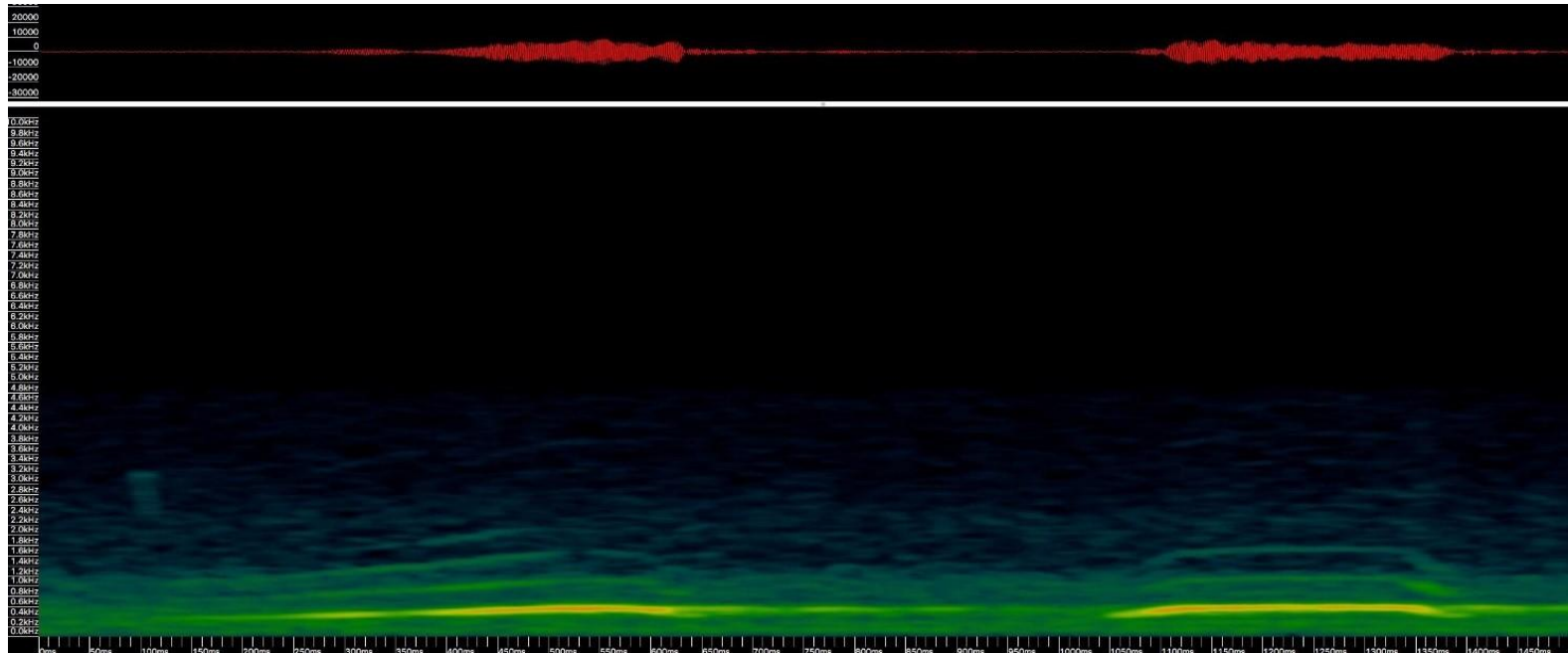
- Small (mainly terrestrial) mammals
- Possums / Gliders
- Bats





AUDIO RECORDERS (Song Meters)

- Birds, Possums, Gliders (acoustic recorders)
- Bats (ultrasonic recorders)
- Programmable: dawn chorus, dusk chorus, night
- Data analysis: listen, spectrogram (Arbimon)



SCAT, TRACK & DIGGING Surveys



SPOTLIGHTING & STAGWATCH Surveys



PHOTO POINTS

2019



2021

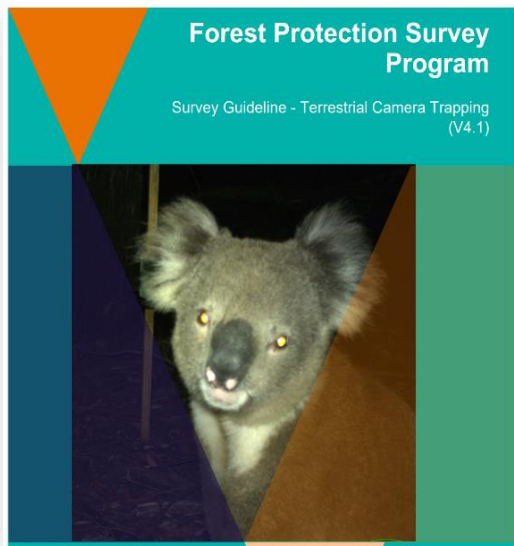


DIY CITIZEN SCIENCE TRAINING PROGRAM

MODULE 1:

Project planning

- Aims
- what information?
- target species
- methods, timing
- equipment
- permits & permissions



MODULE 2:

Fieldwork (in person)

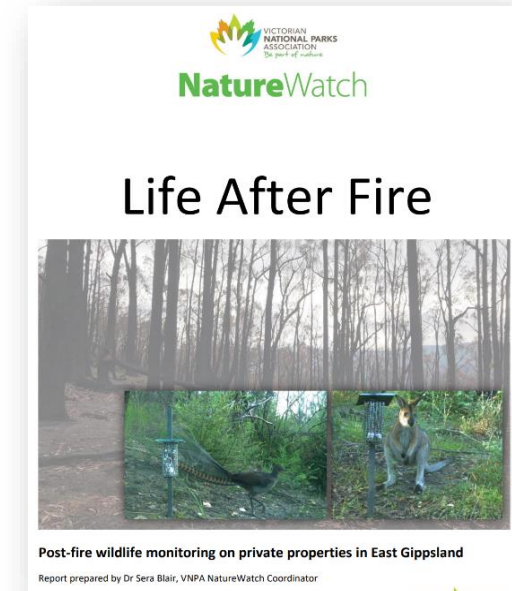
- Cameras
- Audio recorders
- Spotlight surveys
- Scat & track surveys
- Avenza maps
- Data recording



MODULE 3:

Data & Outcomes

- Managing data
- Analysing data
- Sharing the data
 - Victorian Biodiversity Atlas
 - Direct reporting





Life After Fire project for Mount Cole & Pyrenees ???

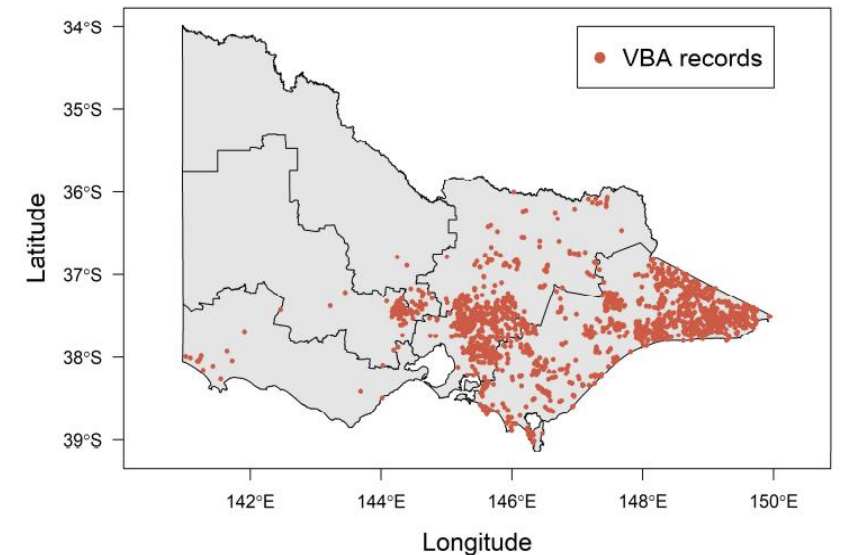
Run Module 1 in March, Module 2 April, Module 3 in September / October.

General fauna surveys plus targeted look for Brush-tailed Phascogales and Powerful Owls

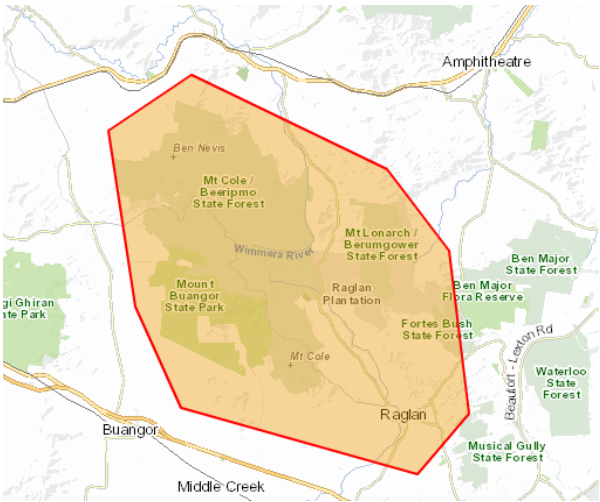
Paired with fieldwork expeditions with NatureWatch volunteers in Mt Cole State Forest

Limitations for NatureWatch

- no specific funding (limits time & longevity)
- audio data
- limits on expertise & activities we can do



Victorian Biodiversity Atlas – listed threatened animals in the Mount Cole / Raglan area

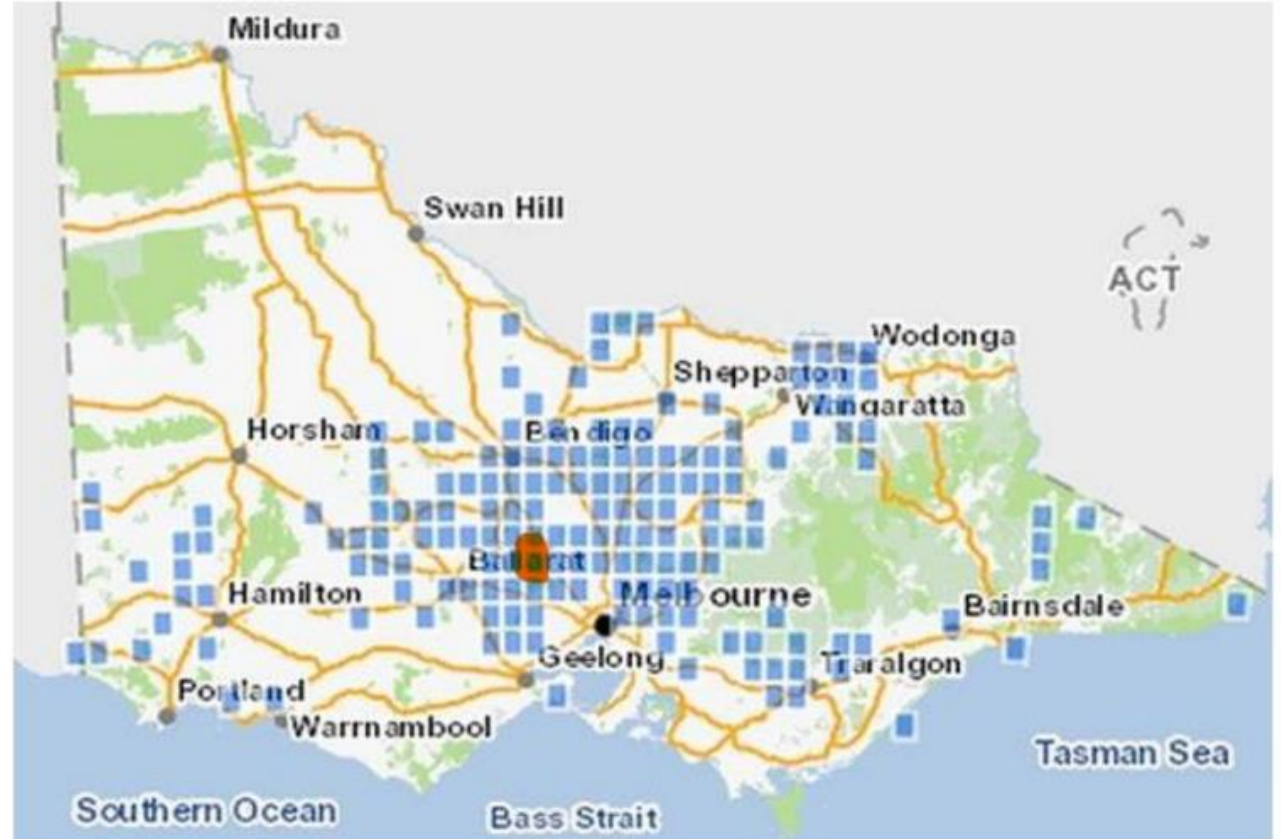


<i>Ardeotis australis</i>	Australian Bustard
<i>Antigone rubicunda</i>	Brolga
<i>Ninox connivens</i>	Barking Owl
<i>Ninox strenua</i>	Powerful Owl
<i>Callocephalon fimbriatum</i>	Gang-gang Cockatoo
<i>Hirundapus caudacutus</i>	White-throated Needletail →
<i>Melanodryas cucullata</i>	Hooded Robin
<i>Pyrrholaemus sagittatus</i>	Speckled Warbler
<i>Grantiella picta</i>	Painted Honeyeater
<i>Anthochaera phrygia</i>	Regent Honeyeater
<i>Phascogale tapoatafa</i>	Brush-tailed Phascogale
<i>Petaurus australis</i>	Yellow-bellied Glider
<i>Pseudophryne bibronii</i>	Brown Toadlet
<i>Pseudophryne semimarmorata</i>	Southern Toadlet
<i>Litoria raniformis</i>	Growling Grass Frog ←



Brush-tailed Phascogales / Tuan (*Phascogale tapoatafa*)

- Listed as Vulnerable in Victoria
- Forage for insects and spiders under rough 'stringy' bark, in rotting logs, and leaf litter.
- Dens in tree hollows, tree stumps, or under bark flakes
- Mate in late autumn – early winter, males die
- Females wean young till late winter, die soon after



VNPA 2020 MONITORING



Cameras

Pyrenees

- Agile Antechinus
- Yellow-footed Antechinus
- Common Brushtail Possum
- Common Ringtail Possum
- Koala
- Swamp Wallaby
- Eastern Grey Kangaroo
- Krefft's (Sugar) Glider
- Feathertail Glider
- Treecreeper spp
- Raven spp
- White-winged Chough
- White-browed Scrubwren
- Pied Currawong
- Crimson Rosella
- Deer, Fox, Cat

Song Meters

Mount Cole

- Krefft's (Sugar) Glider
- Koala
- Common Brushtail Possum
- Mountain Brushtail Possum

- Southern Boobook Owl
- Australian Owlet Nightjar
- Powerful Owl
- Blue-winged Parrot

Spotlighting

Mount Cole

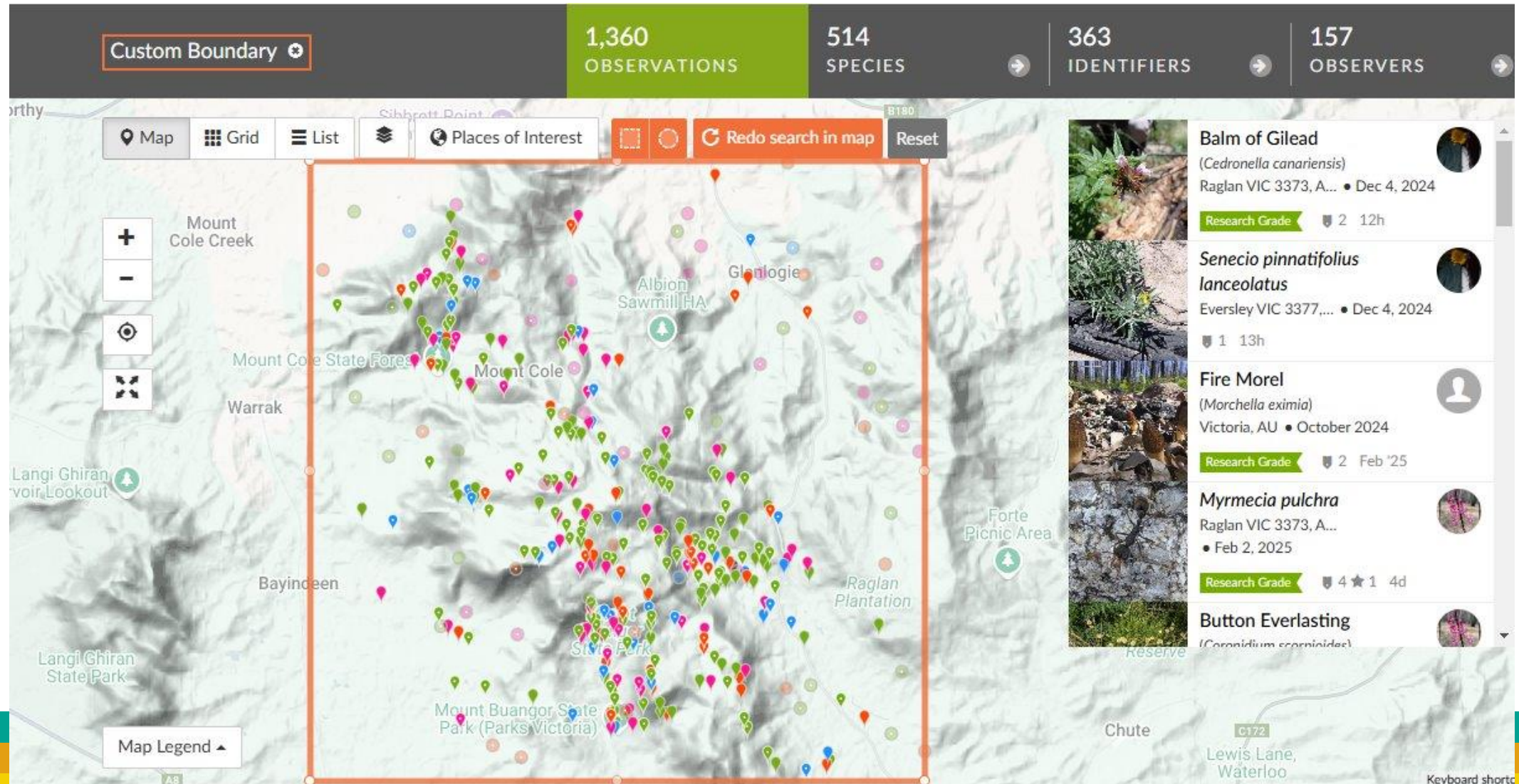
- Koala
- Eastern Grey Kangaroo

Pyrenees

- Common Brushtail Possum
- Koala
- Feathertail Glider

SUGGESTIONS:

- Build a list of flora and fauna for your property – pre and post fire.
- Start a group iNaturalist project for the region



Brush-tailed Phascogale (*Phascogale tapoatafa*) VU ★ Research Grade



weedyk8

2 observations

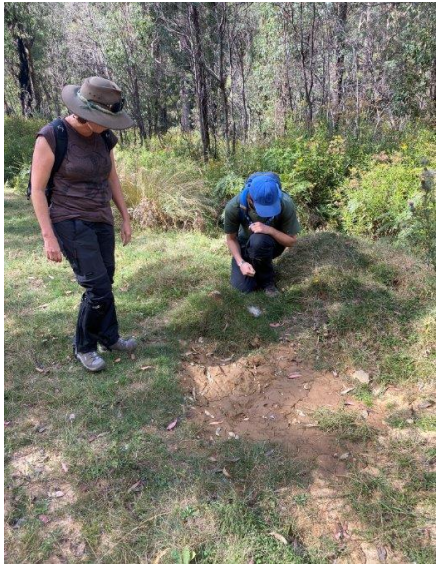


Observed:
Sep 15, 2024 · 18:05 AEST

Submitted:
Sep 15, 2024 · 18:05 AEST



- Rotating property fungi surveys in late Autumn / early Winter.
- Rotating property flora surveys in the Spring.
- Use guidebooks, apps, VBA lists and iNaturalist to ID.
- Do photo points on your property



QUICK SUGGESTIONS:

- Link revegetation with forest floor structures like stumps / logs / log piles / branches for habitat
- Integrate art into the healing journey and to bond the community. Exhibition?
- Get tertiary student placements to help with collecting stories / knowledge, wildlife data collection and analysis



Thanks!