

### Weeds and Pests on Public Land 2022-2023





WPPL Collaboration Event in the Grampians in 2023 - Ally Hughes.

The <u>Weeds and Pests on Public Land (WPPL) Program</u> funds landscape-scale weed and pest projects, focusing on protecting Victoria's biodiversity. The program began in 2005 and is delivered by DEECA and Parks Victoria along with now 42 partners and key stakeholders across Victoria. In 2022-2023, the WPPL Program continued to fund eight flagship projects across Victoria including:

- Glenelg Ark, Grampians Ark, and Southern Ark projects targeting foxes to protect and benefit a wide range of native mammals, birds, and reptiles.
- Central Highlands Eden, Glenelg Eden, and Otway Eden projects controlling high risk weed species that threaten native plants and animals.
- The Mallee Bounceback project which aims to control rabbits to restore semi-arid woodlands.
- The Weeds at the Early Stage of Invasion (WESI) project which builds the capability of land managers to respond to early invader weeds.

### WPPL Program Achievements in 2022-2023



**10** Iditional Ov

Traditional Owner groups engaged or involved



18
Staff directly

employed



21

Community
engagement
events delivered
by projects



2,254

Volunteer hours



42

Delivery partners and key stakeholders



721,111

Total hectares of predator control

**457,698 Ha** in priority locations



50,239

Total hectares of herbivore control

**49,084 Ha** in priority locations



9,407

Total hectares of weed control

**4,888 Ha** in priority locations



\$1.91 mill

of co-investment provided by project partners

### Partnering and engaging with Traditional Owners

# Weeds at the Early Stage of Invasion (WESI)

WESI ran a Swifts Creek, Gippsland, weed identification training event that was attended by 8 First Nations people, including participants from Moogji Aboriginal Council East Gippsland and Bidwell First Nations Clans Aboriginal Corporation

### **Mallee Bounceback**

First People of the Millewa Mallee Aboriginal Corporation Cultural Rangers undertook rabbit control in Taparoo Murray Sunset National Park allowing them to build skills and knowledge regarding rabbit control

### **Southern Ark**

Partnered with Moogji Aboriginal Council East Gippsland to deliver the fox baiting program across the Murrungowar area



Rabbit fumigation being undertaken by a Cultural Ranger at Taparoo – Rhett Cameron.

### **Mallee Bounceback**

#### Protecting and restoring the biodiversity of semi-arid woodlands in north-western Victoria

**50,239 Ha** of rabbit control

**3,124** rabbit warrens fumigated

**2,334** rabbit warrens ripped

**96%** of transects with an average of **1 or fewer rabbits** per spotlight kilometre

- No evidence of rabbit browsing pressure at most sites
- Increase in juvenile canopy trees
- Semi-arid woodlands still in decline and need additional intervention such as revegetation

#### 2 engagement events

- Neds Corner Safe Haven Workshop
- Parks Victoria field visit to Pippins
   Management block and Murray
   Sunset National Park



Ripping rabbit burrows at Taparoo – Rhett Cameron.



Pine regeneration at Wyperfeld National Park – Rhett Cameron.

### Weeds at the Early Stage of Invasion

Supporting Victorian land managers to manage environmental weeds threatening our native biodiversity

3 <u>newsletters published</u>

3 school visits
2 training events
delivered with 51 people
attending

#### Social media engagement

**5** social media accounts **2,963** followers across all social media platforms (Facebook, Instagram & X/Twitter) **34,988** Tweet (X) impressions

WESI has shared its resources with over **68 stakeholders** via its newsletters, social media engagement, and training events







From left-right: the weed,
Amazon Frogbit, found in
Bairnsdale – Bianca
Gold; informal weed
training in Gunbower –
Kate Blood; weed ID in
action with the help of
apps and good quality
photos – Bianca Gold.

# Weeds at the Early Stage of Invasion

# Case Study: First record of the weed, Pencil Cactus, found in Victoria

Pencil Cactus (*Cylindropuntia leptocaulis*) is listed as a Weed of National Significance in Australia. It has been introduced from Southwest USA and northern Mexico. Until April 2023, this weed species had not been recorded in Victoria.

The WESI Team, in collaboration with DEECA's Loddon Mallee Region, undertook a field survey and found 35 plants over an area of approximately 400-700m<sup>2</sup>. The site of this new invasive cactus is on public land in north central Victoria, about 70km north of Bendigo. All plants have been mapped and will be entered into the Victorian Biodiversity Atlas.

To raise awareness about the new cactus, WESI did a radio interview with the ABC. Information about the new weed was successfully shared on social media, in the WESI newsletter, and in subsequent weed ID training.

The WESI Team is supporting local land managers with its eradication.



Pencil Cactus discovery with Kate Blood pictured – Bianca Gold.

### **Central Highlands Eden**

Reducing the impact of high threat weeds to protect native biodiversity of Victoria's Central Highlands

**4,476 Ha** of weed control

10 partners involved

On-ground works in **20 (of 24) biodiversity asset areas** 

WeedStop training occurred for the first time since 2019, with **34 participants** completing the accredited course in November 2022

20 eradication target species18 containment target species







From left-right: Field trip to Lake Mountain to talk about Central Highlands Eden weed control – Sally Lambourne; the weed, Creeping Bellflower (Campanula rapunculoides), in the project area – Bradley Matthews; WeedStop training class – Sally Lambourne.

### Glenelg Eden

Reducing the impact of high threat weeds to protect the native biodiversity of Victoria's far south-west

**4,246 Ha** of weed control

2 training events delivered

- Building capability of Gunditj Mirring Traditional Owners to respond to high threat weeds
  - Workshop with South West TAFE students

The team treated weeds at **250 sites** across the landscape this season:

76% of all eradication targets treated17 species of priority weeds for containment infestations3 species of priority weeds for asset protection infestations









Williams all photos.

# **Otway Eden**

#### Reducing the impact of environmental weeds to restore the biodiversity of the Otway Ranges National Park

**686 Ha** of weed control

**13** delivery partners

**371** volunteer hours

**15** species of weeds were targeted for eradication

**25** species of priority weeds for containment infestations

**45** species of priority weeds for asset protection infestations

Control areas were extended to cover new infestations of South African Weed Orchid in **Metallic Sun Orchid population sites** in the Port Campbell Area









# **Otway Eden**

### Key learning: Pruning saws for woody weed removal

The Otway Eden team have found the purchase of a relatively inexpensive item – a small battery-powered pruning saw – has made woody weed control much more efficient.

Traditional chainsaws are heavier and therefore harder on the operator, and comparatively less safe. These small saws are ideal for cutting woody weeds with a diameter less than 15cm.

As they don't use petrol they are also more environmentally friendly, don't expose the user to fumes, and help to reduce the carbon emissions associated with weed control.

Weed removal in the Great Otway National Park – Matthew Russell.



# **Glenelg Ark**

#### Landscape-scale fox control to protect the native biodiversity of Victoria's far south-west

**73,630 Ha** of fox control

**13,000** baits deployed for fox control through **26** treatment rounds

The annual monitoring program was delivered in October 2022

Over **100,000 images** from camera traps were collected and processed

#### **3+ engagement presentations**

to South West TAFE students, Country Fire Authority members, & field staff about the risks of Phytophthora







From left-right: wet conditions in the Glenelg Ark project area in 2022-2023; Community engagement in action; Phytophthora dieback observed in Grass-trees in the project area – Glenelg Ark team all photos.





# **Glenelg Ark**

#### Case Study: Ecological monitoring in the Glenelg Ark project

In June 2023, Alan Robley and Paul Moloney from the Arthur Rylah Institute (ARI) produced the 2022 monitoring and evaluation update for the Glenelg Ark project with assistance from Glenelg Ark lead Ethan Le Duc.

This was the 13<sup>th</sup> report produced on the project and touches on the progress made in achieving biodiversity benefits by reducing levels of fox predation. Three native species are the focus of this monitoring: Common Brushtail Possum (*Trichosurus vulpecula*), Long-nosed Potoroo (*Potorous tridactylus*) and Southern Brown Bandicoot (*Isoodon obesulus*).

The report found that colonisation and/or survival rates for Long-nosed Potoroo and Southern Brown Bandicoot were higher at locations with fox control than at locations without fox control. Common Brushtail Possums were less influenced by fox control, although at areas with fox control their rates were higher.

There was also some evidence that the Short-beaked Echidna (*Tachyglossus aculeatus*) may also have benefited from this ongoing fox control, and this needs further investigation.

Text taken from the report:

Robley, A., Moloney, P.D. and Le Duc, E. (2023). Glenelg Ark—2022 monitoring and evaluation update. ARI Technical Report Series No. 358. DEECA, Heidelberg, Victoria.



Setting up a camera for monitoring native and invasive species within the Glenelg Ark footprint – Glenelg Ark team.

# **Grampians Ark**

#### Landscape-scale fox control to protect native mammals in the Grampians National Park

**162,779 Ha** of fox control

11,150 baits deployed

**1,854** volunteer hours

**7** delivery partners

**3,000+** camera nights and **8,784** trap nights (Elliott & Cage traps) monitoring small mammal populations

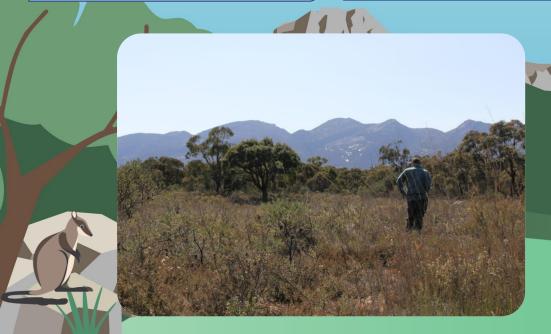
**2 Long-nosed Potoroo's** were fitted with GPS trackers, the first capture in the Gariwerd landscape in almost 20 years

Increased capture of **Southern Brown Bandicoot's** at long-term monitoring sites

The Grampians Ark team hosted

3 work experience students and
ran 3 training events

The autumn Great Gariwerd Bird Survey recorded **1,796** individual birds across **60 species** 





From left-right: bird watching and identification in the Great Gariwerd Bird Survey – Kailee Savoia; Southern Brown Bandicoot (Isoodon obesulus) found in project mammal monitoring – Deakin University.



### **Southern Ark**

Landscape-scale fox control to protect the native biodiversity across eastern Victoria

**484,702 Ha** of fox control

**16,340** fox baits deployed with **26% bait take** 

**9** community events & presentations **1** radio interview

2 DEECA Yammer posts5 DEECA Gippsland Facebook posts

Camera-trap monitoring of **679 sites** undertaken in 2022

Sites were surveyed for 35 nights, equating to **23,765** camera-trap nights

Over **2.6 million images** are currently being analysed in 2023-2024



Marty Healey from the Southern Ark team teaching Gippsland Grammar students about camera trapping – Andy Murray.

### **Southern Ark**

#### Case Study: Community engagement by Southern Ark

The Southern Ark team led the charge in 2022-2023 with excellent community engagement. See below for a snapshot into the events they presented at or hosted to promote their work and to share their project's learnings:

- Provided Gippsland TAFE students with an overview of the Southern Ark project.
- Provided members of the Bidwell Nation an overview of the project.
- Engaged over 100 Year 9-10 students from Gippsland Grammar, giving them an overview of the Southern Ark project and having them carry out cage and camera-trapping activities.
- ABC Gippsland radio interview on Long-nosed Bandicoots.
- Provided a project update to community in Mallacoota, Goongerah Hall, Wairewa Hall, and Tubbut Community Hall.
- Presented at "The Nature of the Bluff" (covering Red Bluff, part of Lakes Entrance-Lake Tyers Coastal Reserve, baited by Southern Ark)
- Southern Ark overview at DEECA conference "Gipps-yarn".



Two years on from the Black Summer bushfires, the endangered long-footed potoroo has been detected at around 80% of the sites they were found pre-fires. Fox control across 1M hectares of East Gippsland by the Southern Ark team is helping long-footed potoroos bounce back.



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A DEECA Twitter/X post on the Southern Ark project – @DEECA\_Vic.

