



# 2022 NATIONAL LANDCARE CONFERENCE

TUESDAY 23 TO THURSDAY 25 AUGUST, 2022 INTERNATIONAL CONVENTION CENTRE, DARLING HARBOUR, SYDNEY

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# Environmental Biosecurity

Working together to protect what we love

Shalan Scholfield, Environmental Biosecurity Office

















## What is environmental biosecurity?







The management of risks to the natural environment, and to social amenity, of pests, weeds and diseases entering, emerging, establishing or spreading

# The impacts











# Social amenity & way of life











# Australia's biosecurity system







The goal of the national biosecurity system is to minimise adverse impacts of pests and diseases on Australia's economy, environment and the community while facilitating trade and the movement of plants, animals, people and products. Intergovernmental Agreement on Biosecurity

#### ANTICIPATE

Environmental scanning, intelligence, offshore surveillance, import risk analysis



Intl. arrangements, import conditions & permits, offshore audit and verification, capabilit building



#### SCREEN

Assessment and clearance, diagnostics, management and treatment, quarantine



### DETECT

Targeted and general surveillance, diagnostics, traceability



#### PREPARE

Response agreements and frameworks, support tools, simulation exercises, farm biosecurity surveillance, diagnostics,



#### RESPOND

Investigate and respond to exotic pest, weed and disease detections. Eradicate or limit spread

### **OFFSHORE**

Activities undertaken offshore to reduce the biosecurity risk associated with imported goods and natural pathways and keep the risks offshore.



#### AT THE BORDER

Activities in international airports, mail centres and seaports to reduce the likelihood of new pests and diseases entering the country.



**RECOVER &/OR ADAPT** 

Recover from incursions or adapt to deal

Reduce spread &minimise impact of established pests, weeds and diseases

DETECT

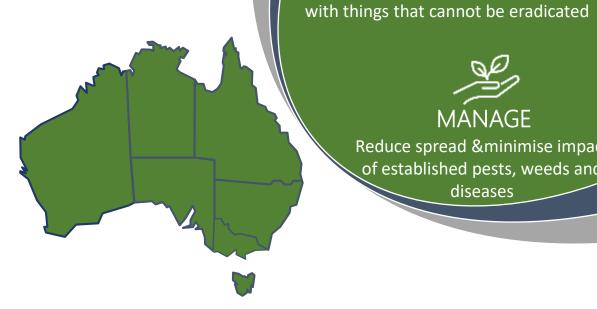
Targeted and general

traceability

### WITHIN AUSTRALIA

Activities in partnership with state and territory governments, industry, the community and land managers.





# Environmental biosecurity risks captured at the border in 2022







On imported cars



Iguana iguana (actual specimen)



Chromolaena odorata (Siam weed) seed intercepted during vehicle surveillance



In shipping containers



Calotes versicolor (DAWE image -actual specimen)



Nylanderia vaga (AntWiki)



In/on imported goods



Ailanthus altissima (tree of heaven) seeds intercepted on packaging (Image - DAWE)



Solenopsis geminata (Pests and Disease Image Library (PaDIL) image.



### Imported flowers contaminated with weed seed



Mikania micrantha seed intercepted on Chrysanthemum sp. fresh cut flowers.



#### Online shopping – illegal import of tarantula



Left: Therophosidae cf. *Psalmopoeus irminia* Right: Therophosidae cf. *Nhandu chromatus* (Department of Agriculture, Water and the Environment (DAWE))

# Toad-ally unbelievable







The toad was found in the shoe of an unsuspecting passenger at Cairns Airport. DEPARTMENT OF AGRICULTURE AND WATER RESOURCES

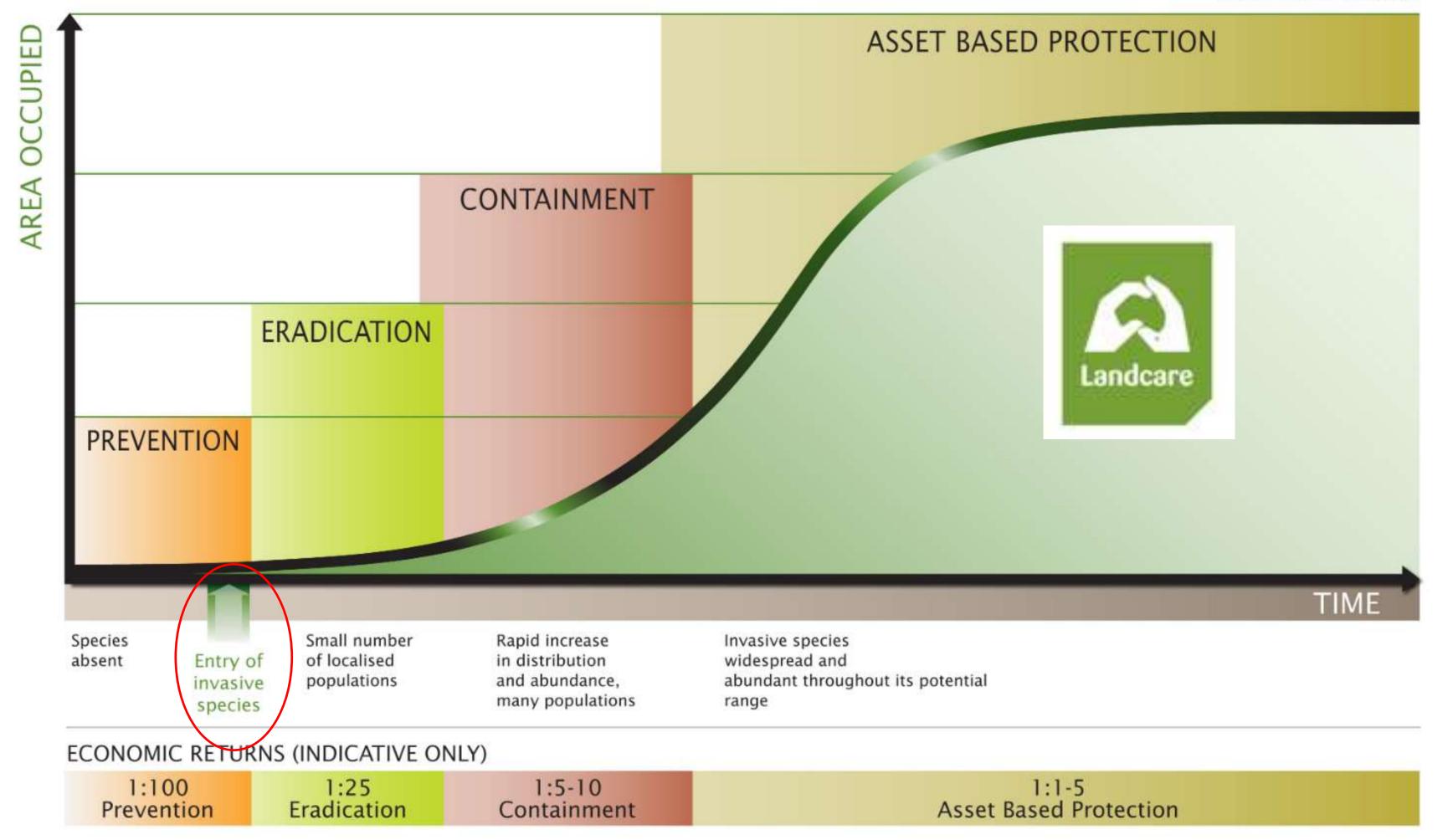


### Invasion curve



### GENERALISED INVASION CURVE SHOWING ACTIONS APPROPRIATE TO EACH STAGE

Version 1.0: 30 APR 2009



## How you can help

### community biosecurity in action



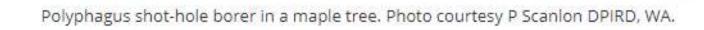




Brett Burdett discovered an influx of dangerous khapra beetles in Australia after he found purchased his new fridge. Picture: Dion Georgopoulos







### General surveillance & citizen science







**Guidelines for General Surveillance** Programs

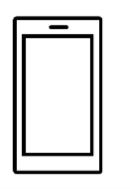
INSIGHTS AND CONSIDERATIONS FROM SYSTEMS THINKING AND NINE CASE STUDIES

Heleen Kruger • Jen Ticehurst • Alex van der Meer Simo



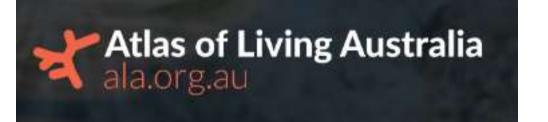


agriculture.gov.au/abares/research-topics/social-sciences/makinggeneral-surveillance-work/guidelines











# National Priority List of Exotic Environmental Pests Weeds and Diseases National Priority List of Exotic





- Released in November 2020
- 168 pests, weeds and diseases that pose the greatest biosecurity risk to Australia's environment or social amenity
- Eight biological or ecological groupings that cover:
  - Aquatic animal diseases
  - Freshwater invertebrates
  - Marine pests
  - Plant diseases
  - Terrestrial invertebrates
  - Vertebrates
  - Weeds and freshwater algae
  - Native animal diseases (wildlife diseases)



### Diseases changing our landscapes forever







The Chief Plant Protection Officer and Chief Environmental Biosecurity Officer at a Myrtle Rust field trip at Tallebudgera, QLD. Inset: Myrtle Rust affected leaf at Tallebudgera. Credit: Oliver Tester



Photos: (left) Wildflowers on Mondurup Peak, Stirling Range before Phytophthora dieback (Robert Olver), (right) Mondurup Peak, Stirling Range after Phytophthora dieback (Department of Parks and Wildlife WA)

## Delivering shared outcomes









- •\$5 million to support prickly acacia weed management in QLD
- 3-yearly national survey of agricultural land managers

2019 workshop with NRM Regions on biosecurity

 Developing program with NSW DPI to help Indigenous Rangers and other land managers with biosecurity



**Environmental Biosecurity Advisory Group** 

**National Biosecurity** Committee



### **Future opportunities**

- •\$9.8 million to scale-up work to control Gamba Grass
- National Established Weed Priorities Framework
- The Decade of Biosecurity Initiative (2021-2030)

### The future is in our hands









### Management

- Landcare! Keep up the fight against established pests, weeds and diseases
- Restore and regenerate landscapes to build resilience





### Surveillance

- Keep a look out for signs of pests or disease in the areas you work or travel
- If you see something that doesn't look right
  - ✓ Take a picture
  - ✓ Record the location
- ✓ Report it to your local state or territory biosecurity authority





### Arrive clean, Leave clean

- Clean boots and equipment when travelling between areas
  - Check clothing, hats and vehicles for weed seeds



agriculture.gov.au/sites/default/files/documents/arriveclean-leave-clean.pdf









### THANK YOU



For more information on environmental biosecurity visit: agriculture.gov.au/biosecurity-trade/policy/environmental

Or email: acebo@agriculture.gov.au

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