



Australian Government  
Department of Agriculture,  
Water and the Environment

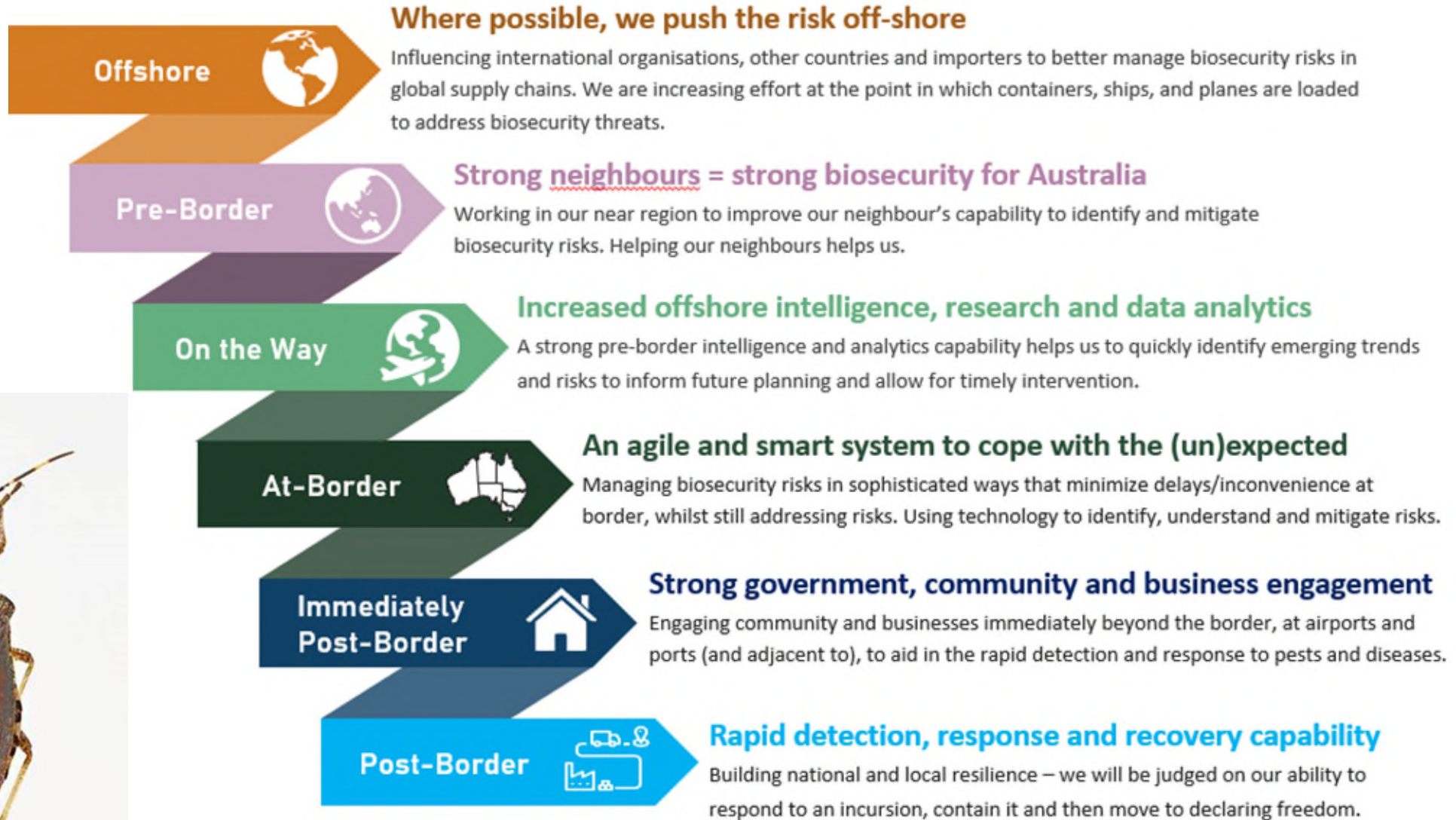
*Healthy environment*  
*Healthy landscapes*  
*Healthy people*

## Why biosecurity matters to Landcare

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Acting Chief Environmental Biosecurity Officer  
August 2021



# The biosecurity system



5 mm



# What is environmental biosecurity?

*Biosecurity protects Australian livelihoods and is vital to strengthening and supporting our environment and economy, including tourism, trade and agriculture. It underpins many aspects of our way of life.*

National Biosecurity Statement 2019

Our natural environment makes Australia unique. Biosecurity keeps it that way.



## Goal

A trusted and robust biosecurity system that embeds consideration of, and actions to address, exotic and emerging pests, weeds and diseases that threaten our natural environment, social amenity, and the resilience of our landscapes



## Vision

One system working together to protect our key environmental assets



### Understand the risks

Improve research, intelligence, data, risk assessment and prioritisation of pests, weeds and diseases, and the assets and values to be protected



### Prevent arrival of exotic pests, weeds and diseases to Australia

Appropriate regulatory powers and actions, and awareness activities that support the public and industry to fulfill their biosecurity obligations.



### Intercept at the border

Strengthen understanding and awareness, pathway analysis and commercial solutions



### Minimise spread and impact

Progress revised NEBRA, Invasives Plan framework, and national preparedness  
Manage pests, weeds and diseases that cannot be eradicated



### Prepare for and respond to incursions

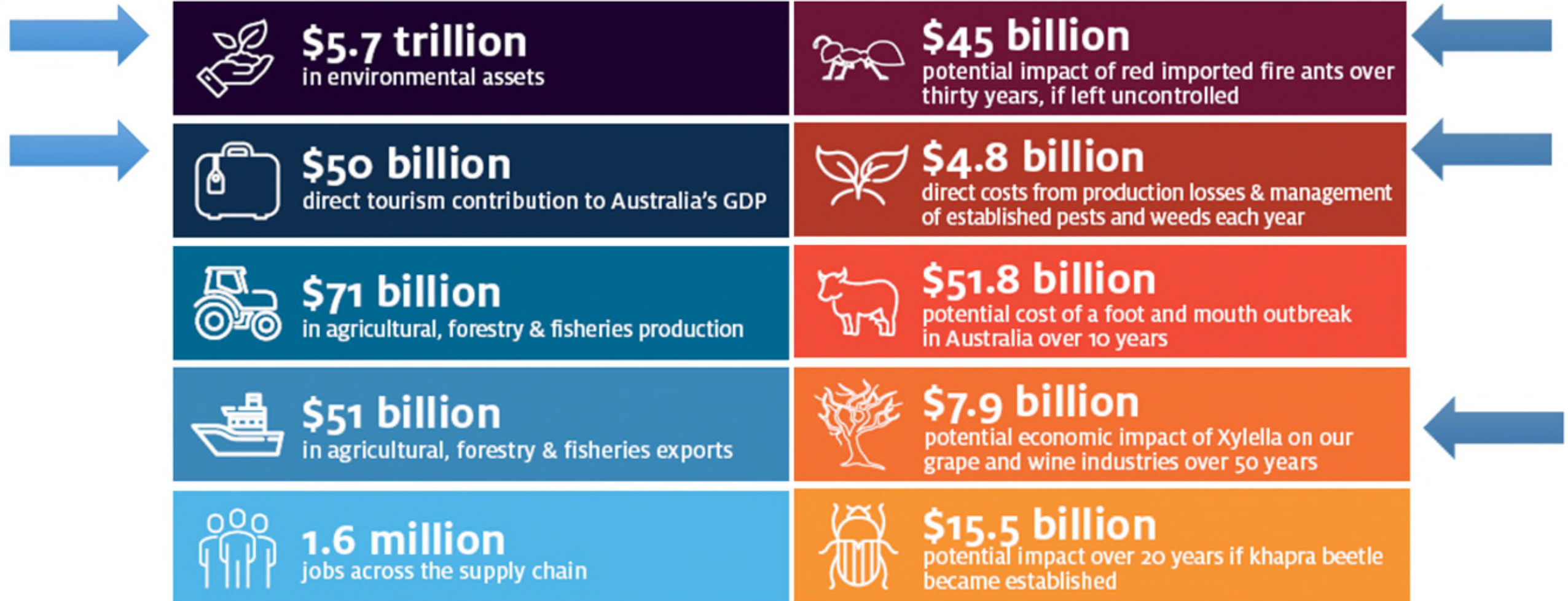
Support implementation of national, state and local plans and programs  
Put the community, including First Nations groups, at the centre of our actions



### Detect incursions beyond the border

Enhance surveillance, including through citizen science, and taxonomic /diagnostic capabilities

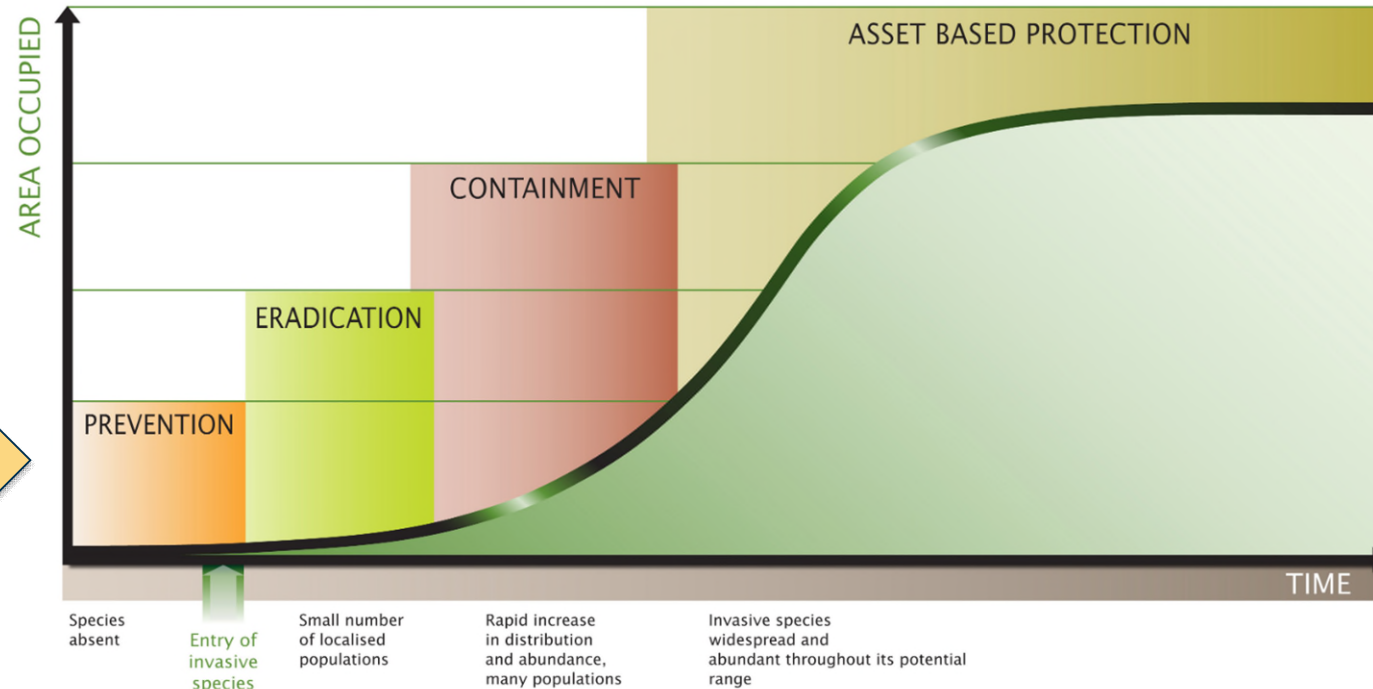
# Why does it matter?



# What do we do?

GENERALISED INVASION CURVE SHOWING ACTIONS APPROPRIATE TO EACH STAGE

Version 1.0: 30 APR 2009



Pre-border and border activities

National Priority List of Exotic Environmental Pests, Weeds and Diseases

Biosecurity import risk analysis and live import list assessment

Convention on Biological Diversity targets

National Environmental Biosecurity Response Agreement (NEBRA)

Established Pest Animals and Weeds Management Pipeline Program


Supporting Communities Manage Pest Animals and Weeds

+ a number of others




# Biosecurity is a partnership


-  Australian government
-  State and local government
-  Representative bodies  
e.g. industry, environmental, natural resource management and community groups
-  Research organisations
-  Individuals



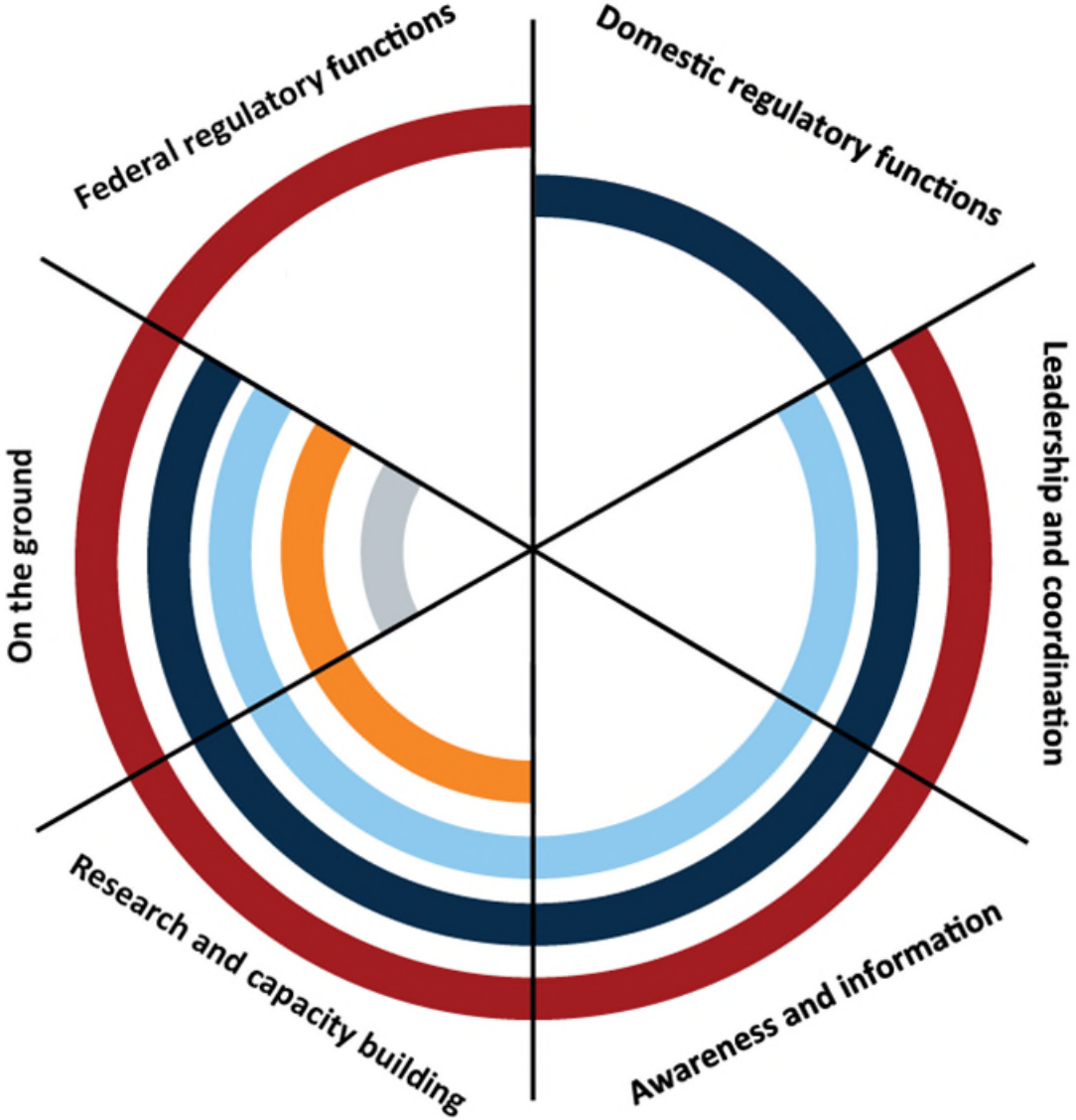
Improving community awareness, engagement and participation



A greater understanding of the personal and cultural values connected to Country and our environment



Effective collaboration to better manage biosecurity risk and response



# Myrtle Rust



The Butchulla Land and Sea Rangers surveying for Myrtle Rust with Dr Geoff Pegg (Department of Agriculture and Fisheries on K'gari (Photos: BLSR) <https://finia.org.au/2020/11/14/myrtle-rust-update/>



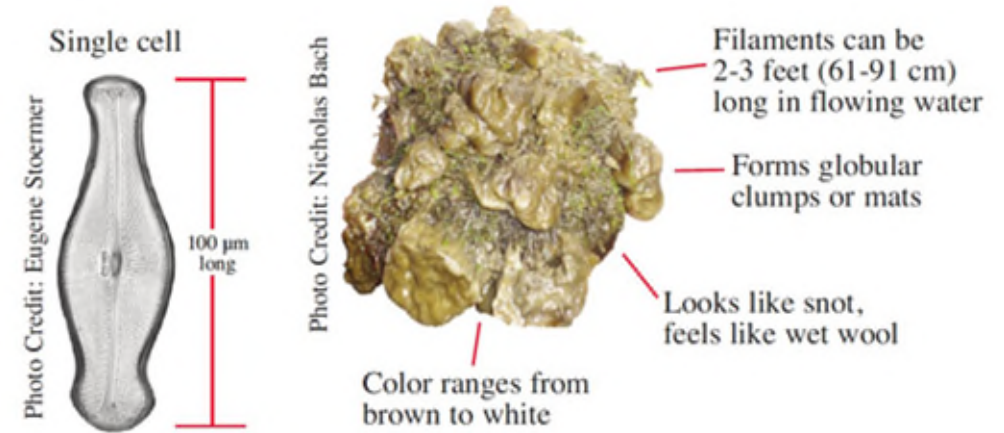
Myrtle rust infection of growing tips results in dieback and prevents flowering in *Melaleuca quinquenervia* <https://landcareaustralia.org.au/project/myrtle-rust-threat-australias-unique-biodiversity/>

- Endemic presence in eastern seaboard of Australia of myrtle rust *Austropuccinia psidii* pathovar *pandemic* – South Australia and Western Australia currently free
- Exotic strains pose a significant pathogenic threat to Australian native plants
- Entry into Australia through
  - Commodity imports – timber, nursery cuttings
  - Windborne spores – highly resistant but long distances
- Huge capacity for spreading once established and very difficult to eradicate and manage
- Exotic strains on the EEPL and NPPP
- NESP Threatened Species Recovery Hub projects
- National Myrtle Rust Action Plan and Symposium



# Didymo aka 'Rock Snot'

- Freshwater diatom found in the cool, nutrient-poor waters of northern Europe and northern North America
- Able to rapidly reproduce from a single cell
- Become an invasive species in its original range and is being found in new areas, including NZ South Island
- Has a range of adverse effects on freshwater ecosystems, as well as human and economic effects
- Once found in a waterway there is **no prospect of eradication**



<https://www.watershedcouncil.org/rock-snot---didymo.html>

Protect our waterways.

✓ CHECK ✓ CLEAN ✓ DRY

<https://www.ecan.govt.nz/your-region/your-environment/our-natural-environment/pest-management/check-clean-dry/>



<https://myrivershed.wordpress.com/2018/11/25/rock-snot-as-lovely-as-it-sounds/>



# Established pest animals



> Wild dogs  
*Canis familiaris*



> European foxes  
*Vulpes vulpes*



> European carp  
*Cyprinus carpio*



> Feral pigs  
*Sus scrofa*



> Feral cats  
*Felis catus*



> Feral deer  
*Cervidae spp.*



# Weeds

- Weeds of National Significance (WoNS)
  - 32 species
  - Raised awareness, understanding and reduced impact of widespread weeds.
  - Encouraged national partnerships to leverage support and resources
- National Established Weed Priorities (NEWP) framework
  - Co-designed national program
  - Consultation currently underway

[pestanimals&weeds@agriculture.gov.au](mailto:pestanimals&weeds@agriculture.gov.au)



<https://nt.gov.au/environment/weeds/weeds-in-the-nt/A-Z-list-of-weeds-in-the-NT/gamba>



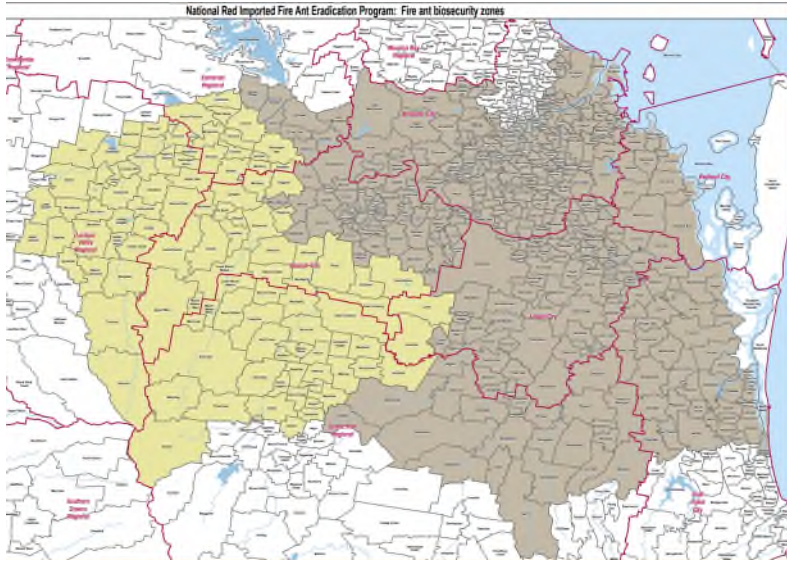
<https://theconversation.com/field-of-nightmares-gamba-grass-in-the-top-end-12178>



<https://wildmatters.com.au/national-established-weed-priorities/>



# Invasive ants



## Red Imported Fire Ants (RIFA)

- Approx. 2-6mm in length
- Repeated stings when disturbed
- Form supercolonies
- Economic, environmental and social amenity pest
- Known attraction and damage to concrete and electrical wires
- **National RIFA Eradication Program – 10 years and \$411.4m**
- **Multiple successful eradications**



## Argentine ants

- Approx. 3mm in length
- Attack nesting birds, hatching eggs and other native fauna
- Form supercolonies
- Can rob commercial beehives
- **Established in areas of mainland Australia**
- **Eradication underway on Norfolk Island**



## Yellow Crazy Ants

- Approx. 5mm in length
- Form supercolonies
- Spray formic acid to immobilise prey (including humans when threatened)
- Protect and 'farm' sap sucking insects
- **Established in areas of Australia**
  - **Christmas Island**
  - **Wet Tropics World Heritage Area**
- **Eradication has been successful in some places**



# It's all about the people



Gardening



Farming



Domestic travel



International travel



Online shopping



Recreational fishing



Bushwalking



Owning pets



Volunteers working, pulling Bitou bush on Brunswick Heads chemical free site.

<https://landcareaustralia.org.au/making-peace-with-the-weeds/>

[biosecurity.gov.au/report](https://biosecurity.gov.au/report)

[pestsmart.org.au](https://pestsmart.org.au)

[feralscan.org.au](https://feralscan.org.au)



# Biosecurity is **YOUR** responsibility

Found a biosecurity risk?

***SEE. SECURE. REPORT.***

**Call 1800 798 636**

**Report online: [awe.gov.au/report](https://awe.gov.au/report)**