

Ants and
Invertebrates in
Restoration

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Invertebrates in ecosystem function

- Improved water infiltration and reduced soil compaction
- Increased decomposition and nutrient cycling
- Pollination
- Seed dispersal +/-
- Influence plant abundance and composition, including phenology
- Regulating services (community equilibrium, disease, pest control, etc.)





Natural
recolonisation
will happen



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© Jaydon DB

Encouraging invertebrates in restoration

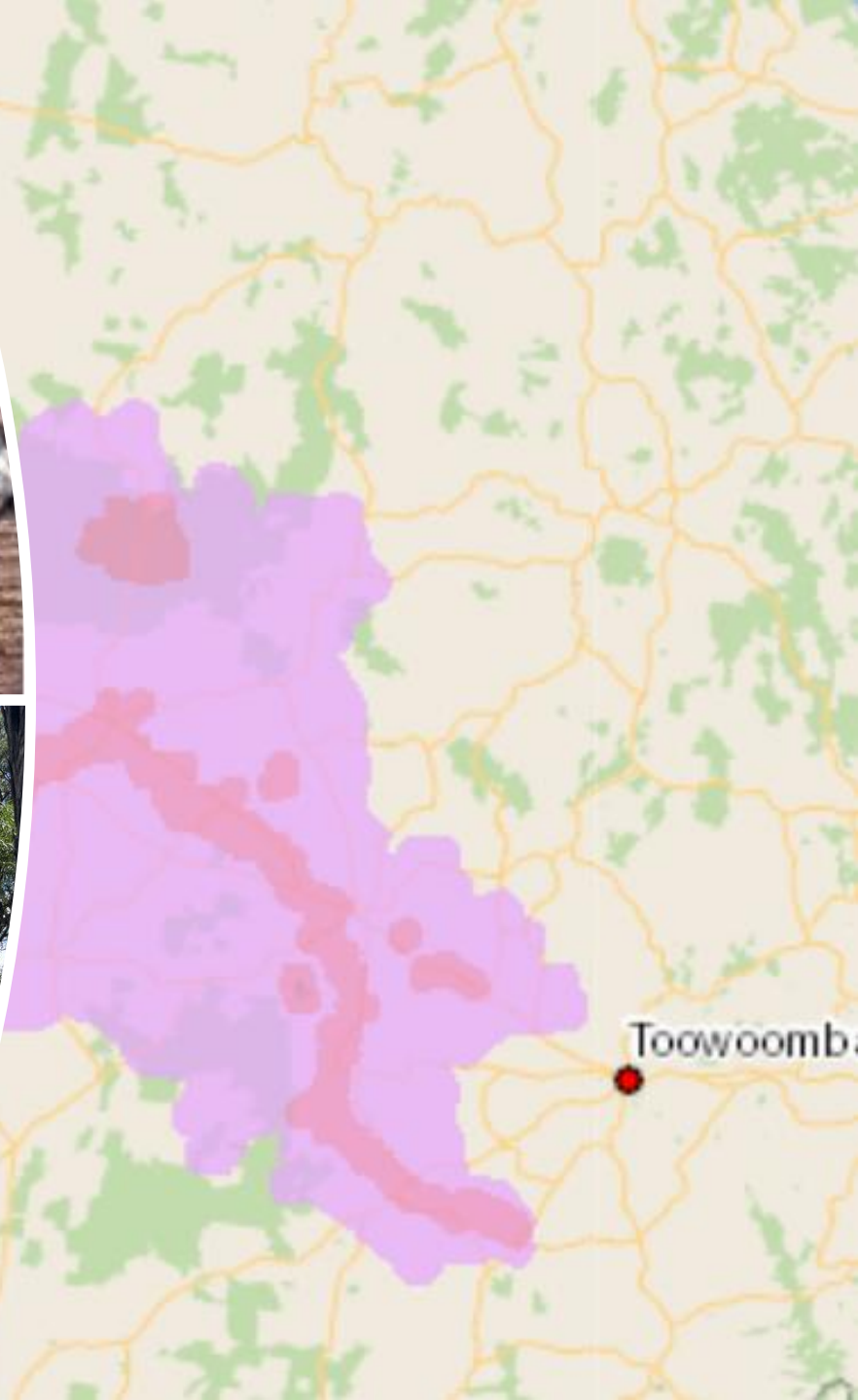
- Consider recolonisation capabilities
 - Provide stepping stones if required for low-mobile species
- Provide shelter, particularly moisture retention
- Variety of vegetation species and structure
- Introduce artificial habitat
- Reduce chemical applications where possible

Restoring threatened invertebrate habitat

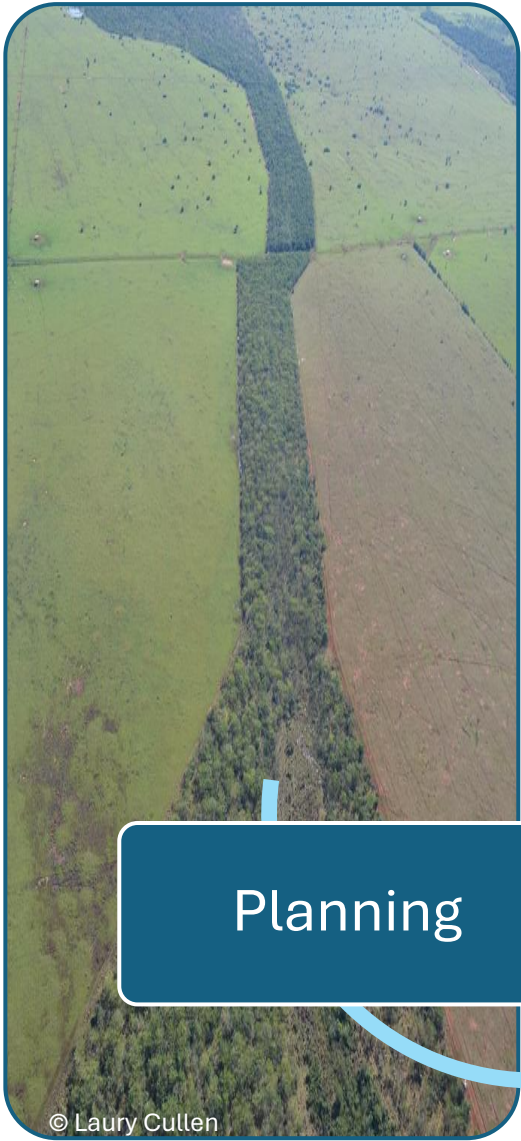
- Richmond Birdwing
Butterfly (vulnerable) and
Pararistolochia
praevenosa



- Brigalow Woodland Snail







Planning



Revegetation



Additional habitat features



Management Plans

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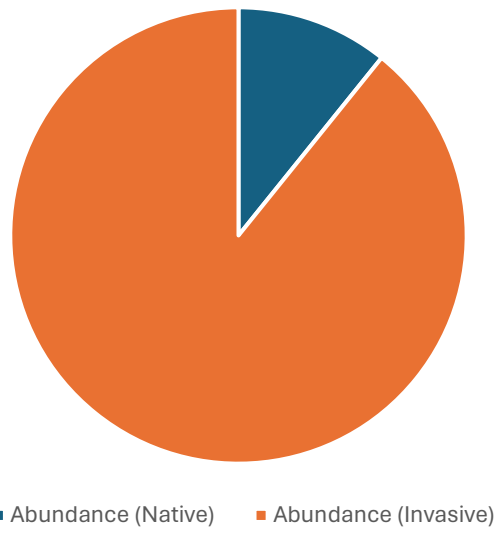
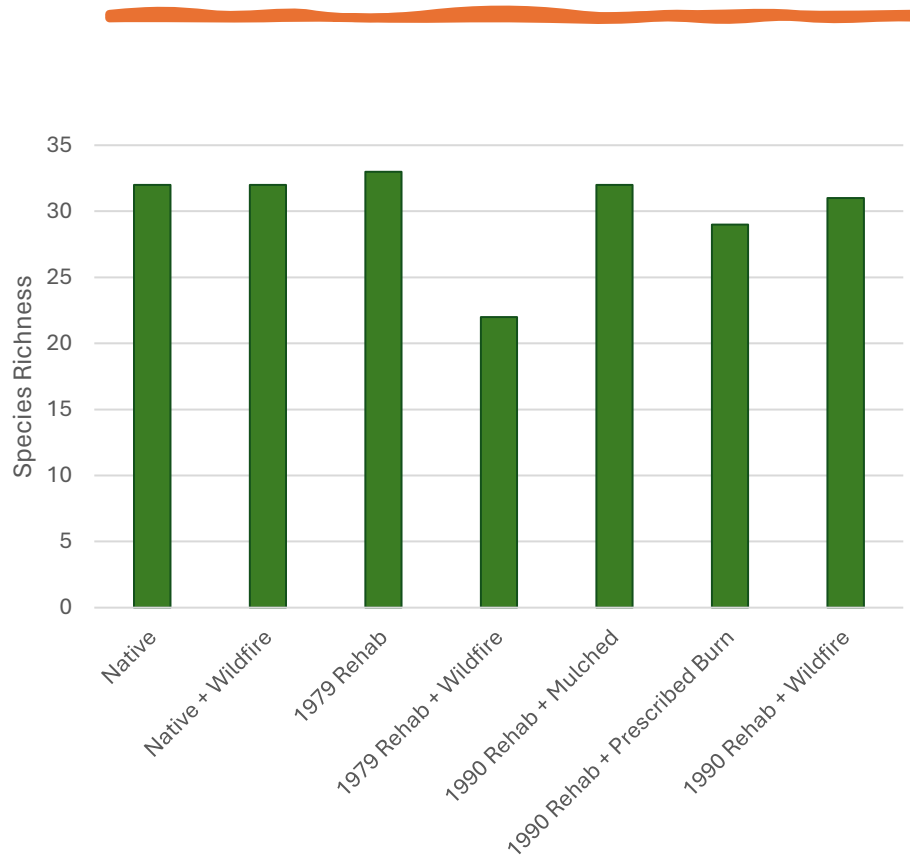
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Invasive ants in restoration



Coastal Brown Ant (*Pheidole megacephala*)



Red Imported
Fire Ants
(*Solenopsis
invicta*)

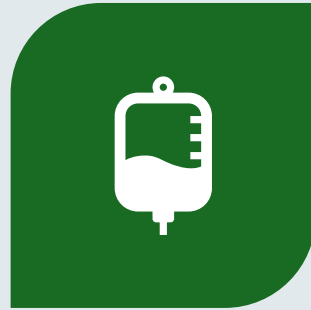




Impacts



ECONOMIC



HEALTH



SOCIAL/
LIFESTYLE



ENVIRONMENTAL





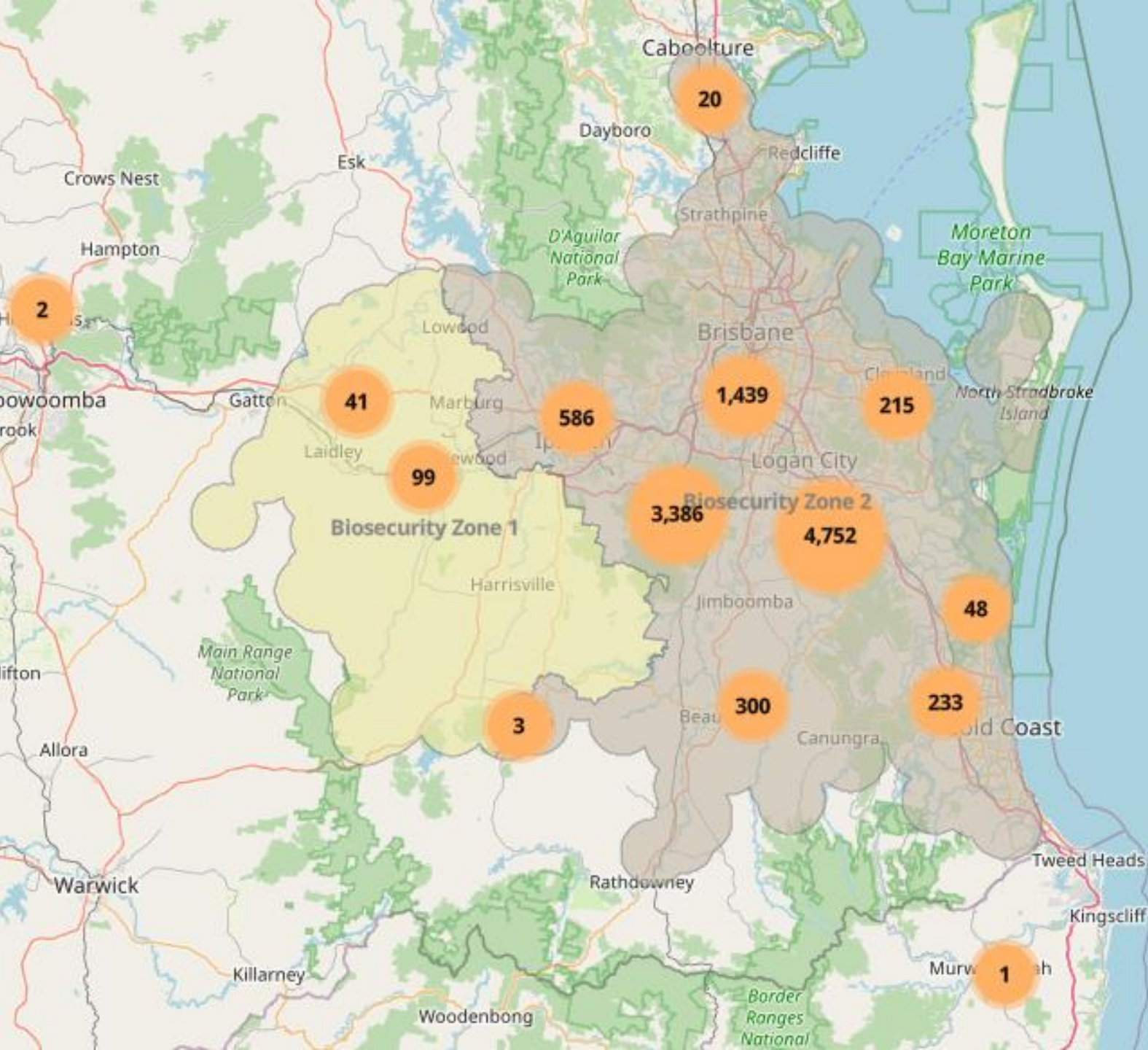
Fire ant spread



Known fire ant carriers

- Machinery
- Scaffolding / shipping containers
- Soil / quarry products
- Mulch / manure
- Hay
- Tubestock/pot plants
- Turf





Detections in the last 12 months

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Ways to prevent spread

Follow biosecurity restrictions, especially for moving carriers off-site

Washdown practices

Ensure carriers brought onsite are accredited

Treatment options

Disturbance options (mulch piles, etc.)



Other Invasive Ants

- In SEQ:
 - Argentine ants (*Linepithema humile*)
- Elsewhere in Australia:
 - Browsing ants (*Lepisiota frauenfeldi*)
 - Electric ants (*Wasmannia auropunctata*)
 - Yellow crazy ants (*Anoplolepis gracilipes*)
 - Tropical fire ants (*Solenopsis geminata*)

Further information on invasive ants

www.fireants.org.au

www.agriculture.gov.au/biosecurity-trade/pests-diseases-weeds/plant/tramp-ants

www.daf.qld.gov.au/business-priorities/biosecurity/invasive-plants-animals/ants

