## **LORD HOWE ISLAND** RODENT ERADICATION PROGRAM

The largest populated island to undertake a full scale eradication of rodents. What does it take for an operation of this magnitude to be successful?

## The total bait application of cereal pellets will contain a total of 1.2kg of the active ingredient brodifacoum.



2001

Mice and rats are responsible for the extinction of at least 5 endemic bird species and 13 invertebrate species since 1918. Inaction will threaten the unique biodiversity values on which World Heritage listing is based.



House mice (Mus musculus) arrived on Lord Howe Island before 1860. Black rats (Rattus rattus) were introduced in 1918 when the ship SS Makambo ran aground.

### Lord Howe Island phasmid:

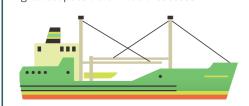


Including the world's rarest insect, the Lord Howe Island phasmid. Thought to be extinct since 1920, it was rediscovered on a rodent-free island in the Lord Howe Island Group in 2001.

# **SEP 2017-APR 2019**

Located 775km off the coast of Sydney, Lord Howe Island's remote location means the project requires extensive planning and logistics management. in conjunction with broad and ongoing community engagement to ensure the

greatest possible chance of success.



Most of the equipment and materials needed for the project will be shipped by the Island Trader.

Responsible for project planning



The Rodent Eradication Program combines aerial and ground baiting methodology.

### **AERIAL TEAM JUN/JUL 2019**

Aerial baiting will focus on the nonsettlement areas of the island. Two aerial applications are planned to kill all rodents in the non-settlement area. Baiting is scheduled for winter to decrease the risk to non-target native animals.

Each helicopter is equipped with a flight line Global Positioning System (GPS), recording accurate flight lines to ensure bait is applied with 100% coverage. Use of deflector buckets will minimise hait in the marine environment

### **AERIAL BAIT APPLICATIONS** 3-5 days each, 14-21 days apart. Scheduled for June/July 2019.

HELICOPTER PILOTS Highly skilled with experience flying in challenging conditions.

AERIAL SUPPORT CREW One helicopter engineer, one GIS officer, one loading supervisor, and five bait loaders.



## 2000

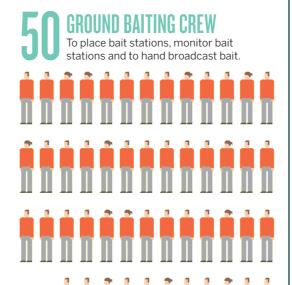
NON-SETTLEMENT AREAS Aerial baiting

Ground baiting using bait stations or hand

broadcasting.

## **MAY-OCT 2019**

Bait stations will be placed throughout the settlement area, with hand broadcasting in areas between bait stations and aerial areas.



**APR 2019-AUG 2021** 

**CAPTIVE MANAGEMENT CREW** Up to 85% of woodhens and 50-60% of currawongs will be housed during baiting by the Taronga Zoo team, who provide specialist care for the birds during the monitoring phase.



## **DOG TEAMS**

Two permanent biosecurity dogs and their handlers will monitor rodent activity. Specially trained rodent detection dogs and their handlers will also be used after the baiting.



Intensive rodent monitoring will occur for two years, followed by ongoing biosecurity monitoring. If no rodents are detected two years after the initial eradication the project will be deemed a success.

## **5** OUTCOMES **AUG 2021**

- Increased biodiversity.
- Enhanced world heritage values.
- ▼ Removal of rodenticide from Lord Howe Island permanently.
- ▼ Removal of domestic rodent impacts and related health concerns.
- Increased numbers and breeding success for birds such as the Kermadec petrel, masked booby and white-bellied storm petrel.
- Increased seeds and seedlings for numerous plant species including the critically endangered little mountain palm
- Recovery of endemic ground lizards and invertebrates such as land snails.
- ✓ Reintroduction of the world's rarest insect, the Lord Howe Island phasmid.
- Long term benefits to tourism and the island's economy through improved visitor experience



### **TIMELINE**



PRE-2017

2001-2004 Feasibility study 2007-2012 Initial trials

2012 Funding received. and community

Additional studies engagement.

SEP 2017-MAY 2019

2017

Recruitment planning and operational logistics

2018

Woodhen and currawong capture

MAY-OCT 2019 Ground baiting. **JUN/JUL 2019** Aerial baiting.

2019

MAY-NOV 2019 targeted health

monitoring. **AUG 2019** 

Environment and

Masked owl eradication. SEP-OCT 2019

2020

Currawong (staged) release. **NOV 2019** 

Woodhen release

JUL 2019-JUL 2021 Rodent monitoring and biodiversity henefits

2021

**AUG 2021** Final detection and

rodent monitoring.

**AUG 2021** 

Outcome of project declared.

Long term biodiversity monitoring over 3-10 years, plus ongoing rodent and biosecurity detection.

POST-2021

POST-2021

