

# ISLAND CONSERVATION RESEARCH

## Invading Rat Behaviour

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House mouse <*Mus musculus*>

12-30 g, 65-95 mm



Pacific rat <*Rattus exulans*>

40-80 g, 115-150 mm



Brown rat <*Rattus norvegicus*>

140-500 g, 400 mm



Black rat <*Rattus rattus*>

70-300 g, 160-220 mm



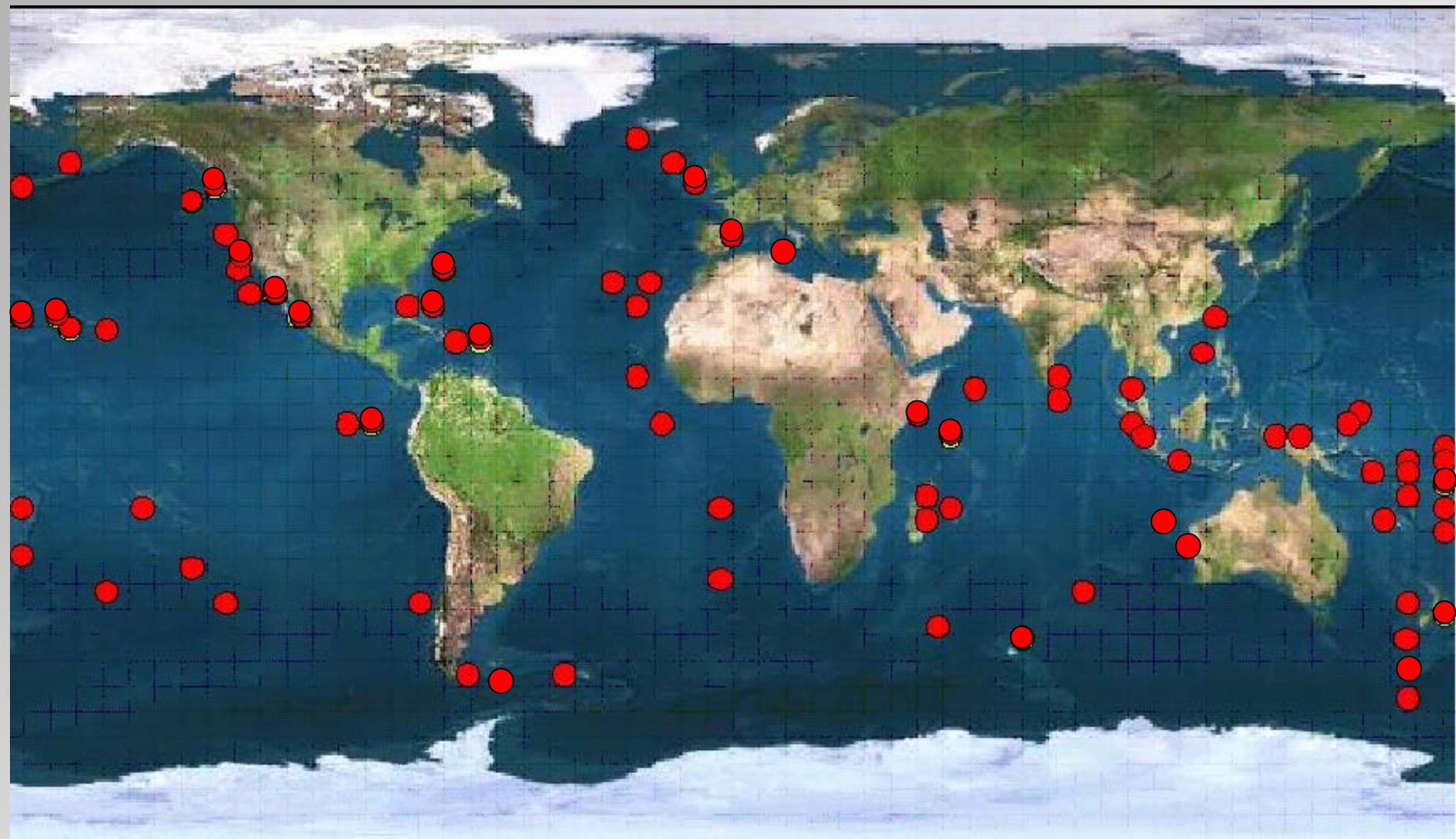
# New Zealand Islands

- 300 islands >5ha
- Many have been invaded by rats
- Rats are eradicated but can get back by swimming or boats





Commensal rodents have colonised >82% of all major island groups in the world





# Impacts on native island fauna

A photograph showing a brown rat perched on a branch, eating a small bird chick from a cup-shaped nest made of twigs and dried leaves. The background is dark with green foliage.

Rats are responsible for **40-60%** of all bird and reptile extinctions

# Razza the rat

- 'The Noises'
- Rodent eradication (1980s)
- Rodent reinvasion (2000s)



Razza was released on a rat free island  
After failing to catch him he swam 400m to another island before finally being caught



# Goat Island Marine Reserve

- First marine reserve (1975)
- University Marine Laboratory
- Rats eradicated 1994 but returned in 1996.  
Eradicated again 2005
- Single adult male rats released to study



# Conservation Benefits

- Tiritiri Matangi
  - Lighthouse & Farm (1864 - 1970s)
  - University Research & Restoration (1980s)
  - Conservation & Education (1990s)

