



THE UNIVERSITY OF
AUCKLAND
Te Whare Wānanga o Tāmaki Makaurau
NEW ZEALAND

Strategic Environmental Assessment for Predator Free New Zealand

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Target Species



Possums



Mustelids



Rats



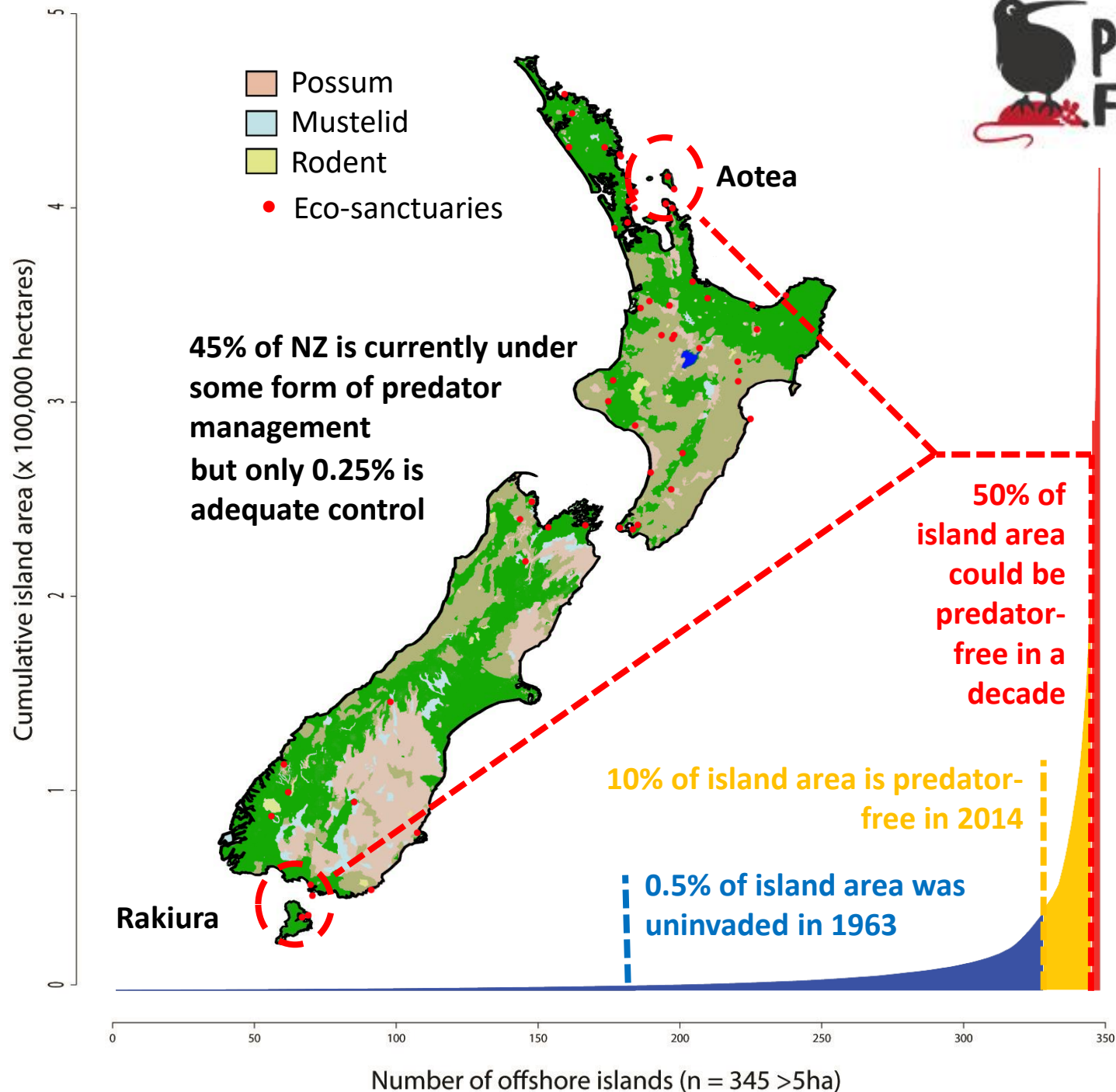
Mice

- Eight species constitute the predators in Predator-Free New Zealand
- They are being targeted as predators that cause overwhelmingly negative effects upon our native biota
- Because they are introduced invasive species, we are morally able to aim for complete eradication of them from New Zealand

PFNZ Narrative



- 2007: Les Kelly returns to NZ from Australia and motivated by the lack of avifauna starts discussions about a PFNZ
- 2012: Sir Paul Callaghan gives a last motivating speech on PFNZ to Zealandia
- 2013: PFNZ Trust established (bottom-up approach)
- 2016: Government announces PFNZ2050 (top-down approach)
- Predator-Free New Zealand: Conservation Country (2015, *BioScience*) classified the challenges of a PFNZ in to 5 categories:
 - Biological and Technical
 - Social and Political
 - Economic





Predator Free New Zealand 2050

Predator Free New Zealand is an ambitious, world-leading \$28 million project to fight back against the introduced pests which threaten our nation's natural taonga, our economy and primary sector.



Apply SEA to PFNZ

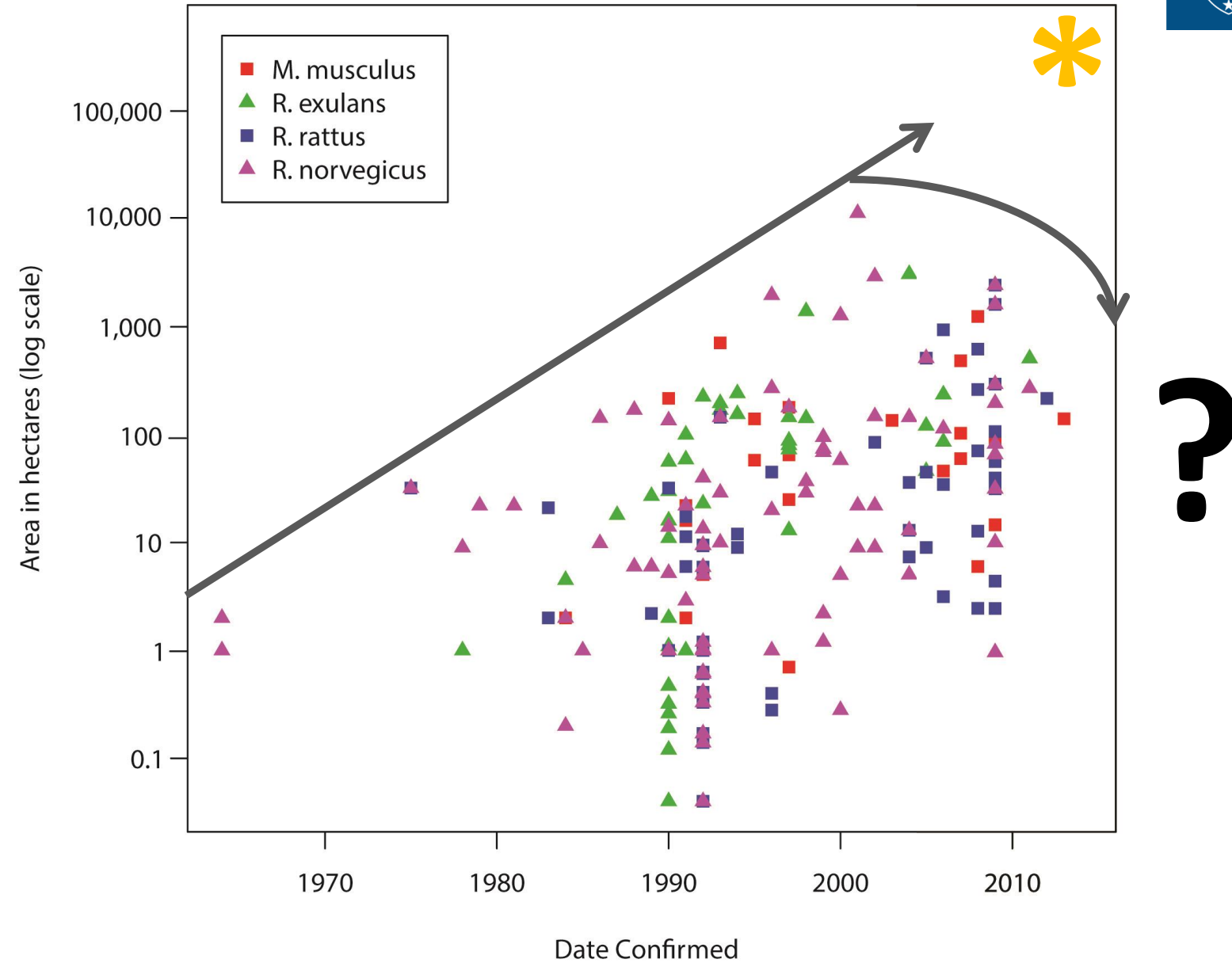


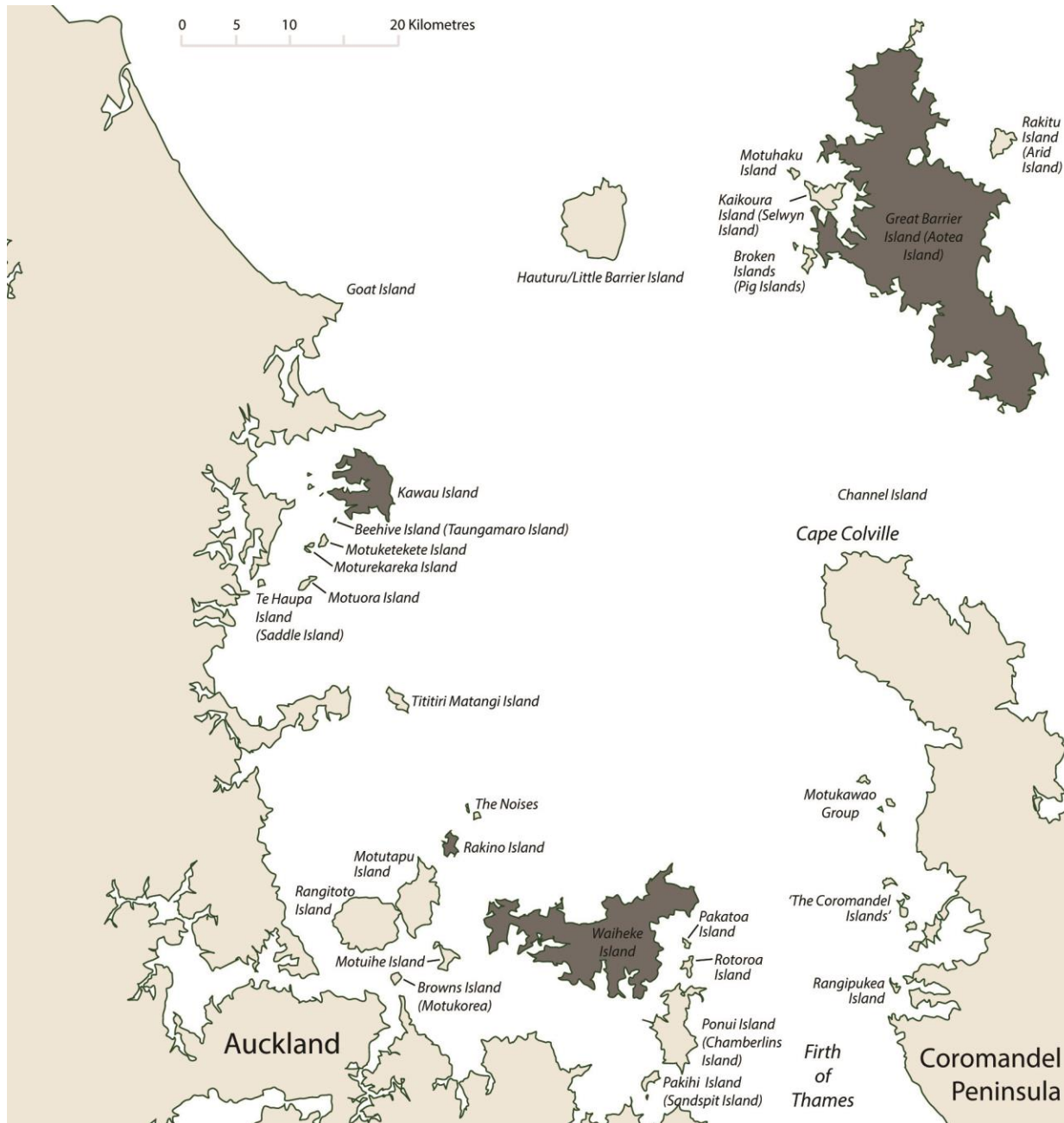
- PFNZ will include many specific projects and partners including government agencies, CRIs, Universities, NGOs and community groups
- Current and proposed solutions will face a mix of social and environmental constraints, including covering human health, animal welfare, livelihoods, cultural and moral issues
- Strategic environmental assessment (SEA) provides a framework that can be applied consistently in different locations and by different science and management groups as efforts are scaled up on island and “mainland” areas
- An SEA should include a strong social-economic component alongside the more usual ecological and water quality assessments for eradication options and ongoing operations and biosecurity

Lessons from Islds



- Scaling up to PFNZ is based upon lessons from eradications of introduced predators on islands
- Eradication of introduced predators from inhabited islands is shown to require consideration of complex sets of ecological, technical and social feasibility, preferably using participatory processes of planning, assessment and monitoring
- Previous biologist-led proposals to eradicate introduced predators from inhabited islands have generally been met with negative responses, e.g.
 - Lord Howe Island
 - Aotea (Great Barrier Island)
 - Rakiura (Stewart Island)





Aotea: cats + rats /
contentious history
of discourse

Kawau: cats + rats
+ stoats / wallaby
controversy

Rakino: rats
(eradicated 2002)

Waiheke: cats +
rats + stoats / no
discourse

**HAURAKI
GULF**

Apply SIA to IAS



- SIA used widely on islands outside New Zealand for oil, forestry and tourism development.
- Limited application in New Zealand to islands and for pest control (although see Kapiti and Pomona Islands)
- Over half the island groups of the Hauraki Gulf Marine Park are now predator-free
- Larger inhabited islands (Ponui, Aotea, Kawau, Waiheke) are the remaining infested islands
- Generated social profile of each island to understand the social context alongside ecological context (see poster by Jo Aley)
- Pre-cursor to comprehensive SIA for inhabited Hauraki Gulf islands

Key Aspects



Values – the values which residents attach to their physical, ecological and social environment, and the multiple ways the extant ecosystem contributes to the social and economic well-being of island residents

Livelihoods – the maintenance of livelihoods from a diverse economic base including self-sufficiency from the land and marine environment is often a key in these island communities and their attitudes to change

Absorptive capacity – a key theme in developing projects from a community base is the capacity of the community to accommodate or drive change around its leadership, skills, social capital and organisational structures

Collective action – often island communities have a range of internal conflicts and past negative experiences that work against their ability to develop a cohesive approach to managing change either internally or externally driven



ZIP

**ZERO
INVASIVE
PREDATORS**

Enabling a new future



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**NEW ZEALAND'S
BIOLOGICAL
HERITAGE**

*Ngā Koiora
Tuku Iho*

National
SCIENCE
Challenges

