



Seabird Conservation through Invasive Species Management

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Partnership for nature and people

Seabirds of the Pacific Islands



- **42 species of seabird** known or suspected to breed throughout the tropical Pacific Islands. **10** are considered **endemic**
- **11 globally threatened** (CR, EN, VU) and one near threatened species

Threats to Seabirds



- Seabirds face multiple threats on land and at sea. Of these IAS are both widespread effecting all seabirds and are often the leading cause of decline, and extirpation.
- Introduced vertebrates cause most harm particularly rats and cats.
- The breeding cycle is the most vulnerable life stage where eggs and young are preyed on, but adults can be impacted too.

Responding to IAS Threats

Three IAS management strategies all deliver and sustain seabird conservation outcomes;

- Biosecurity
- Control or suppression; sustained reduction of the target species and to a level where seabird recovery and or ecosystem objectives are met
- Eradication, permanent elimination of the target species



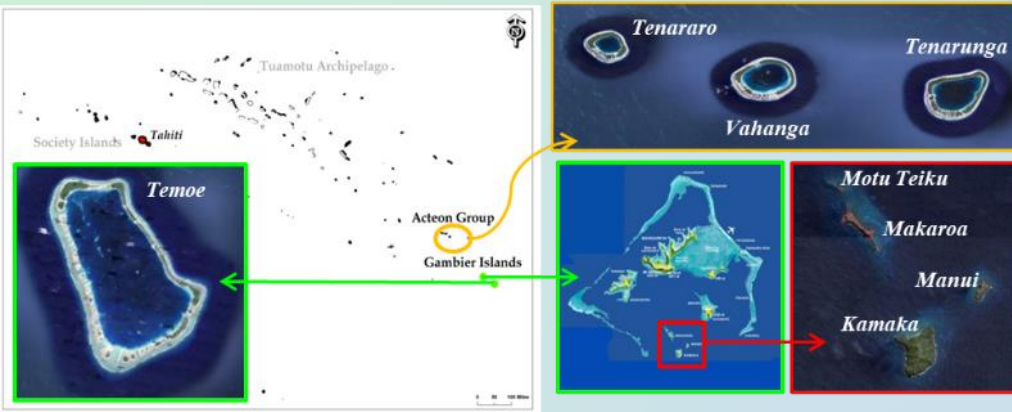
Where is an IAS Response Needed?

- Tropical Pacific Islands are typically underrepresented in the identification of priority seabird Islands for invasive species eradication
 - Croxall, J., Butchart, S., Lascelles, B., Stattersfield, A., Sullivan, B., Symes, A., & Taylor, P. (2012). **Seabird conservation status, threats and priority actions: A global assessment**. *Bird Conservation International*, 22(1)
 - Agreement on the Conservation of Albatrosses and Petrels. (2012). **ACAP Conservation Priorities**. Fourth Meeting of the Parties
 - Brooke, M.d.L., Hilton, G.M. and Martins, T.L.F. (2007), **Prioritizing the world's islands for vertebrate-eradication programmes**. *Animal Conservation*, 10: 380-390
- One global prioritisation has included technical, social and political feasibility (of eradication) and includes several Pacific Islands
 - Holmes ND, Spatz DR, Oppel S, Tershy B, Croll DA, Keitt B, et al. (2019) **Globally important islands where eradicating invasive mammals will benefit highly threatened vertebrates**. *PLoS ONE* 14(3): e0212128.



Country/Territory	Island	IAS Threat	GT Species Benefiting
French Polynesia	MohoTani	Felis catus, Ovis aries, Rattus exulans	Pomarea mendozae, Nesofregetta fuliginosa
	Motu Oa	Rattus exulans	Nesofregetta fuliginosa, Pterodroma alba
	Hatu Iti (Motu Iti)	Rattus exulans	Nesofregetta fuliginosa, Pterodroma alba
	Motu Mokohe	Rattus exulans, Rattus rattus	Pterodroma alba
	Fatu Uku	Rattus exulans	Pterodroma alba
	Hatutaa	Rattus exulans	Pterodroma alba
	Manui	Oryctolagus cuniculus	Nesofregetta fuliginosa
	Tarakoi	Capra hircus	Nesofregetta fuliginosa
	Akamaru	Capra hircus, Felis catus, Rattus exulans, Rattus rattus	Pterodroma atrata
Kiribati	Enderbury	Rattus exulans	Pterodroma alba
	Canton (Kanton)	Felis catus, Rattus exulans, Rattus rattus	Pterodroma alba
Pitcairn	Henderson	Rattus exulans	Pterodroma atrata
US MOLI	Jarvis	Mus musculus	Nesofregetta fuliginosa

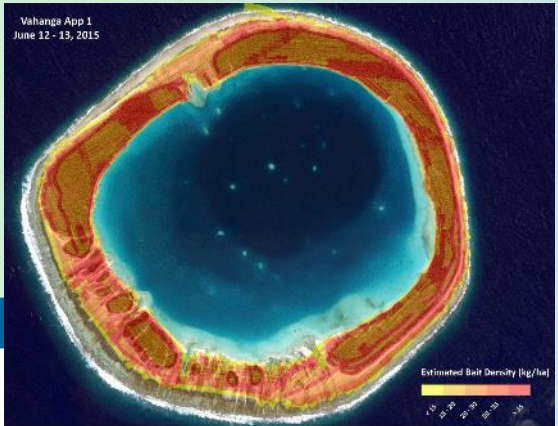
Acteon & Gambier Islands French Pol



- 6 islands, c.1500ha
- 5 vertebrates, goats, rabbits, 2 Spp rat, cats
- 7 threatened birds
- 18 breeding spp of seabird



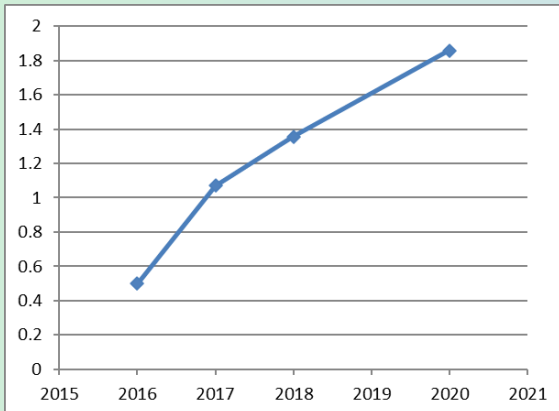
- 2+ years of preparation
- Developed and delivered through a primary partnership between SOP Manu, Island Conservation and BirdLife
- Aerial application of rodenticide
- Successfully implemented for all sites and IAS in 2015



Preventing Extinctions



- Eradications confirmed successful for 5 of the 6 sites in 2017
- Results to date include:
 - 5 new seabird populations on 3 islands (Christmas Shearwater and Tahiti Petrel NT; Tropical Shearwater; Black Noddy; Red-tailed Tropicbird)
 - Polynesian Storm Petrel (EN) doubled on Manui
 - Murphy's Petrel increasing and down listed from NT to LC
 - New predator secure population of Tukururu (CR)
 - Copra production doubled



Nesting PSP across 15x100m² plots post rabbit eradication



Eradications Aren't all Complex



- Small Pacific Is NGOs have delivered over 40 successful eradications and others by governments
- The majority are less than 100ha
- Rats have been at least one of the target species in all, and most have been ground operations
- These have benefited at least 16 threatened birds and reptiles including, 7 spp of seabird plus many others

Benefits of IAS Eradication for Seabird Conservation



- Threatened species recovery
- Provides conditions for seabirds to (re)establish
- Restoration of terrestrial and marine ecosystem services
 - Nutrient inputs N&P which stimulate microbial activity benefiting terrestrial (i.e. plants and inverts) and marine lifeforms including coral reef health
 - Climate resilience

What Assistance is there?

- PRISMSS provides access to technical expertise in eradications, biosecurity, also control and other IAS mgmt. functions
- Predator Free Pacific is one of the 5 PRISMSS programmes supported by Island Conservation and BirdLife



Predator Free Pacific



Protect our Islands



Resilient Ecosystems

