

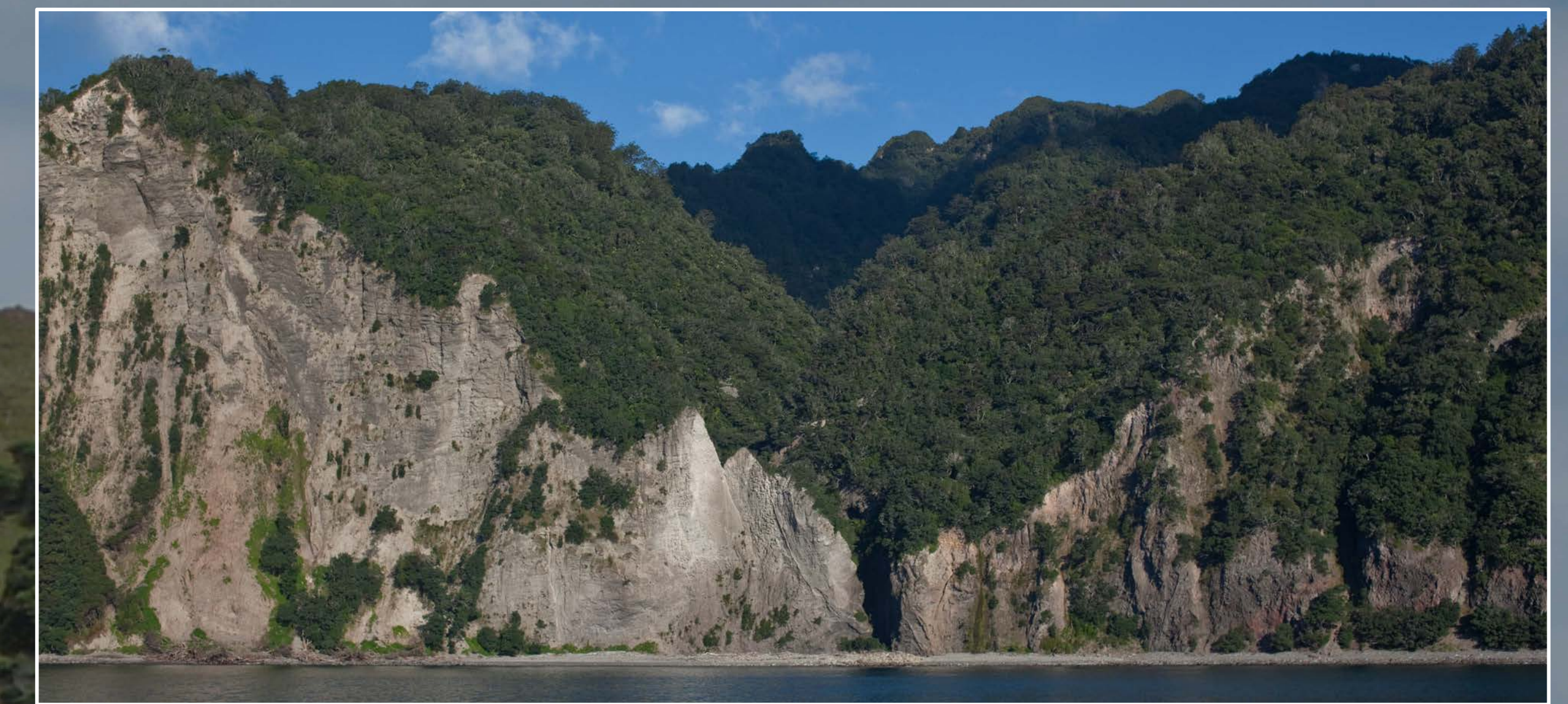
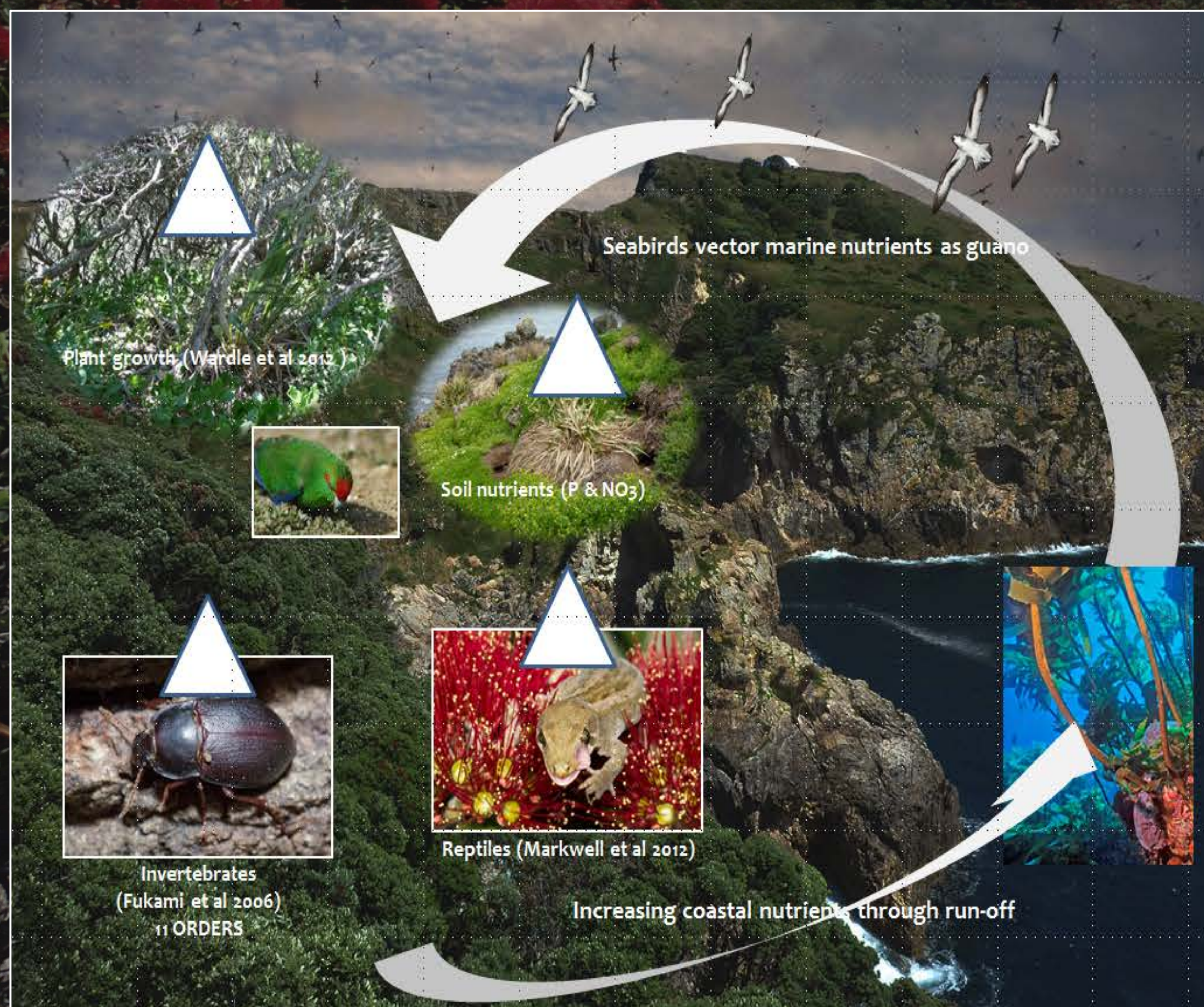
Poison-drop islands

Burgess Island (Pokohinu), Mokohinau Islands

In less than three decades after kiore (Pacific rat; *Rattus exulans*) were eradicated, in one of the first aerial poison bait operations (1990), 46 bird species now utilize Burgess Island's habitats, compared with 24 species reported from the literature during the last decades of rat infestation. Of these, nine are seabird species, only four of which maintained small breeding populations on Burgess Island prior to rat eradication. The nine species today include white-faced storm petrel (*Pelagodroma marina*), northern diving petrel (*Pelecanoides urinatrix*), fluttering shearwater (*Puffinus gavia*), little shearwater (*Puffinus assimilis*), and black-winged petrel (*Pterodroma nigripennis*), all small burrow-nesting seabirds that are highly vulnerable to predation. The four most abundant land bird species breeding on the island are red-crowned parakeet (*Cyanorhamphus novaezelandiae*), bellbird (*Anthornis melanura*), tui (*Prosthemadera novaeseelandiae*) and silvereye (*Zosterops lateralis*), all New Zealand native taxa. In less than 30 years after predator removal, Burgess Island hosts a rich avifauna, and provides a valuable example of natural recovery following predator eradication without any further active restoration measures.

And it is not just birds that are benefitting in this predator-free environment, the island is a mecca for reptiles. In addition, plant life and invertebrates are also rebounding.

The value of seabird islands



Te Hauturu-o-Toi (Little Barrier Island)

Just fourteen years ago, the New Zealand storm petrel (*Fregetta maoriana*) was thought to be extinct, it had not been seen for 108 years. There is no doubt that finding the New Zealand storm petrel breeding on Hauturu was a great relief. The island is one of New Zealand conservation's crown jewels, especially since cats were finally eradicated in 1980, and Pacific rats (or kiore) in 2004. Had the eradication of rats not taken place – it is unlikely we would have found these tiny seabirds breeding before they finally succumbed to extinction.



Looking ahead

These pest-free havens, Burgess Island and Hauturu, like many of the New Zealand's precious predator-free islands, are invaluable refuges for rare and endangered plants, birds and animals whose mainland habitats have been destroyed. They are living proof of how fauna and flora can be restored. There are still more islands around New Zealand that will benefit from the eradication programmes carried out by the Department of Conservation with the support of iwi and community groups. Discovering the breeding site of an 'extinct' species a mere 50 kilometres from our largest city should be a wake-up call that we must fight to save our precious biodiversity.

Rates of poison bait application

Burgess: This operation was completed long before a recipe for rodent eradication was well developed. A monsoon bucket was used. **Hauturu:** A total of 55 tonnes of rodent bait with rates for the 1st and 2nd bait applications averaging 11.7kg/ha (~1 bait per 1.7m²) and 6.16kg/ha (~1 bait per 3.2m²) respectively across the island. **Rakitu:** Specified rates are 8kg/ha and 4.5kg/ha.

