

There's a cage on Little Barrier Island, that's teeming with little tuatara. The temporarily caged juveniles represent hope for the future of their species.

There are about one hundred of them, all descended from 'natives' of the island. None is more than 10 years of age, which is young for this celebrated 'dinosaur' of New Zealand reptiles.

The tuatara are waiting in their island 'holding pen', tended and fed by the resident conservation officer, for the day Little Barrier/Hauturu is declared rodent free. Then it will be deemed safe to let them roam loose on this island ark, free of threats from rats, mice or any other mammalian predator.

'Releasing over a hundred tuatara on Little Barrier will make a fantastic day,' says Charles Daugherty of Victoria University, whose research colleagues Nicky Nelson and Sue Keall can take a fair amount of the credit for getting them all there. 'It's a really good outcome, considering 13 years ago they were thought to be extinct on the island and nobody was interested.'

In fact, the tuatara revival that's occurred throughout New Zealand, on Hauturu and other islands in the Hauraki Gulf and in the Marlborough Sounds, ranks among our most successful species-recovery stories. It's one that's been achieved by cooperation between several organisations; the Department of Conservation, Victoria University, Zoological Society of San Diego, Auckland Zoo, Hamilton Zoo, iwi and conservation groups. It's seen the establishment of new tuatara populations on several islands. It's led to the discovery of a new species, the Brothers tuatara, or Gunther's tuatara. Academic research related to the incubation of eggs in captivity has attracted both international



The tuatara research team at Victoria University, Dr Nicky Nelson (left), and Sue Keall, with resident tuatara Oliver.

interest and significant sponsorship.

Much of the recovery work has been undertaken in line with the Department of Conservation's Tuatara Recovery Programme, and has been made possible by rat eradications that have ensured the safety of tuatara on island habitats.

Charles Daugherty tells this story:

'Back in 1984, we started a three-year study on tuatara egg ecology. We visited 25 islands and in the process discovered that the Brothers Island tuatara (Gunther's tuatara or *Sphenodon guntheri*) on North Brother was genetically different, and that it was the only population of that species. We proposed to DoC that they mount a rescue programme by collecting eggs on the island [off

Marlborough Sounds] and incubating them here at Victoria.

'For three years from 1989 we collected about 70 eggs per year from the island, incubated them here and raised them in captivity. The eggs have a low survival rate in nature so by incubating them here we were able to improve the rate of hatching success.

'By 1995 half of those hatched and raised were taken to Titi Island in the Marlborough Sounds. In 1998 the rest went to Matiu/Somes Island. Thus we have been able to establish two new wild populations on rat-free islands and rescue what was a very rare species of tuatara.'

In the mid-1990s, as rat eradications were carried out on Hauraki Gulf islands, tuatara



Scientists working on the rescue of tuatara populations have discovered a new species of tuatara on tiny North Brothers, an islet off Marlborough Sounds (above). It has been named the Brothers Island tuatara or Gunther's tuatara, *Sphenodon guntheri*, pictured left.

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