

Rotoroa Island: from rehabilitation to revegetation[©]

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Rotoroa is one of many islands in the Hauraki Gulf, close to Auckland, the largest city in New Zealand. Rotoroa Island lies just east of Waiheke Island close to Chamberlins Island (Ponui) and Pakatoa Island.

Rotoroa's land area is around 82 hectares (approx. 200 acres) in an interesting shape with gentle to steep sloping hills, several beautiful bays with sandy beaches ideal for swimming, rocky coastal outcrops and some crumbly cliffs that drop sharply to the sea.

In 1908 the Salvation Army purchased the island for a reported 400 pounds to expand their existing drug and alcohol rehabilitation facility which was running out of space on nearby Pakatoa Island. By this time it seems all the original native vegetation had been cleared from Rotoroa and the land largely used for grazing sheep and cattle. Photos taken around the 1950s show some of the extensive buildings the Salvation Army erected including large dormitories, hospital, kitchens, washhouses, staff houses, and a chapel in a prominent central position on the hill, workshops, a jailhouse and butcher's shop. There were also large vegetable gardens and tennis courts. This was all centred around what is known as Home Bay or Front Bay, close to the only wharf on the island.

With much of the rest of the island a working farm, along with the produce from vegetable gardens and orchards the island population was largely self-sufficient for food. Plantings of pine (*Pinus radiata*) and Monterey cypress (*Cupressus macrocarpa*) provided some shelter as well as a ready source of firewood and timber.

City life was several miles away by boat, so being on the island was an effective way of breaking the cycle of drug and alcohol abuse. However, a large proportion of people released from this environment back to the mainland soon fell into their old ways.

By 2005 the Salvation Army had disestablished their rehabilitation services on Rotoroa (nearby Pakatoa having been sold in 1964) by which time many of the buildings were in poor repair, and the place lay derelict for several years.

In 2008 Rotoroa Island Trust was formed, funded through the philanthropy of Neal and Annette Plowman and, with the aim of creating a conservation park, the trust purchased a 99-year lease of the island from the Salvation Army. The trust's vision is for Rotoroa Island to become a sanctuary where people can experience the wonder of New Zealand's wildlife and to be a leader in conservation management and education, at the same time respecting the island's heritage and history as a place of recovery and renewal.

On taking over the lease of the island the trust immediately set to work clearing away most of the old buildings and a major revegetation project was instigated. Much of this required a range of heavy machinery which was barged in. Some of the twenty or so buildings that were demolished contained asbestos, which needed specialist removers. Seven houses were kept and renovated; three are now used for staff, the other four now offer Qualmark™ accredited accommodation for up to 44 visitors, including 18 in the so-called Superintendents House which has been converted to suit backpackers.

The most cost effective way of dealing with the twenty thousand or so pines, cypresses and other exotic trees was to cut them down and feed them through a monster chipper, turning them into mulch which was spread over areas soon to be planted with native plants.

Revegetation also began in 2008 and over the next 4 years 400,000 native plants were planted by contractors, almost all 1-L-pot grade, brought over from the mainland. In most areas plants quickly established and now in 2017 have formed dense areas of growth several metres high interspersed with a network of tracks, some gravel others grassed and providing visitor access throughout the island.

Some areas have been left open grassland to provide grazing for ground dwelling

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native birds like the endangered takahe of which there are now five on the island.

A few of the most notable existing exotic trees have been left, including a mature stand of 11 Norfolk Island pines, *Araucaria heterophylla*. The health of some of these is deteriorating and measures have been taken through feeding and mulching to improve their condition. There are also twelve mature *Phoenix* palms, probably *P. canariensis*. They seem in good health and are prolific seeders. To minimise the risk of seedlings emerging in revegetated areas the seed heads are cut off each year – and any seed that does drop to the ground carefully collected up.

In 2015, after aerial bait drops and much trapping Rotoroa Island was declared predator free. There are over 100 rat trackers and traps on the island in an attempt to keep it that way. Rats are the hardest to control as they can swim from nearby islands. Three have been caught in the last couple of months, emphasising the need for constant vigilance to maintain that predator-free status.

Rotoroa Island Trust entered into a partnership with Auckland Zoo and the Department of Conservation which has resulted in the release of several endangered native species on to the now predator-free island, including kiwi, takahē, tīeke (saddleback), pāteke (brown teal) and skinks, and many of these are now breeding successfully. Future releases of other endangered species are planned.

Artificial floating islands on the ponds provide resting places for a range of birds. The roots of plants on these islands grow deep into the water and provide a favourable breeding environment for native fish to be released into these ponds in the future.

Enclosures have been created to encourage rare skinks to breed. Moko skinks and shore skinks have been released into these and are breeding successfully.

New buildings on the island include an award-winning visitor centre with a museum acknowledging the history of the Salvation Army on the island, and a student learning centre. The latter provides facilities for educational field trips available to schools, focussing on practical ways students can become involved in conservation.

Public access to Rotoroa is via ferry leaving from Auckland which stops at Orapui on Waiheke Island then Rotoroa Island on the way to Coromandel.

To learn more about Rotoroa Island, visit: www.rotoroa.org.nz