



Mamaku Point
CONSERVATION RESERVE

ANNUAL OPERATIONS REPORT

December 2019



CONTENTS

BACKGROUND	3
DESCRIPTION.....	3
HISTORY	3
MAMAKU POINT CONSERVATION TRUST	4
BIODIVERSITY.....	5
BIODIVERSITY OBJECTIVES.....	5
FLORA STRATEGY	5
FLORA HIGHLIGHTS.....	5
FAUNA STRATEGY.....	6
FAUNA HIGHLIGHTS	7
EDUCATION.....	8
EDUCATION OBJECTIVES	8
SCIENTIFIC & ACADEMIC STRATEGY	8
SCIENTIFIC & ACADEMIC HIGHLIGHTS	8
YOUTH EDUCATION STRATEGY	9
YOUTH EDUCATION HIGHLIGHTS.....	9
PUBLIC EDUCATION STRATEGY	10
PUBLIC EDUCATION HIGHLIGHTS	10
SUSTAINABILITY	11
SUSTAINABILITY OBJECTIVES.....	11
FINANCIAL SUSTAINABILITY STRATEGY.....	11
FINANCIAL SUSTAINABILITY HIGHLIGHTS	11
ENVIRONMENTAL SUSTAINABILITY STRATEGY.....	12
ENVIRONMENTAL SUSTAINABILITY HIGHLIGHTS	12

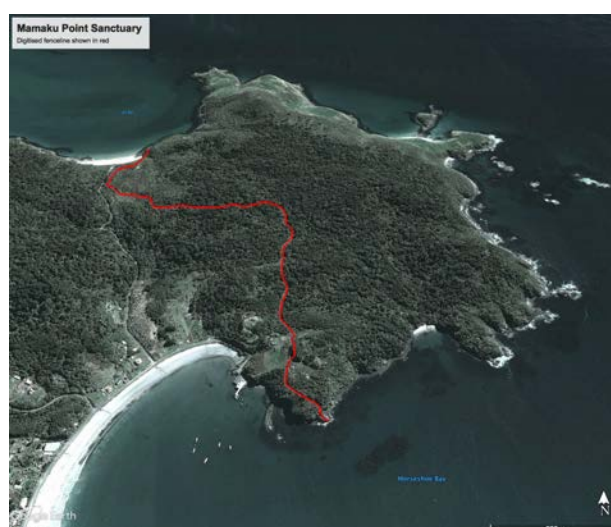
Background

Description

Mamaku Point Conservation Reserve is located 4km north-west of Oban township on the north-eastern coastline of Stewart Island \ Rakiura, which is situated 27km off the southern coastline of the South Island, New Zealand \ Aotearoa.

The Reserve makes up most of a 172 hectare property encompassing an entire headland comprised of rugged hilly terrain, rewilding grasslands, pristine sandy beaches, streams and some of the oldest native podocarp forest in NZ.

Since 2005 the Reserve has been enclosed by a 2.1km long biosecurity fence extending from Horseshoe Bay to Lee Bay, preventing the movement of non-native mammals into the Reserve. An extensive biosecurity grid is maintained both inside and outside the fence, and both the fence and the biosecurity grid are remotely monitored using VHF, cellular and satellite communications to ensure that any biosecurity breaches are detected immediately.



As a result of the comprehensive biosecurity programme, the Reserve is a thriving habitat to over 127 native species, including at least 26 native bird species, scores of native invertebrate species, and one of the highest concentrations of Kiwi for its size.

Located within the Reserve is an environmental education centre, which in past years accommodated school parties of up to 40. Today the education centre includes a kitchen, communal space, shower and bathroom blocks, and sleeps 14 people comfortably. The first tenting school groups were welcomed back in 2018, and additional bunk rooms will be added in 2020 so that the centre can again accommodate up to 38 people.

History

Prior to November 2000 the property was privately owned and managed as a farm by the Turnbull family, with the seaward faces used for sheep and cattle grazing, while the higher inland areas remained as native bush. In November 2000 the Dancing Star Foundation purchased the property and set about turning most of it into a biosecurity preserve for native flora and fauna.

In 2017, the Reserve was purchased by a family trust associated with Roy and Rachel Thompson, who subsequently established the Mamaku Point Conservation Trust in order to engage the wider community in their biodiversity, education and sustainability objectives for the Reserve.

The name Mamaku Point is taken from a prominent landmark within the Reserve close to Nathan's Island. Mamaku is the Maori name of the [black tree fern](#) (*Cyathea medullaris*), which are found on the point.

Mamaku Point Conservation Trust

The Reserve is leased and managed by the Mamaku Point Conservation Trust, an incorporated [charitable trust](#) and [registered charity](#), the Trustees of which are:

- Professor Philip Seddon (chair)
- Phillip Smith
- Roy Thompson

The primary objectives of the Trust are:

1. maintaining and enhancing **biodiversity** within the Reserve;
2. making the Reserve accessible by the public for **conservation education** and eco-tourism activities; and
3. working toward the financial and environmental **sustainability** of the Reserve's operations.

Day to day management of the Reserve is delegated to our fantastic General Manager, Antony Simpson, who is supported in his efforts by a large number of wonderful and valued supporters who give their time generously toward achievement of the Trust's objectives, particularly the following folks:

- Ernie Mason for going above and beyond at every opportunity;
- The 2019 team at Ignite Consultants for their consulting project;
- Kathleen Lalor for her restoration plan;
- Silvia Rodriguez for her fungi and lichen survey;
- Josh Jones and Britta Sisam-Jones from [Snapping Wild](#) for their many stunning bird photos.

Special thanks are also extended to Phillip and Dianne Smith, who kindly donated a new lawn mower and BBQ to the outdoor education centre.

The following report details the objectives, strategies and highlights of our second year of operation, through to 31 December 2019.

Biodiversity

Biodiversity Objectives

The Trust's primary objective is to conserve and enhance the health and diversity of the native flora and fauna within the Reserve. Specifically, the Trust will:

- Ensure that the biosecurity of the Reserve is maintained to the best of the Trust's ability;
- Seek opportunities to re-establish native species not currently found within the Reserve.

Flora Strategy

The Trust's 2019 strategies in respect to flora were to conserve the existing native flora and to help facilitate the rewilding of those areas that were previously cleared for farm grazing.

The previous owners maintained a policy of minimising the removal or destruction of non-native plants such as gorse, macrocarpa and eucalypts. While the Trust understands the reasons for this policy, our strategy is to remove or destroy all non-native plants within the Reserve, to the extent practical, and in particular to eliminate all:

- Gorse
- Macrocarpa and eucalypt trees
- Darwin's Barberry
- Gunnera
- Ragwort

Flora Highlights

The exotic trees felled around the outdoor education centre in 2018 continue to be processed into firewood, some of which has been donated toward Island fundraising activities.

Considerable effort was applied over the course of 2019 to the eradication of gorse at the Horseshoe Bay end of the Reserve, and most established gorse in this location has now been removed. Regrowth is being actively controlled and this work will continue into 2020 and beyond, with the focus also moving toward the Lee Bay end of the Reserve.

The most exciting development in 2019 has been the successful application to the Billion Trees Fund for a grant from the toward the ecological restoration of 17.84ha of former pasture on the seaward faces of the Reserve. This is a four year project involving the collection of native seedlings within the Reserve and re-planting of these seedlings in the target area.

A small team of part-time staff, supported by volunteers, started the process of collecting and potting seedlings in late 2019.

Fauna Strategy

The Trust's 2019 strategies in respect to fauna were to conserve the existing native fauna, to help grow the populations of the resident species and to seek opportunities to re-establish other absent natives such as Yellowhead (Mōhua, *Mohoua ochrocephala*) and South Island Saddleback (Tieke, *Philesturnus carunculatus*).

The Trust remains particularly interested in the potential to establish tuatara (*Sphenodon punctatus*) within the Reserve. There is a pressing need to find new locations for the expanding population of captive bred tuatara and it is the Trust's understanding that the Reserve represents a very suitable habitat due to its north facing aspect, abundance of invertebrate populations on which tuatara predominantly prey; including beetles, crickets and spiders, and an absence of the weka.

The ongoing control of non-native mammals is critical to the health of both flora and fauna within the Reserve, and is enforced through a strategy involving three lines of defence:

- The first line of defence is provided by the biosecurity fence. However, as the fence terminates at the high tide mark at each end, it is possible for these mammals to swim or walk around the fence ends at low tide.
- The second line of defence is provided by fenced cells on the Reserve side of each end of the fence. These cells act to contain any rats, cats and possums making it around the fence ends with a high density and diversity of traps within a small space.
- The third line of defence is provided by trapping and baiting throughout the property and immediately outside the biosecurity fence.

In addition to the three lines of defence, we are also actively trapping and baiting for cats, rats and possums on our property outside the biosecurity fence to minimise the pressure on the fence in the first instance. Overlaying the three-lines of defence biosecurity strategy, the Trust maintains the following priorities:

- A zero-tolerance policy in respect to cats within the Reserve. Should cats be sighted, or any sign of cats be detected, the animal(s) will be found and destroyed as a priority.
- Ongoing rat and possum baiting within the Reserve is focused around the fence ends, particularly around the more susceptible Lee Bay end.
- The bait stations within the central part of the property will be retained in situ but only activated when required in response to any infestations.

Fauna Highlights

During its second year of operation the Trust identified 4 additional native bird species living within the Reserve, bringing the total identified to 26:

- Sub Antarctic skua
- Welcome swallow
- Fiordland crested penguin
- Sooty shearwater

In respect to biosecurity activities, highlights included:

- With funding support from DOC, we were able to purchase 50 additional DOC 200 traps, bringing our biosecurity network to a total of 330 rat, cat and possum traps, and 600 rat bait stations;
- The Celium remote trap monitoring system installed in 2018 has proven to save a tremendous amount of time and energy previously wasted on continually checking traps that had not been activated. With further funding support from DOC we have extended this network to fully cover all 330 traps;
- A very significant rat incursion occurred over the middle of 2019, concurrent with the Rimu mast event. The team were kept busy re-baiting the bait stations, clearing traps and trialling new control solutions for several months. Rat densities are now returning to previous nominal levels;
- Very high levels of cats and possums are being trapped outside the Reserve, as they flow out of the National Park and run up against the biosecurity fence. We would love to see DOC re-double their efforts at pest control around Lee Bay Road;
- Cats and possums continue to be an occasional problem within the Reserve, particularly at the Lee Bay end of the Reserve where they can more easily get around the biosecurity fence at low tide. This is and will continue to be an ongoing battle;
- We experienced our first deer incursion at the end of 2019, and although one animal has been dispatched we believe another one or two are yet to meet Antony.

Education

Education Objectives

The Trust's secondary objective is to facilitate education, research and public awareness of the importance of restoring and conserving our native flora and fauna. Specifically, the Trust will:

- Allow access to the Reserve, and accommodation in the education centre, for school parties and youth groups;
- Allow access to the Reserve, and accommodation in the education centre, for scientific and academic researchers;
- Allow access to the Reserve to members of the public, via appointed guides, for general conservation education and experiences.

Scientific & Academic Strategy

The Trust's strategy in respect to scientific and academic research is to proactively seek out those tertiary institutions, Government agencies and NGO's who are involved in researching methods of restoring and protecting the biodiversity of New Zealand's natural environment.

The Trust will support and assist selected researchers by making the Reserve accessible to them at no cost and by making the accommodation facilities available to them at a relatively low cost.

Scientific & Academic Highlights

2019 saw a ramp up of scientific and academic work on the Reserve, with the following projects worked on during the year:

- Silvia Rodriguez, a biologist, completed a preliminary survey of the Reserve's fungi and lichen in March;
- Kathleen Lalor, a Masters of Wildlife Management student from Otago University, completed a full restoration plan for the Reserve in June;
- Chris Stowe, from Urtica Ecology, completed a High Value Areas Ecological Assessment Report for Environment Southland in August;
- Rachael Egerton, from Anekdotia, completed an archaeological assessment report in September.

These reports are available on our website at www.mamakupoint.nz/visit-research.

Our focus for 2020 will be on researching our existing lizard population and the opportunity for translocation of rare and high value lizard species found elsewhere on Stewart Island \ Rakiura.

Youth Education Strategy

The Trust's strategy in respect to youth education is to proactively encourage the return of school and youth groups to the Reserve, so that young people can gain first-hand experience and knowledge in respect to the biodiversity of our natural environment free of non-native mammals, and hopefully acquire a lifelong passion for the conservation of the natural environment.

The Trust will support such groups by making the Reserve accessible to them at a minimal cost per person per day, and by making the accommodation facilities available to them at a relatively low cost. The Trust aims to have every youth group visiting Stewart Island visit the Reserve within their activity programme.

Youth Education Highlights

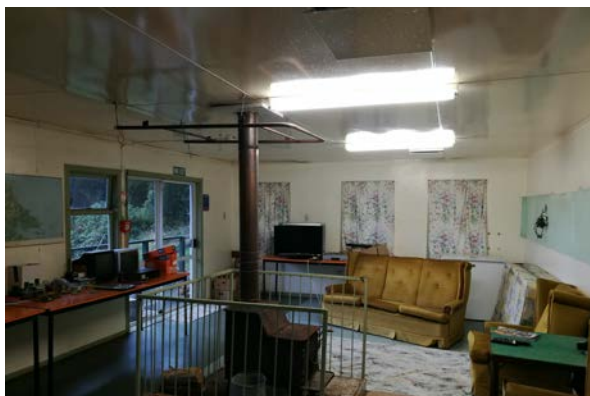
The Trust obtained a Resource Consent in December 2018 to host school camp groups, but has not yet started promoting the outdoor education centre as a base for school camps pending completion of the facility upgrades. We did however host two camps over the year: Queenstown Primary School, who brought two groups of 40 children and adults for a week each, and John McGlashan College who brought a group of boys to the Reserve for a week in November.



New bunks

Over 2019 the Trust continued the renovations and upgrading of the outdoor education centre in preparation for future school camps, including:

- Installation of 7 new bunk beds and a double bed (bringing the total to 14);
- Installation of a new wood burner in the lounge;
- Installation of new vinyl and carpet in the kitchen and lounge;



Lounge before



Lounge after

The next major investment in the education centre will be the replacement of the old bunkhouse (photo below left), currently used as a utility shed, with a well-insulated new structure designed to accommodate 24. The structure has already been prefabricated (photo below right) and is awaiting building consent prior to construction later in 2020.



Old bunkhouse



New structure

Public Education Strategy

The Trust seeks to open the Reserve to the local community, domestic visitors and foreign tourists in order to promote a greater awareness and understanding of the biodiversity of our natural environment when freed of non-native mammals. The Trust aims to have a significant percentage of visitors to Stewart Island include a visit to the Reserve by the end of 2022.

Public Education Highlights

The Trust has been pleased to see steady growth in eco-tourism activity on the Reserve over 2019, with Ulva's Guided Walks and Beaks and Feathers' hosting visitors on their respective kiwi spotting and "Natures Pantry" medicinal and edible plant walks. The Reserve also hosted renowned chef Gordon Ramsey, who recorded a significant segment of a National Geographic episode focused on Stewart Island indigenous foods within the Reserve.



Sustainability

Sustainability Objectives

The Trust's third objective and final is to work toward financial and environmental sustainability in all aspects of its operation. Specifically, the Trust will:

- Collect donations from Reserve visitors to help fund the Trust's biodiversity and education objectives;
- Apply for grants and seek donations to help fund the Trust's biodiversity and education objectives;
- Minimise the use of non-renewable energy in its daily operations;
- Maximise the generation of renewable energy in its daily operations;
- Minimise the generation of non-recyclable waste.

Financial Sustainability Strategy

The biosecurity of a privately-owned conservation reserve such as Mamaku Point is always vulnerable to a lack of funding, so the Trust's strategy is to unashamedly strive for financial sustainability.

The Trust will seek opportunities to generate revenue from visitors to the Reserve via access fees and will proactively seek grants and donations toward the Trust's biodiversity and education objectives. The Trust aims to be financially self-sustaining by the end of the financial year ending March 2020.

Financial Sustainability Highlights

The Trust has been fortunate to have received a number of grants toward specific projects over the last 12 months, totalling \$137,064, and is grateful to the support of the following organisations in this respect:

- **DOC Community Fund**, toward improved biosecurity;
- **Kiwis for Kiwi**, toward a baseline kiwi count and research plan;
- **Environment Southland**, toward deer proofing of native seedling nursery for riparian planting;
- **Billion Trees Fund**, toward ecological restoration of the former grassland;
- **Polson Higgs**, toward financial planning advice;
- **World Wildlife Fund for Nature New Zealand**, toward an ecological restoration plan.

Environmental Sustainability Strategy

The Trust's 2018 strategy in respect to environment sustainability is to apply best-practise energy use in its daily operation, including minimising the use of non-renewable energy and maximising the generation of renewable energy.

These environmental sustainability objectives are particularly challenging on Stewart Island, given that the local electricity supply is 100% non-renewable and the island receives relatively low sunshine hours. The Trust will therefore be pragmatic in pursuing these objectives, balancing the costs of achieving them against the higher objectives relating to biodiversity and education. The Trust seeks to minimise the generation of non-recyclable waste and to ensure that the environment within the Reserve is as pristine as possible.

Environmental Sustainability Highlights

During the Trust's second year of operation, the environmental sustainability activity has focused on cementing the energy and water efficiency plans put in place in 2018, and the removal of defunct plant, equipment and rubbish left over from the days when the property was an operating farm.

The Trustees of the Mamaku Point Conservation Trust would like to conclude this report by thanking the Department of Conservation and Environment Southland for the recognition of the Trust's efforts over the course of 2019, and thank again all those people who have contributed to the well-being of the Reserve over the last year.

We look forward to continuing to increase the biodiversity within the Reserve, and welcoming increasing numbers of visitors to experience the Reserve, over the upcoming year and beyond.

