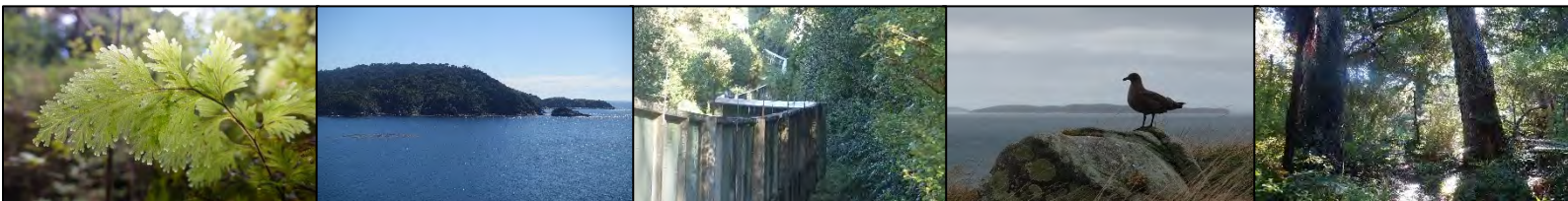




Mamaku Point Conservation Reserve Restoration Plan 2021-2030



Mamaku Point Conservation Reserve

Restoration Plan 2021-2030



urtica
ECOLOGY

Report produced for: Mamaku Point Conservation Trust

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Purpose

The management of the Mamaku Point Conservation Reserve is undertaken by the Mamaku Point Conservation Trust, (the Trust).

This Restoration Plan (hereafter the Plan) outlines the Trust's vision and three core objectives and sets out the broad steps for the next ten years.

The core objectives of the Mamaku Point Conservation Trust are¹:

- Maintain and enhance biodiversity within the reserve.
- Make the reserve accessible to the public for conservation education and eco-tourism activities
- Work towards the financial and environmental sustainability of the Reserve's operations.

These core objectives focus on **biodiversity**, **conservation education** and **sustainability**, and these three areas provide the framework of the Restoration Plan.

The Plan:

- Presents actions that should be taken in the next ten years that support the Trust's core objectives and vision.
- Links to past research and projects (see below) and current initiatives and builds on these.
- Does not provide operational detail that describes what actions should be undertaken by whom and at what cost.

Plan period

The period of this plan is for ten years – from 2021 to 2030.

Vision

Mamaku Point Conservation Reserve is a healthy, predator-free, self-sustaining indigenous ecosystem where visitors experience nature at its best.

Background and Overview

Description

Mamaku Point Conservation Reserve (MPCR or the Reserve) is situated on the north-eastern coastline of Stewart Island / Rakiura (Fig. 1), 27km south of the South Island, New Zealand. The Reserve includes an c. 172 ha area covering most of a rugged peninsula 4km north of Halfmoon Bay.

The Reserve extends from the seashore to 120 m and includes a range of landforms and topography, from hill country of moderate relief to sandy beaches, rocky shorelines and steep coastal embankments and cliffs. Much of the northern coastal area is exposed to frequent, strong, salt laden winds from the westerly quarter, as well as less frequent easterly gales. Nathan Island, to the northwest of Mamaku Point, is managed as part of the Reserve (Fig. 1).

¹ Mamaku Point Conservation Reserve. 2018. Annual Operations Report. 12p.



Figure 1: Topographical map showing the location of MPCR (shown in red).

Ecological Setting

MPCR has strong physical connections with other nearby natural habitats. Much of the Reserve is surrounded by the marine environment. Most of the western side of the Reserve is contiguous with similar intact and regenerating forest primarily protected within public conservation land. On the southern side of the Reserve, land parcels are in private ownership. These somewhat fragmented areas are smaller and have no legal protection. They also include some grassland areas cleared of their former forest cover.

Legally protected habitats on private land are relatively few on Stewart Island; in the Halfmoon Bay area there are just a few QEII covenants (Fig. 2). The owners of MPCR are in the process of placing a covenant over a small wetland area (outside of MPCR) at the corner of Lee Bay Road and Horseshoe Bay Road (not shown in Fig. 2).



Figure 2: Aerial photograph showing the location and protection status/land tenure of habitats near MPCR (shown in red). DOC land is shown in green. QEII covenants are outlined in blue. Stars = known archaeological sites (source: NZAA).

Land Tenure

The land included in MPCR was privately owned until 2000, with the seaward faces farmed and grazed by sheep and cattle. The inland areas were kept as native bush.

In late 2000, the Dancing Star Foundation purchased the property, turning it into a biodiversity reserve. In 2005 the Foundation erected a 2.1km long predator-proof fence from Horseshoe Bay to Lee Bay, stopping the movement of non-native mammals into the Reserve.

In 2017, the Reserve was purchased by a family trust associated with Roy and Rachel Thompson, who subsequently established the Mamaku Point Conservation Trust. The trust is an incorporated charitable trust and registered charity. The Reserve is leased and managed by the Mamaku Point Conservation Trust.

Facilities

An extensive biosecurity grid is maintained both inside and outside the predator-proof fence (Fig. 3). 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. Day to day management is undertaken by General Manager, Antony Simpson.

There is an environmental education centre within MPCR, with bunkroom and cooking facilities and a camp site for groups to stay (Fig. 4). The Trust has undertaken upgrades to the facilities and is in the process of replacing the old bunk house. In the future they plan to upgrade the amenities block and continue to make improvements as required.



Figure 3: Predator proof fence along the western boundary of MPCR.



Figure 4: Environmental education centre facilities at MPCR.

Biodiversity Values and Significance

Eighty-five percent of Stewart Island is protected within the Rakiura National Park. Although MPCR is outside the national park, the predator-proof fence which separates MPCR from the rest of Stewart Island, adds to the uniqueness and importance of the Reserve. MPCR is the only predator-proof fenced reserve on Stewart Island giving it significant conservation potential for vulnerable species.

MPCR is also part of the world's southern-most Dark Sky Sanctuary, which is centred on Stewart Island.

The Reserve has outstanding biodiversity and aesthetic values, supporting an unusually diverse range of ecosystems and species which is rarely seen on private land anywhere on Stewart Island, or in Southland.

There are at least eight distinct plant communities in MPCR which can be classified into seven ecosystem types (Fig. 5). Plant diversity is correspondingly high with at least 146 native species so far recorded. There are at least 30 native bird species².

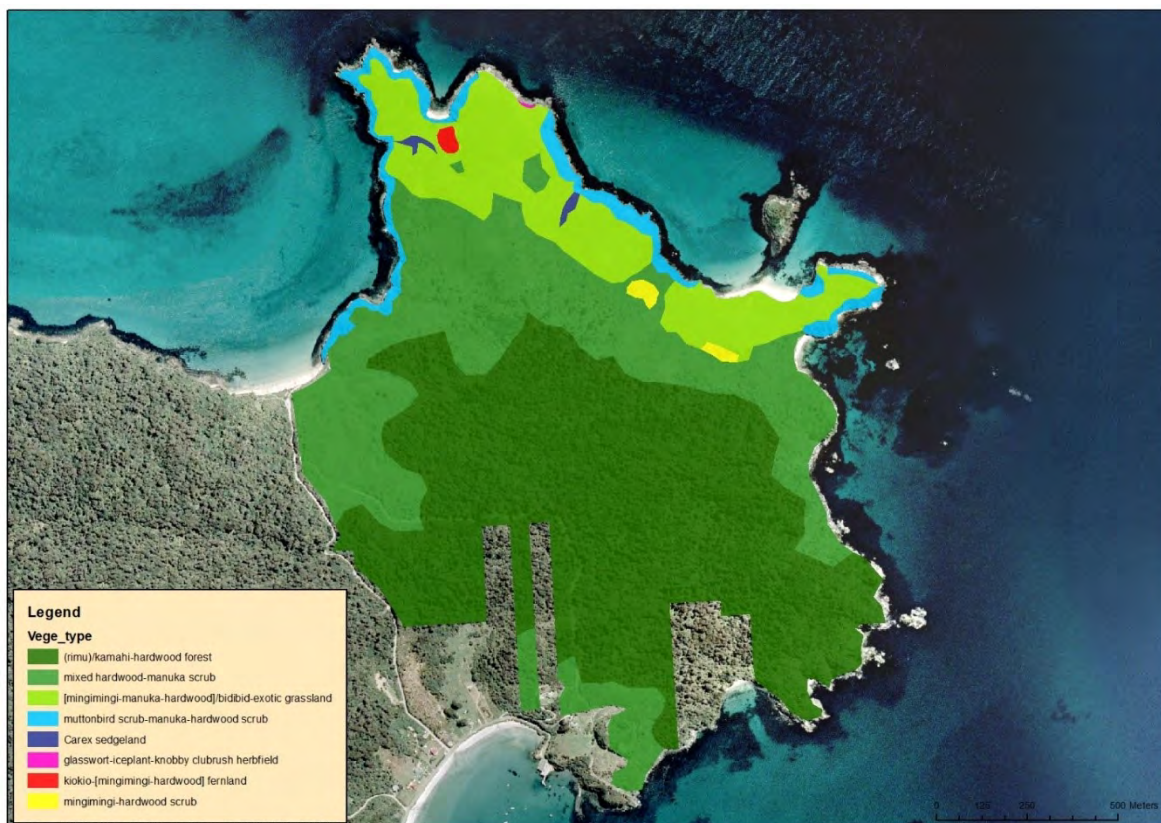


Figure 5: Aerial imagery showing the broad habitat units described in MPCR by Stowe (2019).

The Reserve supports a range of nationally threatened flora and fauna, with at least 10 nationally threatened plant and 13 nationally threatened bird species³. The coastal turf community is considered a naturally rare and endangered ecosystem⁴.

Although some of the vegetation patterns in MPCR are clearly the result of past disturbance, the coastal influences of wind and salt play a major part in shaping the composition and structure of the

² Stowe, C. 2019. High Value Area. Ecological Assessment Report. Mamaku Point. 37p.

³ Stowe, C. 2019. High Value Area. Ecological Assessment Report. Mamaku Point. 37p.

⁴ Holdaway et al. 2012. Status Assessment of New Zealand's Naturally Uncommon Ecosystems. *Conservation Biology* Volume 26, Issue 4, pages 619–629.

vegetation communities on the northern coast. These notably include coastal herbfield, grassland-rushland and shrubland that support a range of plants particularly adapted to the environment. These communities are restricted in area but contribute greatly to the floristic diversity at MPCR, and support several specialist ferns, herbs and shrubs⁵.

The predator-proof fence has enabled the vegetation to recover both in natural intact communities and those previously farmed. The abundance of deer and possum palatable species is higher inside the fence in forest communities⁶.

Past Research and Management & Current initiatives/Projects

Plants:

- Includes 2 of the 250 vegetation plots set up in the 1978-1984 Stewart Island Botanical Survey by Hugh Wilson.
- 2013 Brian Rance (DOC), initial plant inventory based on a short visit⁷.
- 2018 Kathleen Lalor - MSc student. Carried out a brief quantitative vegetation assessment using 14, 10 x 10 m plots on randomly chosen sites from 5 habitat units⁸.
- 2019 Chris Stowe - High Value Areas Survey based on a brief visit, extending the plant species inventory and provided a plant community classification, identifying eight broad vegetation communities, discussed the ecological significance of MPCR and gave some recommendations for restoration and weed control⁹.
- 2019 Silva Rodriguez – initial fungi and lichen survey¹⁰.

Birds:

- 2008 – translocation into the reserve of rifleman (*Acanthisitta chloris*) and brown creepers (*Mohoua novaeseelandiae*)
- 2012, 2013 – translocation of Stewart Island robin (*Petroica australis rakiura*)
- Bird Counts 2003-2017 Kari Beaven SolutionNZ – appears to be only done on one day per year.
- Kathleen Lalor did 5-minute bird counts every 100 metres along 17 bait lines (which are 50 m part). A total of 129 sites measured over a period of approximately 6 weeks. Found an overall dominance of bellbirds and tui. Results possibly affected by bad weather.
- General inventories by Kathleen Lalor (2018-2019) and Chris Stowe (2019), indicate there are at least 29 bird species present.
- 2020 Emma Craig¹¹. Tokoeka initial investigation 2020, only 4 nights. Gave recommendations for monitoring.

Skinks:

- 2018 Kathleen Lalor set out 9 pitfall skink traps in the grassland area. 22 Southern Grass Skinks (*Oligosoma aff. polychroma*) caught over the 15-day survey. All in good condition.
- Proposed – baseline lizard study: Grant application currently with WWF. Assess the conservation potential of MPCR for lizards by gaining baseline data on the lizard species and abundances present.

⁵ Stowe, C. 2019. High Value Area. Ecological Assessment Report. Mamaku Point. 37p.

⁶ Rance, B. 2013. Dancing Star Foundation land, Horseshoe Bay – Vegetation report. Unpublished report, Department of Conservation, Southland.

⁷ Rance, B. 2013. Dancing Star Foundation land, Horseshoe Bay – Vegetation report. Unpublished report, Department of Conservation, Southland.

⁸ Lalor, K. 2019. Mamaku Point Conservation Reserve. Restoration Plan. 45p.

⁹ Stowe, C. 2019. High Value Area. Ecological Assessment Report. Mamaku Point. 37p.

¹⁰ Rodriguez, S. 2019. Mamaku Point Conservation Reserve. Fungi and Lichen. 11p.

¹¹ Craig, E. 2020. Rakiura Tokoeka Investigation. Mamaku Point Conservation Reserve 22-27th February 2020. 15p.

Aim to 1); develop a MPCR Lizard Management Plan detailing survey results, long-term monitoring design and future recommendations for lizard conservation, including potential species translocations and 2); train community in lizard monitoring techniques in partnership with trained herpetologists to maintain ongoing monitoring within MPCR.

Restoration planting:

- Some preliminary planting took place in August 2020. The start date for the One Billion Trees Funding planting has been postponed until 2021 due to the COVID19 pandemic. Around 5 ha to be planted every spring and autumn for 3 years. Dead trees chipped for mulch. Seedlings sourced from within MPCR and potentially also SIRCET (Stewart Island /Rakiura Community and Environment Trust). Plant 17.4 ha fixed indigenous species at a stocking rate of 4400 stems per hectare on a coastal area or previously grazed farmland. The planting is intended to facilitate the reversion of land to native forest.

Biosecurity:

- 2018 Jo Ritchie¹². Draft Biosecurity Plan also identifies the likely sources and pathways for invasive species to access Mamaku Point and measures that need to be undertaken at source points for the likely pathways. Likely invasive species include: rats, mice, cats, possums and plant pests.

Pest Management:

- The predator proof fence is the first and arguably the most important aspect for maintaining pest numbers to low or non-existent levels. The second line of defence is provided by fenced cells on the Reserve side of each end of the fence. The third line of defence is provided by trapping and baiting throughout the property and immediately outside the biosecurity fence.

Archaeology:

- 2019 Rachel Egerton¹³. Undertook an archaeological assessment prior to the proposed native planting. Gave suggestions for the inclusion of archaeological information in visitor interpretation information.

Marketing:

- 2019 Ignite Consultants¹⁴. Recommended steps for marketing in four areas: school groups, website improvements, technology, funding.
- 2020 Emails sent out to schools throughout Otago and Southland promoting MPCR as an environmental education destination.

¹² Ritchie, J. 2018. Mamaku Point Biosecurity and Incursion Management Plan. 2018. 14p.

¹³ Egerton, R. 2019. Mamaku Point Conservation Reserve Stewart Island/Rakiura. Archaeological Assessment Effects. 57p.

¹⁴ Ignite Consultants Project Report. 2019. Mamaku Point Conservation Reserve. 37p.

Restoration Plan

This document outlines an operational restoration plan for the next ten-year period (2021-2030). The Plan builds on past research and management (see above) and the core objectives of the Trust.

The primary core objectives of the Trust are outlined on the MPCR website and in the 2018¹⁵, 2019¹⁶ and 2020¹⁷ Annual Operations Reports. These are used to organise the framework of the restoration plan. The core objectives of **biodiversity**, **conservation education** and **sustainability** provide a 'biocultural' framework for the restoration plan where science and conservation are considered alongside people-focused goals of education and outreach. The two facets are intertwined. Engaging and inspiring the public not only educates but also helps provide financial support and volunteer resources.

Each core objective has a Goal. Each Goal is subdivided into Management Categories which have at least one specific Management Objective (Table 1). The focus, actions and outcomes of each Management Objective are itemised (Table 2). Note that the specific details of each action are not discussed in detail due to the financial constraints of the project.

Much of the restoration plan involves collecting initial information to understand the current state of the diversity of flora and fauna in MPCR. This information will then drive management and research going forward. Management and research projects need to be prioritised in a logical order that builds on what has already been undertaken.

¹⁵ Mamaku Point Conservation Reserve Annual Operations report December 2018.

¹⁶ Mamaku Point Conservation Reserve Annual Operations report December 2019.

¹⁷ Mamaku Point Conservation Reserve Annual Operations report December 2020.

Summary of Goals and Management Objectives

Table 1. Summary of Goals and Management Objectives outlined in detail in Table 2.

Trust's Core Objective	Goal	Category	Management Objectives
Biodiversity	Goal 1: To conserve and enhance the health and diversity of the native flora and fauna within MPCR.	Biosecurity	Objective 1: Maintain and improve pest management strategies to eliminate introduced animal populations.
			Objective 2: Eliminate known problem weeds and prevent new weed incursions.
			Objective 3: Identify and minimise the risks associated with unsupervised public access to MPCR.
		Geographic Information Collection and Management	Objective 4: Streamline MPCR management by setting up a geographic information system (GIS) database to collate, capture, store and display a broad range of data.
		Current Environmental/Biodiversity State	Objective 5: Quantify the current diversity of biota at MPCR through research, surveys and monitoring to understand what biota are present now and provide key information to assess future changes over time in a predator-free environment.
		Environmental/Biodiversity Monitoring Over Time	Objective 6: Establish & improve ongoing monitoring and reporting systems to capture and communicate long-term management performance and ecosystem health.
		Threatened, At Risk and Rare Species	Objective 7: Understand the status and population trends of threatened/rare species in MPCR to ensure appropriate levels of protection/enhancement.
		Flora and Fauna Translocation/Re-Introduction	Objective 8: Restore or re-establish appropriate flora and fauna to MPCR.
		Plant Community Restoration	Objective 9: Restore degraded indigenous vegetation to create resilient, sustainable and regionally appropriate ecosystems in MPCR.
		Long-Term Reserve Protection	Objective 10: Formalise protection of MPCR to ensure the conservation achievements will continue in perpetuity.
Conservation Education	Goal 2: To facilitate education, research and public awareness of the importance of restoring and conserving our native flora and fauna.	Group Visitors	Objective 11: Increase group (public and schools) visitor numbers each year from 2021 by at least 50%.
		Community Involvement	Objective 12: Increase community involvement and volunteer input every year from 2021 by at least 50%.
		Collaborative Relationships	Objective 13: Triple the number of long-term collaborative relationships in 10 years to help achieve the management objectives outlined in Goals 1, 2 & 3 and support the long-term vision for MPCR.
		Cultural and Historic Heritage	Objective 14: Quantify and map the unique historic and cultural heritage of MPCR.
			Objective 15: Develop educational resources to celebrate the historic and cultural heritage of MPCR.

Table 1 cont.

Trust's Core Objective	Goal	Category	Management Objectives
Sustainability	Goal 3: Work toward financial and environmental sustainability in all aspects of the MPCR operation.	Financial Sustainability	Objective 16: Generate a 20% annual growth in donations and grants each year from 2021 for the next nine years to support MPCR operations and research.
			Objective 17: Generate \$60,000.00 per year (excluding grants) received through camp income and ecotourism visitors from 2022 to support MPCR's operational costs.
		Environmental Sustainability	Objective 18: Reduce energy use/waste in MPCR by 15% by 2026.
		Operational Sustainability and Best-Practise	Objective 19: Ensure all aspects of MPCR's daily operation follow best-practise standards.
			Objective 20: Develop/update industry-standard, 'best practise' policies/procedures to maintain and improve the biological, cultural & historic resources in MPCR.

Goals and Management Objectives for the 2021-2030 Restoration Plan.

The primary core objectives of the Trust as outlined on the MPCR website and in the 2018, 2019 and 2020 Annual Operations Reports are used to organise the framework of the restoration plan. These objectives, which focus on **biodiversity, conservation education** and **sustainability**, provide the basis of the Goals in this restoration plan. Each core objective has a Goal. Each Goal is subdivided into Categories which have at least one specific Management Objective (see Table 2).

Much of the restoration plan involves collecting baseline information to understand what the diversity and abundance of flora and fauna are in MPCR. This information will then drive management and research going forward. Management and research projects need to be prioritised in a logical order that builds on what has already been undertaken.

Breakdown of the Restoration Plan.

Table 2: Details of the Mamaku Point Conservation Reserve Restoration Plan.

Goal 1: Biodiversity - To conserve and enhance the health and diversity of the native flora and fauna within MPCR.

For this Goal, the restoration plan focuses on setting up a GIS to provide an environmental data management system, as well as quantifying what plants and animals are present, where they are, what are their threats, and which additional special species could the Reserve benefit from. The primary focus is maintaining biosecurity – i.e. pest numbers at low or nil densities. Continued protection and enhancement of biodiversity within MPCR flows from this, as well as the potential for translocation/establishment of threatened/rare flora and fauna.

*Priority ranking: Very High (VH), High (H), Moderate (M), Low (L). Any years specified are abbreviated to the last two digits of the decade e.g. 2021 is shortened to “’21”. These represent completion dates.

Category: Biosecurity

Management Objectives	Focus	Actions	Outcomes	Frequency	Year					Priority*
					2021-2022	2023-2024	2025-2026	2027-2028	2029-2030	
Objective 1: Maintain and improve pest management strategies to eliminate introduced animal populations.	Introduced pests	Continue to cutback adjacent vegetation close to the biosecurity fence to ensure eliminate incursions.	Make it possible for future translocations/establishment of threatened flora and fauna within MPCR.	ongoing						VH
		Undertake a review of MPCR’s biosecurity and implement any recommendations.	Improved biosecurity.	ongoing						VH
			Effective control and eradication of introduced predators and other threats to indigenous flora and fauna within MPCR.	ongoing						VH
		Continue to maintain existing bait lines and trap stations for animal pests throughout MPCR, including the fenced cells and immediately outside the fence.	Maintain and enhance populations and communities of indigenous flora and fauna at MPCR.	ongoing						VH
		Continue to test & adopt new innovations & approaches to biosecurity, run a feasibility study to find better tools (e.g. thermal imaging) to improve detection of incursions.	Ensure best practise, continued innovation and testing of methods.	ongoing						VH

		Share knowledge and work with SIRCET & Predator Free Rakiura towards the greater goal of a predator free Oban and Stewart Island.	Provide a safe, long-term refuge for rare and endangered species.	ongoing							H
		Ongoing, regular pest monitoring inside MPCR.	Fast response to incursions or spikes in pest numbers.	ongoing							VH
			Better understanding of the types of incursions and the impact on native flora and fauna.	ongoing							VH
	Herbivores	Eradicate deer if they access – understand how deer are getting into the reserve and investigate methods to prevent this.	Continued recovery and protection of plant communities/biodiversity.	ongoing							VH
			Fewer, or no deer, in the reserve.	ongoing							VH
		Investigate feasibility of mitigating coastal erosion and effects on predator proof fence at Lee Bay.	Fence maintained, improved biosecurity.								VH
		Investigate methods to prevent low tide access for cats and other pests at Lee Bay.	Fewer, or no, cat incursions into MPCR.	Trialling in 2021							VH

Management Objectives	Focus	Actions	Outcomes	Frequency	Year					Priority
					2021-2022	2023-2024	2025-2026	2027-2028	2029-2030	
Objective 2: Eliminate known problem weeds and prevent new weed incursions.	Introduced plant pests	Establish/review the MPCR weed management programme using the Southland Regional Pest Management Plan ¹⁸ to identify and prioritise the eradication/containment of problem species.	Identify all organisms specified as weeds in the Southland Regional Pest Management Plan present in MPCR.		Mar '21					VH
		Eliminate organisms specified as weeds in the Southland Regional Pest Management Plan from MPCR.	Minimal presence of problem weeds in MPCR.	ongoing						M
		Make weed ID and information sheets available to contractors and volunteers for existing and potential weeds at MPCR.	Improved weed identification and surveillance.		Jun '21					H
		Improve and ensure biosecurity measures encompass potential weed vectors (e.g. people, soil, plants, machinery etc.).	Prevent any new weed incursions into MPCR.	ongoing	May '21					VH
		Remove felled wood from camp. Fell all introduced trees and remove seedlings	Removal of potential weed source. Aesthetics, naturalness and habitat enhanced.	ongoing	Aug '21					H
		Spray gorse in areas where it is preventing/ slowing down the re-establishment of native plant species.	Removal of potential weed source. Aesthetics and naturalness enhanced.	ongoing						VH
		Co-operate with DOC and Regional Council initiatives in the eradication of Darwin's barberry and Chilean rhubarb.	Remove weeds and enhance naturalness.	ongoing						H

¹⁸ Southland Regional Pest Management Plan 2019-2021. Environment Southland.

Management Objectives	Focus	Actions	Outcomes	Frequency	Year					Priority
					2021-2022	2023-2024	2025-2026	2027-2028	2029-2030	
Objective 3: Identify and minimise the risks associated with unsupervised public access to MPCR.	People	Undertake a review of the risks & benefits of allowing greater, unsupervised public access to MPCR (e.g. biosecurity, disturbance to flora/fauna arising from more people, and potential infrastructure construction).	Negative effect on biosecurity or flora/fauna within the reserve.		Jun '21					H

Category: Geographic Information Collection and Management.

Management Objectives	Focus	Actions	Outcomes	Frequency	Year					Priority
					2021-2022	2023-2024	2025-2026	2027-2028	2029-2030	
Objective 4: Streamline MPCR management by setting up a geographic information system (GIS) database to collate, capture, store and display a broad range of data.	Information management	Investigate a range of options for a GIS e.g. Q-GIS (free software), ARC Online and/or assistance from other providers (e.g. GIS in Conservation (GiC)).	Identify the best GIS system for MPCR's needs.		Sep '21					VH
		Install IT capacity to facilitate GIS capability and storage of data.	An effective, integrated environmental management system.		Nov '21					VH
		Provide GIS training for reserve staff to manage and maintain the GIS database.	Efficient and effective data capture in a spatial database.	ongoing	Dec '21					H
		Collate and input data & spatial layers into a GIS database. These should include baseline environmental data & imagery (elevation, soils, aerial and satellite imagery); vegetation communities/ecosystems; infrastructure (e.g. buildings, tracks); archaeological/historic sites; research and monitoring data (e.g. flora and fauna surveys/records, location of monitoring sites, weed distribution), trap/bait station network, restoration planting sites etc.).	Streamline management and provide the resources for interactive management of the Reserve's environmental & biological resources.	ongoing	Feb '22					H
			Easily produce maps/resources for volunteer labour, funding applications, interpretation etc.	ongoing	'22					H
			Enhanced capability to visually communicate MPCR's work and successes with the public, supporters and potential funding partners.	ongoing	'22					H

Category: Current Environmental/Biodiversity State

Management Objectives	Focus	Actions	Outcomes	Frequency	Year					Priority
					2021-2022	2023-2024	2025-2026	2027-2028	2029-2030	
Objective 5: Quantify the current diversity of biota at MPCR through research, surveys and monitoring to understand what biota are present now and provide key information to assess future changes over time in a predator-free environment.	All species/ Ecosystems	Set up an advisory group of experts in a range of ecological fields to provide ongoing guidance to the Trust for research decisions/direction and adaptive management.	Peer reviewed decisions by experts with a strong working background in the relevant fields of conservation/ecology to ensure the Trust is making in appropriate decisions.	ongoing	May '21					VH
		Establish a MPCR Conservation Manager role to oversee/facilitate conservation/ecological projects.	Improved logistical support, increased ability to manage and research the Reserve's biological resources.				'28		M	
	Flora	Seek advice from appropriate experts on setting up vegetation monitoring to assess changes over time resulting from management, or to enable comparisons between vegetation inside (predator-free) and outside of the Reserve. Potential methods include permanent 20 x 20 forest plots, seedling ratio index (SRI) and Foliar Browse Index (FBI).	Robust but affordable method for obtaining detailed information on the current vegetation in the Reserve which can be used to measure changes; the progress/success of management practises; and identify priorities for future management and research.		Sep '21					H
		Contact tertiary agencies and other organisations (see Objective 13) to advertise proposed monitoring projects.			Jan '22					
		Implement approved monitoring regime to gather baseline data (potentially over the 2022/2023 summer).	Monitor and quantify current key vegetation variables to assess change over time.		Nov '22					H
		Summarise baseline vegetation information gathered and communicate with the public/donors and potential funding partners.	Summary information to quantify the biodiversity and special biological features of MPCR with comprehensive list of flora.			Jun '23				H
		Depending on the data collected, possibly use the baseline data to quantify individual plant communities and produce a detailed vegetation map	Detailed baseline information on main vegetation communities.			'23				M
			Map and GIS layer showing the distribution of specific vegetation communities			Nov '23				M

		of MPCR (a potential Honours or Masters student project).								
Threatened/At Risk Plants.	Review flora list for MPCR to identify threatened or at-risk plant species. Update list periodically to reflect current Threat Classifications as these are published by DOC (every 5 years).	Summarise the abundance and distribution of threatened or at-risk plant species within MPCR.		Mar '22						H
	Initiate threatened and at-risk plant survey (see below in Objective 7).	Greater understanding of the distribution, abundance and threats to threatened or at-risk plants at MPCR.		Nov '22						H
Plant pests	Initiate a survey of pest plant presence, abundance and distribution.	Better understanding of existing pest plant presence, abundance and distribution for management planning.		Nov '21						H
		Prioritise & undertake pest plant control/eradication.	ongoing							VH
All flora	Capture data in GIS system or other database (refer to Objective 4).	Biodiversity data is captured, updated regularly and able to be interrogated easily for management tasks.								H
	Archive plant biodiversity information in the NZ National Vegetation Survey Databank (https://nvs.landcareresearch.co.nz/).	Archive for safe keeping and to contribute to the overall knowledge of NZs flora.	ongoing							L
Fauna	Seek advice from appropriate experts on setting up monitoring for specific fauna groups to assess changes over time resulting from management, ecosystem health, or to enable comparisons between taxa inside (predator-free) and outside of the Reserve.	Robust but affordable methods for gathering information on fauna in the Reserve to be used to measure changes over time; the progress/success of management practises; and identify priorities for future management and research.		Sep '21						H
	Using outcomes from the above discussions, implement approved monitoring regime for aquatic invertebrates; terrestrial invertebrates; bats; freshwater fish; frogs; kiwi; seabirds; and seashore species.	Quantify the current species distribution and abundance of key fauna groups.	ongoing	Jun '22						H
	Undertake lizard monitoring survey (current WWF grant application).	Quantify current lizard species distribution on which to base management and track future change.		'21						H

		Lizard monitoring training for community (a current WWF grant application).	Affordable monitoring undertaken by the community to inform management.								H
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Category: Environmental/Biodiversity Monitoring Over Time

Management Objectives	Focus	Actions	Outcomes	Frequency	Year					Priority
					2021-2022	2023-2024	2025-2026	2027-2028	2029-2030	
Objective 6: Establish & improve ongoing monitoring and reporting systems to capture and communicate long-term management performance and ecosystem health.	Monitoring	Seek advice from appropriate experts to determine the appropriate remeasurement frequency for 5-minute bird count monitoring stations (set up Oct- Dec 2018).	Robust monitoring methods.		Sep '21					H
		Remeasure monitoring plots and surveys for key flora and fauna at the appropriate intervals, with key species and remeasurement intervals determined by the expert group (see Objective 5).	Quantify changes in key biota over time to determine the impact of management practises, pest incursions and stochastic events.	to be determined						H
			Report on the data/results to the public, sponsors and funders.	ongoing						H
		Add all new data to the GIS, including initial flora & fauna datasets and remeasurements, pest plant survey and control results, photo points for restoration planting sites, biosecurity incursions.	Information is readily available and easily displayed to inform management of the Reserve.	ongoing						H

Category: Threatened, At Risk and Rare Species

Management Objectives	Focus	Actions	Outcomes	Frequency	Year					Priority
					2021-2022	2023-2024	2025-2026	2027-2028	2029-2030	
Objective 7: Understand the status and population trends of threatened/rare species in MPCR to ensure appropriate levels of protection/enhancement.	Threatened, at risk or rare flora extant at MPCR.	Identify rare/threatened plant species using existing quantitative data from vegetation monitoring, incidental observations and other information sources (e.g. Stowe 2019 ¹⁹).	Summary of current distribution and habitat information for rare plant species in MPCR.		Mar '22					H
		Undertake a detailed rare plant species survey over 2022/2023 summer.	Comprehensive information of the presence & distribution of known and additional threatened or at-risk plants.		Nov '22					H
			Fully understand the distribution, abundance and habitat requirements of threatened and at-risk plants.							H
		Input data into the GIS system.	Rare plant species distribution can be stored and viewed in the GIS.	may be ongoing						H
		Identify threats for rare species (e.g. weeds, habitat change due to succession/restoration/development).	The threats to threatened and at-risk plants are fully understood and mitigated.							H
		Prioritise the rare plant list by rarity & degree of threat to determine which plants may require management. (This is likely to include the following 'at risk' species: <i>Carex aucklandica</i> , <i>Euphorbia glauca</i> , <i>Myosotis rakiura</i> , <i>Sonchus kirkii</i>).	Management actions based on a prioritised list of threatened and at-risk plant species.	ongoing						H
			Viable and sustainable populations of threatened/rare plants are maintained in perpetuity.							
		Collect seed and seedlings from existing populations at MPCR for propagation and future replanting to augment extant populations, or to create new ones.	Threatened/rare plant populations are augmented. Additional 'insurance' populations are created.	ongoing						H

¹⁹ Stowe, C J. 2019. Mamaku Point High Value Area (HVA) Assessment. Urtica Ecology and Environment Southland.

		Archive seed in the NZ Indigenous Flora Seed Bank https://www.massey.ac.nz/massey/learning/colleges/college-of-sciences/clinics-and-services/new-zealand-indigenous-flora-seed-bank/new-zealand-indigenous-flora-seed-bank_home.cfm .	Off-site archive for threatened/rare plant species.	ongoing							H
Threatened, at risk or rare avifauna extant at MPCR.		Identify rare/threatened bird species using existing quantitative data (e.g. previous bird counts), incidental observations and any other information sources.	Summary of threatened and at-risk birds known to be already present at MPCR.		Nov '22						H
		Use existing quantitative information to summarise locations and likely habitat for the prioritised rare bird species.	Summary of known distribution and habitat for rare bird species.								H
		Review information on rare bird species and undertake further surveys if necessary to fully understand selected species distribution, abundance, habitat and threats. Quantify the information using standardised data sampling methods.	Quantitative data obtained on rare bird abundance, distribution and habitat.								H
		Input data into the GIS system.	Rare bird species distribution stored and viewed in the GIS.								H
		Identify threats for rare species (e.g. weeds, competition, habitat change due to succession/restoration/development).	The threats to threatened & at-risk birds fully understood.								H
			The distribution, abundance and habitat requirements of threatened and at-risk birds fully understood.								H
			Management actions identified to improve or maintain rare bird habitat for continued population success.								H
		Prioritise the rare bird list based on rarity and degree of threat to determine which species may require additional management.	Initiate management based on a prioritised list of threatened & at-risk bird species.								H
			Viable and sustainable populations of threatened/rare birds are maintained in perpetuity.								
	Other Fauna	Start collating a list and locations of other rare and threatened fauna as information comes to hand (e.g. from lizard, invertebrate, fish surveys). Store locations in the GIS database.	Improved understanding of rare and endangered species within MPCR.	ongoing							

Category: Flora and Fauna Translocation/Re-Introduction

Management Objectives	Focus	Actions	Outcomes	Frequency	Year					Priority	
					2021-2022	2023-2024	2025-2026	2027-2028	2029-2030		
Objective 8: Restore or re-establish appropriate flora and fauna to MPCR.	Birds & Reptiles	Undertake a desktop study to identify which birds and reptiles could have been historically present but are no longer present.	List of birds and reptiles known to be historically present in MPCR.		Sep '22						H
		Obtain advice from DOC and relevant conservation specialists on the suite of bird and reptile species that could be suitable for reintroduction to MPCR and can contribute to broader Predator-Free Rakiura goals (e.g. as a soft-release staging post for wider reintroductions).	Establish or use existing national protocols for determining the suitability of species for translocation.		Oct '22						H
			Create a prioritised list of birds & reptiles suitable for translocation.		Oct '22						H
		Monitor populations of bird species (rifleman, brown creepers, Stewart Island robin) translocated to MPCR between 2008 & 2013 to measure population trends as part of planning for future translocations.	Quantify the populations and spatial extent of species previously translocated to MPCR.			'23					M
		Undertake a site-habitat assessment for the most suitable species using local knowledge, the vegetation community map and GIS to identify suitable habitat.	Identify the current size and location of specific habitat for potential translocation species.			'23					H
			Determine if current habitat needs to be enhanced/modified to suit target translocation species.			'23					H
			Identify all steps required to ensure suitable habitat, appropriate habitat size and protection & identify potential hazards, issues.			'23					H
		Understand the translocation application process and become adept at this. See https://www.doc.govt.nz/get-involved/run-a-project/translocation/forms-and-guides/ .	Increased efficiency for completing translocation applications.			Nov '22					

		If appropriate, develop and submit a proposal to DOC to translocate identified species to MPCR.	Provide predator-free habitat for rare and threatened species.		Dec '22					H
		Undertake any habitat and biosecurity requirements in preparation of translocation.	Appropriate habitat requirements for target species.							H
		Translocate individuals of nominated species.	Provide predator-free habitat for rare and threatened species.							H
		Undertake monitoring of translocated species.	Determine establishment and any habitat adjustments required	ongoing						H
		Consider 'population reinforcements' for translocated species.	Improve the genetic diversity and long-term sustainability of species.	ongoing						M
		Continue to build a close working relationship with the Yellow Eyed Penguin Trust and DOC to establish a colony of yellow-eyed penguins in the Reserve.	Establish a self-sustaining colony of yellow-eyed penguins in the Reserve.	ongoing						H
	Threatened, at risk or rare flora present on Stewart Island but absent from MPCR.	Consult with DOC and botanical experts to produce a list of plants that are rare, or which have localised distributions on Stewart Island but are absent from MPCR. These could include the megaherb punui (<i>Stilbocarpa lyallii</i>), coastal carrot (<i>Anisotome lyallii</i>), pingao (<i>Ficinia spiralis</i>), <i>Drymoanthus flavus</i> , <i>Coprosma wallii</i> , <i>Olearia lineata</i> , <i>Melicytus flexuosus</i> , slender wine sedge (<i>Carex tenuiculmis</i>), <i>Carex strictissima</i> and probably others. Many of these plants will also be nationally threatened or at risk.	List of potential rare or locally rare plants to consider for establishment at MPCR in a predator-free environment.		Sep '22					H
		Consult with DOC as to the feasibility, necessity and risks of introducing selected plants to MPCR.	Additional populations for Stewart Island rare plant species in a predator-free environment.		Oct '22					H
		Identify if and where species specific appropriate habitat exists at MPCR using the vegetation community map and GIS.	Identify the extent of appropriate habitat for individual rare/threatened species.			'23				H

		Create a planting plan and implement. With permission/permit from DOC undertake propagule/seed collection from natural populations. Propagate plants for introduction to suitable habitat at MPCR.	Sustainable populations of rare/threatened plants rare on Stewart Island are established at MPCR. Opportunities for visitors to enjoy seeing rare, but visually striking and interesting plants such as punui and <i>Melicytus flexuosus</i> (if included in eco-tours and interpretation).	ongoing		'23				H
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Category: Plant Community Restoration

Management Objectives	Focus	Actions	Outcomes	Frequency	Year					Priority
					2021-2022	2023-2024	2025-2026	2027-2028	2029-2030	
Objective 9: Restore degraded indigenous vegetation to create resilient, sustainable and regionally appropriate ecosystems in MPCR.	Flora	Consult with Southland District Council planners or seek expert advice to determine if resource consent is required to undertake vegetation clearance where tracks exist or need to be formed for improved management efficiencies, walking tracks, or other infrastructure.	Environmental effects are consented for and mitigated, avoided or remedied.		Apr '21					H
		If necessary, engage a suitably qualified person to undertake an Assessment of Environmental Effects (AEE).	Environmental Effects of vegetation clearance assessed & quantified.		Jun '21					H
		Establish protocols to manage impacts & risks (e.g. loss of significant flora and fauna, vegetation communities, habitat, biosecurity) for infrastructure work & ongoing maintenance.	Limit biosecurity risks, impacts to native species within MPCR.		Aug '21					H
		As part of the One Billion Tree project, re-establish and re-surface the ATV access route to Bob's Point along the old fence line.	Improved access to facilitate efficient access to planting areas.		Jun '21					H
		Use the vegetation map and other ecological information to identify the additional areas for vegetation restoration for 2022 to 2030.	Prioritised plan for future vegetation restoration and translocations.		Dec '22					M
			Identify areas for restoration planting and infrastructure development (e.g. access routes).			'23				M
			List of plant species for restoration plantings.			'23				M
		Use the above information to prepare land and undertake additional restoration plantings.								M
		Spray rank grass and bidibid as part of site pre-planting preparation.	Improved survivorship and establishment of restoration plantings.	ongoing						H
		Start collecting seed & seedlings and work with SIRCET to propagate locally sourced plants.	Local genetic stock for plants.	ongoing						M
Initiate and complete the One Billion Trees planting project.	17ha of planted land along the coastal slopes of MPCR.		Aug '21					H		

		Set up photo points to annually monitor the planting establishment progress.		ongoing	Sep '21						H
		Ongoing maintenance of planted areas – weeding, spraying, check plant guards.	Increased survivorship and faster establishment.	ongoing							
		Plan for enrichment planting (stage 2 restoration planting with shade tolerant species, add to diversity, replacement planting).	Mimic natural plant composition, broaden plant feeding range for birds, add species which haven't naturally established from nearby natural habitat.								M

Category: Long-term Reserve Protection

Management Objectives	Focus	Actions	Outcomes	Frequency	Year					Priority
					2021-2022	2023-2024	2025-2026	2027-2028	2029-2030	
Objective 10: Formalise protection of MPCR to ensure the conservation achievements will continue in perpetuity.	MPCR	Progress legal protection of the Reserve through QEII Covenant protection.	Formal long-term legal protection for MPCR should ownership change.		'21					H

Goal 2: Conservation Education - To facilitate education, research and public awareness of the importance of restoring and conserving our native flora and fauna.

For this Goal, the Plan develops the educational and group facilities at MPCR, builds a marketing strategy to raise awareness of MPCR and to engage and inspire the public about conservation and restoration, and lastly develops ongoing relationships with groups, researchers and local tour operators and the community.

Category: Group Visitors

Management Objectives	Focus	Actions	Outcomes	Frequency	Year					Priority
					2021-2022	2023-2024	2025-2026	2027-2028	2029-2030	
Objective 11: Increase group (public and schools) visitor numbers each year from 2021 by at least 50% until capacity is reached.	Camp spaces	Develop a plan to fill the 16 consented camp spaces available per year within five years & find funding for youth groups to fill two slots.	A detailed strategy for achieving this objective.		Mar '21					H
	Camp facilities	Construct a 24-person bunkroom facility (to be completed in 2021). Repurpose utility shed.	Upgraded accommodation with a greater capacity for overnight stays.		Jan '21					VH
		Continued improvements to the camp from funding and camp income, including:								
		<ul style="list-style-type: none"> Install solar power at campsite & manager's house. 	Financial & environmental sustainability.							M
		<ul style="list-style-type: none"> Set up alternative accommodation for reserve, research & voluntary staff. 	Can continue to operate when camp is booked.							VH
		<ul style="list-style-type: none"> Sewerage improvements. 								H
		<ul style="list-style-type: none"> Rebuild ablutions and laundry block. 								L
		<ul style="list-style-type: none"> Improving environmental educational resources. 		ongoing						H
		Improve the parking, roads, tracks and paths around the camp, re-surface track to Frenchmans Bay.	Improved infrastructure, more appealing destination.	ongoing						VH
		Provide a covered area for living, covered storage and/or a drying room at the campsite.	Health & safety. Improved logistics for living in a high rainfall area.							M
		Create a walking tracks strategy outlining a network of walking tracks with signage, information panels and activity zones.	Logical and efficient plan for developing a walking track network.		'22					H
Implement development of walking tracks.	Improved visitor experience and engagement.							M		

		Apply for funding for information panels.	Improve interpretative information. Preserve history.							M
		Work with appropriate specialists to produce wording for information panels and a graphic artist (or graphic artist students) to create graphics for panels.	Well-written, engaging information. Visually appealing, professional signs.		Sep '22					M
Marketing		Create a visual virtual field trip video.	A teaser video to attract groups to visit, a longer form video for virtual visits to encourage people to visit MPCR or become a donor.		Jul '22					H
		Determine if supporting a tertiary student marketing intern to implement a marketing plan for MPCR is feasible (as suggested in the Ignite report).	Increased MPCR brand awareness and more effective website.		Jun '22					M
		Build an ongoing presence on social media (Facebook, Instagram) with regular posts on life at MPCR, short videos of wildlife, recognition of key contributors & donors.	Inspire and educate the public, raise brand awareness.	ongoing	Apr'21					H
		Train key MPCR personnel to use social media effectively.	Continue to inspire and connect with the public.		Mar '21					H
		Ensure MPCR has a profile on www.stewartisland.co.nz under 'See: Do: Stay' as a listed activity and other also relevant tourism websites.	Raised profile as a destination for people visiting Stewart Island.		Mar '21					H
		Work with current partnership eco-tour companies to ensure guided trips to MPCR are listed on their respective websites (e.g. the guided Beaks and Feathers trips are not on their website) & are correctly linked from the MPCR website.	Raised profile and increased visitors for MPCR. Hyper-link from the MPCR website to Beaks and Feathers website.		Mar '21					H
		Optimise the MPCR website with relevant keywords for search engines (ongoing as new content is added).	Interested people will find it in the internet search engines.	ongoing	May '21					H
		Add Trust vision, Reserve photos and relevant maps to MPCR website.	Improve information & visual attractiveness.	ongoing	Mar '21					H
		Add detailed vegetation map to the website and information about key significant (rare and taonga) species.	Increase public interest and the special features of MPCR.		Dec '22					M
		Add a secure, automated online booking system on the website.	Streamlined booking system		X		Mar			M

		Update the location and content of the donation page on the MPCR website (see Objective 16 for more details).	Raise awareness of need for funds, profile projects to donate to, how the funds would be used.		Mar '21					H
		Create a kids' resources page and subpages on the website, information about MPCR (rare biota), fun facts about MPCR and the inhabitants, numbers of pests trapped. Include the results of the trapping app that MPCR uses.	Inspire and engage children online.	ongoing	X	V				H
		Set up a Google Ads campaign that links to specific pages on the MPCR website to raise awareness of MPCR. Google Ad Grants provides \$10,000 USD/month for advertising.	Raise awareness of MPCR as a conservation reserve, destination for ecotourism, schools & other groups.	ongoing						M
Operations /Marketing		Undertake a SWOT analysis to identify barriers to groups visiting MPCR (e.g. is the distance from Halfmoon Bay and lack of transport a barrier to casual visitors?). Investigate options to overcome barriers and implement this.	Identify specific barriers to make MPCR more accessible as a destination.	possibly ongoing	X	V				H
Schools		Partner with an outdoor education specialist to create activities and information for school groups, as well as activity zones on walking tracks.	Information pdf pamphlet or booklet to summarise the facilities, reserve map, booking system, getting there, activities, resources provided.	possibly ongoing						L
	Education resource pack for visiting schools and schools who visit virtually.								L	
	Follow up on email campaign for MPCR as an educational destination for mid to lower South Island and send additional promotional material to these schools.	Raise profile and market the facilities to mid to lower South Island schools.	ongoing						H	
	Host a 'familiarity weekend' for key school educationalists from mid to lower South Island schools & Otago University.	Raise the profile of MPCR as an educational destination.				V			H	
	Explore possibilities of developing the ambassador programme with the Halfmoon Bay Primary School (see Ignite report).	Drawcard for school groups & promoting mutually beneficial relationships.							M	
	Encourage schools to book future camps.	Repeat bookings with schools already familiar with MPCR.	ongoing						H	
		Post-visit ongoing school engagement/interaction with MPCR to build closer relationships & sustain/inspire interest in conservation.	ongoing						H	

	Specialty Adult/ Tertiary education groups	Partner with an outdoor education specialist to create information for interest and adult education groups.	Information pdf pamphlet or booklet to summarise the facilities, reserve map, booking system, getting there, reasons for visiting.							M
		Collate contact details for speciality naturalist and interest groups, adult education, tertiary education groups to send promotional material to groups and tertiary institutions in the mid to lower South Island and contact them.	Raise profile and market the facilities to mid to lower South Island adult interest groups and educationalists.		May '22					M

Category: Community Involvement

Management Objectives	Focus	Actions	Outcomes	Frequency	Year					Priority
					2021-2022	2023-2024	2025-2026	2027-2028	2029-2030	
Objective 12: Increase community involvement and volunteer input every year from 2021 by at least 50%.	Operations/ Marketing	Develop a plan to improve local community involvement:	Improve accessibility for the local community and create a culture where locals want to be involved.		Oct '21					H
		<ul style="list-style-type: none"> Identify ways to increase local community involvement in enjoying the reserve and volunteering (e.g. specific activities, creating an ongoing pool of keen volunteers) and start implementing these strategies. 							H	
		<ul style="list-style-type: none"> Undertake a feasibility study to determine the pros and cons of unsupervised access to MPCR, including access via pin-pad. 							M	
		<ul style="list-style-type: none"> Develop a Lee Bay entrance plan, to include car parking, landscaping, sculptures and information panels to welcome & inspire visitors. Implement this. 			Sep '22					M
	Marketing	Add a “volunteer” button to every page of the website, add additional information about volunteer roles and quotes from past volunteers (see https://www.sircet.org.nz/ for an example of this).	Capture the interest of potential volunteers and increase volunteering uptake.		Oct '21					
Operations/ Marketing	Develop/maintain close ties with the Stewart Island/Rakiura Community & Environment trust for sharing of information and resources.	Grow local knowledge for restoration & conservation. Grow the pool of local volunteers.	ongoing							H

Category: Collaborative Relationships

Management Objectives	Focus	Actions	Outcomes	Frequency	Year					Priority
					2021-2022	2023-2024	2025-2026	2027-2028	2029-2030	
Objective 13: Triple the number of long-term collaborative relationships in 10 years to help achieve the management objectives outlined in Goals 1, 2 & 3 and support the long-term vision for MPCR.	Researchers	Use projects outlined in Objectives 1 & 2 of the Restoration Plan to approach key researchers and research institutions.	Inspiring, long-term collaborations which work towards achieving the management objectives in this Plan and advancing science in a predator-free environment.		Nov '21					H
		Explore the feasibility of developing an education/research collaboration with a tertiary institution (e.g. create an internship programme, use MPCR as a conservation field course destination).	Ongoing, strong ties with a conservation/research institute.		Dec '21					VH
	Volunteers	Build relationships with conservation volunteering organisations (e.g. https://conservationvolunteers.co.nz/) to develop an ongoing volunteer resource for specific projects.		ongoing						M
	Conservation Organisations	Identify 5 key NZ conservation organisations to partner with (e.g. Yellow Eyed Penguin Trust) and form formal relationships with these organisations.	Raised profile for MPCR, joint partnerships, shared knowledge, raise reputation as a contributor of NZ conservation.							H

Category: Cultural and Historic Heritage

Management Objectives	Focus	Actions	Outcomes	Frequency	Year					Priority
					2021-2022	2023-2024	2025-2026	2027-2028	2029-2030	
Objective 14: Quantify the unique historic and cultural heritage of MPCR.	Information gathering	Use Rachel Egerton’s archaeological report and involve local iwi and historians to summarise the Māori and early European history and cultural heritage of MPCR and local Stewart Island area.	Understand the special cultural heritage of MPCR.			V				H
		Undertaken further investigation to find the exact location of the significant Māori archaeological sites.	Identify specific cultural sites in MPCR.						M	
	Summary Map	Create a cultural/historic map of MPCR and digitise this for the GIS database.	Identify special cultural and heritage areas in MPCR.						M	

Management Objectives	Focus	Actions	Outcomes	Frequency	Year					Priority
					2021-2022	2023-2024	2025-2026	2027-2028	2029-2030	
Objective 15: Develop educational resources to celebrate the historic and cultural heritage of MPCR.		Create resources based on the themes suggested by Rachel Egerton’s archaeological report.	Education resources for visiting school groups.							M
		Plan and develop a cultural/historical interpretation walking track in MPCR, include taonga species.	Increased appreciation and connections for visitors with the historical and cultural heritage of MPCR.						M	

Goal 3: Sustainability - Work toward financial and environmental sustainability in all aspects of the MPCR operation

For this Goal, the Plan identified ways that the Mamaku Point Conservation Trust can generate income and work towards environmental sustainability while supporting objectives outlined in Goals 1 & 2.

Category: Financial Sustainability

Management Objectives	Focus	Actions	Outcomes	Frequency	Year					Priority
					2021-2022	2023-2024	2025-2026	2027-2028	2029-2030	
Objective 16: Generate a 20% annual growth in donations and grants each year from 2021 for the next nine years to support MPCR operations and research.	Finance	Develop and implement a plan to secure finance for the next five years through donations and grants. Review in 2026.	Financial plan for securing funds.		Feb '21					H
		Identify critical barriers to achieving the desired results of this objective.	Strategy to overcome barriers		Feb '21					H
	Donations	Decide on donation initiatives: e.g. general donation. Could be done through Blackbaud Peer-to-Peer Fundraising (https://hello.blackbaud.com/BBP2P-JG-NZ.html), which has premium branding, different payment options etc. e.g. adopt an acre, create a digital map of MPCR divided into acres to adopt and show on website. e.g. name a rare bird (donate \$500 to name a rare bird). e.g. sponsor a project. e.g. donate a tree. e.g. leave a legacy with a bequest. e.g. corporate sponsorship. e.g. payroll giving – give a little from your pay each week. e.g. create a membership with an annual subscription. Members regularly updated on projects, advancements, get priority for volunteering, and get sent a digital information resource kit to help spread the word.	Develop a range of donation options that suit both individuals and larger corporate sponsors.	ongoing	Mar '21					H
		Update the location and content of the donation page on the MPCR website (see Ignite report).	Raise awareness of need for funds, profile projects to donate to, how the funds would be used.		May '21					H

Marketing	Create a “Donate Now” button on the website header. Add a “donate” button to every page of the website (see https://www.sircet.org.nz/ for an example of this).	Raise awareness of need for funds. Make it easy for people to donate from any page of the website.		Apr '21						H
	Review automated follow-up email campaign for donators.	Thank you email, tax receipt, printable certificate.		June '21						H
	Create and send a members/donors bi-monthly newsletter to communicate MPCR news	Update & educate MPCR donors/members on current and future activities. Keep MPCR in donors/members’ minds.	ongoing	Mar '21						H
Grants	Use the Restoration Plan to prioritise pre-planned projects to apply for funding for major capital and research projects.	Increased efficiencies with funding applications	ongoing							H
	Create/update/maintain a database of potential funding agencies with website links, funding deadline dates, funding focus etc. See https://www.doc.govt.nz/get-involved/funding/ , https://www.es.govt.nz/about-us/funding-and-support/environmental-enhancement-fund , https://predatorfreenz.org/resources/funding-options/national-funds/ and https://www.naturespace.org.nz/national-funding for possible funding streams.	Increased efficiencies with funding applications	ongoing	Feb '21						H
	Develop ongoing collaborative relationships with tertiary and research agencies to carry out the objectives outlined in Goal 1.	Ongoing, professional collaborations to increase the understand of the biodiversity of MPCR and success of projects undertaken.	ongoing							H
	Develop collaborative relationships with corporate organisations to provide grants/funds for specific projects outlined in the Restoration Plan.	Corporate financial support for MPCR projects. Provide ongoing opportunities to raise and strengthen brand awareness for MPCR and corporate sponsor.	ongoing							H
	Develop ongoing relationships with philanthropic organisations that support and promote conservation in NZ. (e.g. Mohua Charitable Trust http://www.mohua.co.nz/).	Financial and peer support for MPCR Goals and projects.	ongoing							H

Management Objectives	Focus	Actions	Outcomes	Frequency	Year					Priority
					2021-2022	2023-2024	2025-2026	2027-2028	2029-2030	
Objective 17: Generate \$60,000.00 per year (excluding grants) received through camp income and ecotourism visitors from 2022 to support MPCR's operational costs.	Income	Develop a plan to generate income through the camp and ecotourism.	A plan for securing funds for contribute to MPCR's operational costs.		Apr					H
	Camp	Increase income generated through groups visiting the camp (see Objective 11 in Goal 2).	Revenue, potential donors/members/volunteers, raise brand profile.	ongoing						H
	Marketing	Work with local eco-tourism operators to develop daytime tours (currently just night kiwi tours) and night sky tours.	Revenue, potential donors/members/volunteers, raise brand profile.	ongoing	Jan					VH
		Consider supporting local artisans to sell local, nature-themed art/craft items as a memory of MPCR.	Revenue, raise brand awareness and participator 'ownership'.	ongoing						M

Category: Environmental Sustainability

Management Objectives	Focus	Actions	Outcomes	Frequency	Year					Priority
					2021-2022	2023-2024	2025-2026	2027-2028	2029-2030	
Objective 18: Reduce energy use/waste in MPCR by 15% by 2026.	Waste	Develop a plan to minimise the generation of non-renewable waste in MPCR's daily operations and implement.	Reduction in waste and costs of waste disposal.	ongoing						H
		Removal of plant, equipment and other materials left over from the former farming operation.	Redundant/spent operational material removed. Improved visual and natural environment.							M
	Energy	For the camp, undertake a feasibility study to explore alternative sources of renewable energy and ways to minimise waste (e.g. composting toilets).	Identify ways to increase sustainability in daily operations to reduce costs & MPCR's environmental footprint. Use these as educational tools for groups.		Dec					M
	Sustainability	Identify corporate collaborations to help facilitate improved environmental sustainability/use renewable energy.	Fund solar power installation.							M

Category: Operational Sustainability and Best-Practise

Management Objectives	Focus	Actions	Outcomes	Frequency	Year					Priority
					2021-2022	2023-2024	2025-2026	2027-2028	2029-2030	
Objective 19: Ensure all aspects of MPCR's daily operation follow best-practise standards.	Operations	Update and improve health and safety plans for visiting schools.	Minimise hazards and health & safety issues.	ongoing						H
	Monitoring	Use up-to-date data collection and data entry methods that meet NZ-wide standards.	Data collected using robust, recognised methods. Ability to directly compare ecological changes on MPCR with other parts of NZ.							H

Management Objectives	Focus	Actions	Outcomes	Frequency	Year					Priority
					2021-2022	2023-2024	2025-2026	2027-2028	2029-2030	
Objective 20: Develop/update industry-standard, 'best practise' policies/procedures to maintain and improve the biological, cultural & historic resources in MPCR.	Policies	Create and/or keep up to date the following policies: biosecurity for visiting groups, health & safety for visiting groups and volunteers, training for volunteers, cultural consultation, plant & animal diseases, historic and cultural sites, data sampling techniques, management techniques, self-introduction, sourcing, species protection, translocations. Whenever possible, follow industry standard, best-practise techniques. Review these annually to ensure they met the current standards of the time.	Completed policies on hand ready to use when appropriate. Managed projects, resources, and personnel at MPCR to 'best practise' standards in all areas.	ongoing updates						H