



Mangapārae Papakainga

Restoration Progress Report December 2020

Mangapārae Papakainga Restoration

11 Te Whiwhi Steet, Whatatutu

Gisborne

Virginia Tamanui and Sjimmy Fransen

Introduction

Te Kooti Arikirangi Te Turuki prophesied over the lands at Mangatū concerning its erosion which our whānau in 2017 interprets, underpins the basic need for kaitiakitanga and healing in the wake of colonization, land loss, deforestation, farming and mismanagement of our whenua that has led to an erosion of our ways of knowing and being associated with uninterrupted tenancy, and caring for the whenua, over many generations. Our whānau led and managed restoration project hopes to address the loss of this mātauranga and, to have an opportunity, to demonstrate our commitment of relationship with our whenua toward wellness and flourishing for the land and the people.

We are planting over 10000 Tōtara, Kahikatea, Mānuka, Kānuka, Karaka, Pūriri, Rewarewa, Rimu, Tītoki and other native species and wetland species. This will encourage the return and species improvement of native pigeon the Kererū, Weka and Tui. Mangapārae will be a haven for endangered birds and plants including Ngutukākā. In addition, we are building spaces for reflection, a way-finding loop with boardwalks and accessible walkways.



Mangapārae Papakainga

Progress report

Planting 4000 trees June-October 2020



Species plated 2020

- Dacrycarpus dacrydoides - Kahikatea or White Pine
- Podocarpus totara - Totara
- Sophora tetraptera - NZ Kowhai
- Leptospermum scoparium - Manuka
- Kunzea ericoides RX90 - kanuka
- Cordyline australis - Cabbage tree
- Coprosma robusta - Karamu
- Pittosporum eugenoides - Lemonwood
- Hoheria angustifolia
- Griselinia littoralis
- Hoheria populnea
- Melicytus ramiflorus RX90 - Whiteywood
- Pittosporum ralphii
- Myrsine australis - Matipo/Mapou
- Dacrydium cupressinum - Rimu or Red Pine
- Knightia excelsa - Rewarewa or NZ Honeysuckle
- Alectryon excelsa - Titoki

Monitoring November 16th, 2020

Monitoring team: SJimmy Fransen, Virginia Tamanui, Stephanie Gardner (Project Crimson, expert support)

Advanced Plot Method, to provide a statistically robust estimate of survival and early growth. X 6 plots with permanent peg at the centre of each plot and mark out a circular area with a 5-metre-long piece of string to create a 10 m diameter plot.



| Mangaparae Papakainga Native Tree planting and monitoring | | | |
|--|--|---|--|
| Total Trees planted 8000 | | | |
| <i>Survival by species and Species and approx. numbers planted</i> | | | |
| Date of monitoring | | 16/11/2020 | |
| Methodology | Advanced Plot Method, to provide a statistically robust estimate of survival and early growth. The Advanced Plot Method is based on sampling a small proportion of planted native trees using a network of plots placed across a representative area of the planting site. | Established grid across planted area with plot at each intersect of grid. Require minimum of six 10m diameter plots per planting. | Marked out the plots place a permanent peg at the centre of each plot and mark out a circular area with a 5-metre-long piece of string to create a 10 m diameter plot. |
| Species name | Average height (in centimetres) | Subjective assessment of plant vigour 1. Poor 2. Struggling 3. Average 4. Good | Season planted |
| Plot 1 | | | 21 trees in plot |
| <p>SAMPLE PLOT LAYOUT</p> <p>Place permanent peg at the centre of each plot</p> <p>Record survival and height by species for planted trees within 5m radius</p> | | <p>SAMPLING LARGE-SCALE PLANTED AREAS</p> <p>Establish grid across planted area with plot at each intersect of grid.</p> <p>Require minimum of six 10m diameter plots per planting.</p> <p>Aim to sample a minimum of 200 planted natives.</p> | |

| | | | |
|-------------------------|------|---------|-------------------------|
| Kanuka | 0.9 | Good | 2020 |
| Kahikatea | 65 | Good | 2019 |
| Kanuka | 60 | Good | 2019 |
| Kanuka | 1.3 | Good | 2019 |
| Kanuka | 1.15 | Good | 2019 |
| Kanuka | 1 | average | 2020 |
| Tarata | 0.45 | Good | 2020 |
| Tarata | 0.3 | Good | 2020 |
| Kanuka | 0.85 | Good | 2019 |
| Rimu | 1.5 | Good | 2019 |
| Kanuka | 1.3 | Good | 2019 |
| Kahikatea | 0.45 | Good | 2020 |
| Kanuka | 0.85 | Good | 2019 |
| kohukohu | 0.2 | poor | 2020 |
| Kanuka | 1.2 | Good | 2020 |
| Hoheria Angustifolia | 0.7 | Good | 2020 |
| Hoheria Angustifolia | 0.5 | poor | 2020 |
| Hoheria Angustifolia | 0.55 | Good | 2020 |
| Kanuka | 1.1 | Good | 2020 |
| Kanuka | 0.9 | Good | 2020 |
| rewarewa | 0.85 | Good | 2020 |
| Plot 2 | | | 15 trees in plot |
| Kapuka | 0.5 | Good | 2020 |
| Rimu | 1.1 | Good | 2020 |
| kohukohu | 0.2 | poor | 2020 |
| Kanuka | 0.4 | Good | 2020 |
| rewarewa | | dead | 2020 |
| karomiko | 0.3 | poor | 2020 |
| Kanuka | 0.1 | poor | 2020 |
| manuka | 0.3 | Good | 2020 |
| Hoheria Angustifolia | 0.6 | Good | 2020 |
| Tarata | 0.3 | poor | 2020 |
| rewarewa | 0.7 | poor | 2020 |
| Kahikatea | 1.1 | Good | 2020 |
| Kanuka | 0.4 | Good | 2020 |
| Kahikatea | 1 | Good | 2020 |
| Kanuka | 0.6 | Good | 2020 |
| Plot 3 | | | 25 trees in plot |
| Hoheria Angustifolia | 0.9 | Good | 2020 |
| Kapuka | 0.5 | Good | 2020 |
| Kahikatea | 0.7 | Good | 2020 |
| Hoheria Angustifolia | 1 | Good | 2020 |
| Kanuka | 0.6 | Good | 2020 |
| Hoheria Angustifolia | 0.5 | Good | 2020 |
| mapou | 0.4 | Good | 2020 |

| | | | |
|-------------------------|-----|--------------|-------------------------|
| Kahikatea | 0.6 | Good | 2020 |
| Kanuka | 0.5 | Good | 2020 |
| manuka | 1 | Good | 2020 |
| Hoheria Angustifolia | 0.5 | Good | 2020 |
| Tarata | 0.4 | Good | 2020 |
| manuka | 0.8 | Good | 2020 |
| Kanuka | 0.8 | Good | 2020 |
| mapou | 0.3 | Good | 2020 |
| Kanuka | 0.1 | Good | 2020 |
| rewarewa | 0.8 | Good | 2020 |
| manuka | 0.9 | Good | 2020 |
| kotukutuku | 0.6 | Good | 2020 |
| kanuka | 0.9 | Good | 2020 |
| Tarata | 0.5 | Good | 2020 |
| manuka | 0.8 | Good | 2020 |
| karamu | 0.6 | Good | 2020 |
| Kahikatea | 0.6 | Good | 2020 |
| Kahikatea | 1.1 | Good | 2020 |
| Plot 4 | | | 23 trees in plot |
| totara | 0.5 | Good | 2020 |
| Kahikatea | 0.8 | Good | 2020 |
| Kahikatea | 0.9 | Good | 2020 |
| Kahikatea | 0.8 | Good | 2020 |
| Kahikatea | 0.4 | Good | 2020 |
| totara | 0.4 | Good | 2020 |
| totara | 0.6 | Good | 2020 |
| totara | 0.4 | Good | 2020 |
| totara | 0.7 | Good | 2020 |
| totara | 0.7 | Good | 2020 |
| totara | 0.6 | Good | 2020 |
| totara | 0.9 | Good | 2020 |
| totara | 0.7 | Good | 2020 |
| totara | 0.5 | Good | 2020 |
| Kahikatea | 1.1 | Good | 2020 |
| totara | 0.6 | Good | 2020 |
| totara | 0.4 | Good | 2020 |
| totara | 0.5 | Good | 2020 |
| Hoheria Angustifolia | 0.5 | Good | 2020 |
| manuka | 0.5 | Good | 2020 |
| mahoe | 0.4 | Good | 2020 |
| Totara | 0.4 | Good | 2020 |
| Totara | 0.5 | Good | 2020 |
| Plot 5 | | | 28 trees in plot |
| Rimu | 1.1 | Good | 2020 |
| Tarata | 0.4 | Good | 2020 |
| Tarata | 0.5 | Good | 2020 |
| Rewarewa | 0.5 | poor | 2020 |
| Hoheria Angustifolia | 0.5 | poor browned | 2020 |

| | | | |
|----------------------|-----|--------------|------------------|
| hoheria Sexitylosa | 1.1 | poor | 2020 |
| karomiko | 0.4 | Good | 2020 |
| Hoheria Angustifolia | | dead | 2020 |
| karomiko | 0.5 | Good | 2020 |
| manuka | 0.3 | poor | 2020 |
| Kanuka | 0.5 | Good | 2020 |
| Hoheria Angustifolia | 0.9 | Good | 2020 |
| manuka | 0.4 | Good | 2020 |
| Kapuka | 0.5 | Good | 2020 |
| kotukutuku | 0.4 | Good | 2020 |
| titoki | 0.6 | poor | 2020 |
| manuka | 0.5 | Good | 2020 |
| manuka | 0.4 | poor | 2020 |
| tikouka | 0.3 | Good | 2020 |
| mahoe | 0.4 | poor | 2020 |
| Manuka | 0.4 | good | 2020 |
| Kanuka | 0.4 | Good | 2020 |
| Tarata | 0.4 | Good | 2020 |
| Kanuka | 0.5 | Good | 2020 |
| Kapuka | 0.4 | Good | 2020 |
| Rimu | 1 | average | 2020 |
| Kanuka | 0.6 | Good | 2020 |
| Kanuka | 0.6 | Good | 2020 |
| Plot 6 | | | 21 trees in plot |
| Tarata | 0.5 | Good | 2020 |
| Rimu | 1.1 | Good | 2020 |
| manuka | 1.3 | Good | 2020 |
| Hoheria Angustifolia | 0.5 | Good | 2020 |
| dead | | | 2020 |
| manuka | 0.4 | Good | 2020 |
| manuka | 0.4 | Good | 2020 |
| Tarata | 0.3 | Good | 2020 |
| Hoheria Angustifolia | 0.7 | Good | 2020 |
| Tarata | 0.6 | Good | 2020 |
| Hoheria Angustifolia | 0.8 | Good | 2020 |
| Kanuka | 0.4 | poor | 2020 |
| manuka | 0.3 | Good | 2020 |
| Kapuka | 0.3 | Good | 2020 |
| karomiko | 0.5 | good | 2020 |
| Manuka | 0.4 | Good | 2020 |
| karomiko | 0.4 | Good | 2020 |
| Tarata | 0.6 | Good | 2020 |
| mapou | 0.3 | struggling | 2020 |
| Hoheria Angustifolia | 0.5 | poor browned | 2020 |
| Tarata | 0.3 | poor | 2020 |
| | | | |

| Mangaparae Species and approx. numbers planted | | |
|---|-------------|--|
| Manuka | 2600 | |
| Kanuka | 1550 | |
| Taupata | 45 | |
| Karamu | 365 | |
| NZ Kowhai | 160 | |
| Kahikatea | 660 | |
| Totara | 800 | |
| Matai | 24 | |
| Puriri | 55 | |
| Rewarewa | 113 | |
| Ti-kouka | 250 | |
| Ake ake | 14 | |
| Rimu | 200 | |
| Kohuhu | 200 | |
| Koromiko | 200 | |
| Lemonwood | 500 | |
| Hoheria angustifolia | 500 | |
| Griselinea littoralis | 100 | |
| Hoheria populnea | 50 | |
| Whiteywood | 160 | |
| Ngutukākā | 4 | |
| Pittosporum ralphii | 200 | |
| Matipo/Mapou | 150 | |
| Titoki | 100 | |
| | 9000 | |

Key moves 2020

- Removal of noxious plants and pests completed
- Planting completed

Planting team: Moeawa, Sjimmy-Zev, Apenti, Kito, Ngawari, Sjimmy, Virginia, Ngaire, Wana, Trish, Gerald, Renee, Whatarau, Vicky Courtney, Dianne, Ginia, Hauturu, Peipi whanau, Rakati and others.

- Driveway repaired
- Fencing maintained
- Health and safety and COVID
- Mangaparae Community response: \$50 Pack and Save vouchers for all Whatatutu households
- Website updated www.mangaparae.com

Photographic documentation 2020













