

# 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.



## 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

Griselinea 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 16<sup>th</sup>, 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 Papak	ainga Native Tree planting and	monitoring	
Total Trees planted 8000			
Survival by species (	and Species and approx. number	s planted	
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
Place permanent peg at the centre of each plot  Record survival and height by species for planted trees within 5m radius		SAMPLING LARGE-SCALE PLAN	Establish grid across planted area with plot at each intersect of grid.  Require minimum of six 10m diameter plots per planting.  Aim to sample a minimum of 200 planted natives.

Kanuka	0.9	Good	2020
Kahikatea	65	Good	2019
Kanuka	60	Good	2019
Kanuka	1.3	Good	2019
Kanuka	1.15	Good	2019
Kanuka			2020
Tarata	0.45	average Good	2020
Tarata	0.43	Good	2020
Kanuka	0.85		2020
		Good	
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	0.7	Cood	2020
Angustifolia Hoheria	0.7	Good	2020
Angustifolia	0.5	poor	2020
Hoheria	0.3	ροσι	2020
Angustifolia	0.55	Good	2020
Kanuka	1.1	Good	2020
Kanuka	0.9	Good	2020
rewarewa	0.85	Good	2020
Plot 2	0.83	Good	15 trees in plot
Kapuka	0.5	Good	2020
Rimu	1.1	Good	2020
kohukohu			2020
	0.2	poor	2020
Kanuka	0.4	Good	
rewarewa		dead	2020
karomiko	0.3	poor	2020
Kanuka	0.1	poor	2020
manuka	0.3	Good	2020
Hoheria	0.6	Good	2020
Angustifolia			
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	2.2	Cood	2000
Angustifolia	0.9	Good	2020
Kapuka	0.5	Good	2020
Kahikatea	0.7	Good	2020
Hoheria	4	Good	2020
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	0.9	Good		2020
totara	0.5	Good		2020
Kahikatea	1.1	Good		2020
totara	0.6	Good		2020
totara	0.4	Good		2020
totara Hoheria	0.5	Good		2020
Angustifolia	0.5	Good		2020
manuka	0.5	Good		2020
mahoe	0.4	Good		2020
Totara	0.4	Good		2020
	0.4			2020
Totara	0.5	Good	20 troop in plat	2020
Plot 5	A A	Cood	28 trees in plot	2020
Rimu	1.1	Good		2020
Tarata	0.4	Good		2020
Tarata	0.5	Good		2020
Rewarewa	0.5	poor		2020
Hoheria	٥٢	noor browned		2020
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	0.0	- G000	21 trees in plot
Tarata	0.5	Good	2020
Rimu	1.1	Good	2020
manuka	1.3	Good	2020
Hoheria	1.5	Good	2020
Angustifolia	0.5	Good	2020
dead	0.5	3000	2020
manuka	0.4	Good	2020
manuka	0.4	Good	2020
Tarata	0.3	Good	2020
Hoheria	0.5	Good	2020
Angustifolia	0.7	Good	2020
Tarata	0.6	Good	2020
Hoheria	0.0		1929
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	0.3	JU USSIIIIS	2020
Angustifolia	0.5	poor browned	2020
Tarata	0.3	poor	2020
	0.5	, p. 00.	2020

Mangaparae Species and appre	ox. 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 <u>www.mangaparae.com</u>

### Photographic documentation 2020

























