



MIRO Past and Future —People, Pests and Plants

Jo Greenman and Terry Webb



Photo: Jill Bagnall



The Organisation—Part 1

- Jun 1998: Some EHEA members propose establishing a Mainland Island in the Northern Forest
- Aug 1998: MIRO subcommittee of EHEA formed; local Iwi consulted about MI concept
- Nov 1999: Agreed that finances to be separate from EHEA
- Nov 2001: Long-term objective is to establish a Mainland Island, but extent uncertain
- Mar—Oct 2003: GW takes over EHRP responsibility from HCC, meets with MIRO to discuss its activities; MIRO forms sub²committee to look at future directions, agreeing on:
 - Reintroductions
 - Lakes block revegetation
 - Rata mapping
 - Pest animal eradication
 - Pest plant eradication
 - Administration
 - ~~Reintroduction of plant species~~
- A complete split from EHEA is suggested, not everyone agrees!

MIRO Committee Members

Ray Smith (Chair, 6y)
Jan Heine
Arnold Heine
Stan Hunt
Jill Bagnall
Ben Wiles
Gen Walcott
Keena Gibbs
Felicity Rashbrooke
Rob Harris
Jerry Wellington
Graeme Claridge
Gail Abel
Alan Bagnall
Reg Cotter
Bob Brockie
George Gibbs
Derek Sale
Owen Spearpoint
Chris Morey
David McDougall
Graham Maxwell



The Organisation—Part 2

- Mar 2004: “Need a coordinated programme”— Gail (Chair from Aug)
- Jan 2005: Mission Statement adopted by MIRO:
 - Protection and restoration of native species
 - Elimination of pests
 - Reintroduction of native species
 - Achievement of our vision through involvement and advocacy
- Feb 2005: MIRO Subcommittee organised into:
 - 1) monitoring/predator control (including Lakes revegetation)
 - 2) administration/sponsorship 3) pest plants 4) bird translocationsAgreed to move to independent status as a priority
- 2005/06: EHEA committee and then AGM formally advised of separation
- Apr–Jul 2009: Draft constitution approved by MIRO subcommittee; MIRO becomes an Incorporated Society and then a registered charity
- April 2010: mission statement, guiding principles and actions agreed
- (February 2011: Baring Head becomes part of EHRP)

MIRO Committee Members

Gail Abel (Chair, 6y)
Russell Bell
Pene Burton
Maureen Hines
Kevin Bateman
Erik Vanderspek
Mike Rumble
Parker Jones
Doug Mercer
Colin Ross

Doug Mercer (Chair, 5y)
Nick Pharazyn
Keith Levy
Linda Mead
Sally Bain
Terry Webb

Terry Webb (Chair, 7y...)
Bjorn Johns
Robin Conner
Ian White
Manus Chakraborty
Pamela Hyde
Oliver Seiler
Ben Bruno
Heidi Peck



Trying to Help the Birds



Birds counts were started in 1999 and continue to this day

Robin translocation

2007 & 2008 – MIRO collected and released 28 robins from Waitatara River, monitoring showed wide dispersal

2011 & 2012 – 80 more from Kapiti Island

A well-executed project, lessons learned

Due to wide dispersal and forest size, this project was not continued, but at least we tried.



Acoustic recorders

2017 – 5 acoustic recorders deployed to record bird song and Bats

2020 – Kiwi reported near Wainuiomata

2021 – now 10 recorders deployed across 20 sites each winter

To date no kiwi or bats have been detected





Tūturiwhatu/Banded Dotterels



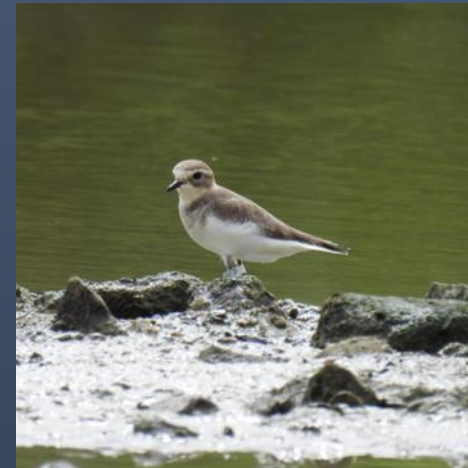
2014 – Dotterel monitoring starts at Eastbourne with 2 pairs

Today – 30 to 40 nests monitored across 3 sites: Eastbourne, Roto Parangarahu and Ōrua Pauanui/Baring head

- 100s of monitoring trips annually
- Volunteers make a huge effort erecting temporary fences and signage.
- Iwi place Rāhui
- Trapping networks, including cat traps, have been set up for protection
- Education campaign to address the cat predation



Parker Jones leads this operation and learnings are used nationally.





All Things Trapping – Possums

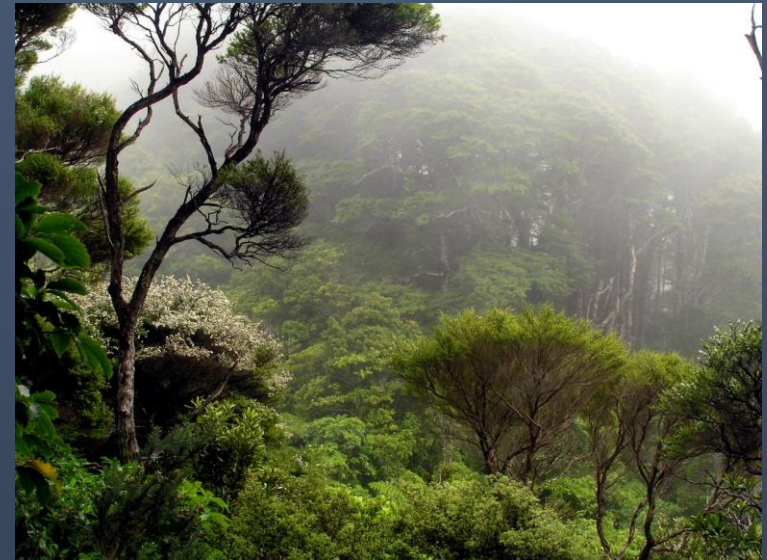
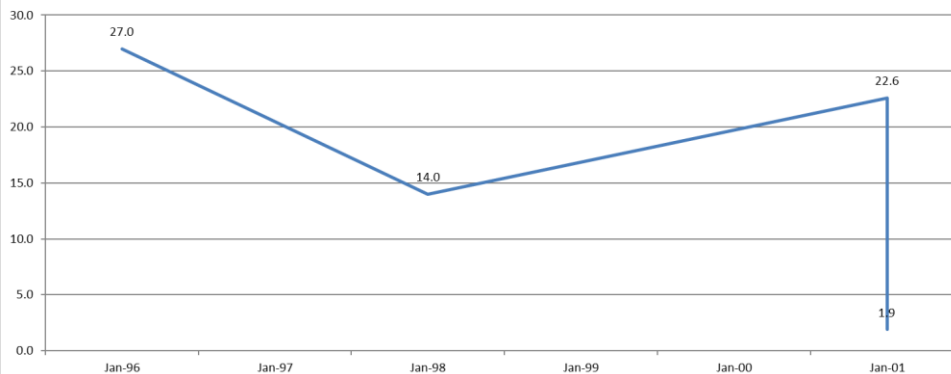


- Possum Busters late 1990's
- GW-led possum removal late 2001:
Residual Trap Catch (RTC) index plummets
3-yearly control campaigns considered
5% target RTC



Photo: Phil Benge?

Northern Forest Possum Monitoring (RTC Index) to Jan 2001





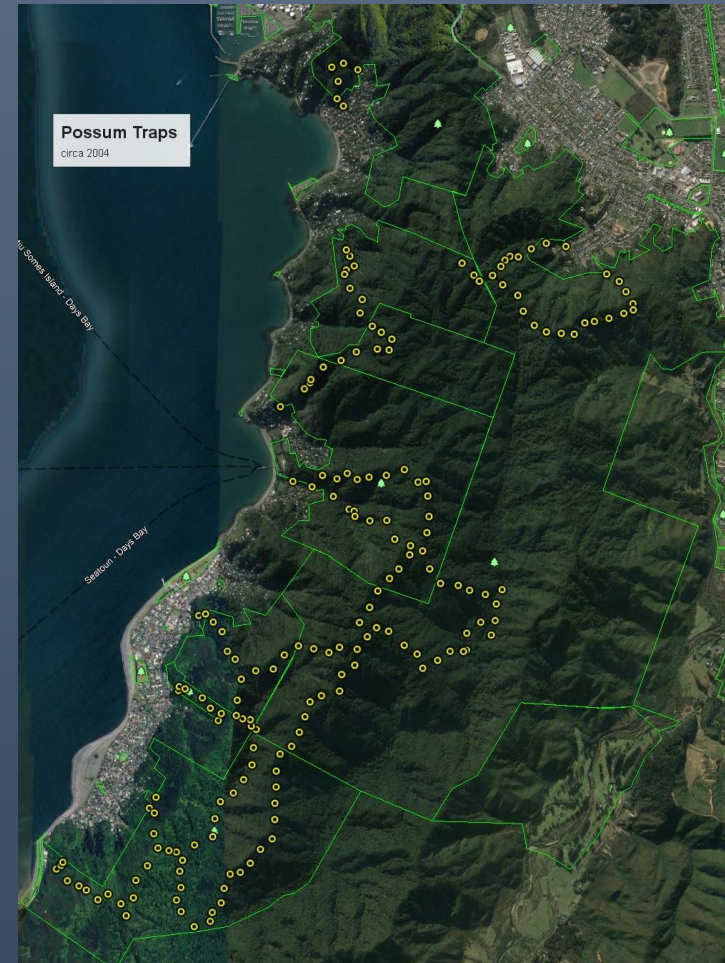
Possums continued...



- 2002: Damage to gardens at forest edge
- Reactivate possum busters? 30 more traps ordered
- Some individual traplines operating in the Forest, with regular catches
- 2004: GW propose establishing more traplines for MIRO



Photo: Gail Abel



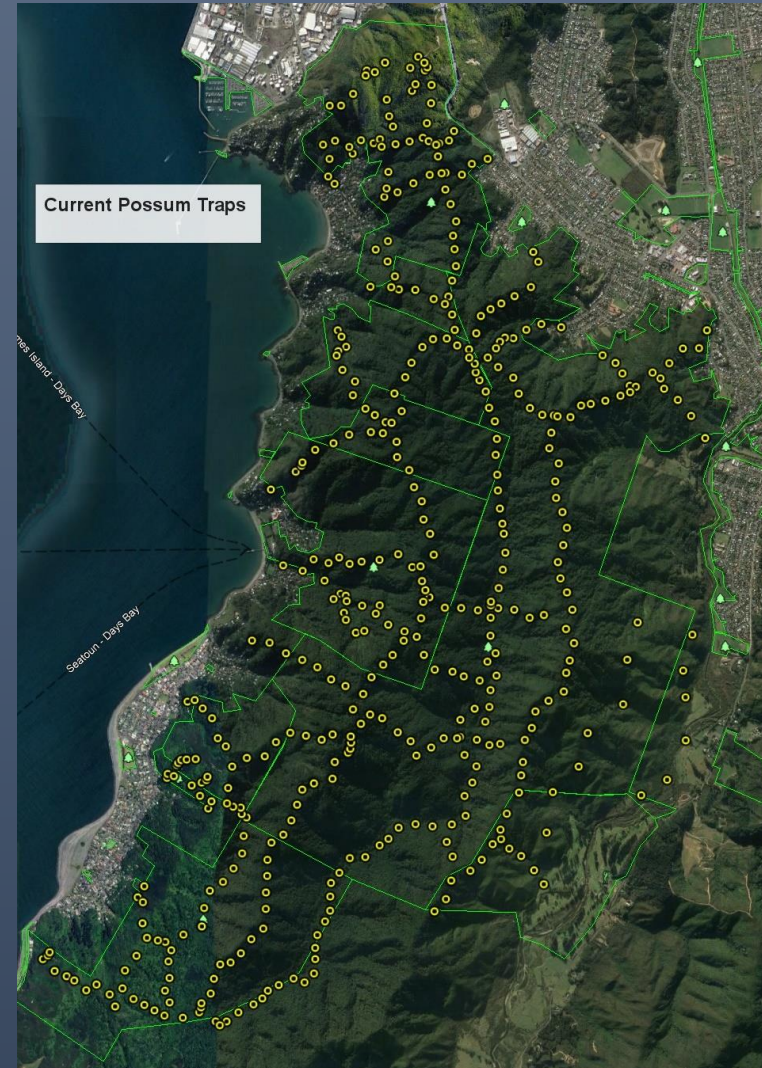
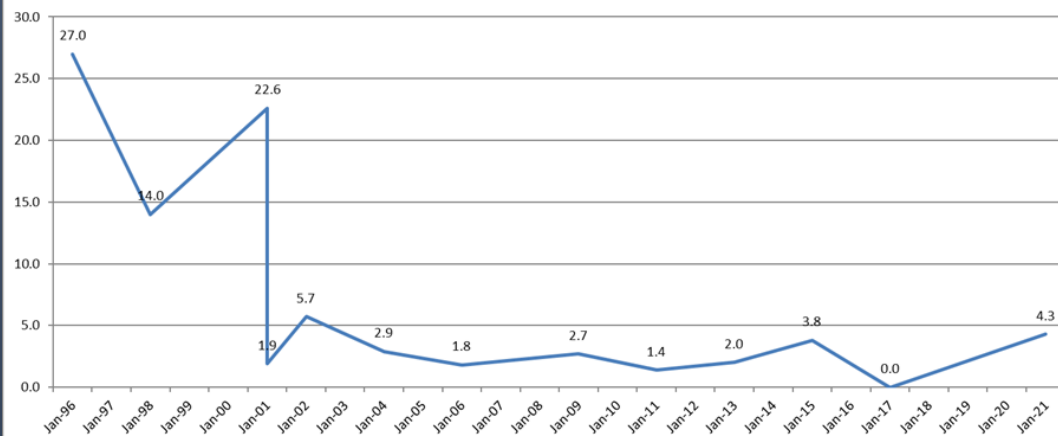


Possums continued...



- Further traplines established to give more complete coverage
- RTC index maintained at low level
- OSPRI involved because <2% RTC required to remove Bovine TB
- Future:
 - 1 trap/ha! 🖐️
 - Gapfilling?

EHRP Northern Forest Possum Monitoring Trend (RTC Index) to Mar 2021

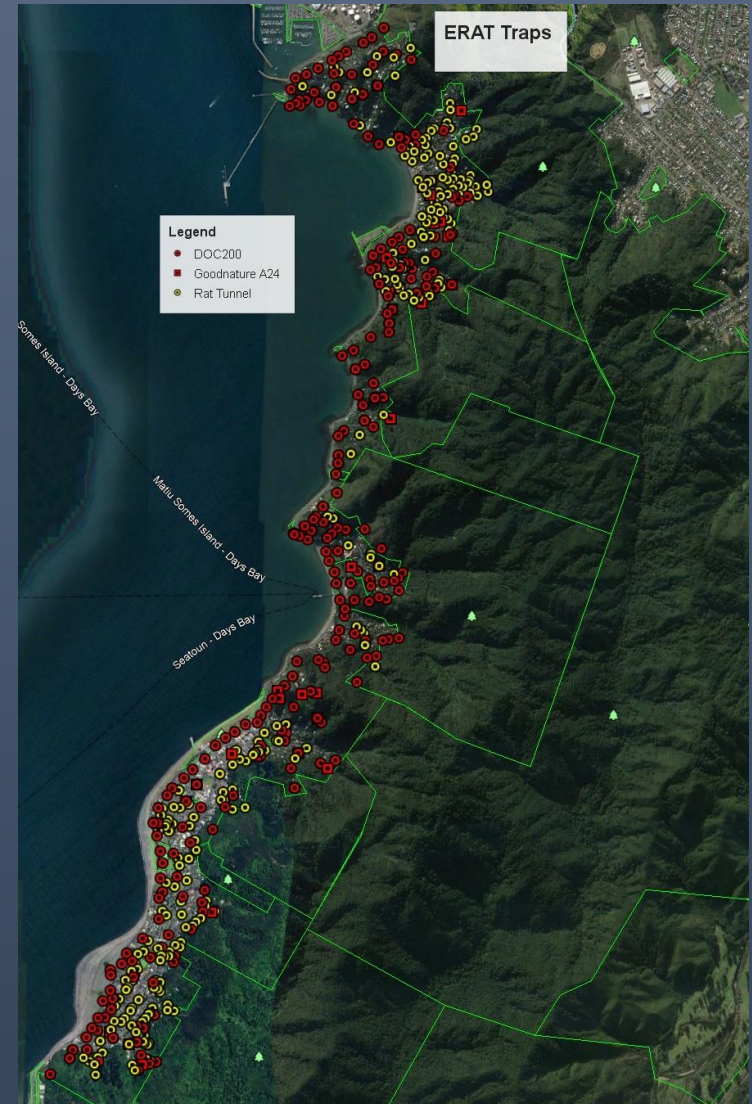




All Things Trapping – ERAT



- 2016: Project kicked off by Sally Bain with community meeting; already 20 A24s supplied by HCC deployed on loan
- 2017: \$35k MfE grant secured plus HCC contribution
- Over 3 years:
 - 150 foreshore DOC200s installed
 - Over 400 households trapping (including ~100 DOC200s)
 - Regular monitoring in place:
 - Rat tracking now at about 5%
 - Hedgehogs at about 17% !!
- Future:
 - Bird protection areas for shared path (with funding)
 - Better baiting?
 - Hedgehog control (A24's?)





All Things Trapping – Mustelids (and Hedgehogs)



- 2003: reluctance to trap stoats (thought to control rat population)
- 2008: only a few stoat traps in use
- 2010: stoat traps being assembled for Middle Ridge (MI)
- 2013: 27 DOC200s in place around MI, 39 more needed to cover it
- 2017: Forest-wide DOC200 network in place
- 2019: Feral cat trap network added
- 2020: Kiwi Corridor extension
- Future:
 - Better baiting?
 - Interpreting motolure data?

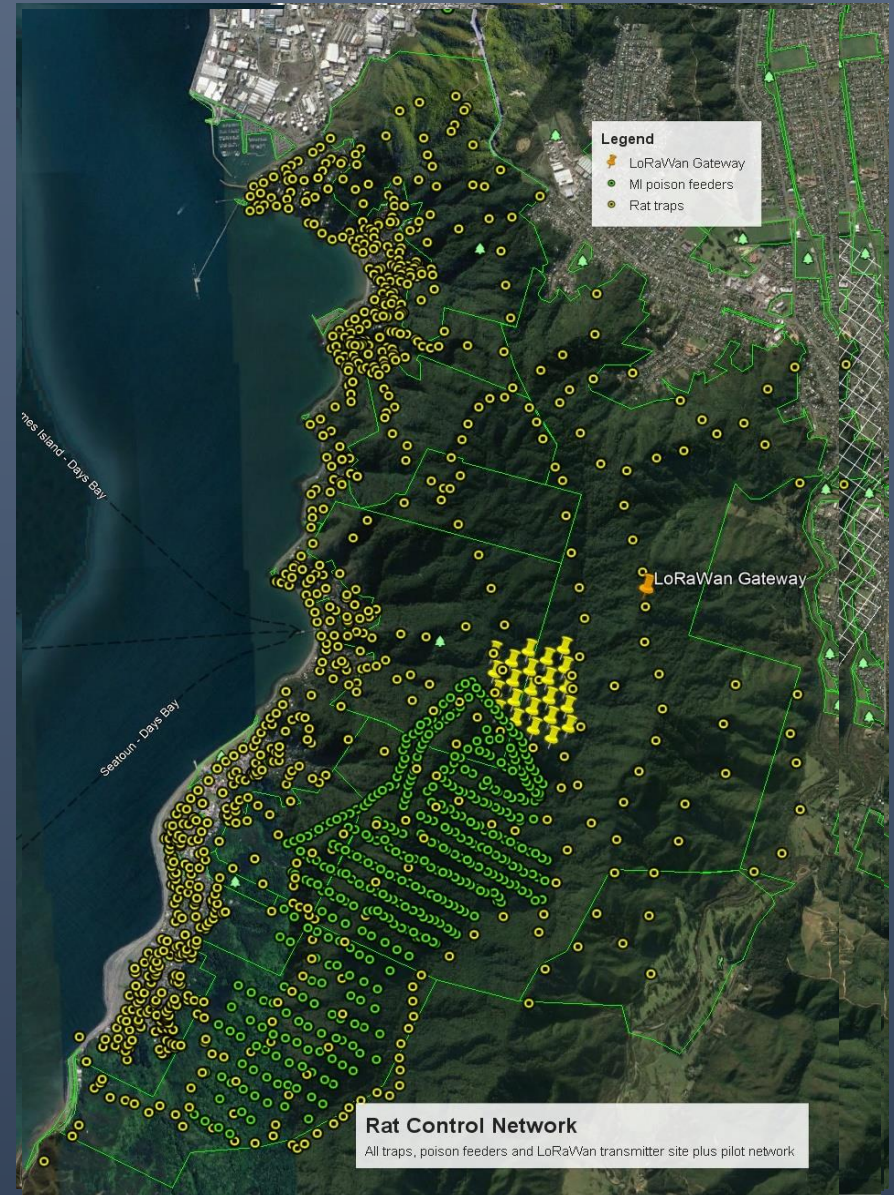




All Things Trapping – Rats!



- 2002: Early rat trapping (e.g. 87 traps near Hawtrey)
- 2006: GW established Mainland Island
- MI extended, then partly intensified in 2010
- 2015: Further MI extension postponed
- 2017: Trial of A24 traps shows low catch rate
- 2023: GW approves installation of radio gateway for small trial network
- Future:
 - Forest-wide rat control desirable
 - Done elsewhere in NZ on this scale
 - Must be long-term sustainable, so efficient, hence radio trial
 - Targeted trapping may help, but need to handle mast years





Plants Galore!



Roto
Parangarahu
and
Baring Head/
Ōrua-Pouanui





Seed Collection, Raising and Departure



MIRO Nursery 2009



MIRO Nursery 2019





15 Planting Plots

Plot 1 2007



Plot 15 2021-2023





Plot 1





Plot 2



So much growth we cut down Ngaio to plant the future canopy trees like Rata and Miro



Plots 3 & 4



2009



2022



2013



2021





Plots 9,10 and 11



2015



2022





Plot 13



2019



Human chain gang to get the plants to the top of the plot

2023



First secondaries going in



Plot 14



2020



2023





Freedom Planting



Pukatea 10 years later



Mass primary plants



New secondary freedom planting experiment



2012



The original protectors were hard core





Going Forwards



- Contractors are planting 900 plants this year
- Keep the stock out
- Keep controlling pest animals
- More freedom planting
- Protector & Planting plot fence removal...





MIRO's Plants



Taranaki Whānui ki Te Upoko o Te Ika, Tangata whenua hands on reconnecting with the whenua

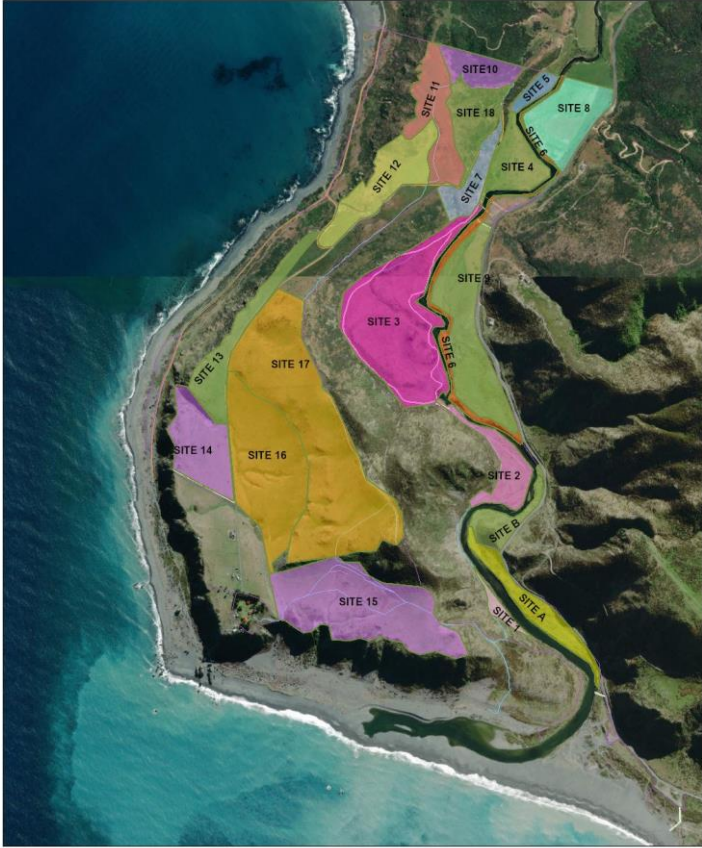




Baring Head/Ōrua Pouanui



Baring Head Ōrua Pouanui planting zones 2023



30/04/2023

- Miro Nursery has supplied over 5,000 Plants for /Baring Head/Ōrua Pauanui since 2013
- Up to this year focus has been on the revegetation of the river Valley
- 64,000 plants planted by the end of 2023



Climate Emergency declared

- Low Carbon Emissions funding
- Grazing retirement Feb 2023
- Pest animal and plant control
- Wildfire risk assessment
- Fire break development



Baring Head/Ōrua Pouanui



- Terrace planting plot trials
- Red Tree Trials





Baring Head/Orua Pouanui





Going Forwards



Now there are vast areas to revegetate with a special mix of grey scrub and stunted coastal forest





Breadth of Activities



1998-2004

About 15 individual projects:

Rata aerial photos & photo points

Rata bands mapped

Hinau seed monitoring

Tree flowering and fruiting measurements

Deer exclosure plant survey and comparison plot

Mistletoe protection

Shop Window planting and protection

Helping GW with invertebrate pit fall traps

Bibliography

Fact/information sheets

Quarterly bird counts

Pest trapping and monitoring:

- Possum control with at least 5 trap lines

- Mustelid trapping (~30 DOC200s)

- Mainland Island Habitat (87 rat traps)

- Rat monitoring

2023

Pest trapping & monitoring

Revegetation

Bird monitoring & protection

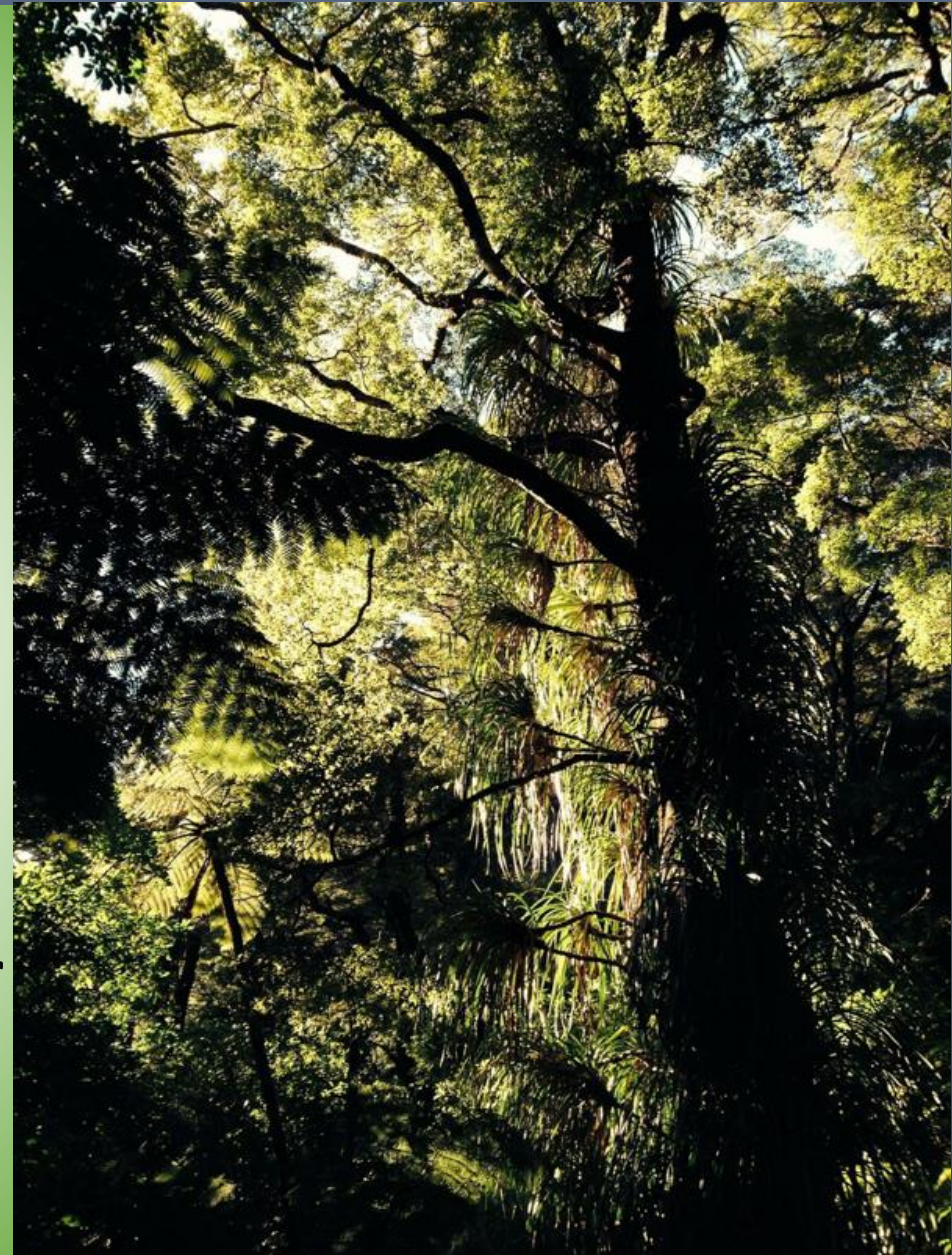
Publicity



We Need Your Help!



- Get stuck in on the ground
 - Committee member, Secretary, Publicity/Social media
 - Help with the other key projects
 - Radio linked traps project
 - Dotterel monitoring
 - Translocations??
 - Pick a project and see it through
 - Create your legacy
- ➡ Chat to a committee member





Questions?



Photo: Parker Jones

THANKYOU GAIL

Millions of seeds collected

- 24 years MIRO membership

1,000+ Plants planted

46,000 Plants grown
to planting size

- 7 years as Treasurer 1999-2006

- 6 years as Chair 2004-2010

100s Volunteers

recruited and

wrangled

47 bird
counts

- Convenor of bird counts for 24 years

- Helped to develop formal trapping lines,

recruited volunteers & had her own line

Lots of rats, organised
possums &

- Managed the MIRO nursery for 17 years and

hedghogs

trapped

still going strong

40 financial reports

180 MIRO meetings

There's
only
1 Gail