Kiwi Coast Ten Year Report





Maia the kiwi at her release, Feb 2023. Photo: Carlyn Condon

Report prepared by Ngaire Sullivan, Kiwi Coast Coordinator, July 2023.

This document can be downloaded from the Kiwi Coast website: www.kiwicoast.org.nz

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Executive Summary

This Ten Year Report presents Kiwi Coast's key activities and achievements from July 1, 2012 – June 30, 2023. A summary of achievements to date against Key Performance Indicators, Objectives and Goals identified in the <u>Kiwi Coast Trust Strategic Plan</u> is also provided.

Kiwi Coast Coordinators and specialist contractors have now provided a decade of support aimed at fostering links and enabling community, hapū and iwi-led conservation and kaitiakitanga across Northland.

Over the decade the number of projects linked into Kiwi Coast has increased beyond expectation - from 32 to 225. The collective area managed by these entities has likewise increased to over 251,300 hectares.

A key focus of Kiwi Coast has been supporting these groups and projects to carry out effective and efficient pest control. Introduced pests defoliate forests, compete with native wildlife for resources, destroy nests, wetlands and forest floors and predate on vulnerable native species to the point of extinction.

Ten years of trap catch data collation has demonstrated both the tenacity of Northlander's to sustain their projects through often difficult times and the strength of Kiwi Coast's collaborative approach. A record number of 116,952 animal pests were trapped across the Kiwi Coast last year, taking the ten year grand tally to 708,536. On average, approximately 2,250 animal pests are now trapped across the Kiwi Coast network every week.

A further 22 skill building workshops were held in 2023 taking the ten-year total to 121. These have included regional hui and wānanga such as the annual Northland Pest Control Workshop and been a great way of bringing people together to share ideas, skills and perspectives.

Acknowledgement of the hard work and phenomenal results being achieved by projects linked into Kiwi Coast has been championed via a raft of communications, media, presentations and events. The new Kiwi Coast 'Outstanding Group or Project Award' offered in 2022 and 2023 as part of the Northland Regional Council (NRC) annual Whakamānawa ā Taiao – Environmental Awards has become a wonderful way of publicly acknowledging some of the remarkable results of high-achieving Northland projects.

A total of 23,267 people have attended Kiwi Coast supported events and capacity-building workshops over the past ten years. These events have also proven to be prime opportunities to deliver key messages around kiwi recovery and the importance of effective predator control and good dog control for kiwi survival.

Kiwi Coast's partnership with NRC and a multi-year funding agreement with Foundation North has provided a firm base of support for Kiwi Coast operations. Additional funds from sponsors and supporters have assisted with key projects including the Freemasons sponsored field trials of new pest control tools.

Monitoring results have shown that tāonga species such as kiwi and pāteke are now stable or increasing at most Northland sites where the full complement of long-term predator control and good dog control is in place. However, while the recovery of Northland brown kiwi is a New Zealand conservation success story that Kiwi Coast has been proud to play a part in, it is too early to tick the box and move on.

Continuing to create wildlife-friendly corridors via landscape-scale pest control networks across Northland will not only allow tāonga species such as kiwi to roam and disperse safely, but also provides safeguards against the effects of climate change, helping our native forests and wildlife to thrive into the future.

Chairman's Report

Tēnā koutou

It's a privilege to be part of the Kiwi Coast initiative, and I offer a special thanks to my fellow Trustees, the Kiwi Coast crew and the wide community of kiwi supporters and partners.

Ten years of Kiwi Coast have flown by. Severe droughts, Covid-19, cyclones - through it all, our creative and inventive Coordinators have navigated a successful way forward and enhanced the fabric of biodiversity conservation projects over a continually increasing area of Northland.

This in itself is a tribute to the skill, dedication, and commitment of our Coordinators, Ngaire Sullivan, Andy Mentor, and Leslie Baigent, ably assisted by our administrative, in-field and specialist technical support. The team continues to interpret and direct the guidelines of the Kiwi Coast Strategy Group, to meet the Trust's objectives.

Their efforts have been made possible by our ongoing partnership with the Northland Regional Council, multi-year funding grant from Foundation North, donations and keen "Follow a Kiwi" sponsors. We are indebted to this generosity and endorsement of Kiwi Coast's goals and achievements to date.

As is demonstrated by specific examples in this Annual Report, these resources release the amazing power of the multiplier effect made possible by linking and enabling landscape-scale projects that dramatically enhance conservation outcomes.

This diverse matrix of people and projects brings other challenges with it, and highlights the need for carefully considered plans and structures as we progress.

For my part it's a pleasure to be a part of the Kiwi Coast initiative and connected to the amazing projects that are taking place on our doorstep.

Finally, a special thanks to our Trustees, Dr John Craig, Jane Hutchings, Irene Durham, and Ira Seitzer, whose depth of experience and knowledge bring a well-balanced nuance to the Trust's function.

Ngā mihi nui ki a koutou – huge thanks to you all, may we continue to work together for another ten years!

Mike Camm

Kiwi Coast Chairman

Ten years of KIWI COAST

projects involved

Hectares

managed

collectively



Number of groups and

32 → **225**

66,705 **> 251,000**



708,536

Total pests trapped over 10 years

Average number pests trapped per week

Monitoring & Results

Annual Northland Kiwi Call Count Surveys supported

Year 1

5 Yearly Kiwi Listening Blitz's completed

Kiwi returning to silent sites

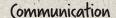
50% of surveyed sites without kiwi in 2016 had kiwi in 2021

Pāteke 2023 flock count

population stable

5 Yearly Kākā and korimako Surveys completed

Kāka & korimako sightings increasing



156,515

No. of website visits over 10 years

1,622

No. of monthly newsletter recipients

No. of roadside billboards Research & Tech

200+

Kiwi Coast Listening App users

No. of new product field trials

Follow a

Hui & wananga

workshops

Know Your Dog Workshops in

No. of people attended events



Strategic Approach

The Kiwi Coast Trusts Strategic Plan (2017) confirmed our commitment to the following:

- Building capacity and capability across Northland's community-led conservation projects and sustaining the current upward trend of kiwi populations.
- Increasing successful kiwi dispersal and movement between distinct populations through establishing linked collaborative predator trapping and social networks.
- Maintaining a high level of communication to celebrate kiwi as a tāonga and engage further communities, iwi and hapū in caring for kiwi.
- Supporting events and skill building workshops to empower active stewardship/ kaitiakitanga to protect and nurture Northland's biodiversity for future generations.
- Exploring new ways of resourcing community and hapū-led conservation.
- Building the resource capacity of the Kiwi Coast Trust towards financial sustainability.

Shaun Gifford demonstrates DOC 200 at Pests off Puhipuhi Trapping Workshop, Nov 2022. Photo: Kiwi Coast



Kiwi Coast Coordinators

Kiwi populations are linked through connecting people, projects and places across Te Tai Tokerau.

Kiwi Coast Coordinators have worked on-the-ground to help enable and sustain the groups and projects involved, teaming up with specialist Northland contractors to provide extra support as needed.

Over the past decade as the number of groups and projects linked into Kiwi Coast has grown, so has the number of Kiwi Coast Coordinators – but not at the same rate. With two full-time and one part-time Coordinator to support 225 entities across an active management area of 251,000 hectares, it is likely further Coordinators are needed to ensure a high level of support and assistance can be provided to all the entities currently involved, whilst allowing for further growth.

Over the decade Kiwi Coast Coordinators have assisted with:

 Coordinating and enabling hapū, iwi and community-led pest control, native species recovery and dedicated kiwi projects.

- Providing on-the-ground support and technical advice for existing projects and assisting new groups to start.
- Supervising contracted professional predator trappers and coordinating the Trapper Mentoring Program.
- Liaising with hapū, iwi, key organisations, businesses and government agencies.
- Where appropriate, preparing submissions on statutory plans and processes.
- Assisting with regional ecological monitoring, including fieldwork, data analysis and reporting.
- Organising Kiwi Coast skill building workshops and kiwi events as well as supporting other community events.
- Facilitating community meetings and workshops.
- Communicating community stories, successes, innovations and ideas to help share information, transfer knowledge and encourage projects to learn from one another.



Health and Safety

Kiwi Coast entered into the Sitewise Health and Safety system in 2019 and has maintained this accreditation to date.

Kiwi Coast Coordinators have completed Workplace Assessments and Chemical Inventories for both the Whangarei and Bay of Islands storage sheds containing pest control equipment, including hazardous materials. Hazard Identification and Risk Management forms were completed in conjunction with site hosts at all events led by Kiwi Coast.

Kiwi Coast Coordinators continued to work with contractors to maintain health and safety procedures in day-to-day work and support their accreditation to *Sitewise*. This has helped to ensure high quality operations across the board, allowed the sharing of new hazards identified and promoted continuous improvement in work safety practices.

Incidents reported by Kiwi Coast contractors have been logged and raised for corrective and preventative action. Wasp sting incidents continue to be the most frequent incident raised. Where relevant, incidents were followed up to assist with preventing reoccurrences or minimising the effect.

Thanks to subsidised courses offered by Volunteering Northland, Kiwi Coast Trust has resourced First Aid training certification for key contractors and as requested by community-led projects. Protective clothing provided by Kiwi Coast to key contractors to supplement their own equipment has included branded sun hats, beanies, high-vis vests and work shirts.

Financial Summary

Kiwi Coast Charitable Trust has continued to both seek and generate funds to enable the support of Northland community and hapū-led kiwi recovery and conservation projects.

Two multi-year funding agreements currently provide a firm base of support for Kiwi Coast operations. These include a funding grant with Foundation North and a partnership agreement with NRC.

Additional funds from sponsors and supporters were gratefully received and assisted with key projects (see Appendix 1 for a Financial Summary).

Kiwi Coast's independent income generating mechanisms have grown over the past decade to include merchandise sold at events and through an online shop, the supply of traps and modified trap boxes for Northland conditions, local fundraising opportunities (for example Z's 'Good in the Hood') and the popular 'Follow a Kiwi' sponsorship scheme.

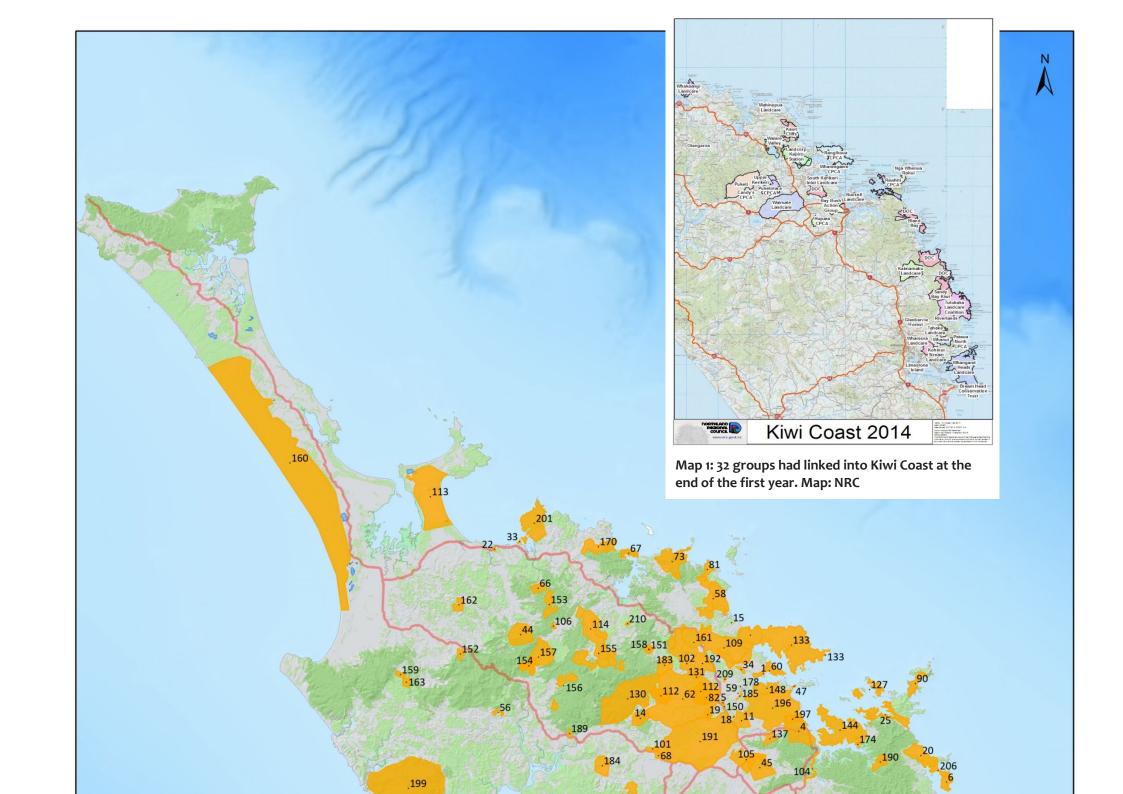
Entities Collaborating in Kiwi Coast

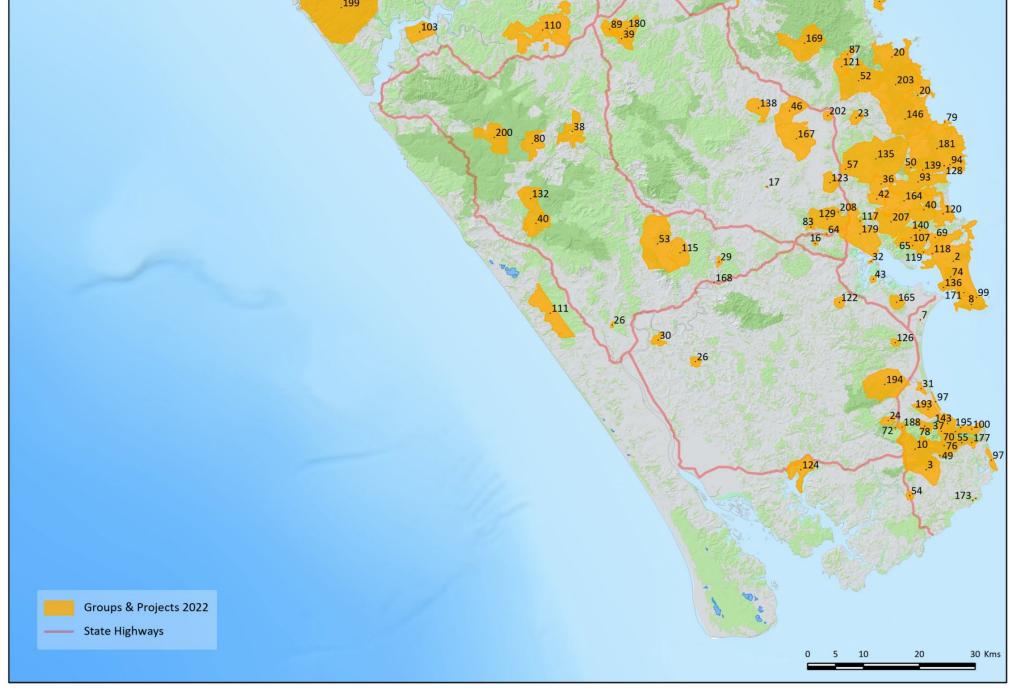
The growth of the Kiwi Coast collaborative network over the past decade has exceeded all expectations.

At the end of its first year, 32 projects were linked into Kiwi Coast, predominantly along Northland's east coast. Ten years on, this has grown into a regionwide network involving 225 entities across Te Tai Tokerau (see Maps 1 and 2).

The collective area managed by these groups and projects has increased to approximately 251,300 ha (see Appendix 2).







Map 2: After 10 years, 225 entities have linked into Kiwi Coast Map: Biospatial

Predator Control

A key focus of Kiwi Coast has been supporting the removal of introduced animal pests that defoliate forests, compete with native wildlife for resources, destroy nests, wetlands and forest floors and predate on vulnerable native species to the point of extinction.

Over the last decade Kiwi Coast has focused on enabling effective hapū and community-led pest control - building skills, linking projects and assisting with regional monitoring and data collation to demonstrate the results achieved.

For the past ten years Kiwi Coast has collated annual trap catch data from all the projects involved to demonstrate the collective impact being achieved across Northland. This year 180 Northland projects, groups, and organisations submitted data that showed 116,952 pests were collectively trapped in 2022 alone.

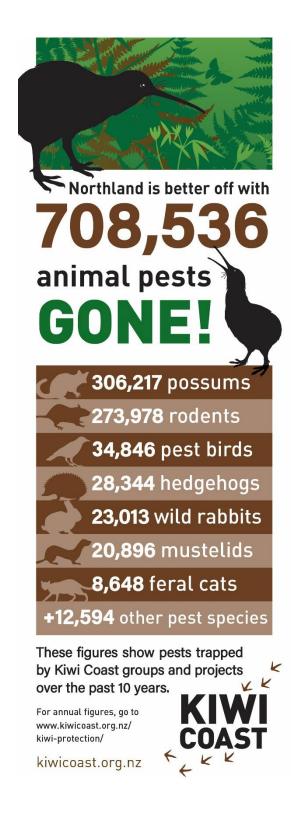
The grand ten-year tally is 708,536 pests, with approximately 2,250 pests now trapped every week across the Kiwi Coast network.

These results not only demonstrate the sheer hard work and scale of effort, but also generate a sense of pride and mana in the work being done and the results achieved. It helps to show that individually, groups are achieving great results, but together they are achieving something truly phenomenal.

Kiwi Coast Trust also supported and assisted with community-led ground-based pest control operations aimed at reducing trap-wise predators via 2 - 5 yearly controlled pulses of toxins with secondary poisoning effects.

In line with the Kiwi Coast Strategic Plan, Kiwi Coast further supported predator control in key areas to link distinct projects and create continuous trapping networks across the landscape. This aims to boost kiwi survival, breeding success and enable safe kiwi dispersal between distinct populations. In this way, we are collectively building New Zealand's first kiwi corridor and working towards restoring the regional gene flow of Northland brown kiwi.

Kiwi Coast also worked with NRC Predator Free Whangarei and Pēwhairangi-Whanui teams to coordinate additional resources, boost the 60,000ha predator control zone in eastern Whangarei and amplify the Pest Free Purerua Project in the Bay of Islands.



Kiwi Coast Activities

Over the past decade, Kiwi Coast Coordinators have provided ongoing support across a range of initiatives to help foster, link and grow active stewardship and kaitiakitanga with community, hapū and iwi-led projects across Northland.

Three key areas have been targeted for specific support with dedicated Kiwi Coast Coordinators: the Far North, Mid North-Bay of Islands and the Whangarei Heads – Tutukaka Kiwi Corridor.

In addition, specialist Northland contractors have assisted projects across the region with specific tasks including outcome monitoring, financial administration systems, technical advice and mapping.

Far North

Lesley Baigent came on board as the dedicated Far North Kiwi Coast Coordinator in 2019, assisting new projects to get up and running, as well as providing further support to established groups. Key activities have included providing pest control supplies to projects, encouraging the sharing of skills, environmental education, supporting community capacity building and coordinating outcome monitoring.

Endeavouring to strengthen relationships and encourage links between community, iwi and hapū-led projects, agencies and organisations in the Far North has been a key focus. Working this way has taken time, but slowly and surely, trust has built, and good progress has been made. With the pace set by communities and hapū, Kiwi Coast has respectfully provided support and assistance when, or as needed.

Kiwi Coast's stalls at local shows and festivals have often sparked interest eventuating in tangible outcomes. For example, after Kiwi Coast attended the North Hokianga A and P show in 2023 a pest control meeting held near Kohukohu was attended by over 50 keen locals. From that meeting a Broadwood group formed and is now trapping successfully, expanding as the word spreads and creating a real focus for the local community. Hopefully, this inspires further local groups to get underway once they see the great results being achieved.

Further south there is still good interest in Kaeo and Mangamuka and it is hoped that this will continue to grow with Kiwi Coast support for training and education. Well-established groups on the east coast such as Mahinepua-Radar Hills Landcare, Whakaangi Landcare and Taupo Bay

Land and Coast Care continue to sustain active community-led projects with great benefits for their native forests and wildlife – especially kiwi.

Environmental education with local schools interested in pest control and caring for their kiwi continues, with recent visits to Kaitaia Primary, Peria, Oruaiti and Ahipara schools. Rat traps have subsequently been provided to schools keen to continue the learning and grow student skills. At Ahipara, this has also led to a local trapline being established in collaboration with DOC Kaitaia.

Results from monitoring the outcomes of Far North community and hapū led pest control and conservation activities however has been mixed. Encouragingly, acoustic monitors being used increasingly by groups for the Annual Northland Kiwi Call Count Survey are showing where kiwi are thriving, where kiwi populations can hopefully be rebuilt and confirmed kiwi at previously unknown sites.

An example of this are the data recently analysed by Kiwi Coast for the Honeymoon Valley Landcare Trust which found a single juvenile female kiwi call from 84 hours of listening data at a single site. No calls were heard there last year and it is hoped that the extensive pest control work of the group as part of their Maungataniwha – Otangaroa Kiwi Corridor Project will help these local kiwi thrive. Acoustic monitors are also currently being used to investigate kiwi calls reported from new sites including Lake Ohia, Coopers Beach and much further north. Watch this space!

However, kiwi deaths from uncontrolled dogs continue much to the dismay of all those working hard to help Far North kiwi thrive. Agencies often seem daunted by the enormity of the problem as concerns regarding feral dogs increase and attacks on humans, livestock and native wildlife show no sign of abating.

Kiwi Coast's efforts are ongoing with dog owners, communities, DOC and the Far North District Council to deliver a successful and effective approach that will make a real difference. The 'Know Your Dog Workshops' are a great start. To safeguard Far North kiwi in the light of ongoing social and environmental challenges, proactive and innovative solutions are needed. A Far North kiwi creche is one idea to consider.

Mid North - Bay of Islands

Kiwi Coast's Andrew Mentor began providing fulltime dedicated support to the Mid North in 2017.

In partnership with NRC, key Kiwi Coast activities in the Mid North have included coordination of the Mid North High Value Area (HVA) Steering Group, helping hapū and community-led projects to sustain effective pest control and assisting with ecological outcome monitoring.

Ever-growing, the current number of active Mid North projects is now sixty-eight. Maps 3 and 4 show the significant progress made over the last ten years to link, intensify and expand the Mid North pest control network which now covers over 40,000 hectares.

Kiwi Coast's collation of trap catch data shows that a total of 40,661 pests were removed from the Mid North in 2022 alone. With some of the highest hourly kiwi call rates in Northland, kiwi are thriving thanks to the sustained predator control and dedicated dog control.

Kiwi Coast has also initiated the establishment of a Bay of Islands kiwi rehabilitation centre. A site has been provided by local farmers, building has begun, and offers of support from Bay of Islands vets and Northland accredited handlers have been secured. The recent approval in principle from DOC suggests the centre will be up and running by the end of 2023.



Ngāti Torehina kaumatua Hugh Rihari releasing pāteke. Photo: Phillipa Mentor-Blomeley

Pest Free Purerua Peninsula

The 'Pest Free Purerua' project (PFP) is now in its third year of operation across the Purerua – Mataroa peninsula within the Mid North HVA. The 7,600ha peninsula is home to around 25% of Northland's kiwi population.

The project is led by Kiwi Coast, funded by Jobs for Nature via Save the Kiwi, and supported by Ngāti Torehina, Ngāti Rehia, private landowners, Pamu Landcorp, Plant & Food Research, Summit Forests, Bay of Islands International Academy, Department of Conservation, Save the Kiwi Trust, and NRC.

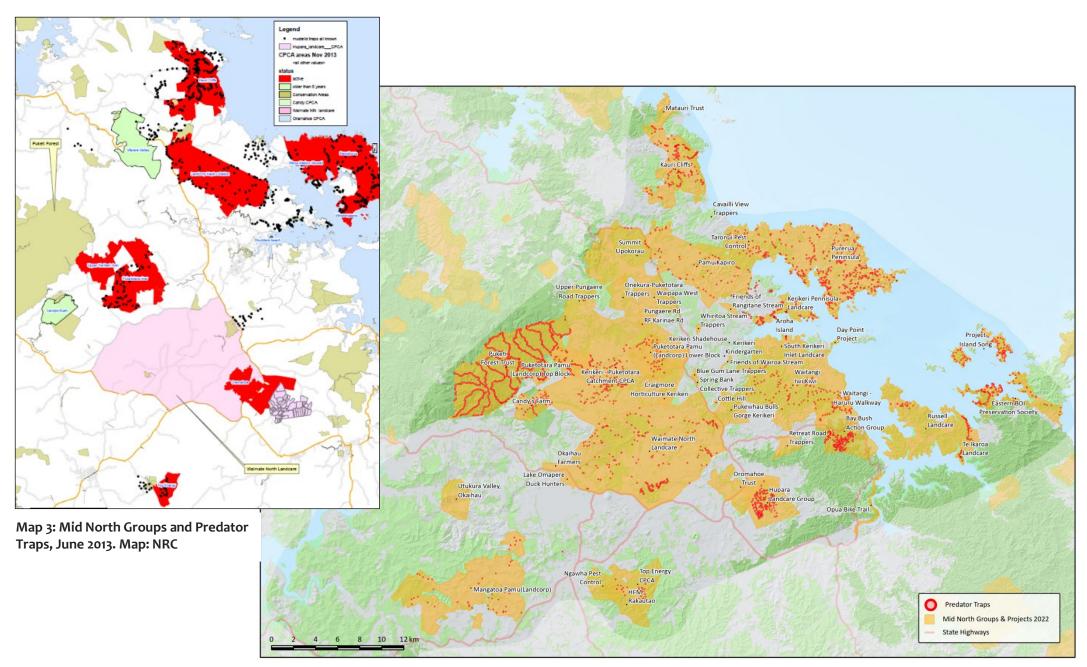
PFP has significantly boosted existing pest control in the area since beginning in 2020 and employs a raft of standard and developing pest control tools and techniques as it "chases zero". The elimination zone is supported by an immediate buffer zone known as Taronui, and the larger protection zone provided by the Mid North HVA.

In 2022, 1,520 pests were trapped on the peninsula. The intensity of pest control has resulted in significant biodiversity gains including in 2022 the restoration of rare coastal maire plants (*Nestegis apetala*), and in 2023 the release of 20 endangered pāteke or brown teal at The Landing.

The pāteke release was carried out in partnership with Ngātiwai Trust, Ngāti Torehina, the Pāteke Recovery Group and NRC. Unfortunately, post-release monitoring found seven of the 20 pāteke deceased in close proximity to the release ponds. Five of the seven were assessed to be cat predation. A further two have an undetermined cause of death. Despite feral cat numbers having been reduced to a minimum on the peninsula, trail cam footage suggests one especially cunning and elusive feral cat is responsible for the bulk of the deaths, showing the challenges inherent in chasing zero and protecting vulnerable indigenous species such as pāteke.

The remaining birds have since dispersed to other sites on the peninsula. Their movements are being tracked via "backpack" radio transmitters along with keen landowner sightings. It is hoped that as PFP's elimination strategies are progressed, more pāteke can be released over time.

Further detailed information on work in the Bay of Islands and Pest Free Purerua can be found in the Mid North High Value Area Year 5 Report July 2023 and the PFP website (https://pfp.kiwi).



Map 4: Mid North Groups and Predator Traps. Map: Biospatial

Whangarei Heads – Tutukaka Coast Kiwi Corridor

Kiwi Coast's Strategic Plan (2017) identifies the area stretching from Te Whara / Bream Head at the tip of the Whangarei Heads peninsula to the Tutukaka Coast as the 'First Focus Area'.

The aim is to link the two established biodiversity strongholds of Whangarei Heads and Tutukaka together via a continuous predator trapping network, engaged communities and good dog control to create New Zealand's first functioning kiwi corridor.

In between the two strongholds, 11 community groups are working together across 15,000 ha to form the 'Kiwi Link' project and bridge the gap.

Over the past ten years Kiwi Coast has worked with the NRC Biosecurity Partnerships team to support the community-led projects from Whangarei Heads, Kiwi Link and the Tutukaka Coast to sustain, intensify and link their projects into a cohesive network.

Results from monitoring kiwi, pāteke and other native forest birds throughout the area indicate that the collaborative landscape-scale pest control network is having the desired result of helping native forests to flourish and wildlife to increase and disperse.



Pekapeka - Long Tailed Bat. Photo: DOC

Kiwi Link

Eleven projects have now been working together as "Kiwi Link" for seven years. Maps 5 and 6 show how the number of predator traps and community groups over the 15,000 ha project area between Parua Bay and Ngunguru Ford have increased markedly since 2013 with the support of Kiwi Coast and NRC.

Kiwi Link groups have trapped 45,044 roaming animal pests over the past seven years. Annual monitoring results have shown the ongoing pest control has improved forest health and helped to restore birdsong to the once near-silent forests.

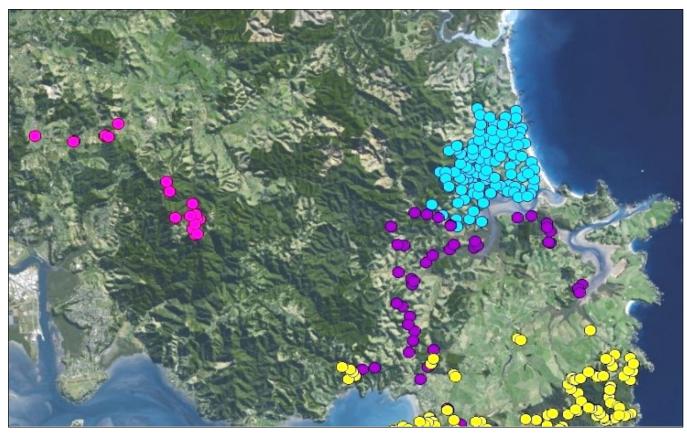
Kiwi Call Count Surveys show kiwi are going from strength to strength within the Kiwi Link HVA as evidenced not only by increasing kiwi call rates but also confirmation of a number of new sites with breeding pairs. Pāteke flock counts and five-minute bird counts also show upward trends in populations of a range of other native birds. Increasing observations of kākā and korimako/bellbird bring hope that such species will return in strength.

These results can be attributed to the ongoing hard work carried out by the many local landowners and land managers involved. The achievements of the Kiwi Link HVA will also be providing a beneficial 'halo' effect for the adjoining Whangarei Heads and Tutukaka biodiversity strongholds. Less pests will be re-invading these areas and native wildlife will be spilling into them.

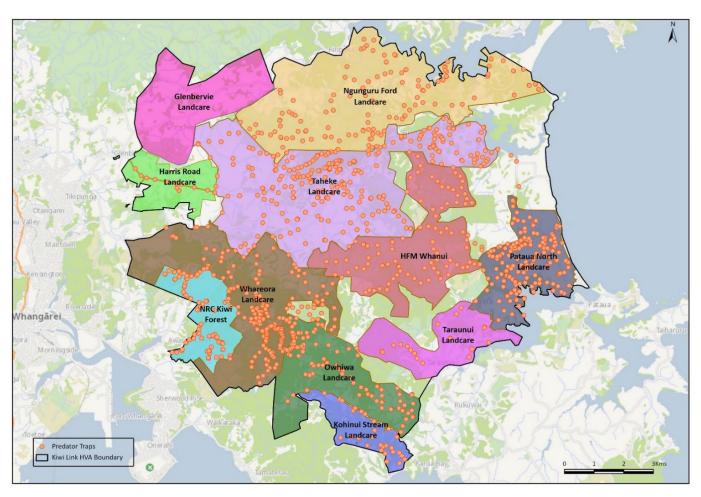
In addition to funds provided during the 2021/22 financial year by NRC and Kiwi Coast Trust, local land managers, research partners, businesses and private landowners contributed \$479,393 of unpaid labour and resources. This significant contribution demonstrates the outstanding commitment and dedication of the groups and projects involved in the Kiwi Link HVA to their native forests, wildlife and kiwi.

Communications were boosted in 2023 with a new dedicated Kiwi Link website (www.kiwilink.org.nz) and social media pages. These have helped to increase information sharing, reach new local landowners keen to be involved and celebrate the good results being achieved.

Highlights for Kiwi Link over the past year have included the confirmation of pekapeka/long-tailed bats at a number of sites and the sighting of a flock of four kākāriki which are rarely seen on the New Zealand mainland. Monitoring data which shows increased kiwi breeding success and dispersal, as well as upward trends of other native bird populations, proves that the hard work of all those involved in Kiwi Link is reaping rewards.



Map 5: Predator Traps in the Kiwi Link area, 2013. Map: NRC



Map 6: Kiwi Link HVA Groups and Predator Traps, 2023 Map: Biospatial

Regional & Specialist Support

The diverse array of groups and projects linking into Kiwi Coast continues to grow. While kiwi are often a uniting factor for inspiration and action, each project has their own specific needs and goals. Hapū, groups and projects across Te Tai Tokerau have been assisted with specialist technical support in addition to the general support provided by the three Kiwi Coast Coordinators.

Projects from the Far North to the south have drawn upon the dynamic-duo of Lesley and certified 'Kiwi Dog' Yagi to provide additional kiwi monitoring support. Together they have assisted with kiwi surveys, provided essential information to exotic forestry harvesting operations and located kiwi as part of specialised monitoring programs.

A growing number of community and hapū-led projects have linked into Kiwi Coast from the west and central areas of Tai Tokerau. This has helped to protect local kiwi populations that may be genetically distinct from those on the east coast, and establish the first building blocks of a west – east kiwi corridor across Northland.

Groups and projects across Northland have also been provided with specialised monitoring assistance and equipment, Trap.NZ training and GIS mapping expertise. This has enabled projects to initiate targeted outcome monitoring and track progress towards their goals. It has also assisted hapū to monitor and investigate the presence of rare species in their rohe such as pekapeka/bats and titipounamu/rifleman.



Pupurangi Nature Sanctuary Project. Photo: Kiwi Coast

To the south, kiwi presence monitoring support has been provided to the Piroa Conservation Trust and Pest Free Kaipara Peninsulas projects. As the 'gateway' for ferrets into Northland and with relatively high ferret trap catch rates, support is also being provided to the southern projects to spearhead Northland's 'Zero Tolerance for Ferrets' initiative.

In the west, increasing pest control and growing linkages between projects in the Mataraua – Mangakahia area are not only benefiting kiwi, but also one of Northland's last kokako populations.

In time, further location specific dedicated Kiwi Coast Coordinators may emerge. However, the approach of providing roving specialist support appears to have worked well over the last few years to fill the high-level specific needs of some of Northland's extraordinary projects.

Northland Kiwi Taxon Plan Revision

The Northland Brown Kiwi Taxon Plan (Craig et al., 2011), which is the strategic guiding document for kiwi recovery work across Northland, expired in 2019. Over the last two years, Kiwi Coast has led the collaborative drafting of a new Taxon Plan with the Northland Kiwi Forum Working Group and National Kiwi Recovery Group. Key concepts for the revised taxon plan were workshopped at Kiwi Coast's 2022 Northland Kiwi Hui with over 100 people participating and good support received for the concepts being developed.

It is anticipated that an initial draft of the Taxon Plan will be completed in 2023. Further workshopping and hui will then be held to ensure the proposed strategy for the next 10 years of kiwi recovery in Northland is robust and shared by all.

Improving Dog Control and Raising Awareness

Uncontrolled dogs continue to be a key concern of communities and remain the most significant threat to adult kiwi survival in Northland.

Raising awareness of the issue and stressing the need for good dog control was a recurring theme at all Kiwi Coast events and workshops. 'Kiwi Live Here' signs, customised with group names and selected dog control messages were supplied on request.

While Kiwi Aversion Training workshops are held regularly for hunting and working dogs, few resources have been available for owners of pet and lifestyle dogs in kiwi zones. The new "Know Your Dog" workshops, developed and delivered by Kiwi Coast Far North Coordinator and retired vet Lesley Baigent, have begun to fill this gap and proved to be successful and well received by dog owners. The first workshops were delivered in 2021 and have quickly gained popularity, with 22 workshops held in just two years.

Kiwi Coast 'Kiwi Live Here' signs, customised with group names and selected dog control messages have proven to be popular with projects, as have fridge magnets and info sheets for holiday houses. 2018 saw the first of the Kiwi Coast roadside billboards go up in collaboration with DOC in response to requests for help from local communities. Customised billboards in English and Te Reo Māori featuring dog control messaging or advising drivers to slow for road-crossing kiwi are now spread across Northland. Roadside billboards are now in place at Ngunguru, SH1 Hikurangi, Hihi, Mangamuka, Pakaraka, Russell and Pataua North.

Improving Cat Controls

Kiwi Coast supports responsible pet ownership and communities working to reduce feral cats to protect native wildlife. Left unaddressed, feral cats thrive in Northland's temperate forests, predating insects, lizards, aquatic species and birds – including kiwi chicks.

To tackle the issue at its source and improve cat controls, Kiwi Coast joined over 1,000 submitters to the Whangarei District Council Animal Bylaw Review in 2022 to request all cats be de-sexed before six months of age and microchipped.

These measures were successfully adopted and will assist in reducing the number of cats ending up as feral predators in Northland forests.



Kiwi Coast Billboard at Hihi (Photo: Bruce Jarvis, Whakaangi Landcare)

Events & Engagement

Over the last decade Kiwi Coast has reached thousands of people through a multitude of meetings, hui, events, workshops and A&P shows.

Presentations have been given to numerous community group meetings, AGMS, government departments, conferences and scientific societies. Kiwi Coast has also participated in regional forums including the Northland Kiwi Forum Working Group and various Predator Free Advisory Groups with NRC and DOC.

In 2023 alone a further 4,424 people attended Kiwi Coast supported events and workshops, taking the ten year tally to 23,267 people.

Supporting and assisting community-led projects with the translocation of tāonga species including kiwi, pāteke, toutouwai/robins and pōpokotea/whiteheads have been particular highlights and shown what can be achieved with sustained and effective pest control.

Public kiwi release events have attracted crowds of hundreds of people keen to briefly meet a wild kiwi up close before its release. More strategically however, kiwi releases have created opportunities to grow the understanding of the need for pest control if native species are to persist and engage dog owners in the crucial importance of good dog control for kiwi survival. Post-release remote telemetry monitoring of kiwi as they disperse and breed and the associated story-telling and ongoing communications have enabled these messages to continue to be shared and spread further.

A particular highlight of the 2023 events was the Bay of Islands P & I show. Over 750 people passed through the Kiwi Coast stand, learnt about pest control initiatives, kiwi recovery, gained education info and had some kiwi themed family fun!

Kiwi Coast has also provided regular opportunities for the regional network to gather to share skills and grow connections between people and places with free hui and wānanga/workshops. Northland Pest Control Workshops have been held annually and in 2022 Kiwi Coast held its first Northland Kiwi Hui.



Ngaire Sullivan (Kiwi Coast) with Aperahama Edwards and Kris Macdonald (Te Whanau a Rangiwhakaahu) and Tawhiti Rahi the kiwi (Photo Kieran Pullman)

Over the past decade a successful strategy to bring people together from all walks of life has emerged. This has seen the alternation of regional hui and workshops between community halls and marae, hosting each event at a different location every year in partnership with the local hapū and community. The 2023 Northland Pest Control Workshop, held in Waipu, and co-hosted with Patuharakeke and the Piroa Conservation Trust showcased the success of this strategy with over 200 people attending.

This approach has encouraged wider participation and encouraged an increased understanding of particular challenges faced by different projects, local environments and customs and tikanga Māori.

Education

Over the last 10 years Kiwi Coast has delivered environmental education modules, activities and events to Northland schools and at large public events.

Online training resources have also been developed, including the Kiwi Call Count Survey and the Kiwi Coast Listening App. Each year, presentations from Kiwi Coast hui and wānanga are also shared online so that information can continue to be accessed after the event and for those unable to attend.

The Northland Pest Control Guidelines were reviewed and updated in 2020 in conjunction with the NRC Biosecurity Team. The guidelines have become a comprehensive key pest control resource that is now utilised extensively in Northland as well as nationwide.





Skill Building Workshops

Community leadership and kaitiakitanga have been enabled and supported at over a hundred skill building workshops over the last 10 years. These were provided upon request and tailored to build knowledge and specific skills within the hosting community or project.

A further 22 skill building workshops were held over the past year, taking the 10-year total to 121.

Each collaborative workshop shared technical knowledge and expertise from a range of sources including local professional predator trappers, hapū and community leaders, NRC Biosecurity Staff, DOC and professional training providers.

A wide range of skill sharing and capacity building workshops have been either supported or held by Kiwi Coast over the past ten years including:

- Annual Northland Pest Control Workshops
- Northland Kiwi Hui
- Trap.NZ Training Workshops
- Professional Trappers Fieldtrips
- Local Hands On Pest Control Workshops
- Know Your Dog workshops
- First Aid Courses
- Controlled Substance License Courses
- Online Kiwi Listening & App Trainings
- Caring for Kiwi Workshops

Kiwi Coast has also provided transport and sponsored community group members to attend national events such as the annual National Kiwi Hui and Biosecurity conferences and workshops.



Everything is connected whakatauki.

Communications

Kiwi Coast has implemented an integrated communications strategy designed to:

- build linkages between projects via sharing information, stories and successes.
- celebrate kiwi as a tāonga.
- engage people in caring for kiwi.
- build acceptance of animal pest control practices required to regenerate native forests and wildlife.
- positively encourage good dog control.
- establish the Kiwi Coast as a successful and accessible initiative in which everyone can participate.

Communications included a live, continuously updated website, social media and regular electronic newsletter. Over the last ten years, Kiwi Coast communications have reached hundreds of thousands of people, both locally and internationally.

A revamped Kiwi Coast website will be completed in late 2023 and aims to increasingly incorporate mātauranga Māori concepts where appropriate.

As at June 30, 2023:

- A total of 156,515 people visited the Kiwi Coast website over the last 10 years
- 1,622 people subscribe to Kiwi Coast's monthly e-newsletter
- Facebook 'Follows': 2,739
- Instagram 'followers' (began October 2019):
 672

Kiwi Coast has also enjoyed a strong media presence, with articles featuring in an array of local, regional, national and international online and printed media including Radio NZ and MORE FM radio stations, the NZ Herald, Northern Advocate, Northland Age and Whangarei Report, interviews with TVNZ, The Guardian, Stuff, Australia Radio National Drive and the American Audubon magazine.

Pataua North Kiwi Crossing Sign, 2023. Photo: Derek Barnston



Results and Monitoring

Kiwi Coast is underpinned by a robust scientific monitoring framework that ensures accurate measurement of outcomes. Table 1 presents a summary of monitoring results and the Kiwi Coast Trust's achievements to date against Key Performance Indicators identified in the 2017 Strategic Plan.

Kiwi

Over two decades of Northland brown kiwi (Apteryx mantelli) Annual Kiwi Call Count Survey Data shows that populations are generally either stable or steadily increasing (Craig, 2022a) at almost all Northland sites where the full complement of integrated animal pest control is in place (traps and toxins) and communities are committed to the excellent care and control of their dogs. This bucks the national trend identified by the Kiwi Recovery Group of an overall 2% decline per annum of kiwi populations (Germano, et al., 2018).

Kiwi Coast's long-term 'Kiwi Monitoring Plan' (Topia, 2014) is based on best practice kiwi monitoring protocols developed by DOC. As well as the Annual Kiwi Call Count Surveys, it includes the use of Kiwi Listening Devices to investigate new sites, and 5-Yearly Kiwi Listening Blitz's.

Regional Population Trends

Kiwi Coast works with DOC each year to encourage, train and coordinate groups to carry out Kiwi Call Count monitoring, and the data are then analysed by Kiwi Coast and DOC and presented in the following year in the 'Northland Kiwi Call Count Report'.

For the third year in a row, the Kiwi Coast Listening App assisted with making the monitoring more efficient and enjoyable. Over 200 kiwi listeners are now registered for the app.

The most recent Northland Kiwi Call Count Report (Craig, 2022b) stated:

"There were overall mixed results for the 2022 Northland kiwi call count survey. Three of the four original clusters trended down after all had trended up in the previous year."

However, "It was discussed in the 2021 report (Craig, 2022) that the high call counts observed in 2021 may have been a response to the 2020 drought (less breeding during the drought, followed by potentially better body condition and a boom in courtship in 2021).

It was good to see that overall the 2022 results were not substantially lower than those observed the year before, indicating that the 2021 results were not a peak, but rather part of a general pattern of stable or increasing calls throughout the range of Northland brown kiwi."

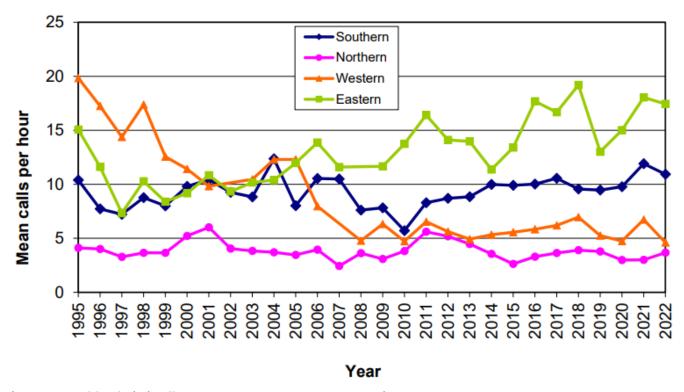


Figure 1: Northland Kiwi Call Count Survey Data 1995 - 2022. Craig, 2022

Kiwi Listening Blitz's

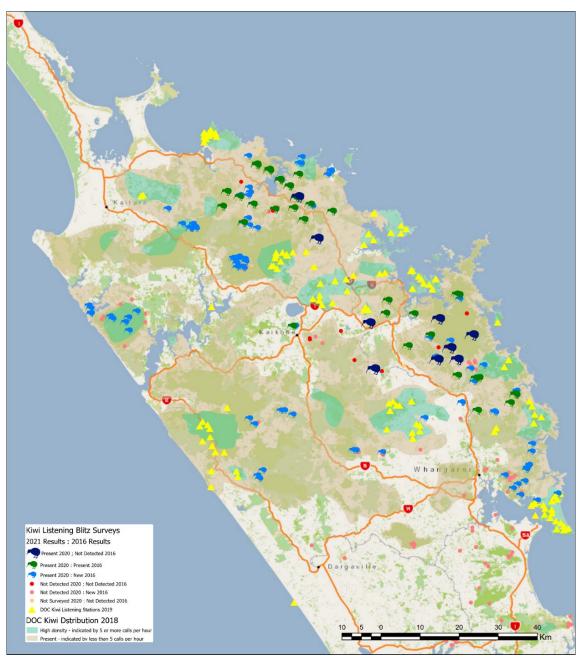
Kiwi Coast has carried out two "Kiwi Listening Blitz's" over the past ten years using acoustic monitoring devices or Kiwi Listening Devices (KLDs). The aim of this monitoring is to track changes in Northland brown kiwi distribution over time. The expectation is that kiwi numbers will increase and expand into new areas in response to the sustained pest control and improved dog control occurring across the Kiwi Coast network.

During the first Kiwi Listening Blitz in 2016, the Kiwi Coast collective project area was 75,000 hectares. Fifty-eight sites were surveyed, with kiwi detected at 65% of them.

Kiwi Listening Blitz #2 re-surveyed the 2016 sites, as well as an additional 170 sites to investigate the expanded Kiwi Coast project area of 205,000ha at the beginning of the fieldwork in 2020.

As shown in Map 7, a total of 228 sites were surveyed during Kiwi Listening Blitz #2. Kiwi were detected at 137 or 60% of the sites surveyed. All sites surveyed in 2016 that recorded kiwi, still had kiwi in 2021.

Excitingly, 50% of sites that did not detect kiwi in 2016 were found to have kiwi in 2021. These results were of great delight to the landowners and communities involved who had been working hard to 'get kiwi back'.



Map 7: Kiwi Listening Blitz Results 2016 & 2021. Map: A Duxfield

Indicator Species Monitoring

In addition to kiwi monitoring, Kiwi Coast Trust, in partnership with NorthTec and DOC, established an 'Indicator Species Monitoring Program'.

This program monitors selected iconic Northland species to document the response of native wildlife other than kiwi to predator control and community stewardship. The species included in this program are pāteke/brown teal (Anas chlorotis), kākā (Nestor meridionalis) and korimako/bellbird (Anthornis melanura).

Pāteke

900

Pāteke are the rarest mainland duck in New Zealand.

Congregations of pāteke at Northland flock sites have been counted annually in February since 1988 to monitor population trends. Kiwi Coast has worked each year with community groups, specialist staff at DOC, the Pāteke Recovery Group and NorthTec to assist with the flock counts and investigate new sites.

Analysis of the 2023 Pāteke Flock Count data confirmed that the endangered endemic nocturnal ducks have continued to flourish on Northland's east coast where intense predator control has been sustained. This year the flock count total was 625, a slight increase from last year (see Figure 2).

DOC Senior Biodiversity Ranger, Nigel Miller analysed the results and stated that the data showed:

"... a positive indication of pāteke population trends, particularly since predator control started."

"The small increase this year is a result of a couple of good breeding seasons driven by wet springs, but offset to some degree by the same wet conditions discouraging birds from joining flocks at all. So, hopefully the actual population is far greater than the numbers show."

Mike Camm from the Pāteke Recovery Group added:

"What is rewarding right now in the middle of their breeding season, is the large number of successfully fledged juvenile families of 4,5, and 6 pāteke, still with their parent pairs on small ponds and streams from Ngunguru to Sandy Bay."

"No doubt due to a combination of factors like a suitable breeding climate, plentiful food supply and suppressed predator numbers. A real testament to the benefit of the large-scale landscape predator trapping being undertaken".

*2015

2026 2027

200, 200, 2010 2017 2017 2013 2014

2007

Year

2006

Total Pateke Counted at Northland Flock Sites 1998 - 2023

Figure 2: Northland Pāteke Flock Count Data. Source: Department of Conservation, 2023

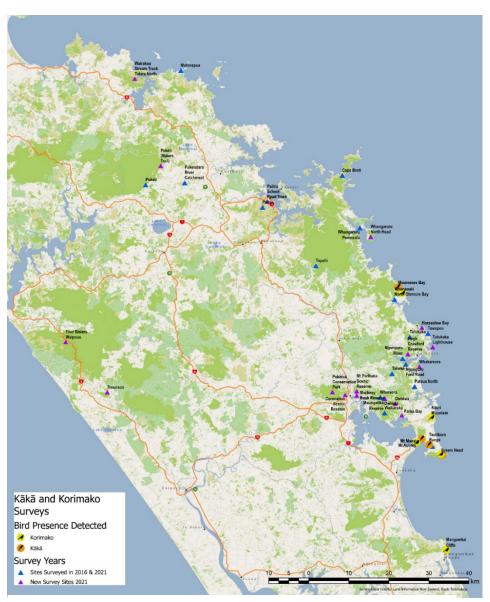
Kākā & Korimako Surveys

Kiwi Coast has carried out two five-yearly Kākā and Korimako Surveys over the past ten years in partnership with NorthTec. While rare on the mainland, kākā and korimako exist in good numbers on the offshore islands off Northland's east coast. The aim of the surveys is to track changes in the distribution of kākā on the Northland mainland, as it is hoped that they will naturally return in response to the significant and growing amount of pest control being carried out.

Kākā and korimako currently visit some Northland areas sporadically – especially in winter when island food sources are low. By conducting the survey in summer, it is expected that any birds detected will be permanent residents rather than temporary visitors.

The first survey conducted in 2016 only detected korimako at one site (Bream Head Scenic Reserve). In the 2021 survey, bellbirds were again detected at Bream Head as well as an additional five sites – Reotahi / Mt Aubrey, Manaia Ridge Scenic Reserve, Mangawhai Cliffs, Kauri Mountain, and Otamure Bay (Whananaki North) (see Map 8).

Kākā were detected at Bream Head Scenic Reserve, Taurikura Ridge, and Manaia Ridge Scenic Reserve in 2016. In 2021 they were only detected at one site -Bream Head Scenic Reserve although Taurikura was unable to be re-surveyed affecting this result.



concluded that "... the distribut

The survey report

"... the distribution of kākā and bellbird are still very restricted across the Kiwi Coast. If mammalian predation is limiting these species', it is hoped that with continued predator management the distribution of these species will be greater when the surveys are repeated in 2026." (Ambury et al., 2021).

Map 8: Kākā and Korimako 2016 & 2021 Survey Map: A Duxfield

Table: 1: Kiwi Coast Key Performance Indicators, Measures and Outcomes

Objective	Key Performance Indicator (KPI)	Source of Measure	Expected Outcome	Baseline Information	Results Summary as at June 30, 2023
Northland brown kiwi populations in eastern Northland are increasing.	An overall upwards trend of kiwi populations in managed sites on the Kiwi Coast.	Annual Kiwi Call Count Survey. Northland brown kiwi distribution map of high and low density kiwi populations (DOC).	Increased kiwi population.	Northland Annual Kiwi Call Count Survey data since 1995. DOC Kiwi Distribution Maps.	2022 Kiwi Call Count Data shows stable or increasing Northland kiwi population trends. Kiwi Distribution Map last updated by DOC in 2016.
Northland brown kiwi are dispersing into new sites.	Northland brown kiwi confirmed at new sites.	Kiwi Coast 5-yearly Kiwi Listening Blitz.	Expanded Northland brown kiwi distribution.	Kiwi Coast Baseline Kiwi Listening Blitz (2016).	Scheduled Kiwi Listening Blitz's completed (next due 2025).
Northland brown kiwi populations are linked via safe kiwi corridors.	Northland brown kiwi are moving between separate populations.	Telemetry monitoring of transmitted kiwi. Possible DNA monitoring as techniques and expense allows.	Kiwi tracked moving safely through and between project areas.	Existing telemetry data.	Transmittered kiwi tracked moving successfully within Tutukaka Coast, Whangarei Heads and Kiwi Link.
Northland's biodiversity flourishes.	Increased populations and distribution of key native indicator species.	Kiwi Coast Indicator Species Monitoring Program: Participation in DOC led Annual Pāteke Flock Counts 5-Yearly Kākā & Korimako Surveys	Populations of native species increase. Expanded distribution of native species in Northland, including return of species currently restricted to offshore islands back to the mainland.	DOC Annual Pāteke Flock Count Survey data since 1993. Kiwi Coast Baseline Kākā & Korimako Survey (2016).	2023 Pāteke Flock Count Survey shows increase to 625. Distribution continues to expand in eastern Whangarei. Scheduled Kākā & Korimako Surveys completed (next Survey due 2025).
Animal pest populations are reduced by landscape scale predator trapping networks.	Animal pests in eastern Northland are being actively controlled to declared levels.	Annual collation of trap catch data. Hectares under management.	Kiwi populations increase and can disperse safely into new areas. Populations and distribution of native species increase in Northland.	Annual collation of pest control results and hectares under pest control since 2013. Annual group reporting and GIS analysis of project area extent.	708,536 animal pests collectively trapped over past ten years. Approximately 251,000 hectares collectively under active management by groups and projects.

Objective	Key Performance Indicator (KPI)	Source of Measure	Expected Outcome	Baseline Information	Results Summary as at June 30, 2023
Community, iwi/hapū-led conservation projects are linked through the Kiwi Coast.	Numbers of community, iwi/hapū-led conservation projects participating in the Kiwi Coast.	Tally of number of entities involved.	Community-led projects work together towards the shared vision of building NZ's first kiwi corridor.	No. of projects involved tallied since Year 1.	225 groups, projects and organisations involved (see Appendix 2).
Community and iwi/hapū have the skills and resources needed to engage in biodiversity stewardship / kaitiakitanga to the full extent they wish.	Capacity and skill building workshops are held upon request of communities.	Number of skill building workshops held. Number of people attending Kiwi Coast supported events and workshops.	Communities, iwi and hapū are actively and effectively involved in biodiversity stewardship / kaitiakitanga.	No. of workshops held recorded since Year 1. No. of people attending events and workshops recorded since Year 1.	111 workshops held since 2013. Total number of people at Kiwi Coast supported workshops and events since 2013: 23,022
Increased understanding, knowledge and support for kiwi recovery.	Integrated communications system has strong regional and national presence.	Communications reach.	Increased number of people engaged in kiwi recovery and accepting of methods needed for success.	Analysis of communications data since Year 1.	Number of website visits over 10 years: 156,515 Electronic newsletter: 1,622 subscribers, 52.2% opening rate (Industry average is 37%). Social Media: Facebook 'Follows': 2,739 Instagram (began October 2019): 672 followers.
Kiwi Coast has a financial mechanism in place to generate independent income.	Financial mechanisms developed and generating income.	Amount of independent funds being generated.	Kiwi Coast has an independent income stream to help sustain communityled kiwi recovery.	No financial mechanism in place in Year 1.	Kiwi Coast online store and merchandise range developed and extended. Charitable Trust status gained in 2017 to enable donations and sponsorship. "Follow a Kiwi" sponsorship scheme launched in 2017.

∑ 28

Research and Technology

Over the last decade Kiwi Coast Trust has worked with a range of specialist contractors, innovators and research partners to assist with the development of new tools and technology that will help Northland projects find efficiencies and maximise ecological gains.

In addition, field tests of novel pest control tools have been supported with the intention of saving individual community projects spending hard-won funds on products that may still need modifications to work effectively in Northland conditions.

12 novel pest control and monitoring tools have been field tested including:

- Celium nodes and hubs
- Ezylure dispensers
- Poditraps
- SA4 ferret traps
- ZIP Motolure dispensers
- NZAT220 resetting traps
- Mobile phone trail cams
- New lures such as Poaku lures, stoat bedding and fishy cubes
- F-Bomb ferret traps
- Flipping Timmy possum traps
- Oceansense kiwi listening devices

Novel tools are generally presented and demonstrated by researchers and innovators at the annual Kiwi Coast Regional Pest Control Workshop. Trial results and trapper feedback are then reported back at subsequent workshops to enable further information and skill sharing.

Kiwi Listening App Upgrades

In 2020 the Kiwi Coast Listening App was developed to increase the ease and efficiency of Northland's Annual Kiwi Call Count Survey.

The app now helps over 200 kiwi listeners each year record their data more efficiently and effectively, saving hours of data entry labour. In 2021 DOC reported that the Kiwi Listening Survey data had not only been received in record time, but in a cleaner state, making subsequent analysis much easier.

Additional features of the app include on-the-spot date and time stamps and automatic GPS location recording. Listeners can also record kiwi calls - taking the uncertainty out of the monitoring for new listeners.

Freemasons Sponsored NZAT220 Field Trial

In February 2021, Kiwi Coast initiated a field trial of NZ Autotraps' AT220 mechanically re-setting NAWAC approved possum and rat trap. Three community-led projects across the region were invited to participate – Mangatete Landcare in the Far North, Tutukaka Landcare in eastern Whangarei, and Piroa-Brynderwyns Landcare to the south. Northland Freemasons sponsored 30 AT220s, enabling each group to receive 10 traps.

Bay Bush Action (BBA) also secured funding to run an independent two-year field trial, deploying 533 AT220s over a 260ha area in Opua. To maximise the robustness of all the results obtained across the Kiwi Coast and BBA field trials, a standard set of baseline protocols was agreed upon for trap installation, servicing and data collection.

The field trial revealed issues with the NZAT220 that NZ Autotraps were quick to assist with solving. For example, ongoing clogging of the lure system led to a replacement of the bottle dispenser to a pouch system. By working closely and collaboratively, refinements to the AT220 are already underway to improve trap performance as a direct result of the field trial.

Automated Kiwi Call Recognition Software and new Acoustic Monitors

Kiwi Coast is working with Oceansense to create improved acoustic monitors and develop automated kiwi call recognition software.

Over the past year, two new Oceansense kiwi listening device prototypes have been trialled and modified. The next step is to produce ten units for further testing. It is hoped that these units will be an upgrade of the DOC acoustic monitors now used heavily across Northland for an array of wildlife monitoring. It is anticipated that the Oceansense devices will bring improved kiwi call detection, easier analysis and reduction in device failures.

The development of automated kiwi call recognition software is also progressing well, with the first version now being tested on Kiwi Coast data. With hundreds of hours spent analysing kiwi call data each year, if successful this will be extremely useful for Northland projects.

Zero Tolerance for Ferrets - ZIP Motolure Trial

Community and hapū workshopping during Kiwi Coast's 2022 Northland Kiwi Hui raised the idea of Northland becoming "ferret free". Many eastern projects already suspect they are ferret free due to sustained predator control and research suggests ferrets never reached certain areas in the Far North. Monitoring tools capable of detecting ferrets to prove presence or potential absence were therefore needed.

ZIP Motolures, which automatically dispense 1ml of whole egg mayonnaise every 24 hours, have been promoted as capable of detecting pest animals, including ferrets. In 2022, ZIP Motolures were trialled to test their ferret detection capability at sites that regularly report relatively high ferret catches by Northland standards.

Fifteen trial sites were established on two Pamu farms at Omamari (10 sites) and Titoki (5 sites), beginning in the peak ferret dispersal season of December-January. Sites were selected based on the professional advice of predator trapper Tina Winder, with preference given to sites considered to be prime ferret locations. These included forest /paddock interfaces, bush edges, intersections of farm tracks, fence lines and waterways. Sites where ferrets had been previously shot, trapped or observed during night hunting with thermal equipment were also targeted.

Each ZIP Motolure was paired with a Browning Dark Ops Max HD Plus (BTC-6HD-MXP) trail cam to monitor pest interactions and all sites were entered into Trap.NZ. Some sites also had a SA2, Enviromate100 automatic bait station, DOC 250 or other pest control device to potentially increase the attractiveness of the site to ferrets due to the presence of possum catches in traps, lures in the Enviromate 100's, or eggs in DOC 250s. Each site was checked at least monthly, with labour kindly funded by Pamu.

By July 26 2023 – after seven months - no ferrets had been recorded interacting with ZIP Motolures at any site. One ferret was recorded on trail cam (at Pamu Omamari Site 10), moving through the site, but it showed no interest in the ZIP Motolure. A same-sized ferret was subsequently trapped in a DOC 250 baited with a whole fresh hen egg three weeks later at a different location on the Omamari Pamu block and it was suspected to be that individual.

The trial continues and will next be extended to include new sites further south with the Piroa Conservation Trust and Pest Free Kaipara Peninsulas. As both projects regularly report some of the highest annual ferret catches for the region, this should assist with investigating the capability of the ZIP Motolures to detect ferret presence in Northland conditions.



Installing ZIP Motolures December 2022



Pamu Omamari ZIP Motolure Trial Sites

Summary

Over the last ten years, Kiwi Coast has grown rapidly and learnt much.

The 'can-do', action-on-the-ground, grassroots style of the Kiwi Coast has engaged the hearts and minds of many Northlanders, inspiring and motivating more and more people to get involved and actively look after "their patch" and "their kiwi".

The unforeseen challenges posed by droughts, Covid-19 and cyclones have not only been met but resulted in stronger relationships, renewed determination and innovative solutions.

Kiwi Coast Coordinators provided a raft of support, training and practical workshops to help build the skills and capacity of the groups and projects involved. The solid base of support for community, hapū and iwi-led projects across Northland has assisted groups to share their knowledge, stories, successes, lessons and innovations. It has been backed by a multi-pronged communications network and an array of community events, wānanga and hui, ensuring Northland projects are able to grow and learn together.

However, the growth in number of Kiwi Coast Coordinators has not matched the rapid increase of groups and projects involved. With 2 full-time and one part-time Coordinator to support 225 entities across an active management area of 251,000 hectares it is likely further Coordinators are needed to ensure that a high level of support and quality service can be provided to all the entities involved.

The resources brought in by the Kiwi Coast Trust through the NRC Partnership, Foundation North grant and a growing number of sponsors have been used extremely efficiently. Funded operations and activities have resulted in demonstratable differences on-the-ground, as proven by an array of monitoring data.

The 708,536 animal pests collectively trapped are testament to the ongoing hard work of Northlanders on farms, forests and private blocks. Pest control motivated by tāonga species such as kiwi, has had widespread flow-on benefits to communities and biodiversity. These benefits are both tangible and intangible. They include improved native forest health, the return of birdsong to once silent forests, the recovery of threatened species and the empowerment of people, living confidently in increasingly cohesive communities as they come together to care for their special places and cherished tāonga.

Seeking efficiencies, maximising gains and ensuring upward trends of kiwi populations are sustained remain key strategic priorities of the Kiwi Coast Trust. With the first predator-free peninsula projects underway in Whangarei and Purerua, 'chasing zero' is replacing mindsets of endless pest suppression.

Kiwi Coast remains committed to championing community, iwi and hapū led native forest regeneration projects across Northland. With iconic kiwi as our collective flag-bearer, projects work autonomously while part of collaborative landscape-scale pest control networks. Continuing to build wildlife-friendly corridors through Northland will not only allow tāonga species such as kiwi to roam and disperse safely, but take essential steps towards restoring regional gene flow.

Together, as a collaborative network, with Kiwi Coast Trust offering a platform of support, an increasingly cohesive korowai of protection is being woven for Northland's native forests and wildlife. Monitoring results have shown that tāonga species such as kiwi and pāteke are now stable or increasing at most Northland sites where the full complement of long-term predator control and good dog control is in place. However, while the recovery of Northland brown kiwi is a New Zealand conservation success story that Kiwi Coast has been proud to play a part in, it is too early to tick the box and move on.

The incessant reinvasion of pests into managed areas, continued dog kills of kiwi, and increasing frequency of prolonged droughts and floods all pose major threats that could quickly undo the gains made to date if left unaddressed. Potential exhaustion of community-led projects that have been working hard for two decades must also be acknowledged.

The task ahead for the Kiwi Coast over the next ten years is to maintain momentum and strategic direction to ensure the continued wise use of resources that will most benefit Northland's native forests and wildlife and ensure communities, iwi and hapū are firmly in the driving seat of New Zealand's first kiwi corridor.

The Kiwi Coast Trust again thanks all the groups and projects for their enduring and relentless hard work. Many thanks also to our partners Northland Regional Council, principal funders Foundation North, Save the Kiwi Trust, the keen 'Follow a Kiwi' fans, and sponsors. We are privileged to work with you all on this amazing initiative – here's to the next ten years!

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Appendix 1:

Kiwi Coast Trust Financial Summary July 1, 2022 – June 30, 2023*

Income	
Foundation North Grant (Year 2: Oct 2022 - to Oct 2023)	\$246,125
NRC - KC Partnership Funds	\$201,422
Save the Kiwi Trust JFN - Pest Free Purerua Project	\$100,000
Donations and Sponsorship	\$4,796
- Northland Freemasons	\$13,000
Interest Received	\$1,942
Sales - Kiwi Coast Merchandise etc	\$2,105
Sales - Pest Control Equipment	\$33,340
Services Invoiced eg Monitoring	\$3,782
Total Income	\$606,511
Operating Expenses	
<u> </u>	+0.6=0
Accountancy, Insurance, Transaction and Audit fees	\$8,670
Administration & Financial Management	\$31,074
Building Predator Trapping Capacity Trapper Mentoring Communications	\$2,402
	\$18,498
Community Project Implementation Support	\$2,164
Dog Owner Support & Engagement	\$7,096
Education, Engagement & Events	\$17,325
Health & Safety	\$1,325
Kiwi Coast Coordinators - Labour & Mileage	\$245,856
Kiwi Coast Field Support	\$10,733
Kiwi Coast Trapper Training Workshops and Field Trips	\$11,531
Kiwi Listening App Maintenance & Updates	\$600
Mapping Marting Hail Travel Contra	\$935
Meeting, Hui & Travel Costs	\$5,089
Merchandise Expenses - Cost of Goods Sold	\$1,214
Monitoring Equipment	\$499
Monitoring Indicator Species	\$17,824
Monitoring Kiwi Post Control Controctors	\$16,753
Pest Control Contractors Pest Control Products	\$94,320
	\$19,473
Resources for Workshops and Events	\$1,693
Specialist Community Project Support	\$7,818
Strategic Project Support incl Bol Kiwi Rehab Centre	\$11,962
Training Courses for Community Groups and Projects	\$1,238
Trial New Trap Technology	\$12,582
Total Operating Expenses	\$548 , 675
Operational Funds remaining (due to Foundation North Grant period)	\$57,836

Note: *Excludes GST and does not include funds or expenses of umbrellaed projects

Appendix 2: Entities, projects and groups involved in the Kiwi Coast as at June 30, 2023

No. Entities	Name	Location	Project Area (ha)
1	Aroha Island	Kerikeri	18
2	Backyard Kiwi	Whangarei Heads	5,845
3	Baldrock Trappers	Kaiwaka	200
4	Bay Bush Action Trust	Opua, Bay of Islands	1,544
5	Blue Gum Lane	Kerikeri	19
6	Blue Orb Charitable Trust	End of Whangaruru Peninsula	413
7	Bream Bay College Rat Patrol	Ruakaka	1
8	Bream Head Conservation Trust	Bream Head	1,096
9	Bream Tail Farm	Bream Tail	430
10	Broadwood Trap and Track	Broadwood	100
11	Brynderwyn Barrier	Brynderwyns	1,500
12	Burma Rd Tolls for Trolls Trappers	Peria	100
13	Campbell Rd Landcare	Pataua	100
14	Candy's Farm	Okaihau	598
15	Cavalli View Trappers	Takou Bay	1
16	Cemetery Road Landcare	Maunu	80
17	Corymbosa Charitable Trust	Ruatangata West	8
18	Cottle Hill Landcare	Kerikeri	12
19	Craigmore Horticulture	Kerikeri	161
20	DOC Whangarei Kiwi Sanctuary and Pateke projects	Various	13,268
21	Di's Farm	Maungakaramea	89
22	Doubtless Bay Landcare	Taipa, Cable Bay and Coopers Beach	356
23	Dunlop & Craig Farm	Otonga	445
24	Durham Road Farms	Waipu	300
25	Eastern Bay of Islands Preservation Society	Eastern Bay of Islands	n/a
26	Faraway Project	Arapohue	250
27	Fish & Game - Flaxmill Wetland	Dargaville	69
28	Fish & Game - Jack Bisset & Greenheart Wetland	Poroti	113
29	Fish & Game - Underwood Block	Dargaville	400
0	Flagstaff	Waipu	157
31	Friends of Matakohe/ Limestone Island	Matakohe/ Limestone Island, Whangarei Harbour	608
32	Friends of Rangikapiti Pa & Mangonui School	Coopers Beach	247
33	Friends of Rangitane Stream	Kerikeri	20

34	Glenbervie Landcare	Glenbervie	1,365
35	Harris Rd Area Landcare	Glenbervie	550
36	Hawkhill Farm	Morewa	124
37	Helena Bay Estate	Helena Bay	155
38	Honeymoon Valley Landcare	Peria	2,426
39	Hupara Landcare	Hupara	1,428
40	Hukerenui CPCA	Hukerenui	1,620
41	JH Dowell Trust	Day Point	40
42	Jonathan Rae Trust	Takou Bay River Scenic Reserve	72
43	Jude Rd Forest Care	Mangawhai	350
44	Kaiatea Landowners	Ngunguru	320
45	Kaiaka Landcare	Peria	200
46	Kaikohe - Ngawha	Kaikohe	1,109
47	Kaikohe Christian School	Kaikohe	1
48	Kaimamaku Landcare	Kaimamaku – Kaiikanui	2,818
49	Kaipara Forest Conservation Trust	Houto	1,100
50	Kaiwaka Community Pest Control Group	Kaiwaka	500
51	Kapawiti Kaitiaki	Mangawhai	70
52	Kauaepepe Landcare	Raetea	93
53	Kauri Landcare	Kauri	231
54	Kauri Cliffs	Matauri Bay	2,172
55	Kerikeri Cubs	Kerikeri	1
56	Kerikeri Kindergarten	Kerikeri	1
57	Kerikeri Peninsula Conservation Trust	Kerikeri Peninsula	1,750
58	Kerikeri Plant & Food Research	Kerikeri	100
59	Kerikeri-Puketotara Catchment CPCA	Kerikeri - Puketotara	5,743
60	Kerikeri River West Trapline	Kerikeri	20
61	Key Industries	Auckland	n/a
62	Kiwi Link HVA	Eastern Whangarei	(incl. as groups)
63	Kiwi North Pest Patrol	Whangarei	25
64	Kohinui Stream Landcare	Kohinui Stream Catchment	366
65	Kohumaru Kiwis	Kohumaru	350
66	Kowhairoa Historical Reserve	Whangaroa	500
67	Lake Omapere Duck Hunters	Lake Omapere	50
68	Lamb Rd Landcare	Parua Bay	345
69	Langs Beach Estate	Langs Beach	200
70	Living Waters	Tangatapu Catchment, Bay of Islands	4
	Maclester Group	Brynderwyns	40
<i>.</i> 72	Mahinepua/Radar Hills Landcare	Mahinepua – Radar Hills	1,150
73	Manaia Landcare	Whangarei Heads	484
 74	Mangahui Rd Landowners	Tahere	50

75	Mangatete Landcare	Fisher Riley Rd, Kaitaia	1,000
76	Manulife Forest Management: Brynderwyn Kiwi Project	Brynderwyns	1,800
77	Manulife Forest Management: Gammons Block	Mangakahia	1,368
78	Manulife Forest Management: Rakautao	Kaikohe	647
79	Manulife Forest Management: Whanui Project	Pataua North	927
80	Manulife Forest Management: Whatoro CPCA	Kaihu	1,414
81	Marunui Conservation	Brynderwyns	423
82	Marunui's Ring of Steel buffer	Brynderwyns	927
83	Massey Road Trappers	Massey Road, Waipu	800
84	Matapouri Kaitiaki	Whale Bay - Matapouri	102
85	Mataraua Kiwi Project	Mataraua, Kauri Coast	1,252
86	Matauri Trust	Matauri Bay	325
87	Maungaparerua Stream Landcare	Kerikeri	250
88	Millington Rd Kiwi Group	Maunu	40
89	Mill Rd Trappers	Kawakawa	95
90	Moturoa Island	Bay of Islands	147
91	Moturua Island	Bay of Islands	200
92	Motutangi Pest Wipeout	Motutangi	10
93	Native Forest Restoration Trust - Puketi Mokau Shirley Guildford	Whangaroa	400
94	Ngā Kaitiaki o Huruiki Maunga	Mt Huruiki between Whangapara and Whangaruru	315
95	Ngā Ringa Tawhiti o Te Puna Aroha	Kawakawa	10
96	Ngawha Pest Control Area	Ngawha	2,000
97	Ngā Kaitiaki o Ipipiri	Rakaumangamanga	2,300
98	Ngati Wai Trust Board	Ngati Wai rohe	n/a
99	Ngunguru Sandspit & Ngunguru Ford Landcare	Ngunguru Ford	1,775
100	Northland Regional Council	NRC Mt Tiger block	500
101	NorthTec Conservation Management	Various	
102	NZ Fairy Tern Trust	Waipu & Mangawhai Spits	1,044
103	Northland Forest Managers	Northland (Waikaraka Forest)	
104	Ocean Beach Landcare	Ocean Beach, Whangarei Heads	23
105	Oi Kaitiaki	Langs Cove to Bream Tail Farms	870
106	Okaihau Eco Warriors	Okaihau	20
107	Okaihau Trappers	Okaihau	100
108	Onekura Rd Trappers	Waipapa	100
109	Opara Kiwi Conservation Estate	Opara Peninsula, Hokianga	200
110	Opua Bike Trail	Opua	40
		1	

111	Orcada Ltd	Matauri Bay	609
112	Oromahoe Road Trappers	Oromahoe	38
113	Oromahoe Trust	Oromahoe	102
114	Otaha Station	Takou Bay	612
115	Otangaroa Landcare	Otangaroa	105
116	Otangaroa Workgroup	Otangaroa	5,550
117	Owhiwa Landcare	Owhiwa	819
118	Pa Hill	Brynderwyns	6
119	Pamu Kapiro-Avocado	Kapiro	600
120	Pamu Kapiro Station	Kapiro	1,888
121	Pamu Mangatoa	Southern Hokianga	4,660
122	Pamu Omamari	Omamari	2,838
123	Pamu Puketotara	Puketotara	1,339
124	Pamu Rangiputa	Karikari Peninsula	3,683
125	Pamu Takakuri	Takakuri	1,654
126	Pamu Takou Bay Milk	Takou Bay	350
127	Pamu Titoki	Titoki	1,002
128	Papakarahi Landcare	Whangarei Heads	part of WHLF
129	Parihaka Community Landcare	Mt Parihaka, Whangarei	191
130	Parua Cemetery Road Landcare	Parua Bay	50
131	Pataua North Landcare	Pataua North	1,109
132	Pathways Drive	Kerikeri	5
133	Peach Orchard Predator Hunters	Whakapara	738
134	Pest Free Mangapai	Oakleigh/Mangapai	3,650
135	Pest Free Parakiore	Whangarei	750
136	Pest Free Peninsulas Kaipara	Pahi, Petley, Te Pahi and Matakohe Peninsulas	6,000
137	Pest Free Purerua - Mataroa	Mataroa Peninsula	5,400
138	Pests Off Puhipuhi	Puhipuhi	100
139	Piroa Conservation Trust	Piroa Brynderwyns	incl. as projects
140	PF Olsen - Houto Trapping Project	Houto	1,508
141	Project IslandSong	Islands in the Bay of Islands (centered on Urupukapuka)	436
142	Puke Kopipi Restoration Group	Ngunguru	6
143	Pukenui/Western Hills Forest Trust	Whangarei	5,000
144	Puketi Forest Trust	Puketi	7,200
145	Pukewhau Bulls Gorge	Kerikeri	616
146	Pungaere Road Trappers	Kerikeri	55
147	Pupurangi Nature Sanctuary	Kaihu	1,294
148	QEII National Trust	New Zealand	n/a
149	Rayonier Matariki Forests – Glenbervie Forest Project	Glenbervie	6,662

150	Reotahi Landcare	Whangarei Heads	82
151	Retreat Rd Trappers	Haruru - Puketona	205
152	Riponui Kiwi Project	Riponui	979
153	Riverlands Landcare	Ngunguru river	363
154	Ruakaka Forest Trappers	Ruakaka	101
155	Rukuwai Landcare	Owhiwa	44
156	Ruru Kaitiaki	Langs Beach	850
157	Russell Landcare	Russell, Bay of Islands	2,000
158	Russell-Orongo Bay Holiday Park	Russell, Bay of Islands	1
159	Sandy Bay Kiwi	Sandy Bay	3,590
160	Save the Kiwi Trust	New Zealand	n/a
161	Selwyn Driver (Farm)	Whitehills	200
162	Signals Road Trappers	Okaihau	805
163	Siteworx Kapiro	Kapiro	8
164	South Kerikeri Inlet Landcare	South Kerikeri Inlet	1,044
165	Skudders Beach	Kerikeri	10
166	Springbank Collective	Kerikeri	7
167	Summit Burlace	Waiare	137
168	Summit Mokau	Mokau	2,162
169	Summit Omahuta	Omahuta	585
170	Summit Otangaroa	Otangaroa	1,851
171	Summit Stanley-Hunt	Diggers Valley	127
172	Summit Te Hiku	Aupouri Peninsula	22,768
173	Summit Upokorau	Upokorau	2,886
174	Summit Van Crasbeek	Fairburn	332
175	Taheke Landcare	Tahere	1,800
176	Takahiwai Pest Control Group	Takahiwai	480
177	Tanekaha CPCA	Hikurangi	2,919
178	Tangiteroria School	Tangiteroria	3
179	Tapuhi Landcare	Tapuhi	49
180	Taraunui Landcare	Parua Bay	150
181	Taronui Pest Control Area	Purerua	1,215
182	Taupo Bay Coast and Landcare	Taupo Bay	1,850
183	Taurikura Ridge Landcare	Taurikura, Whangarei Heads	255
184	Teal Bay Landcare	Teal Bay	25
185	Te Arai Forest Troop	Te Arai	100
186	Te Kāhu-Neighbours of Pukenui (TKN Landcare)	Kamo	512
187	Te Ranga	Kaeo	705
188	Te Tangi o Te Ata	Eastern Bay of Islands	970
189	The Sanctuary CPCA	Mangawhai	180
190	The Shadehouse Volunteers	Kerikeri	1
191	Tiakina Whangarei	Whangarei	4,557

192	Tutukaka Landcare Coalition Trust	Tutukaka	8,000
193	Upokorau Summit Ecological Project	Upokorau	2,166
194	Upper Pungaere Trappers	Pungaere	319
195	Utakura Trappers	Utukura Valley, Okaihau	250
196	Vision Kerikeri/Friends of Wairoa Stream	Kerikeri	25
197	Volunteering Northland	Northland	n/a
198	Waiare Rd Landcare Group	Waiare	1,776
199	Waihoihoi Kaitiaki	Waipu	380
200	Waihou Valley Trapping	Puketi	150
201	Waikare Whenua Kaitiaki	Waikare	250
202	Waimate North Landcare	Waimate North	5,000
203	Waipapa West Trappers	Waipapa	64
204	Waipu Kiwis	Waipu	650
205	Waipu West Kiwi	Waipu	880
206	Wairahi Trapping Group	Langs Beach	89
207	Waitangi Endowment Forest	Waitangi	700
208	Waitangi-Haruru Walkway	Waitangi	174
209	Waitangi Iwi Kiwi Project	Waitangi	1,564
210	Waitangi Treaty Grounds	Waitangi	100
211	Waitotara Drive Reserve	Waitotara	59
212	Waorahi Kaitiaki	Langs	6
213	Warawara Whenua Ngahere	Warawara	11,051
214	Wekaweka Landcare	Wekaweka Valley, Kauri Coast	1,542
215	Whakaangi Landcare Trust	Hihi Peninsula	3,200
216	Whakapara Pest Control Group	Whakapara	217
217	Whananaki Landcare	Whananaki	7,943
218	Whangarei District Council	Whangarei	n/a
219	Whangarei Heads Habitat Restoration Trust	Whangarei Heads	(incl in WHLF)
220	Whangaruru Nth Residents & Ratepayers	Whangaruru Peninsula	284
221	Wharemoa (Farm)	Matauri Bay	368
222	Whareora Landcare	Whareora/Mt Tiger	2,559
223	Whau Valley Landcare Group	Whau Valley, Whangarei	18
224	Whiritoa Stream Trappers	Waipapa	59
225	Wild Kiwi Girls	Kaeo	40
Total a	rea managed in ha		251,311



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