



# ***Kiwi Coast Annual Report 2016***

Prepared by Ngaire Tyson (Kiwi Coast Coordinator) and the Kiwi Coast Think Tank, July 2016.



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Cover: Huipara the Kiwi held by Accredited Kiwi Handler Todd Hamilton at the Whareora ‘Meet a Kiwi’ event. Photo: Glenys Mullooly

## Executive Summary

This annual report outlines the key activities carried out by the Kiwi Coast during its third year from July 2015 – June 2016.

The operation of the Kiwi Coast continues to be possible through both its partnership with the Reconnecting Northland programme and the unflagging determination of the people-on-the-ground working hard to ensure kiwi populations continue to slowly but steadily increase in eastern Northland.

The momentum of the Kiwi Coast has continued to grow with 71 community groups, projects, iwi/hapu, forestry companies, government agencies and organisations now involved in the Kiwi Coast. This more than doubles the number of groups participating in Year 1. The Kiwi Coast now extends approximately 195km from Bream Head to the Aupouri peninsula in the Far North.

In line with the strategic objectives set out in the Project Plan, priority has continued to be given to reducing threats to kiwi survival, especially within an initial area between Bream Head and Whananaki. Once again, this involved the deployment of new predator traps, more time spent on trap servicing and holding events and workshops to engage people in caring for kiwi protection and improving dog control. A total of 120,293 ha are now under active pest control along the Kiwi Coast.

An additional 540 predator traps were purchased for strategically located groups and projects. As well as reducing predators that threaten kiwi survival, the intent has also been to decrease gaps between neighbouring trapping areas. The result is that the kiwi populations of Whangarei Heads, Mt Tiger, Whanui and Tutukaka are now close to being linked by a continuous trapping network across a series of different projects that have formed a collective called the 'Kiwi Link'.

Likewise, fourteen projects from the wider Bay of Islands area are now working together as the Mid North Alliance. The Kiwi Coast has assisted the alliance with workshops and provided extra predator traps for key locations to assist with on-the-ground linkages.

Collation of animal pest control data across the Kiwi Coast also demonstrated the strength of a collaborative approach when attempting to reduce tenure-blind animal pests at a landscape scale. With a further 52,091 animal pests removed by groups and projects involved in the Kiwi Coast in 2015, over 1000 pests are now removed from eastern Northland on a weekly basis.

Crucial baseline monitoring was completed this year in the form of the first 'Kiwi Coast Kiwi Listening Blitz' and the NorthTec 'Kaka and Bellbird Distribution Survey'. This work completed the Kiwi Coast's monitoring framework and over time will assist the Kiwi Coast to measure its progress towards goals and effects on Northland's biodiversity.

2,027 people attended Kiwi Coast supported events, workshops and 'Kiwi Experiences'. These people came together to celebrate kiwi as a taonga, build skills and deepen their understanding about how to help kiwi thrive.

Projects and groups involved the Kiwi Coast carry out a vast array of biodiversity restoration, protection and enhancement activities. Defined by the groups and projects linked into it, the Kiwi Coast is growing organically into a multi-faceted ecological corridor with kiwi leading the charge as the iconic flag bearer.

## Kiwi Coast Goals

The Kiwi Coast is a collaborative initiative that links community-led conservation projects, iwi and hapu, interested landowners, farmers, forestry companies and agencies in the shared vision of increasing kiwi numbers, creating safe ecological corridors and improving the general biodiversity values of eastern Northland.

The goals of the Kiwi Coast are:

- To support the recovery of local kiwi populations along the east coast of Northland.
- To celebrate the presence of Northland brown kiwi in Northland as a taonga.
- To reduce pests that threaten kiwi.
- To facilitate the safe movement of kiwi and other native species throughout the Kiwi Coast.
- To encourage the restoration of the ecological health and integrity of kiwi habitats, including native forest, scrublands, streams, dune lands and wetlands.
- To encourage the natural return and spread of lost species such as kaka, kakariki and bellbird / korimako, some of which visit, but no longer reside in the area.
- To encourage people to engage in kaitiakitanga / stewardship to protect and nurture Northland's biodiversity for future generations.

## Reconnecting Northland

The Kiwi Coast is proud to be the founding pilot project for Reconnecting Northland (RN). Over 2015/16 the Kiwi Coast provided timely quarterly progress reports to Reconnecting Northland Steering Group members and Funders. The Kiwi Coast Coordinator also attended all Steering Group meetings to provide further information and respond to queries.

The Kiwi Coast continues to provide an example for Reconnecting Northland of a large, landscape connectivity project in operation and assist RN to meet its Targets and reduce its Threats.

The RN Strategic Plan (April, 2016) identifies the following Targets and priority Threats:

### Targets:

- Kauri / Toitu Te Kauri
- Significant Forests / Te Wao Nui a Tane
- Kiwi, Kukupa & Bats
- Dune Systems / Nga Tahuna
- Wetlands & Lakes / Nga Wai Maori
- Estuaries / Nga Wai Tai
- Tuna, Whitebait & Kewai / Nga Taonga Ika

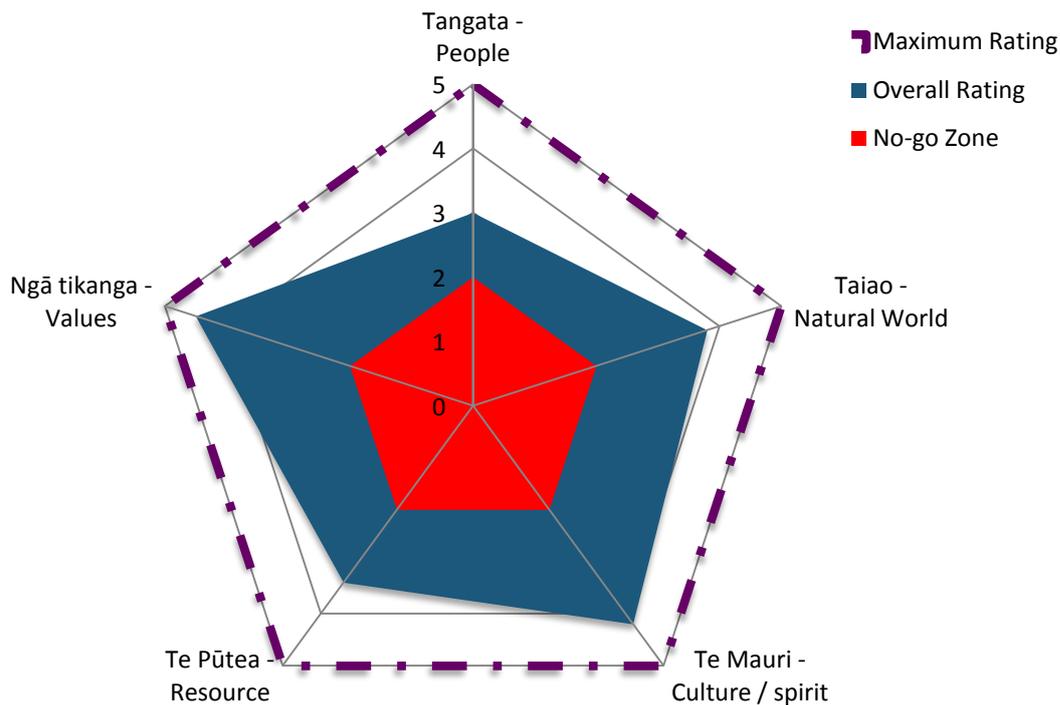
### Threats:

- Kauri Dieback
- Predators
- Browsing animals
- Weeds
- Unsustainable Land Use practices
- Factors Threatening Fish Stocks
- Uncontrolled Dogs

While the Kiwi Coast has a strategic focus on predator control and kiwi recovery, the individual projects and groups involved carry out a vast array of biodiversity restoration activities including animal and plant pest control, education and advocacy, wetland and riparian fencing and planting, threatened species translocation and habitat restoration. While the vision of a thriving kiwi corridor links each project together, no single project focuses solely on predator control for kiwi recovery. In fact a number of groups (for example, Vision Kerikeri, Eastern Bay of Islands Preservation Society and Weed Action Whangarei Heads) have no specific goals relating to kiwi at all.

Accordingly, while the Kiwi Coast could appear outwardly to contribute solely to the RN Target of ‘Kiwi, Kukupa and Bats’, and address the threat of ‘Predators’, in reality the initiative contributes collectively to all seven RN targets and directly addresses all Threats except ‘Factors Threatening Fish Stocks’. Defined by the groups and projects linked into it, the Kiwi Coast has grown organically over the last three years into a multi-faceted ecological corridor with kiwi as the iconic flag bearer.

A preliminary assessment of the alignment of the Kiwi Coast with RN principles and values was carried out by RN in 2016 using a model developed by the Programme Manager. Results, shown in Figure 1 demonstrate that the Kiwi Coast scored well during this assessment and is very well aligned with RN principles and values. Further support is needed for the Kiwi Coast in the areas of ‘Te Pūtea - Resource’ and ‘Tangata - People’.



**Figure 1 – Reconnecting Northland assessment of Kiwi Coast alignment with RN values and principles**

### Reconnecting Northland Values and Principles:

**Tangata:** By connecting willing people, local groups can become clusters of groups which work in coordination with each other. Over time, strategic partnerships can form with tangata whenua grounding and wider interests joining. Institutional gaps and boundaries can be overcome. Many multi-stakeholder groups across Northland can collaborate to create the conditions and resources needed to get to scale.

**Te Taiao:** Identifying narratives that connect landscapes can be used to guide the restorative projects. By using conservation techniques that connect these landscapes and habitats we can create buffer zones around valuable areas, we can grow corridors and make more land uses part of the mix. Over time we can scale this up to have region wide impact.

**Te Mauri:** By starting with a landscape scale that a community relates to their connection can be kindled. As more people experience their taonga and work with each other they become more connected to nature and their community. This leads to more wellbeing and willingness to widen the circle of care. A spiritual connection is a multiplier for people to collaborate to care for nature.

**Te Pūtea:** By connecting up people and using connectivity conservation resources can go further. Conservation success can attract more resources. Local economically productive landholders and businesses can begin to realise savings or find new products and markets. Conservation can become more self-funding. Policy makers can see and support this value creation.

The Kiwi Coast has been recognised by Reconnecting Northland as a ‘precedent setting project’. In partnership, RN and the Kiwi Coast work through new challenges and opportunities that arise as the initiatives progress.

The support of the Reconnecting Northland delivery partners – WWF-New Zealand and NZ Landcare Trust is much appreciated. Likewise, the Tindall Foundation and Foundation North are gratefully acknowledged as primary sources of funding for the Kiwi Coast through the Reconnecting Northland programme.

It was a privilege to host the RN Steering Group, Tindall Foundation Trustees and WWF-NZ trustees on fieldtrips and visits during the year.

*Margaret and Robbie Tindall meet Tindall the kiwi, held by Bernie Buhler.*



## Finances and Expenditure

In the 2015/16 financial year, Reconnecting Northland allocated \$151,788 to the Kiwi Coast. Further direct funding came from forestry companies (\$5000) and an additional \$7087 was carried forward from the 2014/15 financial year yielding a total operational budget of \$163,875. A part-time Kiwi Coast Coordinator was also resourced separately from core Reconnecting Northland funds.

The year was significant for the Kiwi Coast in terms of beginning to receive and generate its own income. Gilbert Pest Traps have become the Kiwi Coast's first sponsor and a small amount of donations have also been received. The Kiwi Coast established an online shop selling branded t-shirts in December and is in the process of transitioning to a charitable trust to enable further fundraising.

Figure 2 depicts Year 3 expenditure and a financial summary is presented in Appendix 1.

In line with the Kiwi Coast Project Plan, emphasis was given to supporting on-the-ground work with 50% of funds spent on predator traps and resourcing professional trappers to service traps for groups and projects at strategic sites.

The second largest portion of funding (19%) was spent on the considerable task of linking, supporting and communicating with all the projects, groups and entities involved - an essential function of the Kiwi Coast.

Monitoring accounted for 14% of the budget. This resourced the Kiwi Listening Blitz and the Kaka & Bellbird Survey and established critical baseline monitoring data for the Kiwi Coast.

Workshops and kiwi events, each tailored to build knowledge and specific skills within the hosting community, accounted for 9% of Kiwi Coast expenditure. They included the skill building 'Trapping for Success Workshops', public kiwi releases and 'Caring for Kiwi' Workshops. As all of these activities were collaborative, involving multiple projects and entities, Kiwi Coast expenditure represents only a small fraction of the true value of these powerfully engaging events.

8% percent of the Kiwi Coast budget was spent on communication. This included engaging a range of professionals to assist with updating the Kiwi Coast website, produce monthly electronic newsletters, social media networking and graphic design work for posters, flyers and customized Kiwi Coast signage.

\$15,239 was carried forward to the next financial year in order to continue implementation of the Kiwi Coast while further funding is secured.

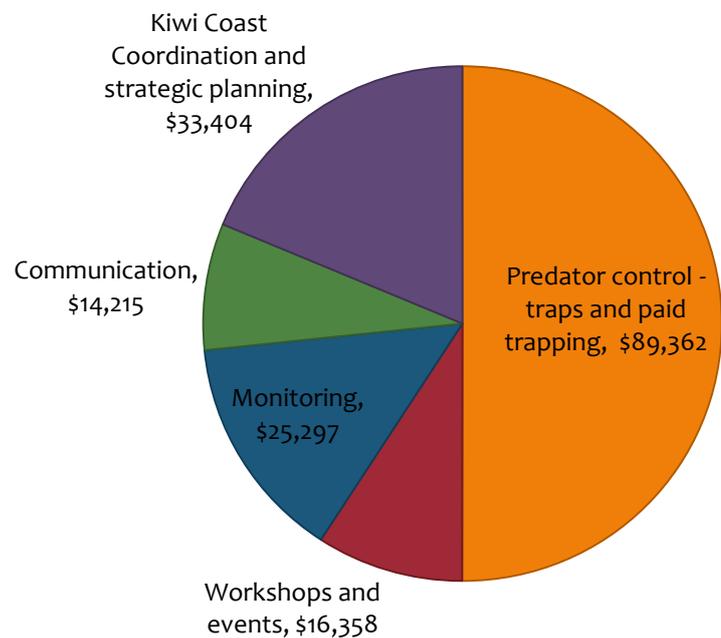


Figure 2 – Kiwi Coast Expenditure July 1, 2015 – June 30, 2016

## ***Involvement of Groups and Projects in the Kiwi Coast***

A further 11 projects and organisations joined the Kiwi Coast this year, taking the total number of entities involved to 71. This more than doubles the number of groups that were participating in Year 1. With the addition of Mangatete Landcare and the Far North Sports Shooting Club, the Kiwi Coast now extends approximately 195km from Bream Head to mid-way up the Aupouri peninsula in the Far North.

Appendix 2 presents a list of all the projects and groups involved in the Kiwi Coast, with direct supporters collaborating organisations shown on the back cover. Also see Map 4 on pages 16-17 which shows groups and projects involved in the Kiwi Coast as at June 30, 2016.

## ***Strategic Implementation of the Kiwi Coast Project Plan***

Implementation of the Kiwi Coast is carried out in accordance with the Kiwi Coast Project Plan (Nov, 2013).

### **Sustaining and linking predator control**

Priority was given to sustaining existing predator trapping, including the Whangarei Heads and Tutukaka Coast kiwi strongholds. An additional 540 mustelid and feral cat traps were purchased to fill strategic gaps and progress the linking of predator control operations into continuous networks across multiple projects. Map 1 shows where predator traps have been added over the year by the Kiwi Coast, Northland Regional Council and the Department of Conservation (DOC). Two key areas of expansion and linkage supported by the Kiwi Coast are the inland Bay of Islands and the Kiwi Coast 'First Focus Area' between Bream Head and Whananaki.

Map 2 shows all the known predator traps in the First Focus Area prior to the start of the Kiwi Coast. Map 3 shows the same area updated with the new traps added to the trapping network over the subsequent three years of Kiwi Coast implementation.

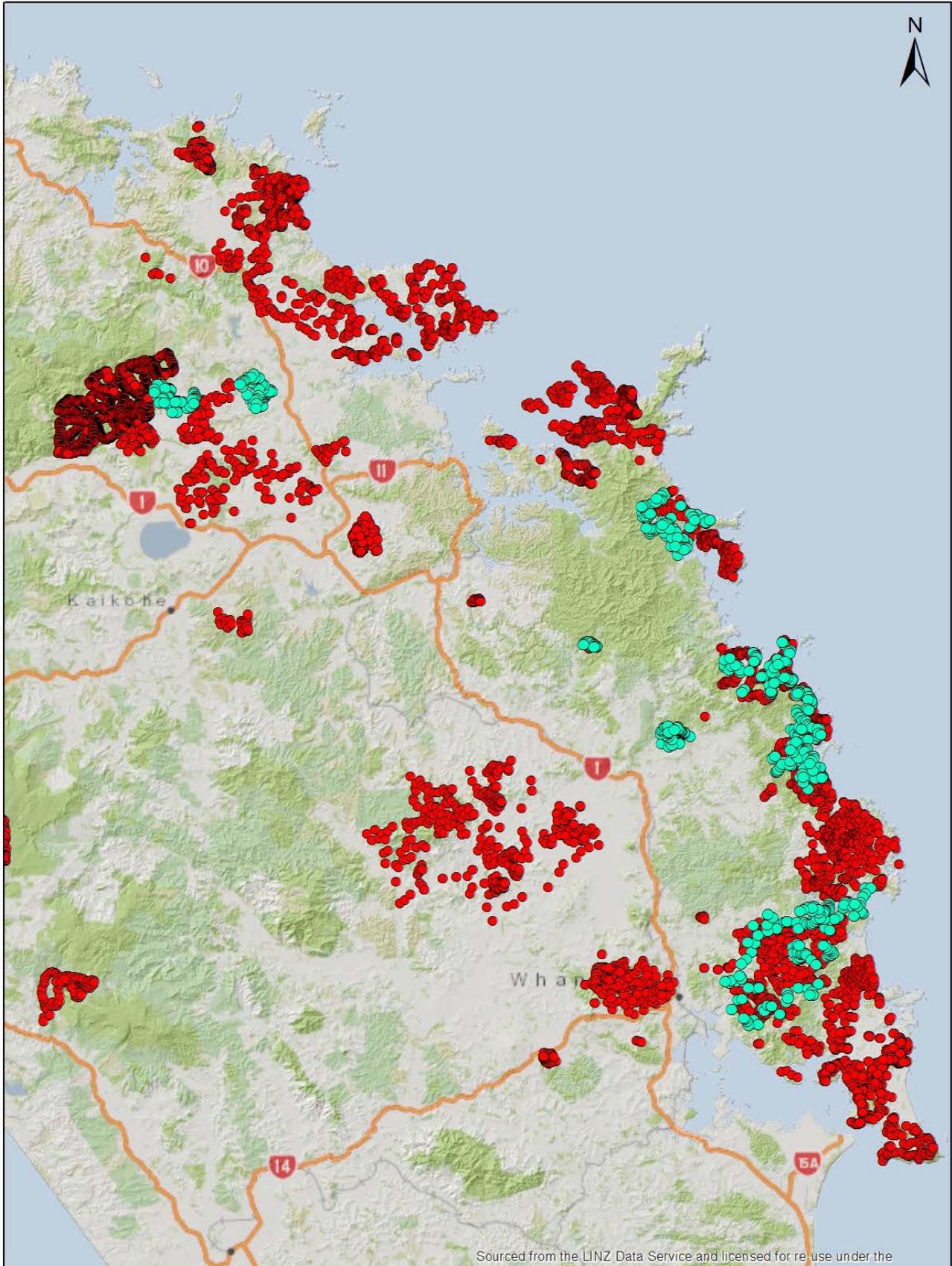
Map 3 depicts two of the key achievements of this year's work. Firstly, the progressive expansion of trap lines by the Taheke, Whareora, Whanui and Owhiwa projects has continued to fill gaps and build towards a establishing a continuous predator trapping network between Whangarei Heads and Tutukaka . Secondly, the expansion of Sandy Bay Kiwi in conjunction with the initiation of the Whananaki Landcare Group has significantly expanded the First Focus Area northwards. This northwards expansion has enabled coastal predator traplines operated by the Department of Conservation for pateke recovery to be extended landwards to protect kiwi on the bordering farms.

Additional predator traps and professional trapper time has also been provided to the inland Bay of Islands area to support and link community-led projects operating in this high kiwi concentration zone. As a result a continuous predator trapping network now exists across Puketi – Puketotara - Waimate North. This work was led and coordinated by the Kerikeri – Puketotara Catchment Community Pest Control Area (CPCA). CPCA coordinator Andrew Mentor said their aim had been:

*“to link up with other groups in the Bay of Islands and get landscape scale pest control happening over an extensive area”.*

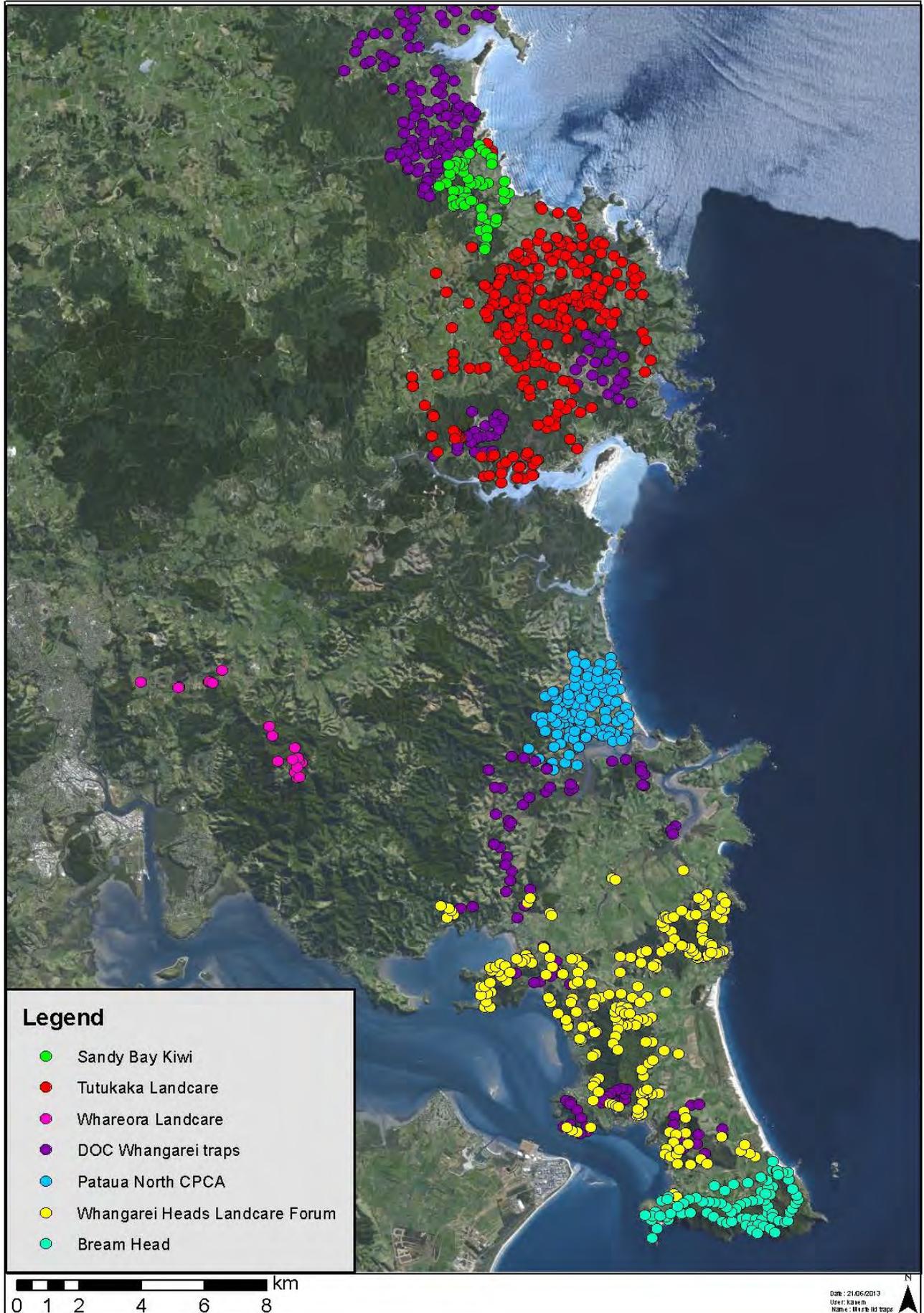
In order to assist with trap management and trap catch reporting, the Kiwi Coast has worked with Groundtruth to develop the Trap.NZ digital trap mapping and data management system. Both online desktop computer and Smartphone App systems are currently being trialed by a number of Kiwi Coast groups.

Map 1 – Predator Traps Added to the Kiwi Coast 2015/16 – the “Map of Steel!”

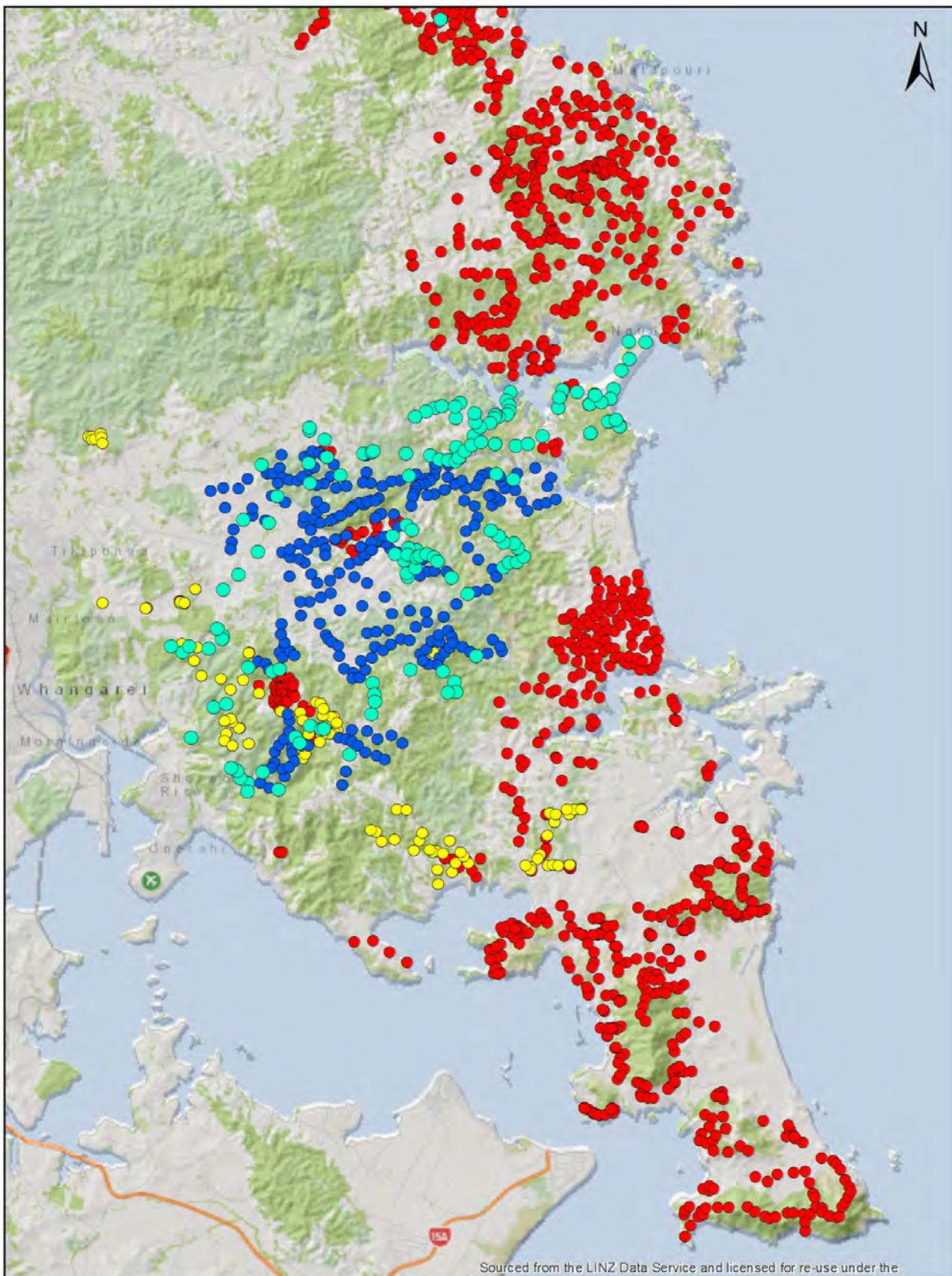


 <p><b>NORTHLAND REGIONAL COUNCIL</b> www.nrc.govt.nz</p>	<p><b>New Kiwi Coast Predator Traps 2015-2016</b></p> <ul style="list-style-type: none"><li>● New Traps Year 3 (2015-2016)</li><li>● Existing Predator traps</li></ul> <p><b>KIWI COAST</b></p>	<p>Map: Kiwi_Coast_Trap_m80 User: sarah Date saved: 22/07/2016 1:47:23 p.m. Crown Copyright Reserved Datum: NZTM 2000 - Projection: NZTM DISCLAIMER: The Northland Regional Council cannot guarantee that the information shown is accurate and should not be relied on in any manner without proper consultation with its owner.</p>
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Map 2 – Predator Traps from Bream Head to Sandy Bay (Northland Regional Council, 2013)



Map 3 – Updated Map of First Focus Area Showing New Predator Traps Added Between Whangarei Heads and Tutukaka



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 <p><b>NORTHLAND REGIONAL COUNCIL</b> www.nrc.govt.nz</p>	<p><b>New Kiwi Coast Predator Traps 2015-2016</b></p> <ul style="list-style-type: none"> <li><span style="color: cyan;">●</span> New Traps Year 3 (2015-2016)</li> <li><span style="color: blue;">●</span> Year 2 (2014-2015)</li> <li><span style="color: yellow;">●</span> Year 1 (2013-2014)</li> <li><span style="color: red;">●</span> Existing Predator traps</li> </ul> 	<p><small>Name: Kiwi_Coast_Trap_map User: rnz Date Saved: 22/07/2016 1:47:23 p.m. Crown Copyright Reserved Datum: NZTM2000 Projection: NZTM DECLARATION: The Northland Regional Council cannot guarantee that the information shown is accurate and should not be relied in any manner without proper consultation with its owner.</small></p>
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## Assisting Groups to Form Collectives

The Kiwi Coast has supported the formation of two group collectives this year – namely the Kiwi Link and Mid North Alliance.

The Kiwi Link brings together seven groups in the First Focus Area of the Kiwi Coast who have taken up the challenge of establishing a continuous animal and plant pest control network between the Whangarei Heads peninsula and the Tutukaka Coast. These projects – Kohinui Stream Landcare, Owhiwa Landcare, Whareora Landcare, Taheke Landcare, Hancock Forest Management ‘Whanui Project’, Pataua North Landcare and Ngunguru Ford Landcare – have back-to-back project areas and are now working closely together to fill the remaining gaps in the predator trapping network that the Kiwi Coast has helped establish.

The Mid North Alliance formed in November, bringing 14 groups from the wider Bay of Islands area together. The Alliance have since had a series of workshops organised in partnership by the Kiwi Coast and Department of Conservation (DOC) to share information, discuss issues of interest to all the groups involved and seek efficient ways to maximize gains from the work being carried out.

The two new collectives join the existing Whangarei Heads Landcare Forum and Tutukaka Landcare Coalition in demonstrating how willing community groups can work together to reach shared goals and maximise efficiencies.

*Tutukaka Landcare Coalition host a WWF-NZ and the Reconnecting Northland Steering Group fieldtrip to the Kiwi Coast*



## Improving Dog Control and Raising Awareness

Improving dog control has been identified by DOC as a key issue for kiwi survival in Northland. Kiwi should live for 50-60 years but have an average lifespan of just 13 years in Northland due to being killed by dogs. Raising awareness of the issue, and stressing the need for good dog control was a recurring theme at all Kiwi Coast events, workshops and wild kiwi experiences.

The Kiwi Coast participated in Northland Kiwi Forum Working Group discussions regarding dog control and met with the Far North District Council, Kiwis for Kiwi Trust, and Environment Northland Ltd to discuss novel approaches to dog control advocacy.

A number of Kiwi Coast projects held 'Kiwi Aversion Dog Training' workshops targeted at hunting and working dogs including Taheke Landcare, Tutukaka Landcare Coalition and the Tanekaha Community Pest Control Area.

Kiwi Coast 'Kiwi Live Here' signs, customised with group names and selected dog control messages continued to be popular with projects. Over the year signs were created for South Kerikeri Inlet Landcare, Taheke Landcare, Puketotara Landcare, Bay of Islands Walkways Trust and Russell Landcare.

The Kiwi Coast, Sandy Bay Kiwi and Tutukaka Landcare Coalition also progressed a new approach to raise awareness of kiwi and improve dog control. This has involved creating fridge magnets which alert visitors that 'Kiwi Live Here' accompanied by a one-page info sheet that clarifies the kiwi-safe behavior expected. These are now in the process of going into 500 holiday homes and baches on the Tutukaka and Whananaki coasts.



*Kiwi Coast fridge magnet for holiday houses and baches*

*Customised 'Kiwi Live Here' signs remind owners to control their dogs*

## Capacity and Skill Building Workshops

The vision of the Kiwi Coast is to support and link community-led kiwi recovery groups in eastern Northland. This includes helping projects build the skills, knowledge and tools they need to get the job done of controlling animal pests, restoring habitats and helping native wildlife thrive.

Five skill building workshops were held throughout the year:

1. Whananaki 'Local Trapping Workshop'
2. Owhiwa 'Practical Pest Control' Fieldtrip
3. Hupara 'Caring for Kiwi' Workshop
4. Groundtruth 'Trap.NZ trap mapping and data management' training workshop
5. Kiwi Call Count training organised with Department of Conservation Whangarei staff. Twenty-three keen new volunteers came out to the Whangarei Kiwi Sanctuary to learn this important monitoring method and were then able to participate in the 2016 Kiwi Call Count Survey.

Bernie Buhler with Bernie the kiwi at the Tutukaka Landcare Coalition kiwi release. Photo: Malcolm Pullman



## Wild Kiwi Experiences and Events

A total of 2,027 people attended Kiwi Coast supported events this year, proving that kiwi are powerful ambassadors for conservation. Winning the hearts and minds of everyone they meet, close encounters with wild kiwi continue to inspire new people to actively engage in kaitiaki / stewardship and motivate existing projects to keep going. During all events involving live wild kiwi, the birds were only handled by Accredited Handlers and the safety and care of the birds were paramount.

Afternoon Public Kiwi Releases held at Whangarei Heads, Tutukaka Coast, and the Hikurangi Swamp were each attended by hundreds of people, eager to see a wild kiwi up close. Early morning blessing ceremonies held by iwi and hapu as the kiwi returned to the mainland from their respective island kiwi crèches enabled tikanga to be observed and provided additional opportunities for locals to have a close kiwi encounter.

On two occasions, between their morning blessing and evening release, kiwi were also taken into Parua Bay and Ngunguru Primary Schools within the Kiwi Coast First Focus Area by Accredited Kiwi Handlers Todd Hamilton (Backyard Kiwi) and Bernie Buhler (Matakohe-Limestone Island Ranger). Both schools were given the opportunity to name kiwi and have subsequently shown great interest in the wellbeing of 'their' kiwi. Engaging the next generation in kiwi care will help ensure a bright future for kiwi on the Kiwi Coast.

Years of hard work by Tanekaha farmers in Hikurangi also paid off this year when they welcomed twelve kiwi back home. The Kiwi Coast was amongst those helping the Tanekaha Community Pest Control Area through the considerable translocation process and was pleased to also help support the eventuating release event in May. Ngati Manuhiri accompanied the kiwi from Sandspit to Hikurangi to gift the kiwi to local hapu Ngati Hau and the Tanekaha community during a powhiri ceremony at the Fonterra Jordan Valley Farm.

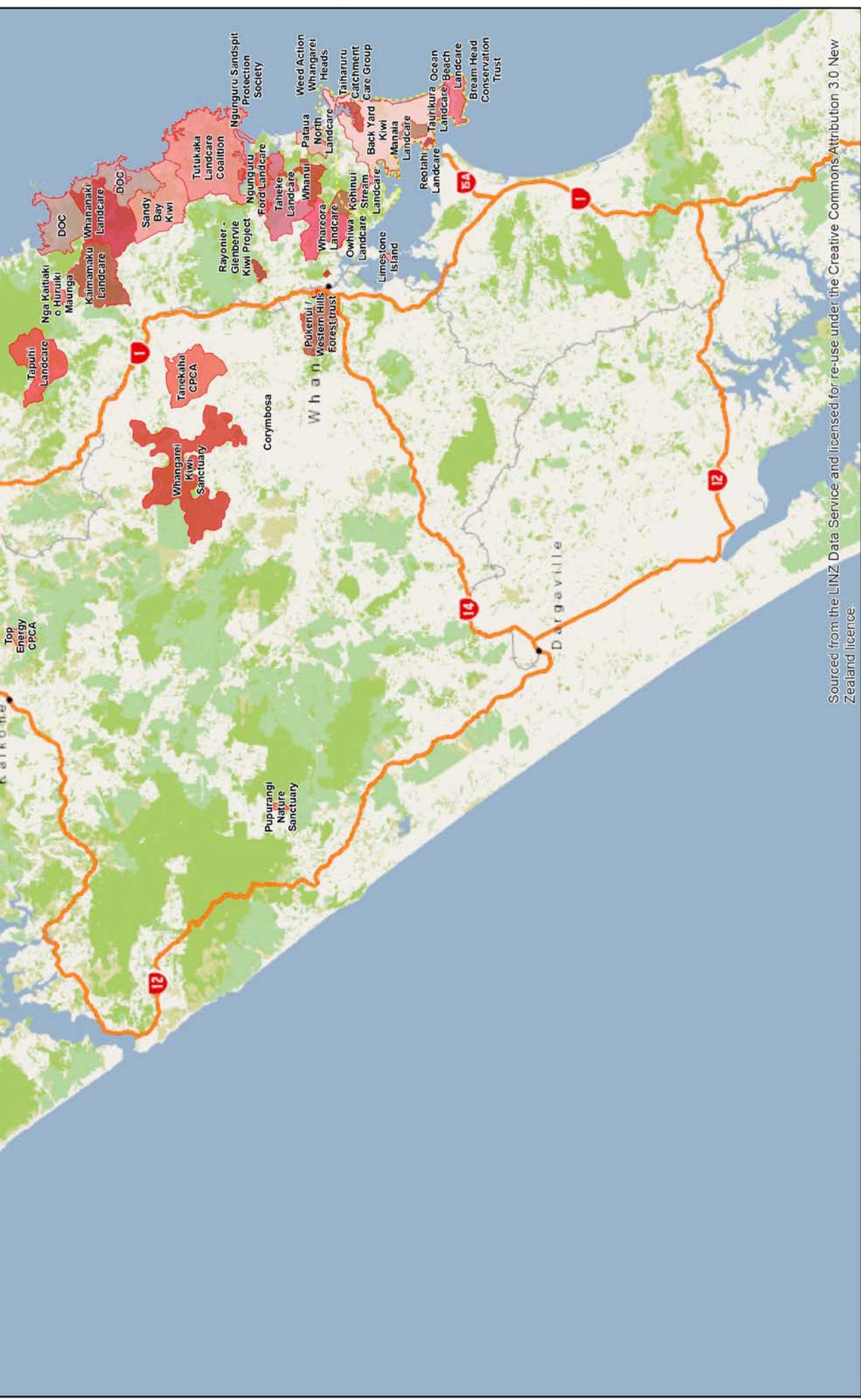
The Kiwi Coast also worked with Whareora Landcare, Backyard Kiwi and Friends of Matakohe/Limestone Island to hold a 'Meet a Kiwi Event' in May. Over 50 people attended the event on a stormy Sunday afternoon, thrilled to see a wild kiwi up close. Huipara and Waimarie the kiwi were subsequently released within the Tanekaha Community Pest Control Area to continue the supplementation of the growing kiwi population there.

Each live kiwi experience involved the collaboration of multiple community groups, agencies, iwi / hapu and schools. Just as importantly as allowing people to engage with kiwi, these events also provided prime opportunities to deliver key messages around kiwi recovery and the importance of good dog control to kiwi survival.

Ngati Manuhiri gift kiwi to Ngati Hau and the Tanekaha community during powhiri. Photo: Malcolm Pullman







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# KIWI COAST 2016

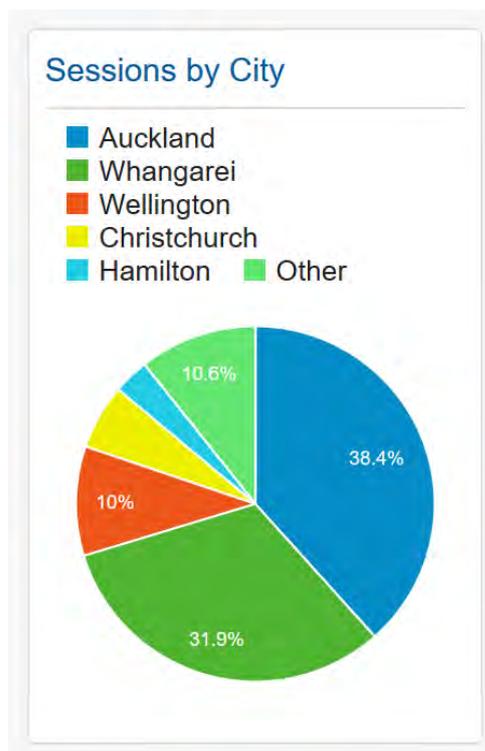
## Communications

Kiwi Coast communications have been carried out with the aim of:

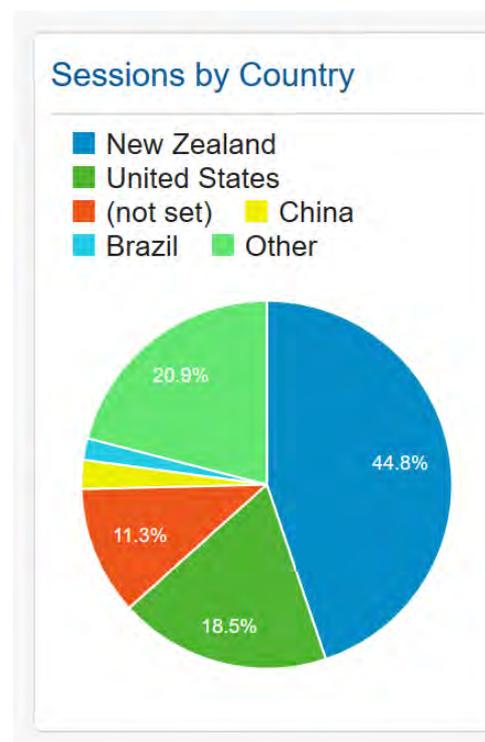
- building linkages between projects via sharing information, stories and successes,
- celebrating kiwi as a taonga,
- engaging people in caring for kiwi,
- building acceptance of animal pest control practices required to protect kiwi,
- establishing the Kiwi Coast as a successful and accessible initiative everyone can participate in.

The Kiwi Coast communicates via an integrated package of a live, continuously updated website, Facebook page and electronic newsletter. The Kiwi Coast Coordinator also represented and promoted the Kiwi Coast at numerous events, workshops and meetings. As Figures 3 and 4 show, the Kiwi Coast is reaching an ever increasing audience of not just local, but international origins.

- Total visits to the Kiwi Coast Website July 1 2015 – June 30 2016: 6,906
- Facebook ‘Likes’ as at June 30 2016: 827 (Up from 472 on 30/6/15)
- Largest reach of a single Facebook post: 10,652 people



**Figure 3 – Location of New Zealanders using the Kiwi Coast Website**



**Figure 4 – Origin of international visits to the Kiwi Coast Website**

The Kiwi Coast continues to enjoy a good media presence. Once again the 'Shared Pest Control Results' went far and wide receiving local, regional and national media attention. The accompanying media release was picked up by the NZ Herald, Predator Free NZ, Northern Advocate, Whangarei Report, and MORE FM radio station.

The Kiwi Coast also collaborated with Kiwi North to have a kiwi themed tent at the two-day Whangarei Summer Show. This flowed into the neighbouring shared tent involving Pukenui Forest Trust, Fish & Game, Northland Biodiversity Forum and NZ Landcare Trust. A steady stream of interested people visited the Kiwi Coast site and over 250 people participated in creating a 'kiwi forest'.

In partnership with Kiwis for Kiwi Trust and Kiwi North, 'Save Kiwi Month' activities and events were held throughout October, including a month long display in the Whangarei Central Library, Kiwi Coast Kids Quiz, Kiwi Talk given to Parua Bay School with Backyard Kiwi, and partnering with 'Kuwi the Kiwi' author Kat Quin-Merewether to visit the Whangarei Central Library for a special Kids-Time book signing session.

250 people help make a 'kiwi forest' at the Kiwi Coast site, Whangarei Summer Show.



## Monitoring: Results and Research

The Kiwi Coast is underpinned by robust scientific monitoring methods that over time will determine whether the initiative meets its key goals such as reducing numbers of pests, supporting the recovery of Northland brown kiwi populations and engaging further people in kaitiaki or stewardship of their local biodiversity.

A summary of the 2015/16 monitoring results is presented in Table 1.

### Annual Collation of Animal Pest Control Results

The annual collation of animal pest control results revealed that 52,091 animal pests were removed by 57 groups, projects, landowners, iwi/hapu, government agencies and organisations from the Kiwi Coast between January – December 2015. This means that over 1000 pests are being destroyed on the Kiwi Coast every week.

When results are tallied over the three years the Kiwi Coast has been in operation, it shows that groups and projects involved have trapped over 100,000 animal pests as detailed in Figure 5.

More than just impressive numbers, these are the real results recorded from actual trap checks and the data then collated by the Kiwi Coast for all the groups involved. The shared pest results represent thousands of hours of trap checking each year by a mix of unpaid and professional trappers working hard to reduce animal pests so native wildlife can thrive.

These results are minimums of the actual numbers of pests destroyed as many groups also use poison baits, and pests eradicated this way are not recorded.

### Northland Brown Kiwi Monitoring

The Kiwi Coast Monitoring Plan (Topia, 2014) provides a plan to monitor the effect of the protection and advocacy work of the Kiwi Coast on kiwi presence, abundance and distribution in eastern Northland using kiwi calls.

However, as kiwi do not begin calling until 2- 3 years of age, kiwi listening monitoring can only detect sub-adult and adult kiwi. This means that while kiwi chick survival should be much improved as a result of the additional predator trapping in conjunction with improved dog control, increasing kiwi numbers may not be detected by Kiwi Listening Devices (KLDs) or human listening for a few years.

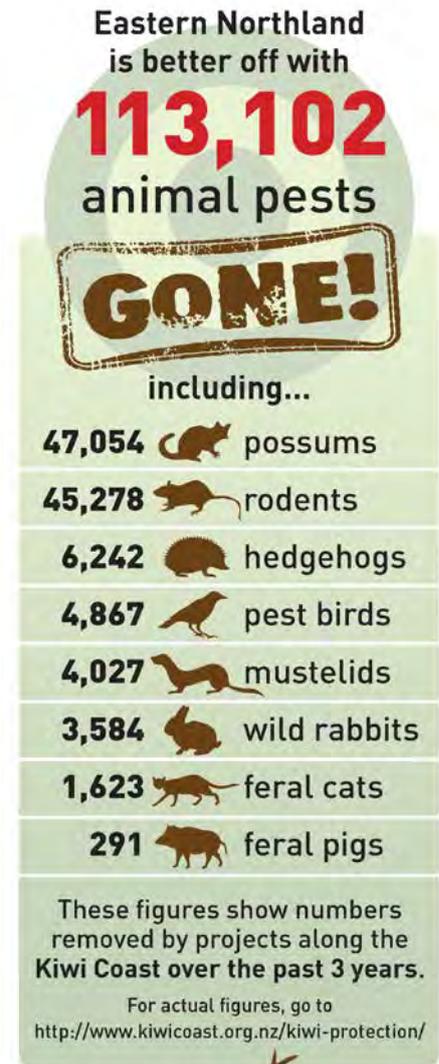


Figure 5 – Animal Pest Results collated from 2013 - 2015

## Responding to Landowner Observations

Kiwi Listening Devices (KLDs) were deployed at the request of landowners on the Kiwi Coast during the year who reported hearing kiwi in areas where they are currently thought to be absent. KLDs have proven to be useful tools for detecting kiwi present in low numbers as they can be set to 'listen in' to large areas over a series of consecutive nights and can withstand cold and wet weather where a human listener may lose enthusiasm!

The value of monitoring with KLDs was proven this year when they were returned to an area first listened into in 2013 that was thought to be devoid of kiwi. The devices did not record any calls in 2013, but this year, after two years of community-led pest control over 800ha by the Taheke Landcare Group, male kiwi calls were recorded.

Sandy Page who has lived on the property for 35 years said:

*"We last heard kiwi here 20 years ago and are absolutely delighted to have them back! This gives our local Landcare Group a whole new take on what we are doing and a huge boost to keep going!"*

## Kiwi Listening Blitz

The first 'Kiwi Listening Blitz' for the Kiwi Coast was completed in 2016 using KLDs. Forty-eight sites were selected across the Kiwi Coast, excluding Kiwi Call Count sites monitored annually by human listeners and areas defined by the DOC as having high kiwi densities. The First Focus Area between Bream Head and Whananaki was also excluded due to prior survey of the area. Kiwi calls were detected at 31 of the 48 sites (~65%) with a mean calls per hour rate of 0.57 (Sachtleben and Tyson, 2016).

In conjunction with data from the Annual Northland Kiwi Call Count Survey and DOC maps of known high kiwi density areas, the 2016 Kiwi Listening Blitz provided a baseline of current kiwi distribution across the Kiwi Coast (Map 5). This established a key outcome monitoring tool for the Kiwi Coast. In time, this monitoring may show changes in kiwi distribution as populations expand and return to areas where they have currently diminished to undetectable densities and are generally regarded as absent by local landowners.

Thalia Sachtleben records data for the Kiwi Listening Blitz



Kiwi Listening Device





### Northland Kiwi Call Count Survey Results

In 2014 the Kiwis for Kiwi Trust reported a national trend of 2% decline per annum in kiwi populations. As per previous years, analysis of the 2015 Northland kiwi call count data ( Figure 6, Topia, 2016) demonstrated that while kiwi are also declining in some parts of Northland (Western and Northern areas), along the Kiwi Coast, kiwi populations are generally stable (Southern) or increasing (Eastern).

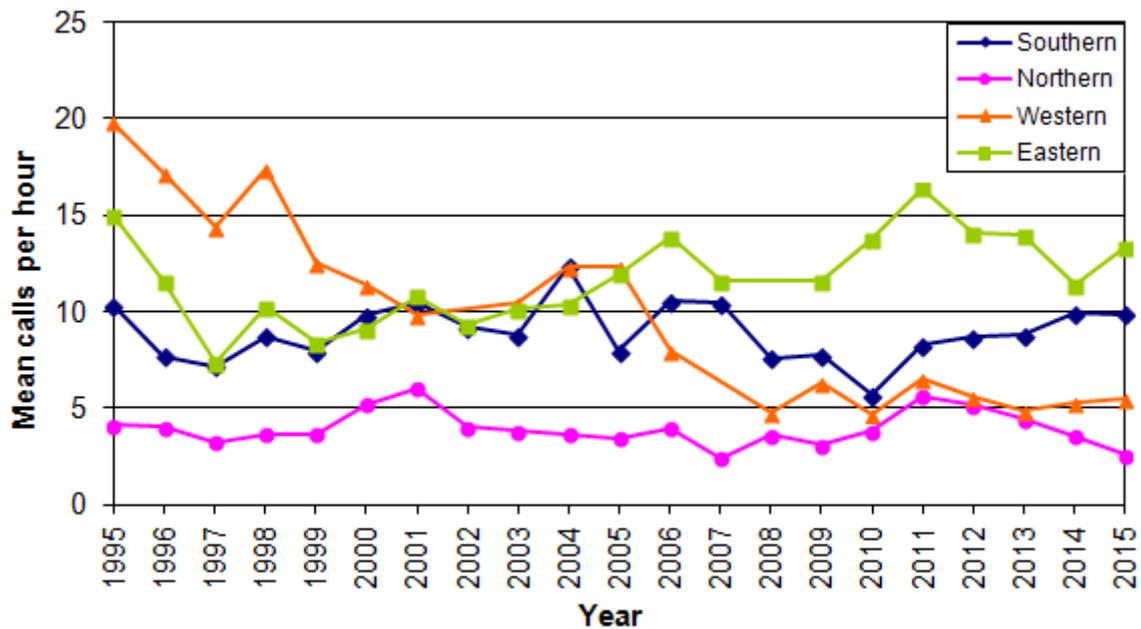


Figure 6 – Mean Annual Kiwi Call Rates per hour for the four original Northland monitoring areas, 1995 – 2015

Topia (2016) noted:

*“The high level of community involvement in the protection of kiwi in the Eastern area continues to be a success for kiwi conservation”.*

As the Kiwi Coast has only been operating for three years, it does not seek to claim these results as a measure of its own success. Rather, the Kiwi Coast supports groups and projects to continue their work and ensure these hard-won gains in kiwi recovery continue.

## Indicator Species Monitoring

Pest control and ecological restoration work carried out by groups and projects involved in the Kiwi Coast will have benefits for the wider native biodiversity of eastern Northland. In order to document the recovery or establishment of species other than kiwi an Indicator Species Monitoring Program has been developed in partnership with NorthTec Conservation Management tutors and students and the Department of Conservation. The indicator species selected include pateke, kaka and bellbird.

### Pateke

For the second year, the Kiwi Coast worked with specialist staff at DOC to assist with the Annual Pateke Flock Counts in eastern Northland. This year Pataua North Landcare, Ngunguru Ford Landcare and the Tutukaka Landcare Coalition participated.

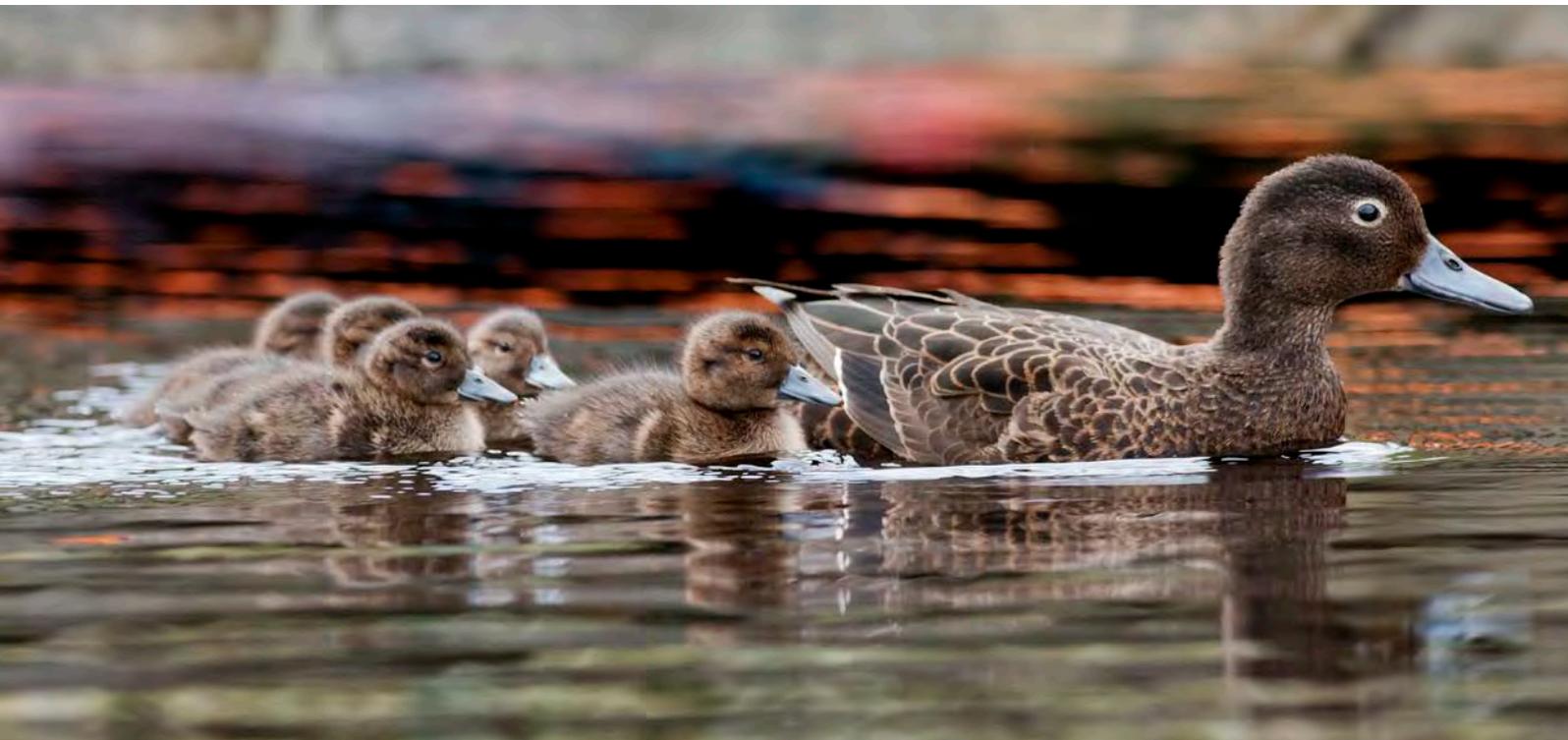
The pateke on Northland's east coast are of special interest as they are wild hatched pateke that have returned to the area after being locally extinct for many years. Vivienne Lepper, from DOC says:

*“The trapping of animal pests along with good dog control undertaken by DOC and groups involved in the Kiwi Coast greatly benefits pateke, as well as many other native species. By doing these flock counts every year we are able to see if the pateke population is increasing in size, and expanding into new areas.”*

Kiwi Coast projects coordinated and monitored three estuaries including the Horahora, Pataua and Taiharuru. The data collected helped to confirm that this rare duck is on the increase along the Kiwi Coast and moving into new sites, as excitingly, pateke were recorded in the Horahora estuary for the first time.

No data analysis of the 2016 Pateke Flock Count or report was prepared by DOC this year.

*Pateke and chicks at Tutukaka. Photo: Malcolm Pullman*



## Kaka and Bellbird

Over the 2015/16 summer NorthTec Conservation Management students and staff developed and implemented a monitoring program for bellbird / korimako and kaka distribution in eastern Northland. This fieldwork provided baseline distribution data for the remaining two species that have been selected as indicators for quantifying Kiwi Coast outcomes.

*“Bellbird and kaka are suitable indicator species as they are highly conspicuous and easily identifiable. Their known source populations are offshore islands in close proximity to the Kiwi Coast and anecdotal evidence suggests that resident populations are limited in areas associated with the Kiwi Coast. It is hoped that data collected in the current study will be used as a baseline for future surveys (i.e., in 2020) so that the change in bellbird and kaka distribution can be documented over time and potentially used as another measure to quantify the success of on-ground management.” (Sullivan et al., 2016)*

Twenty three sites were surveyed between Bream Head and the Hihi peninsula. Kaka were detected at three sites - Bream Head Scenic Reserve, Taurikura Ridge and Manaia Ridge Scenic Reserve. Bellbirds were only detected at the Bream Head Scenic Reserve.

Bellbird and kaka surveys will be repeated every five years during summer to generate a time series of data to document any changes in the distribution of resident populations. Methods to capture anecdotal observations of kaka and bellbird are currently being investigated as an increasing number of landowners are reporting sightings of these species along the Kiwi Coast.

NorthTec students Raureti Sullivan and Alisha Frost surveying for bellbird and kaka in the Mt Tiger forest



Bellbird observed utilising winter food sources by Ngunguru Ford Landcare



**Table 1 – Kiwi Coast Monitoring Results Summary July 2015 – June 2016**

<b>Measure</b>	<b>Method</b>	<b>Results</b>
Distribution of Northland brown kiwi populations	<ul style="list-style-type: none"> <li>• Northland brown kiwi distribution map (DOC)</li> <li>• Five yearly ‘Kiwi Listening Blitzs’</li> <li>• Deployment of Kiwi Listening Devices to investigate reports of new sites</li> </ul>	<ul style="list-style-type: none"> <li>• Completion of first “Kiwi Listening Blitz’ has established baseline data of kiwi presence on the Kiwi Coast</li> </ul>
Estimation of number of adult Northland brown kiwi	<ul style="list-style-type: none"> <li>• Annual Northland Kiwi Call Count survey</li> <li>• Listening devices deployed for low call sites</li> </ul>	<ul style="list-style-type: none"> <li>• Overall kiwi call count data for 2015 shows overall stable (southern) and increasing (eastern) kiwi populations</li> </ul>
Indicator Species Monitoring: Pateke, Bellbird /korimako and kaka	<ul style="list-style-type: none"> <li>• Participation in DOC led Annual Pateke Flock Counts</li> <li>• Five yearly bellbird and kaka distribution surveys</li> </ul>	<ul style="list-style-type: none"> <li>• Pateke numbers increasing with pateke recorded for the first time in the Horahora estuary</li> <li>• Baseline bellbird/korimako and kaka distribution survey completed with resident populations restricted to 3 sites (kaka) and Bream Head (bellbird)</li> </ul>
Number and type of animal pests destroyed annually	Annual collation of trap catch data	<p>Shared Animal Pest Control Results’ Compiled January 2016:</p> <ul style="list-style-type: none"> <li>• 52,091 animal pests were removed from the Kiwi Coast in 2015 (Up from 36,040 in 2014).</li> <li>• 57 landowners, groups, projects, agencies, and organisations participated (Up from 49 in 2014).</li> </ul>
Area under active pest management	Annual collation of data	<ul style="list-style-type: none"> <li>• 120,293 ha (GIS analysis of group project areas).</li> <li>• Up from 78,425 ha in 2015 (group self reporting during ‘Shared Animal Pest Control Results’).</li> </ul>
Number of initiatives involved	Annual tally of initiatives	71 groups, projects and organisations involved as at June 30, 2016 (See Appendix 2)
Number and type of capacity building workshops	Annual tally of workshops	<p>Five workshops held:</p> <ul style="list-style-type: none"> <li>• Whananaki ‘Local Trapper Workshop’</li> <li>• Kiwi Call Count training evening</li> <li>• Owhiwa Landcare ‘Local Trapping Fieldtrip’</li> <li>• Trap.NZ training workshop</li> <li>• Hupara ‘Caring for Kiwi Workshop’</li> </ul>
Number of people attending Kiwi Coast supported events and workshops	Coordination of workshop registration forms and head counts at events	Total number of people at Kiwi Coast supported workshops and events: 2027
Communications reach	Compilation of electronic data	<ul style="list-style-type: none"> <li>• Facebook ‘Likes’ as at June 30 2016: 827 (Up from 472 on 30/6/15)</li> <li>• Largest reach of a single Facebook post: 10,652</li> <li>• Monthly electronic newsletter: 189 recipients (Opening rate of 50.5%. Industry average is 18.3%)</li> <li>• Total number of website visits over year: 6,906</li> </ul>

## Summary

The Kiwi Coast continues to grow and develop organically, attracting further groups involved in wide ranging biodiversity activities. Enabling community, hapu and iwi-led projects to operate at their full capacity remains a key component of the Kiwi Coast's support ethos.

The partnership with Reconnecting Northland has continued to provide a solid foundation for the Kiwi Coast, both in terms of provision of resources and exploration of how to support community-led conservation at a landscape scale.

The deployment of further traps by Kiwi Coast groups continued to close gaps in the trapping network and further reduce predators threatening kiwi survival and dispersal.

The two collectives formed – Kiwi Link and the Mid North Alliance – join the Whangarei Heads Landcare Forum and Tutukaka Landcare Coalition in demonstrating how willing groups can work together to reach shared goals and maximize efficiencies.

The baseline monitoring completed provides a framework that will determine over time whether the Kiwi Coast is on track to achieving its goals and measure its effects on Northland's biodiversity.

The power of kiwi to be their own ambassadors was once again evident throughout the year, as witnessed by over 2000 people. As the momentum of the Kiwi Coast continues, kiwi continue to quietly lead the way, inspiring action, motivating change and leading the charge up the Kiwi Coast.

## References

Kiwi Coast Think Tank. 2013. Kiwi Coast Project Plan. Unpublished Report, revised November 2013.

Reconnecting Northland, 2016. Strategic Plan. Unpublished Report.

Sachtleben, T. and Tyson, N. 2016. Kiwi Coast 2016 Kiwi Listening Blitz. Unpublished Report.

Sullivan, R., Frost, A., Lovell, B., Lloyd, E. Morgan, D. 2016. Baseline Kaka and Bellbird Surveys on the Kiwi Coast. Unpublished NorthTec Report Prepared for the Kiwi Coast.

Topia, M. 2014. Kiwi Coast Kiwi Monitoring Plan. Unpublished Kiwi Coast Report.

Topia, M. 2016. Call count monitoring of Northland brown kiwi 2015. Unpublished DOC Report.

## Appendix 1 – Financial Summary 1 July 2015 – 30 June 2016

Donations and Income \$2,771

### Operational Funding

Reconnecting Northland 2015/16 allocation \$151,788

Reconnecting Northland carry forward from 14/15 \$7,087

Hancock Forest Management \$5,000

**Total funds available** **\$163,875**

### Operational Expenditure

Kiwi Coast Coordination: meetings 1011

Tutukaka Landcare Coalition Predator Control 5623

Backyard Kiwi Predator Control 7095

Whangarei Heads Coordination 2610

Kohinui Stream Landcare Predator Control 2569

Taheke Landcare Predator Control 7204

HFM Whanui Predator Control 4706

Whareora Landcare Predator Control 4678

Owhiwa Predator Control 5328

Ngunguru Ford Landcare Predator Control 6598

Bay of Islands Predator Control Network and Linkages 3000

Kaimamaku & Whananaki Landcare Predator Control 12466

Ngatiwai and Whangaruru Marae Pest Control Project 950

Sandy Bay Kiwi Predator Control Expansion and Linkages 5111

Trapper Mentoring and Audits 1451

New Project Start Up Support 2293

Traps available 17681

Skill building workshops 1467

Kiwi events 4916

Kiwi monitoring 21874

Indicator Species Monitoring 3422

Special Event Hosting 570

Website updates and e-newsletter 5275

Promotion, event and media support 9404

Info, reporting, advocacy and display material 5016

Dog owner engagement and support including signs, fridge magnets 3925

Kiwi Coast Social Enterprise Development 2394

**Total spent** **\$148,636**

**Balance of operational funds to carry forward to 2016/17** **\$15,239**

## Appendix 2 – Groups and Projects Involved in the Kiwi Coast

This table lists the groups and projects who have either linked into the Kiwi Coast or participated in Kiwi Coast activities, such as sharing annual pest control data.

	<b>Group Name</b>	<b>Location</b>
1.	Backyard Kiwi	Whangarei Heads
2.	Bay Bush Action	Opuā, Bay of Islands
3.	Blue Orb Charitable Trust	End of Whangaruru Peninsular
4.	Bream Head Conservation Trust	Bream Head
5.	Corymbosa Charitable Trust	Ruatangata West
6.	DOC Whangarei Kiwi Sanctuary and Pateke projects	Various
7.	Far North Sport Shooting Club	Aupouri Peninsula, Far North
8.	Friends of Matakoho/ Limestone Island	Matakoho/ Limestone Island, Whangarei Harbour
9.	Hancock Forest Management: Whanui Project	Pataua North
10.	Hupara Landcare	Hupara
11.	Kaiatea Landcare	Ngunguru
12.	Kaimamaku Landcare	Kaimamaku – Kaikanui
13.	Kauri Cliffs	Matauri Bay
14.	Kohinui Stream Landcare	Kohinui Stream Catchment
15.	Living Waters	Tangatapu catchment, Bay of Islands
16.	Mackesy Bush Landcare	Mt Parihaka, Whangarei
17.	Mahinepua/Radar Hills Landcare	Mahinepua – Radar Hills
18.	Manaia Landcare	Whangarei Heads
19.	Mangatete Landcare	Fisher Riley Rd, Kaitaia
20.	Nga Kaitiaki o Huruiki Maunga	Mt Huruiki between Whangapara and Whangaruru
21.	Nga Kaitiaki o Ipipiri	Cape Brett peninsula
22.	Ngunguru Ford Landcare	Ngunguru Ford
23.	Northland Regional Council	NRC Mt Tiger block
24.	NorthTec Hunting and Pest Control Course	Maungatika Scenic Reserve
25.	NZ Kiwi Foundation	Various sites around Bay of Islands
26.	Ocean Beach Landcare	Ocean Beach, Whangarei Heads
27.	Otangaroa Landcare	Otangaroa

28.	Owhiwa Landcare	Owhiwa
29.	Papakarahi Landcare	Whangarei Heads
30.	Parua Cemetery Road Landcare	Parua Bay
31.	Pataua North Landcare	Pataua North
32.	Project IslandSong	Islands in the Bay of Islands (centered on Urupukapuka)
33.	Puketi Forest Trust	Puketi Forest
34.	Pukenui/Western Hills Forest Trust	Whangarei
35.	Puketotara Landcare	Puketotara River, Kerikeri/Okaihau
36.	Pupurangi Nature Sanctuary	Kaihu
37.	Rangihoua Community Pest Control Area	
38.	Rayonier Matariki Forests – Glenbervie Forest Project	Glenbervie
39.	Reotahi Landcare	Whangarei Heads
40.	Riverlands Landcare	Ngunguru river
41.	Russell Landcare	Russell, Bay of Islands
42.	Russell-Orongo Bay Holiday Park	Russell, Bay of Islands
43.	Sandy Bay Kiwi	Sandy Bay
44.	South Kerikeri Inlet Landcare	South Kerikeri Inlet
45.	Taheke Landcare	Centered around Taheke Scenic Reserve
46.	Taiharuru Catchment Care Group	Taiharuru, Whangarei Heads
47.	Tanekaha Community Pest Control Area	Hikurangi
48.	Tapuhi Landcare	Tapuhi
49.	Taurikura Ridge Landcare	Taurikura Ridge, Whangarei Heads
50.	Te Tangi o Te Ata	Eastern Bay of Islands
51.	The Shadehouse Volunteers	Kerikeri
52.	Top Energy CPCA	Ngawha
53.	Tutukaka Landcare Coalition Trust	Tutukaka
54.	Vision Kerikeri	Kerikeri
55.	Waimate North Landcare	Waimate North
56.	Waitangi Iwi Kiwi Project	Waitangi, Bay of Islands
57.	Whakaangi Landcare Trust	Hihi peninsula
58.	Whananaki Landcare	Whananaki North
59.	Whangaruru Nth Residents & Ratepayers	Whangaruru Peninsula
60.	Whanui (Hancock Forest Management)	Whanui
61.	Whareora Landcare	Whareora/Mt Tiger

Sponsors and Direct Supporters:



Collaborating organisations, agencies and companies involved:

