



# *Kiwi Coast Annual Report 2014*



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## Executive Summary

A dream held by many was put into practice in 2013 with implementation of the Kiwi Coast thanks to the support of Reconnecting Northland. The Kiwi Coast Annual Report 2014 provides information on the achievements and successes of the initiative set against the objectives identified in the Kiwi Coast Project Plan (2013).

In line with the Project Plan, priority was given to reducing kiwi predators within the first focus area between Bream Head and Whananaki South. This involved the deployment of new traps, more time spent on trap servicing and holding events and workshops to advocate for kiwi protection and better dog control.

At the end of its first year, 32 community, agency and iwi-led conservation projects became involved in the Kiwi Coast, including three new groups that were supported to start. Correspondingly, as groups and projects joined, the project area of the Kiwi Coast expanded. Stretching approximately 175km from Bream Head in Whangarei, to the Hihi peninsula in the Far North, the Kiwi Coast now extends over roughly 270,000ha.

Collation of financial data from projects and groups involved, estimated that the total amount of resources that went into the Kiwi Coast area in the 2013/14 financial year was \$1,049,309. Assigning a dollar value of \$20/hour to unpaid or voluntary labour results in a value of \$308,703. This demonstrates the importance that this often unreported resource brings to the Kiwi Coast, and indeed, many New Zealand conservation projects.

Reconnecting Northland accounted for 11% of the total resourcing. This included support for a part-time Kiwi Coast Coordinator and the essential work of linking of projects together to work towards a shared vision.

Development of robust monitoring methods included a 'Kiwi Monitoring Plan' and the beginnings of an 'Indicator Species Monitoring Plan. Overall, monitoring data shows a pattern of slow and steady increase in kiwi calls. Collation of animal pest control results from groups and projects throughout the Kiwi Coast received national publicity and demonstrated that animal pests in their thousands are being removed from the area each year.

With such a successful first year of implementation, the challenge ahead is to maintain momentum and strategic direction to ensure the continued wise use of resources that will most benefit Northland brown kiwi, and keeping our sights on becoming New Zealand's' first kiwi corridor.



Kiwi Coast features on front cover of the QE II Trust Open Space Magazine.

## Introduction

The first year of Kiwi Coast implementation has been very successful. Northland brown kiwi are safer within the Kiwi Coast due to new predator traps deployed, more time spent checking traps – both by paid professionals and unpaid landowners - and the increased number of people engaged in the shared vision of keeping kiwi safe along Northland’s east coast.

Over thirty existing community and agency-led conservation projects ‘signed up’ to get involved in this first year. Three new community-led projects were also supported to get underway within the Kiwi Coast, two directly attributing their inspiration for starting to the initiative. Numerous landowners, farmers, private individuals, schools and international travelers attended Kiwi Coast supported events, workshops and ‘Kiwi Experiences’ to learn how they can help care for their kiwi.

The success of this first year is largely due to the support of Reconnecting Northland, both in terms of supporting a part-time Kiwi Coast Coordinator and also the allocation of resources for on-the-ground project implementation. The work simply could not have been done without this support.

However, it has been the willingness of community-led conservation projects, iwi, agencies, forestry companies, non-governmental organisations (NGO’s), farmers, businesses and private individuals to work together to build the Kiwi Coast that has taken the initiative from a concept to reality in just twelve months. Without these Northlander’s, there is no Kiwi Coast.

New trans arrive at the NZLT office

New DOC 200 trap in the Maungatika Scenic

Female stoat caught in DOC 200 trap by Whareora Landcare.



## Kiwi Coast Goals

The Kiwi Coast is an inclusive initiative that seeks to engage established community-led conservation projects, iwi and hapu, interested landowners, farmers, forestry companies and agencies to share in the 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, dunelands 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 Northlands' biodiversity for future generations.

Ngunguru School students watch Wairua-Ngahere being released at Tutukaka as Todd Hamilton (WHLF) explains the dangers posed by dogs.  
Photo: Rod Morris



## Reconnecting Northland

The Kiwi Coast is proud to be the first pilot project for Reconnecting Northland (RN). In 2013 Tutukaka Landcare Coalition (TLC) hosted initial members of the RN Steering Group on a 'Kiwi Coast Field Trip' to facilitate a deeper understanding of the initiative and the landscape in which it operates. Steering Group members had the opportunity to talk to representatives of the Kiwi Coast Think Tank, and hear about the progressive work of TLC. Highlights of the field trip included seeing fresh kiwi footprints on a muddy track, and a flock of endangered brown teal/pateke on a pond within native scrubland.

The Kiwi Coast provided quarterly progress reports to RN Steering Group members and Funders, and the Kiwi Coast Coordinator also attended all Steering Group meetings to provide further information and respond to queries.



Mike Camm (TLC) leads a site visit by the Reconnecting Northland Steering Group to Tutukaka on the Kiwi Coast.



## Kiwi Coast Structure

The Kiwi Coast has established an informal operating structure that ensures the initiative remains results oriented and able to evolve. The Kiwi Coast Think Tank meets quarterly and consists of 14 individuals experienced in ecological restoration, on-the-ground kiwi recovery and community/iwi based conservation. The Think Tank consists of representatives from the Bream Head Conservation Trust, Whangarei Heads Landcare Forum (WHLF), Taurikura Ridge Landcare, Ngatiwai Trust Board, Queen Elizabeth II National Trust, Riverlands Landcare, Tutukaka Landcare Coalition, Whangarei District Council, Northland Regional Council, Hancock Forest Management, Kiwis for Kiwi Trust, Department of Conservation and the NZ Landcare Trust. The Think Tank is based in Whangarei, which reflects the genesis of the initiative.

The Kiwi Coast also has a Kiwi Coast Coordinator to help connect the multitude of projects involved, assist with communication and help keep the momentum of the initiative strong.

Lee Barry from WWF-NZ photographs a fresh kiwi footprint in the mud at Tutukaka.



## Finances

In the 2013/14 financial year, Reconnecting Northland allocated \$113,900 to the Kiwi Coast for implementation. These funds were administered by the NZ Landcare Trust. A part-time Kiwi Coast Coordinator, provided by the NZ Landcare Trust, was also resourced separately to this allocation by Reconnecting Northland. A detailed financial summary is presented in Appendix 1.

In line with the Kiwi Coast Project Plan, the majority of the expenditure from the RN allocation (\$73,752) was spent on purchasing an additional 276 predator traps and paying professional trappers to service traps at strategic sites within the first focus area of the Kiwi Coast between Bream Head and Whananaki South.

The next largest portion of the Reconnecting Northland allocation (\$16,758) was expended on communication, advocacy and engagement. This reflects the landscape in which the Kiwi Coast operates, which is predominantly in relatively small blocks of land under private ownership. The success of the Kiwi Coast rests in the hands of these private landholders and managers, be they farmers, forestry companies, iwi/hapu, lifestyle block owners or holiday home owners. Involving people in kiwi recovery through dog and pest control, kiwi listening and community stewardship is the key to the Kiwi Coast.

Steve Henderson, NRC Biosecurity Officer demonstrates traps at the Taheke Local Trapping Workshop.





Table 1 - Kiwi Coast Financial Summary 1 July 2013 -30 June 2014

Action	Group/Project	Amount	Source								
			Reconnect- ing Northland	NRC	DOC	Unpaid labour (@ \$20/hr)	DOC CCP Fund	Kiwis for Kiwi Trust	MfE	ASB Community Trust	Other sources
<b>Totals</b>		<b>1,049,309</b>	<b>119,552</b>	<b>169,899</b>	<b>141,994</b>	<b>308,703</b>	<b>11,110</b>	<b>21,800</b>	<b>61,634</b>	<b>67,145</b>	<b>147,472</b>
<b>Kiwi Monitoring</b>	Kiwi Coast	10,351	8676		1675						
	Puketotara Landcare	560			560						
	WHLF 'Backyard Kiwi'	16,000			16000						
	Whareora Landcare	160			160						
	Waimate Nth Landcare Trust Inc	4,080			4080						
	Bream Head Conservation Trust	10,314			1080		800	8434			
	Rayonier Matariki Forests	260			260						
	Puketeti Forest Trust	9,600			800	8800					
<b>Animal Pest Control Labour</b>	Tutukaka CPCA	162,716	11883	52,000		61333	8500				29000
	WHLF 'Backyard Kiwi'	83,326	7426	62,600		10800					2500
	Manaia Pest Control (1080)	19,720	6368	3,949	403	9000					
	Taheke Landcare & Whanui	7,584	5004	500		2080					
	Owhiwa/Maungatika	1,651	151			1500					
	Puketotara Landcare CPCA	10,890				8890		1000			1000
	Whareora Landcare	35,120		8,000		27120					
	Kohinui Stream Landcare	1,481	1481								
	DOC Pateke Projects	80,000				80000					
	DOC Pest Control (Whangaruru, Bream Head, Parua Bay)	20,000				20000					

	Waimate Nth Landcare Trust Inc	52,000				22000					30000
	Bream Head Conservation Trust	100,123		5,000		8640			35497	21314	29672
	Puketi Forest Trust	103,800			8000	18700		10000		33000	34100
<b>Traps and toxins</b>	Taheke Landcare (incl 2014 traps)	11,986	11986								
	Whanui (Incl 2014 traps for Holwell)	21,806	19306								2500
	WHLF 'Backyard Kiwi'	8,208	8208								
	Owhiwa/Mt Tiger area	2,356	1240		1116						
	Tutukaka CPCA	700	700								
	Oromahoe CPCA	3,500		3,500							
	Puketotara Landcare CPCA	4,500		4,500							
	Kapiro Station CPCA	4,800		4,800							
	Kauri Cliffs CPCA	4,700		4,700							
	Wiroa Station CPCA	2,200		2,200							
	Kerikeri River CPCA	8,500		8,500							
	Whareora Landcare	2,610						2610			
	Bream Head Conservation Trust	5,703		5,000						703	
	Waimate Nth Landcare Trust Inc	3,300		3,300							
Puketi Forest Trust	64,800				30000	20800				7400	6600
<b>Education, Advocacy and Capacity Building</b>	Kiwi Coast	18,108	16758	1,350							
	WHLF 'Backyard Kiwi'	10,000						10000			
	Bream Head Conservation Trust	11,666					1120		10000	546	
	Waimate Nth Landcare Trust Inc	4,000					4000				
	Puketi Forest Trust	10,600					9400				1200
<b>Project Coordination/ Admin</b>	Kiwi Coast	20,566	20366								200
	WHLF 'Backyard Kiwi'	8,400					8400				

	Puketi Forest Trust	25,700				22700					3000
	Bream Head Conservation Trust	33,525				21640			7000	4885	
<b>Other</b>	Puketi Forest Trust	19,100				11400					7700
	Bream Head Conservation Trust	8,240				8240					

**Note:** This table represents a first attempt to collate financial data across the Kiwi Coast. The total should be read as a minimum, as not all groups were able to provide information and some data includes estimates.

\$14,348 of the Reconnecting Northland allocation was carried forward to the 2014/15 financial year. This money remained unspent for two main reasons. Firstly, although the Kiwi Coast budget for 2013/14 was prepared as if implementation would begin on July 1 2013, in reality the funds were not released to the NZ Landcare Trust until late September. This created a string of delays in terms of ordering traps, having them built, and then deploying them in the field. This resulted in some of the funds allocated to paying professional trappers to service traps for the entire year, remaining unused until December once traps were in place. To avoid a repetition of these delays, some of the traps to be deployed in the 2014/15 financial year have been purchased from the 2013/14 budget. Secondly, \$10,000 of the Kiwi Coast budget allocated to kiwi releases was instead funded by the Kiwis for Kiwi Trust, which was a good outcome.

A first attempt has also been made to collate financial information from projects and groups involved in the Kiwi Coast (See Table 1). This data estimates that the total amount of resources that went into the Kiwi Coast in the 2013/14 financial year was roughly \$1,049,309. This needs to be regarded as a minimum, as it does not include financial information for all projects involved in the Kiwi Coast. Despite this, the financial summary demonstrates the collaborative nature of the Kiwi Coast and its complexity.

Assigning a dollar value of \$20/hour to unpaid or voluntary labour results in a value of \$308,703. This demonstrates the importance that this often unreported resource brings to the Kiwi Coast, and indeed, many New Zealand conservation projects.

From an estimated total of \$1,049,309 Reconnecting Northland contributed \$119,552. This accounted for 11% of the total resourcing, including supporting a part-time Kiwi Coast Coordinator and the essential work of linking of projects together to work towards a shared vision of establishing New Zealand's first kiwi corridor.

## Expanding Project Area

The Kiwi Coast began as an idea to connect the biodiversity strongholds of Whangarei Heads and Tutukaka over a 45,000ha area. Due to the considerable interest and enthusiasm of existing community and agency led conservation projects further along Northland's east coast, it quickly became apparent that the Kiwi Coast was being called to spread much further.

Due to demand from groups within the Bay of Islands area, the Kiwi Coast soon had an expanded project area of over 150,000ha that stretched along 100km from Bream Head to Purerua. But it did not stop there! At the end of this first year, the Kiwi Coast now extends to the Hihi peninsula in the Far North. The initiative is now approximately 175km in length, with a project area of around 270,000 ha. See 'Map 1: Projects Involved in the Kiwi Coast as at June 30, 2014'.

The ultimate extent of the Kiwi Coast will largely be determined by the desire of community, agency and iwi-led conservation projects that wish to be involved. Within this in mind, it is important that the Kiwi Coast continues to be strategic in its approach and implementation, giving initial priority to connecting the two biodiversity strongholds of Whangarei Heads and Tutukaka as identified in the Kiwi Coast Project Plan. Without this focus, the Kiwi Coast risks spreading its resources too thinly to be truly effective or make a difference.

Kiwi carried to release site at Tutukaka. Photo: Rod Morris



Map 1 - Projects Involved in the Kiwi Coast as at June 30, 2014



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

Related to the expanding project area of the Kiwi Coast is the increasing number of community, agency and iwi-led conservation projects that have become involved in the Kiwi Coast. A year ago, the Kiwi Coast could only talk about the potential projects that might wish to be involved. This has now translated into reality with 32 projects (See Table 2) either 'signed up' with the Kiwi Coast or participating in Kiwi Coast-wide activities such as the sharing of animal pest control data. To cater to the growing demand, the new Kiwi Coast website has a facility for groups to self register their desire to be involved.

**Table 2 - Groups and Projects Involved in the Kiwi Coast – June 2014**

This table lists groups and projects who have either 'signed up' to participate in the Kiwi Coast or shared their annual pest control data.

	<b>Group Name</b>	<b>Location</b>
1.	'Backyard Kiwi'	Whangarei Heads
2.	Bay Bush Action	Opuia, Bay of Islands
3.	Bland Bay CPCA	Bland Bay
4.	Blue Orb Charitable Trust	End of Whangaruru Peninsular
5.	Bream Head Conservation Trust	Bream Head
6.	DOC Pateke and Kiwi projects	Various
7.	Friends of Matakoho/ Limestone Island	Matakoho/ Limestone Island, Whangarei Harbour
8.	Hupara Landcare	Hupara
9.	Kaimamaku Landcare	Kaimamaku – Kaikanui
10.	Kohinui Stream Landcare	Kohinui Stream Catchment
11.	Mahinepua/Radar Hills Landcare	Mahinepua – Radar Hills
12.	Northland Regional Council	NRC Mt Tiger block
13.	NorthTec Hunting and Pest Control Course	Maungatika Scenic Reserve
14.	NZ Kiwi Foundation	Various sites around Bay of Islands
15.	Otangaroa Landcare	Otangaroa
16.	Owhiwa Landcare	Owhiwa
17.	Pataua Nth Landcare	Pataua North
18.	Project IslandSong	Islands in the Bay of Islands (centered on Urupukapuka)
19.	Puketi Forest Trust	Puketi Forest
20.	Puketotara Landcare	Puketotara River, Kerikeri/Okaihau
21.	Riverlands Landcare	Ngunguru river

22.	Russell Landcare	Russell, Bay of Islands
23.	Sandy Bay Kiwi	Sandy Bay
24.	South Kerikeri Inlet Landcare	South Kerikeri Inlet
25.	Taheke Landcare	Centered around Taheke Scenic Reserve
26.	Taurikura Ridge Landcare	Taurikura Ridge, Whangarei Heads
27.	Te Tangi o Te Ata	Eastern Bay of Islands
28.	Tutukaka Landcare Coalition Trust	Tutukaka
29.	Waimate Nth Landcare	Waimate North
30.	Whakaangi Landcare Trust	Hihi peninsula
31.	Whanui (Hancock Forest Management)	Whanui
32.	Whareora Landcare	Whareora/Mt Tiger

Professional trapper Kelvin Grouse demonstrates traps at Hupara Local Trapping Workshop.



## ***Engaging Support for Landscape Scale Kiwi Recovery***

As fostering public support for landscape scale kiwi recovery via predator trapping and dog control is essential to the success of the Kiwi Coast, considerable effort was also expended in making the most of all opportunities to promote the initiative and raise its' profile. The Kiwi Coast seeks to engage as many different people as possible through clear messaging that invites everyone to participate in simple activities to help kiwi thrive.

This involved supporting Approved Kiwi Handlers to take live kiwi into schools within the first focus area of the Kiwi Coast, holding a 'Live Kiwi Experience' event targeted to boost landowner support in a gap in the trapping network, support for Kiwi Releases at Bream Head, Whangarei Heads and Ngunguru and holding the first 'Caring for Kiwi Workshop' at Kaimamaku.

The Kiwi Coast Coordinator promoted the Kiwi Coast at numerous events, workshops and A+P shows. Presentations were also given to a number of community group meetings and AGMS, government departments, Forums and scientific societies.

Establishing communication about the initiative entailed engaging professional communications consultants to design and create a Kiwi Coast logo, brochure, display, Facebook page, website and an electronic newsletter.

Todd Hamilton (WHLF) and Gail the kiwi with senior students of Parua Bay School.





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

Implementation of the Kiwi Coast has been carried out in accordance with the Kiwi Coast Project Plan (November, 2013). The following section reports on the actions implemented this year in relation to the three objectives identified in the project plan.

### Objective 1: Link the kiwi strongholds of Whangarei Heads and Tutukaka.

Reducing numbers of key kiwi predators (feral cats and mustelids) over the 45,000 initial focus area between Bream Head and Whananaki South was considered to be the key means of achieving Objective 1, and this has been given top priority. This has resulted in the deployment of new predator traps and the contracting of more professional trapper time to service traps. For existing projects in the focus area, this has facilitated the expansion and/or intensification of predator trapping. As new community-led projects have emerged, further trapping areas have also been established at Taheke, Whanui and Kohinui in between the strongholds. Together, this has resulted in the filling of vital gaps in the trapping network in the first focus area.

In total an additional 276 predator traps were purchased by the Kiwi Coast for community-led conservation projects in the first focus area. In Whangarei Heads alone, an extra 76 predator traps are now being regularly serviced thanks to the Kiwi Coast. Map 2 shows all known predator traps from Bream Head to Sandy Bay in June 2013. Map 3 shows the same area updated with new traps added to the trapping network over the first year of implementation. Map 3 highlights both the new projects that have got underway this year, as well as the strategic gaps in the trapping network that have begun to be filled in the heart of the first focus area. Through the continued expansion of Landcare Group project areas and the involvement of new landowners, farmers and Rayonier-Matariki Forests in predator trapping and kiwi recovery, gaps in the trapping network within the first focus area will continue to be filled in the 2014/15 financial year.

It should be noted that the Kiwi Coast does not approach landowners seeking access for trapping sites, nor does the Kiwi Coast itself manage any individual project areas. In the interests of long term sustainability the Kiwi Coast instead supports and links new and existing community-led projects and gives assistance where necessary. Supporting community leaders to coordinate the pest control and kiwi recovery of their areas ensures each individual project will continue long into the future.

Implementation of Objective 1 is summarised in Table 3.

**Table 3 - Implementation of Objective 1**

<b>Project Plan Actions</b>	<b>Implementation</b>
<i>Supporting existing community-led conservation projects to achieve their maximum potential.</i>	<ul style="list-style-type: none"> <li>• Additional predator traps supplied to existing projects</li> <li>• Additional professional trapper hours resourced</li> </ul>
<i>Encouraging the formation of new community-led conservation projects.</i>	<ul style="list-style-type: none"> <li>• Two new Landcare projects formed: Taheke Landcare and Kohinui Stream Landcare</li> <li>• Both projects resourced with predator traps and professional predator trapper by Kiwi Coast. Worked in partnership with NRC Biosecurity who provided additional animal pest control traps and resources.</li> </ul>
<i>Establishing predator trapping where kiwi are present and currently unmanaged and where there are willing landholders.</i>	<ul style="list-style-type: none"> <li>• Professional predator trapping established with Hancock Forest Management at Whanui.</li> </ul>
<i>Providing opportunities for private landowner and commercial engagement, learning, networking and capacity building.</i>	<ul style="list-style-type: none"> <li>• Local Trapper Workshop held at Taheke</li> <li>• “Meet a Live Kiwi” event held at Owhiwa</li> <li>• Live Kiwi taken into Hancock Forest Management, NRC, and Ngunguru, Parua Bay and Whangarei Girls High Schools</li> <li>• Kiwi releases supported at Tutukaka, Whangarei Heads and Bream Head, led by BHCT, TLC and WHLF</li> </ul>
<i>Building predator trapping capacity to enable local operators to successfully protect kiwi and other significant biodiversity.</i>	<ul style="list-style-type: none"> <li>• Idea of trapper mentoring put into practice with success</li> <li>• 4 trapper mentoring days completed</li> </ul>
<i>Working with local agencies to enforce dog control rules and encourage responsible dog ownership.</i>	<ul style="list-style-type: none"> <li>• Kiwi Coast participation in the Northland Kiwi Forum Working Group discussions of dog control advocacy and WDC planning processes</li> </ul>

Objective 2: Connect Community-led Conservation Projects in the Bay of Islands

Kiwi Coast actions in the Bay of Islands have centered on establishing stronger links between existing projects to encourage greater cohesion, communication and coordination. Implementation of Objective 2 is summarised in Table 4.

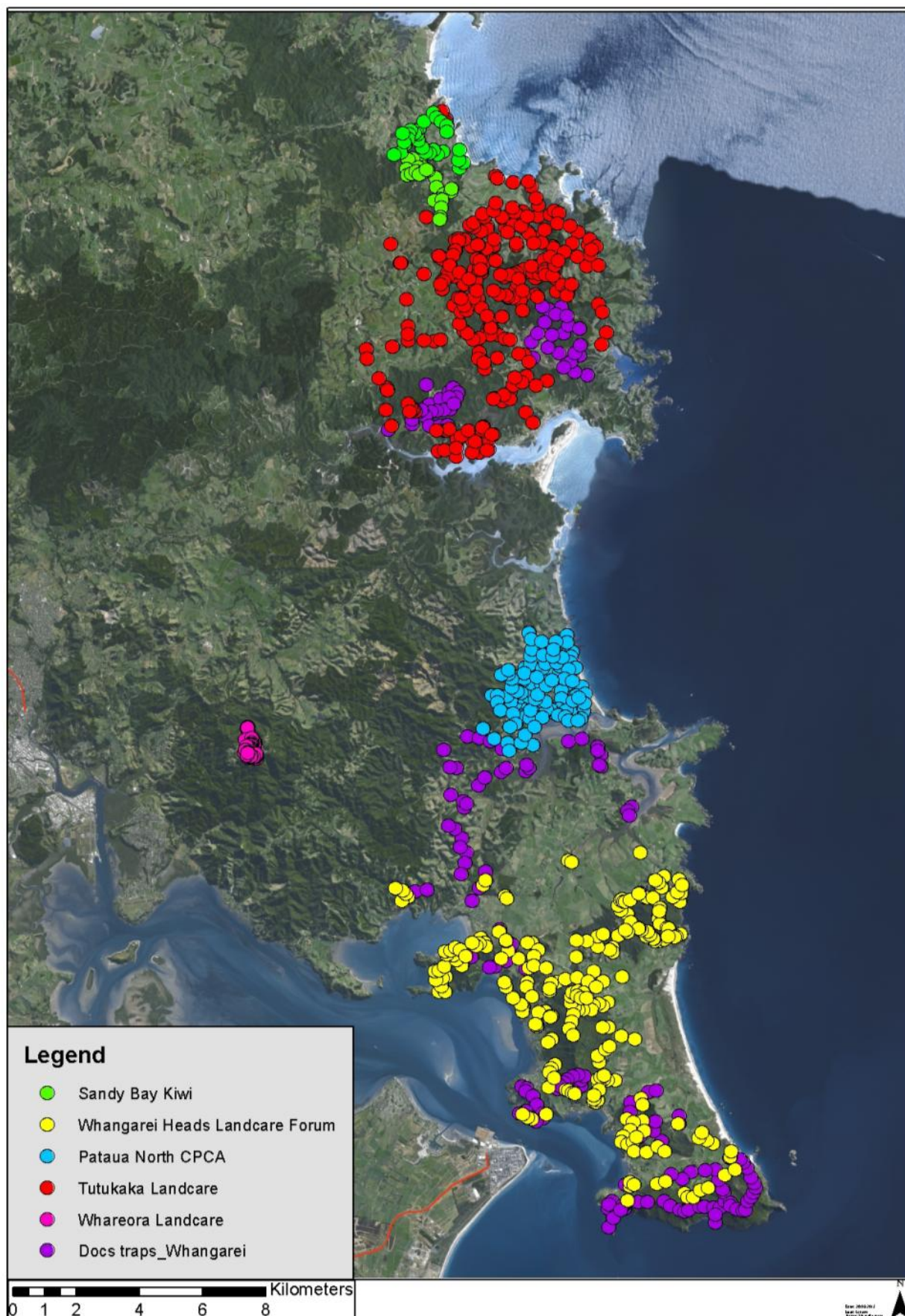
The Kiwi Coast Coordinator met with numerous projects, groups, agencies and NGOs throughout the year in the Bay of Islands, and in some instances, brought project leaders together for the first time. Working with DOC and NRC, trapping data is being gathered, coordinated and mapped. A 'Map of Steel' for the Bay of Islands area is now in development by NRC, allowing the overall trapping network of the Bay of Islands groups to be understood. This will help to identify gaps and highlight areas where initial trapline linkages could be encouraged.

Assistance was also given to community-led conservation projects to apply for independent funding. This included Hupara Landcare, Project IslandSong, and Puketotara Landcare.

**Table 4 - Implementation of Objective 2**

<b>Project Plan Actions</b>	<b>Implementation</b>
<i>Supporting existing community-led conservation projects to achieve their maximum potential</i>	<ul style="list-style-type: none"> <li>• Coordinating trap data held by NRC and DOC, plus gathering of new data to facilitate a Bay of Islands 'Map of Steel'</li> <li>• Kiwi Coast coordinator attendance at numerous meetings and community events to build relationships and trust</li> </ul>
<i>Encouraging and supporting the formation of new community-led conservation projects in the area.</i>	<ul style="list-style-type: none"> <li>• Support of formation of new South Kerikeri Inlet Landcare Group</li> </ul>
<i>Providing opportunities for networking and capacity building such as Local Trapper Workshops.</i>	<ul style="list-style-type: none"> <li>• Hupara 'Local Trapper Workshop'</li> </ul>
<i>Working with local agencies to enforce dog control rules and encourage responsible dog ownership.</i>	<ul style="list-style-type: none"> <li>• Kiwi Coast participation in the Northland Kiwi Forum Working Group discussions of dog control advocacy.</li> </ul>

Map 2 - Predator Traps from Bream Head to Sandy Bay (Northland Regional Council, 2013)





Objective 3: Encourage landowner participation in conservation from Marua – Russell Forest

There are only a small number of existing community and iwi-led conservation projects from Marua to the Russell Forest. Further work is needed to inspire and encourage further stewardship/kaitiaki in this area. Implementation of Objective 3 is summarised in Table 5.

Key actions of the Kiwi Coast in the Marua – Russell Forest area have included meetings with representatives of the Ngatiwai Trust Board and Ngatihine to explore ideas for kaitiaki kiwi projects. Ngatihine are currently assessing all the Public Conservation Land in their rohe for potential pest control projects as well as carrying out catchment management. Further meetings will be held to progress ideas.

Ngatiwai Trust Board representatives are also interested in establishing a kaitiaki kiwi project as part of the Kiwi Coast. Initial sites are currently being considered in the Ngaiotonga – Russell State Forest area. It is hoped that a Ngatiwai led project will get underway in the 2014/15 financial year.

The Kiwi Coast has also worked on building the capacity and skills of the recently formed Kaimamaku Landcare Group to assist them to engage in kiwi recovery. This included developing a new workshop, called ‘Caring for Kiwi’, in which the Project Manager of the Whangarei Heads Landcare Forum shared knowledge, skills and experience with the group. Supporting community leaders to inspire other community-led projects is considered to be a powerful way to engage new communities and credibly share information.

**Table 5 - Implementation of Objective 3**

<b>Project Plan Actions</b>	<b>Implementation</b>
<i>Exploring the relevance of the Kiwi Coast to iwi and hapu led conservation projects.</i>	<ul style="list-style-type: none"> <li>• Meeting with Ngatihine to explore options for kaitiaki kiwi</li> <li>• Working with Ngatiwai to develop an iwi-led conservation project in the Ngaiotonga/Russell State Forest area</li> </ul>
<i>Supporting existing community, iwi and hapu led conservation projects to achieve their maximum potential.</i>	<ul style="list-style-type: none"> <li>• Assistance provided to Kaimamaku Landcare to access NRC Biosecurity E Fund for rat control</li> </ul>
<i>Encourage and support the participation of further landholders in conservation, and the formation of new projects in the area.</i>	<ul style="list-style-type: none"> <li>• ‘Caring for Kiwi’ included landholders from the edges of Russell Forest to Marua</li> </ul>
<i>Provide opportunities for networking and capacity building such as Local Trapper Workshops.</i>	<ul style="list-style-type: none"> <li>• ‘Caring for Kiwi’ workshop held with Kaimamaku Landcare</li> </ul>

## Monitoring

Developing robust monitoring plans and methods to underpin the Kiwi Coast has been a key undertaking in this first year of operation. Monitoring measures have been developed with the assistance of Department of Conservation, scientists, NorthTec Conservation Management tutors and through contracting technical support where necessary to provide assistance and advice. As such, some of the monitoring measures suggested in the earlier Kiwi Coast Project Plan have been revised (See Table 6).

Some of these simple Kiwi Coast monitoring measures may in time be supported by, or incorporated into, a more comprehensive monitoring framework as part of the monitoring undertaken by Reconnecting Northland. For example, in order to ascertain the success of its' 'Kiwi, Kukupa and Bats' target.

Reg from the NorthTec Hunting and Pest Control Course with one of the kiwi rediscovered on Mt Tiger.



## Major Project Reporting

'Major Projects' contributing to the Kiwi Coast are those that receive over \$10,000 in support from the Kiwi Coast in one financial year. Two projects fall into this category in the 2013/14 year – the Tutukaka Landcare Coalition and the Whangarei Heads 'Backyard Kiwi' Project. Both projects have submitted an annual report to the Kiwi Coast, and these are attached in Appendix 4.

The Tutukaka Landcare Coalition (TLC) involves three Landcare groups and at July 2013 had a trapping network extending over 3,500 ha. Over this financial year, TLC has established a series of new traplines and has a goal of expanding their project area to approximately 10,000 ha in the next five years. A key aspect of TLC is that as well as kiwi, the project also involves brown teal/pateke recovery. Thanks to the significant trapping effort of both paid and unpaid trappers working with TLC, pateke numbers are increasing and there are signs that a new flock site is self-establishing at Ngunguru. Mike Camm, Project Manager for TLC, states:

*"I have been amazed at the positive and excited response my sharing details of the Kiwi Coast initiative has engendered in the people I discuss this project with, whether in the local community or beyond, inside or outside NZ. Just the concept of a benevolent umbrella organisation would seem to give people the encouragement that they too can make a difference in their own backyard, confident that they are no longer operating in a vacuum.*

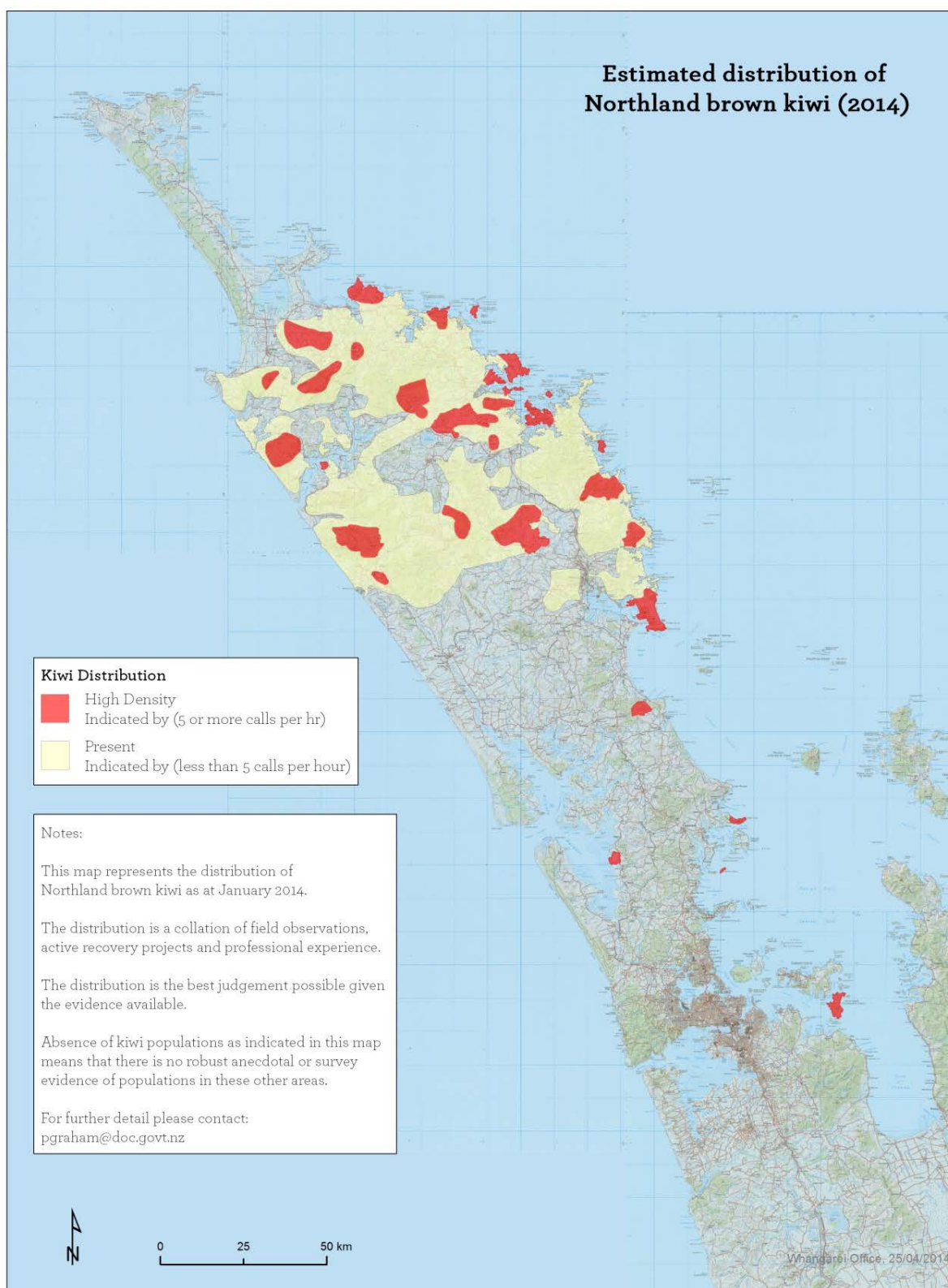
*We anticipate this attitude shift will contribute significantly to the improvement of conditions for our native biodiversity, as well as working to bring people and communities together."*

The Whangarei Heads 'Backyard Kiwi Project' began in 2001, with an estimated 80 kiwi on the 6000 ha peninsula. Using data from the annual Kiwi Call Count Survey, it is estimated that there are now over 500 kiwi. This year Backyard Kiwi have both expanded their trapping network as well as filled in some vital gaps. Kiwi advocacy and community engagement is a strong focus of Backyard Kiwi, with one kiwi release this year attracting 350 people keen to see a live kiwi up close. Todd Hamilton, Project Manager for the Whangarei Heads Landcare Forum says:

*"WHLF Backyard Kiwi and others have worked hard for a successful 13 years of kiwi recovery at Whangarei Heads. It is fantastic to now see that kiwi recovery is gaining momentum in between our project area and Tutukaka LC area and for the facilitation and coordination of those combined kiwi recovery efforts through the Kiwi Coast. Thank you!!"*



**Map 4 - Estimated Distribution of Northland Brown Kiwi (2014)**



**Table 6 - Kiwi Coast Monitoring Results July 2013 – June 2014**

Measure	Proposed Methods In Project Plan	Methods Implemented and Results
Distribution of Northland brown kiwi populations	<ul style="list-style-type: none"> <li>• Northland brown kiwi distribution map (DOC)</li> <li>• Deployment of Kiwi Listening Devices to investigate reports of new sites</li> </ul>	<ul style="list-style-type: none"> <li>• Map revised by DOC: See Map 4</li> <li>• Kiwi Listening Devices deployed at 28 sites. One new breeding kiwi population discovered at Mt Tiger.</li> </ul>
Estimation of number of adult Northland brown kiwi	<ul style="list-style-type: none"> <li>• Coordination of Annual Kiwi Call Count Survey Data</li> <li>• Listening devices for low call sites</li> </ul>	<ul style="list-style-type: none"> <li>• Kiwi Coast Kiwi Call Count Report (see below for details)</li> <li>• Kiwi Coast Kiwi Monitoring Plan completed. Provides methods to detect presence, abundance and distribution.</li> </ul>
Significant species presence and movement	<ul style="list-style-type: none"> <li>• Coordination of landowner observations (via website)</li> </ul>	<ul style="list-style-type: none"> <li>• Revised to 'Indicator Species Monitoring'. Plan drafted.</li> </ul>
Number and type of animal pests destroyed annually	Annual coordination of trapping records	<p>'Shared Animal Pest Control Results' Compiled January 2014. (See Table 7)</p> <p>32 landowners, projects and groups participated</p> <p><u>Results:</u></p> <p>Possums:8997   Rats:11,999  Ferrets:1   Stoats:647  Weasels:456   Feral cats:384  Rabbits: 657   Pigs:11  Hedgehogs:1751   Myna: 58</p>
Number of community-led conservation initiatives involved	Annual tally of initiatives	32 groups and projects involved as at June 30, 2014 (See Table 2)
Number and type of capacity building workshops	Annual tally of workshops	<ul style="list-style-type: none"> <li>• 1 'Caring for Kiwi Workshop'</li> <li>• 2 'Local Trapper Workshops'</li> </ul>
Number of people attending Kiwi Coast supported events and workshops	Coordination of workshop registration forms and head counts at events	<p>Kaimamaku 'Caring for kiwi' workshop = 28</p> <p>Hupara 'Local Trapping Workshop' = 30</p>

		<p>Taheke 'Local Trapping Workshop'= 35  Owhiwa 'Meet a Kiwi' event = 80  Parua Bay School 'Live Kiwi Experience' = 70  Ngunguru School 'Live Kiwi Experience' = 70  Extraordinary Land Event = 90  Total: 403</p>
Landowner behaviour change	Follow up phone survey of workshop attendees	Not progressed. To be replaced by 'Communications Reach'
New measure: communications reach	Compilation of electronic data	<p>Facebook 'Likes' as at June 30: 85  Monthly E-Newsletter recipients: 102  Website 'hits' from June 22: 236:  Northland published media articles: 4  Nationally published media articles: 2</p>

A kiwi egg is shown to Ngunguru School students.

Todd Hamilton (WHLF) tests telemetry monitoring equipment and Wairua-Ngahere the kiwi prior to release at Tutukaka. Photos: Rod Morris



**Table 7 - Shared Animal Pest Control Results 2013**

Group/Project Name	Possums	Rats	Ferrets	Stoats	Weasels	Feral Cats	Rabbits	Pigs	Hedgehog	Myna
Bland Bay Community Pest Control Area	18	71	0	13	8	0	0	0	10	0
Puketotara Landcare/Kiwicare Group	946	287	0	8	4	36	44	0	133	45
Tutukaka Landcare Coalition (T.L.C.)	239	399	0	20	22	34	6	0	118	0
Clayton McInnes' home traps	44	25	0	0	0	2	200	0	2	10
Clayton McInnes' Private contracts	193	160	0	8	11	5	0	0	33	0
Owhiwa - Neil Cook	42	11	0	1	0	0	0	0	0	
Owhiwa Landcare	270	0	0	0	0	0	0	0	0	0
Otangaroa Landcare										
Whareora Landcare	1576	74	0	15	0	2	5	3	9	0
NorthTec Hunting & Pest Control Course	200	50	0	0	0	0	0	3	3	
Grant Brown – Glenbervie	210	77	0	10	0	0	10	0	0	0
NZ Kiwi Foundation	0	1127	0	60	228	79			988	
Puketi Forest Trust	1236	3643	0	176	16	24	NR	NR	34	
WHLF - Backyard Kiwi	154	395	0	32	18	16			48	
Waikaraka - Bill	80			3		3				
Lamb Road Landcare - Daniel	140	31				3				
Mt Aubrey - Harvey and Leo	36	12								
Waikaraka – Gallagher	20									
Taurikura Ridge Landcare	22	2000		2						
Hupara District Landcare Group	637	100	1	5		20	328	3		

Taheke Landcare	101	9		4		6	2		3	3
Sandy Bay Kiwi	40	80		13		8			25	
Kohinui Stream Landcare Group	54	10		3			5		3	
DOC Pateke Project trapping at Whananaki and Mimiwhangata	104	1289	-	123	60	56	24	-	174	
Kaimamaku Landcare	223	220		2		2		2		
Waimate North Landcare Trust inc.	1991	689	0	39	13	59	9		113	
Pataua North Landcare		49		10	2	2				
Russell Landcare Group		7		1					2	
Riverlands Landcare Group	100	95		11		2	19			
Bush Bay Action	306	628		16	2	9				
Matakohe-Limestone Island and buffer	0	115	0	17	10	0	0	0	6	0

#### Whangarei Kiwi Sanctuary (Kiwi Coast areas only)

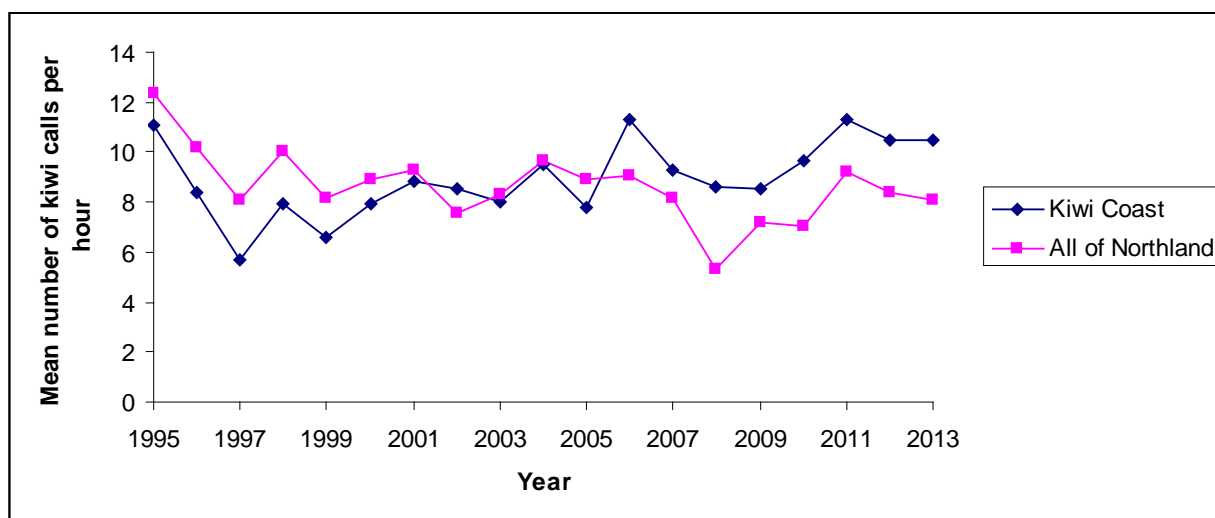
Heads Roadsides/Pikes 987 ha	1	90	0	1	15	3			1	
Manaia/Aubrey 125 ha	0	1	0	0	4	0				
Ngunguru 1973 ha	1	31	0	4	5	4			2	
Pataua 233 ha	3	24	0	2	3	2	1		12	
Taranui 686 ha	3	91	0	3	6	2	1		15	
Bream Head 906 ha	0	65	0	3	9	0	2		11	
Whangaruru 1893 ha	7	44	0	29	6	2	1		6	
Paired Kiwi Coast trial traps				13	14	3				
<b>TOTAL</b>	<b>8997</b>	<b>11999</b>	<b>1</b>	<b>647</b>	<b>456</b>	<b>384</b>	<b>657</b>	<b>11</b>	<b>1751</b>	<b>58</b>

## Northland Brown Kiwi Monitoring

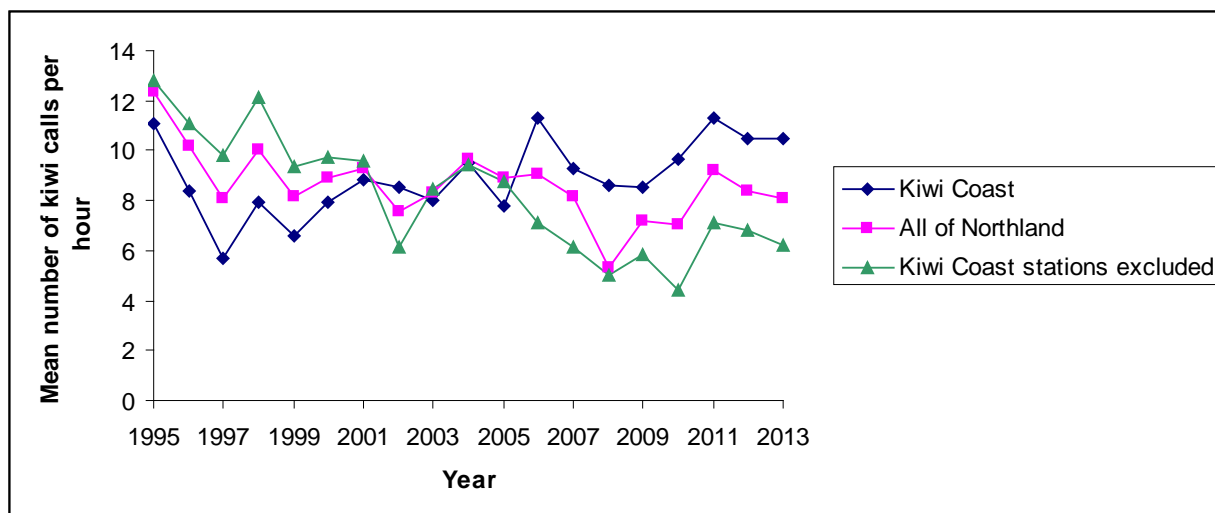
The 'Kiwi Coast Monitoring Plan (Topia, 2014) was completed in June and provides a plan to monitor the effect of the protection and advocacy work of the Kiwi Coast on kiwi presence, abundance and distribution in eastern Northland. This monitoring plan will be implemented in the 2014/15 financial year, including the first '5 Yearly Kiwi Listening Blitz'.

Baseline monitoring of the current state of the kiwi populations within the Kiwi Coast was provided by DOC in the form of dedicated kiwi call count report (Craig, 2013). Analysis of the 2013 kiwi call count data within the Kiwi Coast revealed some interesting results.

*"The general pattern for the Kiwi Coast listening stations since 1995 has been slow and steady increase, with a few peaks. Trends in call count data collected for all of the Northland stations and for just those from the Kiwi Coast showed an interesting result. Prior to and including 2001 the mean call count rates for all of Northland were consistently higher than the mean of the 12 Kiwi Coast stations. However, since 2006 the pattern has reversed and the mean call count rates for the Kiwi Coast stations have been consistently higher than the mean of the 24 all of Northland stations (Chart 1). When the 12 original stations that are not part of the Kiwi Coast are added, the pattern becomes even more obvious, with the mean of these stations being well below the mean of the Kiwi Coast station from 2006-2013 inclusive (Chart 2) " (Craig, 2013).*



**Chart 1.** Mean annual kiwi call rates per hour for all 24 original Northland monitoring stations, and the 12 of these stations that fall within the Kiwi Coast 1995 – 2013.



**Chart 2.** Mean annual kiwi call rates per hour for all 24 original Northland monitoring stations, the 12 of these stations that fall within the Kiwi Coast, and the 12 stations that are not within the Kiwi Coast 1995 – 2013.

*“The general pattern of a slow and steady increase for the 12 Kiwi Coast stations listened from since 1995 is positive, and is very likely a reflection of the extensive kiwi protection effort that has already been happening throughout this area. As the Kiwi Coast project gathers and maintains momentum, this pattern is likely to intensify, particularly in the areas that have been identified as linkages (e.g. the area between Whangarei Heads and Tutukaka)” (Craig, 2013).*

Goldie the kiwi at the ‘Owhiwa Meet a Kiwi’ event.



## **‘Other species’**

The Kiwi Coast is deliberately being promoted as a ‘kiwi saving’ project. However, while a key focus is on protecting kiwi and their habitat, it is expected that the actions undertaken such as pest control, community engagement, and dog control advocacy will also benefit the wider biodiversity values of the area.

Work has begun with NorthTec Conservation Management tutors to create an Indicator Species Monitoring Plan to gauge what effect the Kiwi Coast has on native wildlife other than kiwi. An initial plan has been drafted suggesting that kaka, bellbird, bats and weta may be selected. It is envisaged that NorthTec students will assist with carrying out the monitoring to help build the capacity and skills of Northlanders in the field of ecology, with professional technical support as required.

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## **Summary**

The Kiwi Coast has achieved much in its first year of implementation. The support of Reconnecting Northland has allowed the Kiwi Coast to get up and running, and to begin the work of coordinating community, agency and iwi led kiwi recovery along the east coast of Northland. The rapid expansion of the Kiwi Coast project area to approximately 270,000ha and the willingness of projects and groups to become involved has occurred faster than anticipated. The task now ahead of the Kiwi Coast is to maintain momentum and strategic direction to ensure the continued wise use of resources that will most benefit Northland brown kiwi and ensure sights remain firmly fixed on creating New Zealand’s first kiwi corridor.

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## **References**

Craig, E. 2013. Call Count Monitoring of Northland Brown Kiwi Within the Kiwi Coast Area 2013. Unpublished DOC report.

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

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



## Appendix 1 - Summary of RN Allocation Expenditure

### 1 July 2013 - 30 June 2014

Activity	Amount
<b>Kiwi Monitoring</b>	
Kiwi Call Count analysis, Kiwi listening device deployment and analysis	3624.03
Writing Kiwi Monitoring Plan	880.30
Kiwi Monitoring Equipment: GPS, 10 Kiwi Listening Devices, SD cards and batteries	4171.74
<b>Animal Pest Control – labour</b>	
Tutukaka CPCA	11882.80
WHLF 'Backyard Kiwi'	7426.47
Manaia 1080 operation	6368.00
Taheke Landcare and Whanui	5003.98
Owhiwa/Mt Tiger	150.50
Kohinui Stream Landcare	1480.50
<b>Predator traps and toxins</b>	
Taheke Landcare (incl 2014 traps)	11985.81
Whanui (Incl 2014 traps for Holwell)	19306.06
WHLF 'Backyard Kiwi'	8208.00
Owhiwa/Mt Tiger area	1240.00
Tutukaka CPCA	700.00
<b>Education, Advocacy and Capacity Building</b>	
Development of advocacy material and communications: website, Facebook page, e-newsletter	10550.09
Kohinui Stream Landcare Workshop	471.82
Taheke Local Trappers Workshop	700.87
Kaimamaku 'Caring for Kiwi' Workshop	735.25
Hupara Landcare: Local Trapper Workshop	370.72
Sth Kerikeri Inlet Landcare Local Trapping Workshop	315.00
Extraordinary Land' event support	196.47
Trapper mentoring to share skills and support trappers	670.00
Live kiwi experiences with schools, etc.	1468.20
Owhiwa 'Meet a Kiwi' event	1065.40
Parua Bay School Kiwi Experience (seniors)	214.00
Kiwi Coast Think Tank and other coordinating meetings	365.78
<b>Total</b>	<b>\$99551.79</b>

## Appendix 2 - Mean call count data for all Kiwi Coast stations 1995-2013. (Craig, 2013)

Stn No.	Station name	1995 Mean	1996 Mean	1997 Mean	1998 Mean	1999 Mean	2000 Mean	2001 Mean	2002 Mean	2003 Mean	2004 Mean	2005 Mean	2006 Mean	2007 Mean	2008 Mean	2009 Mean	2010 Mean	2011 Mean	2012 Mean	2013 Mean
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### Northern

7	Puketi	6.6	5.4	2.1	3	6	7.6	6.4	3.5	5	3.4	1.5	2.3	0.8	3.9	4	6.88	9.38	6.25	6.25
8	Puketi SR	5.4	6.5	4.4	4	5.1	6.5	6.1	6.4	8.25	9.4	2.3	5.1	7.4	8.9	9	7.88	9	11.75	9.75

### Mahinepua-Radar Hill

90	Mahinepua 0	-	-	-	-	-	-	-	-	-	-	-	-	2.9	2.9	3.38	3.63	4	7.13	4.38
83	Mahinepua 1	-	-	-	-	-	-	-	-	3.5		2.6	4.1	3.5	2.6	2.38	2.25	3.13	7.5	6.75
84	Mahinepua 2	-	-	-	-	-	-	-	-	4.2	0.8	2.3	4.8	4.3	2.75	3.25	3.25	4.25	6.75	4.75
85	Mahinepua 3	-	-	-	-	-	-	-	-	5.6	4.75	4	5.5	5.4	3.25	5.88	5.25	5.25	10.25	5.00
88	Mahinepua 4	-	-	-	-	-	-	-	-	6.1	4.1	3	7.8	4.7	4.1	9.5	4.75	5.38	10.63	7.13
87	Mahinepua 5	-	-	-	-	-	-	-	-	-	-	-	-	2.4	0.9	2	-	-	-	-
86	Mahinepua 6	-	-	-	-	-	-	-	-	1	2.5	2.3	-	0.4	0.75	1.25	-	-	-	-
89	Mahinepua 7	-	-	-	-	-	-	-	-	0.9	5.9	1.8	4.8	1.9	0.4	-	-	-	-	-
181	Mahinepua 8	-	-	-	-	-	-	-	-	-	-	-	-	0.8	0.4	-	-	-	-	-
182	Mahinepua 9	-	-	-	-	-	-	-	-	-	-	-	-	0.1	0.1	-	-	-	-	-
183	Mahinepua 10	-	-	-	-	-	-	-	-	-	-	-	-	1.6	1.25	-	-	-	-	-
184	Mahinepua 11	-	-	-	-	-	-	-	-	-	-	-	-	2.9	1.25	1.25	-	-	-	-
98	Mahinepua 12	-	-	-	-	-	-	-	-	-	3.5	2.3	3.8	2.5	3.4	2.88	-	-	-	-
99	Mahinepua 13	-	-	-	-	-	-	-	-	-	3.9	3.8	7.4	7.3	5	9.38	7.75	9.5	16	9.63
92	Mahinepua 14	-	-	-	-	-	-	-	-	-	-	-	-	0.6	1.25	1.13	1.38	0.75	-	-
91	Mahinepua 15	-	-	-	-	-	-	-	-	-	-	-	-	1	1.1	1.63	1.75	3.13	-	-
93	Mahinepua 16	-	-	-	-	-	-	-	-	-	-	-	-	1.3	6	2	2.63	5.25	-	-
94	Mahinepua 17	-	-	-	-	-	-	-	-	-	-	-	-	2.5	4.9	5	3.38	6.88	-	-

Stn No.	Station name	1995 Mean	1996 Mean	1997 Mean	1998 Mean	1999 Mean	2000 Mean	2001 Mean	2002 Mean	2003 Mean	2004 Mean	2005 Mean	2006 Mean	2007 Mean	2008 Mean	2009 Mean	2010 Mean	2011 Mean	2012 Mean	2013 Mean
95	Mahinepua 18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.75	-	-	-	-

## Bay of Islands

146	Kauri Cliffs 1 (Pink Beach)	-	-	-	-	-	-	-	-	9	-	-	4	4.25	1.75	5	6.5	-	-	-
147	Kauri Cliffs 2 (Puriri)	-	-	-	-	-	-	-	-	-	-	-	1.5	3	2.75	1	-	-	-	-
10	Marsden Cross	20.9	18.3	9.6	16.7	14.5	19.9	21.9	17.9	18.5	22	19.3	30.6	23	-	20.25	24.5	34.88	30.86	30.25
148	Wiwiki Beach	-	-	-	-	-	-	-	-	-	-	-	32.1	-	-	-	-	-	-	-
149	Mataka Stn Gate, Purerua	-	-	-	-	-	-	-	-	-	-	-	4	4.1	8.25	6.75	18.5	3.25	10	6.88
150	McKenzie Rd, Purerua	-	-	-	-	-	-	-	-	-	-	-	9.5	12.1	10.25	5	7.5	-	2.5	-
151	Mtn Landing (Lot 30) Purerua	-	-	-	-	-	-	-	-	-	-	-	12.3	10.2	18.75	12.6	25	22.75	20.25	-
11	Puketotara	10	13.8	8.1	11.6	9.7	8	-	2.5	7.5	3.6	-	7.1	13.7	10.6	6.17	9.5	9.25	9.13	9.75
152	Waitoto Block	-	-	-	-	-	-	-	-	-	-	-	4	-	-	-	-	-	-	-
12	Rangitane	14	5.6	8.4	10.5	7.5	8.4	11.5	10.5	8.6	8	8	11.5	9.1	15.9	15.25	11.38	10.75	12.75	11.25
153	Aroha Island	-	-	-	-	-	-	-	-	6.88	-	-	12.6	-	-	-	-	-	-	-
154	Napia Bay	-	-	-	-	-	-	-	-	-	8.7	5.5	4.6	4	4.5	3.25	5.6	7.5	3.6	4.00
155	Stirlings Quarry	-	-	-	-	-	-	-	-	7.3	9.8	13	12.4	10.2	8.3	4	8.5	-	-	-
97	Kurapari Rd	-	-	-	-	7.1	-	-	-	12.7	8.8	9.25	10.4	5.5	6	6.75	4.75	2.33	5.5	7.00
13	Waitangi No 12	7.6	7.6	6.3	8.9	5.3	7.1	11.5	15.1	18.4	13.75	11.5	15.5	6.3	-	-	-	-	6.75	7.38
14	Mt Bledisloe	27.1	10.9	5.5	7.9	8.8	5.1	6.4	6.75	4.9	8.9	9.1	5.5	9.6	11.25	8.25	11.38	13.71	7.38	10.75
138	Hupara	-	-	-	-	-	-	-	-	-	25.6	19.3	27.8	-	-	-	-	-	-	-
185	Akeake Reserve, Kerikeri	-	-	-	-	-	-	-	-	-	-	-	-	-	2.75	0.5	-	6.00	-	-
186	Cunningham Gardens, Aroha Island	-	-	-	-	-	-	-	10.75	8.63	-	-	-	-	-	-	-	8.17	-	-
187	Gaitens, Rangitane Rd, Kerikeri	-	-	-	-	10	-	12.8	6.33	6.88	10	12	12.63	14.7	10.5	8	7.25	7.50	4.75	-
188	Blacksmiths Bay (east), Kerikeri (Lex Rennes)	-	-	-	-	-	-	-	10.25	10.3	7.67	8.26	6.20	6	8	4.5	6.88	8.75	6.40	0.00
189	Doves Bay, Kerikeri (Lockyer)	-	-	-	-	4.17	-	-	2	-	3.78	2.46	-	-	4.5	7.5	15.25	18.25	-	-

Stn No.	Station name	1995 Mean	1996 Mean	1997 Mean	1998 Mean	1999 Mean	2000 Mean	2001 Mean	2002 Mean	2003 Mean	2004 Mean	2005 Mean	2006 Mean	2007 Mean	2008 Mean	2009 Mean	2010 Mean	2011 Mean	2012 Mean	2013 Mean
190	Rangitu, Opito Bay Road, Kerikeri	-	-	-	-	-	-	-	-	-	-	-	-	9.1	16	15.5	15.5	-	-	-
191	Tikorangi Road, Opito Bay, Kerikeri	-	-	-	-	-	-	-	-	-	-	-	-	-	4.5	4.5	4	-	-	-
192	Kraus, Hansen Rd, Purerua	-	-	-	-	-	-	-	-	-	3.33	-	-	-	-	11		-	-	-
193	Mataka Beach, Mataka Station, Purerua	-	-	-	-	-	-	-	41.5	-	30	39	32.67	24.5	41.75	30	41.25	-	30.83	30.88
194	Mataka Station, Ninepin Track, Purerua	-	-	-	-	-	-	-	-	-	30	-	-	-	50.75	43.5	-	18.00	-	24.00
195	Mountain Landing (Lot 30) Wharengaere, Purerua	-	-	-	-	-	-	-	-	-	-	-	12.25	10.2	18.75	12.6	25	22.75	20.25	13.25
196	Mountain Landing, Mataka Ridgeline, Purerua	-	-	-	-	-	-	-	-	-	-	-	7.50	10.1	18	25.5	14.25	22.00	-	-
197	Mountain Landing, Paddle (Entrance), Purerua	-	-	-	-	-	-	-	-	-	-	-	8.50	10.2	12.5	14.25	17	-	-	-
198	Mountain Landing, Poraenui Point	-	-	-	-	-	-	-	-	-	-	-	-	7.3	14.5	16	13.75	-	-	-
199	Paoneone	-	-	-	-	-	-	-	16.67	-	-	-	-	-	-	-	-	37.60	-	11.25
200	Pattersons Big Hill	-	-	-	-	-	-	-	9	-	-	30.5	-	4.01	20.5	70.25	33	35.50	-	-
201	Pattersons, Rocky Bay	-	-	-	-	-	-	-	-	-	-	-	-	-	16.5	19.5	17.67	11.67	-	-
202	Tapuaetahi	-	-	-	-	-	-	-	-	-	-	-	5.00	-	3	3.25	16.5		-	7.38
203	Wharengaere Bay	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14.5	15.50	-	-
204	Wiroa Station	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.5	6.67	-	-
205	Wiroa Station Hill 11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.5	-	-	-
206	Maintenance Facility, Kauri Cliffs45	-	-	-	-	-	-	-	-	-	-	-	-	-	6.5	5	13.13	-	-	-
207	Waiau Bay, Matauri X	-	-	-	-	-	-	-	-	2.25	-	-	0.5	0.5	-	-	-	-	-	-
208	Waterfall, Kauri Cliffs, Takou Bay	-	-	-	-	-	-	-	-	6	-	-	5.5	2.25	4.5	3.5	-	-	-	-
209	Hikurua Rd (end)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-
212	Drivers Whitehills farm	-	-	-	-	-	-	-	-	-	-	-	-	-	7.5	2	8	8.00	7.88	-
213	Landcorp Takou Kiwi covenant	-	-	-	-	-	-	-	-	-	-	-	-	-	8.5	0.75	3	-	-	-

Stn No.	Station name	1995 Mean	1996 Mean	1997 Mean	1998 Mean	1999 Mean	2000 Mean	2001 Mean	2002 Mean	2003 Mean	2004 Mean	2005 Mean	2006 Mean	2007 Mean	2008 Mean	2009 Mean	2010 Mean	2011 Mean	2012 Mean	2013 Mean
214	Maori Block	-	-	-	-	-	-	-	-	-	-	-	-	1.5	-	-	3.5	-	-	-
215	Otaha Station (south end)	-	-	-	-	-	-	-	-	-	-	-	-	3	-	-	3	-	-	-
216	Just past Clinton's	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-
217	End of Te Ra Rd	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.25	-	-	-
219	Achtzhener, Bulls Gorge, Kerikeri	-	-	-	-	-	-	-	-	-	-	-	7.0	-	6	11.75	5.75	2.75	-	1.88
220	Airstrip Rd (Baigent-Mercer)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	3.25	-
221	Airstrip Rd (Sharp)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	-	-	-
222	Candy Bush, Puketi Road, middle ridge	-	-	-	-	-	-	-	-	-	-	-	-	-	0.75	6	-	-	-	-
223	Candy Bush, Puketi Road, red cliffs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.5	-	-	5.75	-
224	Candy Bush, Puketi Road, white/yellow path	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11	-	-	11.00	-
225	Kauri Hills, Totara North	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.00	6.25	-
226	Poultons, Kerikeri River, Mangaparerua Rd	-	-	-	-	-	-	-	-	-	-	-	-	-	9	-	6.5	-	5.38	4.63
227	Puketotara Rd = 709	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	-	-	-
228	Puketotara Rd = Kearney	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.5	-	-	-
229	Waipapa Rd West, Kerikeri (Anne C.)	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	-	-	-	-
230	Waipapa Rd West, Kerikeri (Isabella C.)	-	-	-	-	-	-	-	-	-	-	-	-	-	0.6	0.5	-	-	-	-
231	Waitoto, 500m west of Rhyolitic dome, Mangaparerua	-	-	-	-	-	-	-	-	-	-	-	4.0	-	-	-	-	-	-	-
232	Waitoto, Rhyolitic dome, Mangaparerua Road	-	-	-	-	-	-	-	-	-	-	-	4.5	4.6	8	5	-	-	-	-
233	Wharau Rd, Kerikeri (Manning)	-	-	-	-	-	-	-	-	-	-	-	-	3.6	2.5	-	5.5	3.50	4.50	-
234	Wharau Rd, Kerikeri (Starr)	-	-	-	-	-	-	-	-	-	-	-	-	6.25	7	-	-	-	-	-

Stn No.	Station name	1995 Mean	1996 Mean	1997 Mean	1998 Mean	1999 Mean	2000 Mean	2001 Mean	2002 Mean	2003 Mean	2004 Mean	2005 Mean	2006 Mean	2007 Mean	2008 Mean	2009 Mean	2010 Mean	2011 Mean	2012 Mean	2013 Mean
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## Puketi Forest

102	Bramley's Rd	-	-	-	-	-	-	-	-	-	-	-	2.5	0.5	2	2	2.75	2.75	2.5	2.00
103	Pirau Ridge	-	-	-	-	-	-	-	-	-	-	-	0	-	0	1	0.5	1.25	1.25	1.38
104	Pond	-	-	-	-	-	-	-	-	-	-	-	4.5	1	3.75	5	3.5	8	6.88	4.63
105	Pudding Bowl Hill	-	-	-	-	-	-	-	-	-	-	-	0.3	0.75	1.125	2.04	2	1	-	3.00
106	Takapau Track	-	-	-	-	-	-	-	-	-	-	-	0	1	0	2.5	3.25	2.38	2.57	1.38
107	Takapau/Pirau Rd Junction	-	-	-	-	-	-	-	-	-	-	-	0.5	-	1	2.75	1.38	3.5	1.5	1.13
108	Totara Ridge	-	-	-	-	-	-	-	-	-	-	-	5.75	-	0.75	7.13	3.5	6.13	4.63	5.88
109	Waihoanga Gorge	-	-	-	-	-	-	-	-	-	-	-	2	-	3.75	5.38	3.25	6.25	4.5	4.25
110	Waihoanga Gorge 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.5	2.5	1.5	-	4.50
111	Walnut	-	-	-	-	-	-	-	-	-	-	-	4.25	2.5	1.25	3.29	3	5.25	4	4.75
112	Stoat line 9 - Puketi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.13	4	3.63
188	Puketi Nature Trail	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.13	-	3.25

## Russell Peninsula

15	Tikitikiore	10.8	13.5	6.1	6.1	4.5	6.5	2.9	3.3	3.1 (12.3)	6.1 (7.1)	3.38	13	7.9	-	12.25 (5.25)	12.25	13.5	17.75	14.50
59	Opito Farms	-	-	-	-	-	5.7	-	9.9	-	-	4.63	13.1	6.1	9.13	6.75	4.25	5.25	8.13	6.88
60	Flagstaff/Te Maiki	-	-	-	-	-	3.7	1.3	1.3	-	-	-	4.3	-	6.38	-	2.5	4.25	3.88	3.25
62	Uruti Rd	-	-	-	-	-	10.8	7.6	10.5	-	-	7.63	14.4	7.9	5	12.75	12.25	12.75	11.5	13.88
61	Milne Ct	-	-	-	-	-	-	-	-	-	-	-	6.3	5.8	-	-	-	-	-	-
156	Russell Heights	-	-	-	-	-	-	-	-	-	-	-	9.8	4.8	5	2.5	5	-	-	-
171	Mace/Farmer	-	-	-	-	-	-	-	-	-	-	-	-	-	6.63	4.75	17.63	10.38	6.25	4.00
172	Pipiroa Bay	-	-	-	-	-	-	-	-	-	-	-	-	-	0	3	2	2.75	6	5.38
173	Shortlands	-	-	-	-	-	-	-	-	-	-	2	-	2.5	1.38	1.13	1.25	-	2.33	1.13
170	Nikau Block	-	-	-	-	-	-	-	-	-	-	12.88	10	-	1	3	8.88	14.25	9.13	20.75



Stn No.	Station name	1995 Mean	1996 Mean	1997 Mean	1998 Mean	1999 Mean	2000 Mean	2001 Mean	2002 Mean	2003 Mean	2004 Mean	2005 Mean	2006 Mean	2007 Mean	2008 Mean	2009 Mean	2010 Mean	2011 Mean	2012 Mean	2013 Mean
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## Southern

21	Glenbervie 7A	5	6.4	7.1	7.5	5	0.5	1	2.4	1	-	1.3	-	2.4	2.5	1.88	1.75	2.63	1.13	4.25
22	Glenbervie 9A	11.2	3.8	4.3	7.3	5.9	12.6	6.75	5.25	4.5	6.5	-	1.8	2.8	2.9	1.38	2.88	1.63	6.75	6.88
145	Whangaruru	-	-	-	-	-	-	-	-	-	-	-	6	6	10.25	13.38	10.75	24.29	13.5	9.38
26	Mimiwhangata	11	5.6	3.5	3.6	0.3	9.4	19.1	20.3	13.8	20.25	14.3	21	19.5	12.9	11	8.38	-	11	9.00
167	Kaikani Rd	-	-	-	-	-	-	-	-	-	-	-	-	8.5	11.6	15	8.38	7.25	3.75	2.88
27	Sandy Bay 1	3.6	3.4	2.8	8	6.1	3.3	3.5	-	3	-	2.5	-	-	6.75	-	5.25	-	4.17	5.50
194	Sandy Bay 2	-	-	-	-	-	-	-	-	-	-	-	4.5	-	-	3.83	3.5	2.5	4.5	-
195	Sandy Bay 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	4	7.50

## Whangarei Heads

39	Bream Hd 1	-	-	-	-	-	-	5	3.1	5.75	3.1	4.7	5.1	3.5	5	6	3	7.13	9.5	9.63
40	Bream Hd 2	-	-	-	-	-	-	1.2	2	1.25	2.1	2.4	2	2.8	2	-	-	1.25	-	-
41	Bream Hd 3	-	-	-	-	-	-	-	-	-	-	1.5	2	1.3	1.6	-	-	-	8.38	8.63
42	Bream Hd 4	-	-	-	-	-	-	1.2	2	1.25	2.1	2.4	2	1.5	3.1	2	2	5.38	5.33	7.63
69	Bream Hd 6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.88	6.75
44	Taurikura 1	-	-	-	-	-	-	-	-	-	-	1.5	2	-	4.4	4.88	3.13	12.63	9.63	10.75
45	Taurikura 2	-	-	-	-	-	-	-	-	-	-	-	-	-	9	8.5	10.88	10.25	5.5	10.38
46	Taurikura 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.5	1.88	5.88	4.63	4.00
47	Manaia 1	-	-	-	-	-	-	3.5	2.5	4.25	4	3.3	3.9	2.1	5.1	3.88	3.25	10.25	2.88	2.75
48	Manaia 2	-	-	-	-	-	-	4	4.5	4.9	5.75	4	5.3	7.4	7.6	8.75	10.75	8.38	16.63	13.25
49	Manaia 3	-	-	-	-	-	-	3.25	3.9	2.9	-	2.1	3	-	4	3.13	3.5	6.25	3.13	5.13
71	Manaia 8	-	-	-	-	-	-	-	1.5	0.25	1	1.2	2	1.5	1.4	1.88	0.75	2.13	-	4.63
186	Manaia 9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.75	3.63	6.88
54	Kauri Mtn 1	-	-	-	-	-	-	4.5	1.5	-	3.1	7.4	1.3	-	1.4	3	2.13	2.5	3.63	4.63
72	Kauri Mtn 2	-	-	-	-	-	-	-	5.1	3.2	4.3	2.7	2.3	0.4	2.25	3.6	2.38	3.38	5.25	5.00





### Appendix 3 - Summary of Kiwi Coast kiwi listening data for stations listened from in 2013 (Craig, 2013).

Stn. No.	Station name	Listener	1		2		3		4		Total	Mean
			1	2	1	2	1	2	1	2		

#### Southern

167	Kaikaniui	P. Macdonald	3	5	1	1	1	2	3	7	23	2.88
22	Glenbervie 9A	P. Graham	8	9	3	5	7	4	16	3	55	6.88
21	Glenbervie 7A	S. Wairau	2	3	2	6	5	4	7	5	34	4.25
26	Mimiwhangata	C. Moretti	10	8	12	2	10	17	0	13	72	9.00
145	Whangaruru	T. Grant	13	7	12	13	9	11	4	6	75	9.38
27	Sandy Bay	N. Pullman	4	9	5	3	6	10	1	6	44	5.50
195	Sandy Bay 3	N. Pullman	4	11	11	9	5	5	-	-	45	7.50

#### Mahinepua

90	Site 0	M. F. Woodworth <i>et al.</i>	4	9	3	0	6	4	3	6	35	4.38
83	Site 1	M. A Schaab <i>et al.</i>	1	7	2	1	6	8	7	22	54	6.75
84	Site 2	C. Pusch/M. de Vries <i>et al.</i>	1	5	2	3	8	3	6	10	38	4.75
85	Site 3	P. Williams <i>et al.</i>	0	6	5	3	6	5	8	7	40	5.00
88	Site 4	A. Herbert <i>et al.</i>	4	8	9	5	2	7	10	12	57	7.13
99	Site 13	T. Kay/F. Craig/A. Luckman/S. Rose <i>et al.</i>	2	11	6	8	11	15	10	14	77	9.63

#### Waimate North

191	Hupara Land Care 1	W. & S. Atkinson/S. Brown	18	20	14	15	11	4	16	23	121	15.13
245	Hupara Land Care 2	W. & S. Atkinson/S. Brown	22	22	17	23	17	24	24	18	167	20.88
246	Hupara Land Care 3	W. & S. Atkinson/S. Brown	24	20	13	23	15	15	29	16	155	19.38

Stn. No.	Station name	Listener	1		2		3		4		Total	Mean
			1	2	1	2	1	2	1	2		
113	W1	P. Saunders/L. Kerr	12	7	29	25	35	13	48	21	190	23.75
114	W2	L. Mountain/B. Wards	2	5	6	7	9	4	16	8	57	7.13
115	W3	K. Taylor	0	0	2	4	1	0	0	1	8	1.00
116	W4	D. Way	10	6	7	11	11	14	16	12	87	10.88
118	W6	D. Henderson/C. Matthews	6	8	7	6	6	11	7	9	60	7.50
120	W8	D. Way/K. Leung/L.Fletcher	6	10	10	15	8	8	7	9	73	9.13
121	W9	B. Brown	0	0	0	3	0	0	2	3	8	1.00
122	W10	D. Liebert	2	4	5	1	11	3	6	1	33	4.13
124	W12	J. Shaw/J. Todd/D. Way	4	5	3	1	7	2	15	4	41	5.13

#### Whangarei Heads

39	Bream Head 1	W. & R. Newbold	11	9	7	7	9	15	10	9	77	9.63
41	Bream Head 3	A. Petel/G. Pike	9	10	10	5	4	6	15	10	69	8.63
42	Bream Head 4	M. & C. Pearson	9	14	10	5	9	4	7	3	61	7.63
69	Bream Head 6	C. Cook	6	5	11	3	15	0	9	5	54	6.75
54	Kauri Mt 1	J. Nairn	7	6	3	3	6	6	4	2	37	4.63
72	Kauri Mt 2	M. Barteldres	8	6	2	3	5	2	9	5	40	5.00
73	Kauri Mt 3	T. Bull	1	3	5	4	3	3	-	-	19	3.17
74	Kauri Mt 4	G. Faber	5	0	5	4	4	0	7	2	27	3.38
141	Kauri Mt 5	L. & R. Brown	4	5	3	2	4	2	2	2	24	3.00
47	Manaia 1	U. Schmid	7	0	6	0	3	0	3	3	22	2.75
48	Manaia 2	T. Hamilton	9	13	11	14	19	15	20	5	106	13.25
49	Manaia 3	P. Richards	5	4	2	11	6	5	5	3	41	5.13
71	Manaia 8	S. Adams	2	4	11	1	3	7	7	2	37	4.63

Stn. No.	Station name	Listener	1		2		3		4		Total	Mean
			1	2	1	2	1	2	1	2		
186	Manaia 9	J. Williams	6	7	8	7	11	6	7	3	55	6.88
55	Nook 1	W. Oxborrow	2	1	0	1	2	0	1	0	7	0.88
56	Nook 2	P. Coates <i>et al.</i>	4	8	6	4	15	3	7	4	51	6.38
57	Nook 3	L. Sutcliffe	7	3	6	4	4	2	7	4	37	4.63
44	Taurikura 1	C. Mitchell	12	13	7	4	9	12	20	9	86	10.75
45	Taurikura 2	G. Pike	8	17	11	10	5	8	8	16	83	10.38
46	Taurikura 3	K. Lange	4	4	3	6	4	0	7	4	32	4.00
187	Craig Rd	C. & J. McNamara	12	10	9	10	22	19	3	13	98	12.25

#### Tutukaka

125	TLC 1	M. Camm	24	3	22	2	16	2	16	-	85	12.14
142	TLC 3	A. & J. Gilbert	11	7	6	5	3	5	8	12	57	7.13
160	TLC 7	N. Shayer	2	3	1	2	2	2	2	3	17	2.13

#### Eastern

10	Marsden Cross	R. Booth/M. Douglass	26	22	53	27	39	18	28	29	242	30.25
14	Mt Bledisloe	S. M. McManus	7	14	16	10	4	9	16	10	86	10.75
11	Puketotara	A. Mentor/A. Kearney	5	4	8	6	9	17	12	17	78	9.75
13	Waitangi No. 12	A. M. McLeod/R. Booth	2	7	7	8	4	5	15	11	59	7.38
12	Rangitane	A. Walker	14	9	13	7	12	17	11	7	90	11.25

#### Puketi Forest

102	Bramley's Ridge	A. Linton/A. Blackmore/I.D. Wilson	2	3	1	0	1	1	4	4	16	2.00
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Stn. No.	Station name	Listener	1		2		3		4		Total	Mean
			1	2	1	2	1	2	1	2		
103	Pirau Ridge	B. Sutton/B. Boyd/L. M. Alston	3	0	2	4	1	1	0	0	11	1.38
104	Pond	I. D. Wilson/L. Alston/V. Miller	5	2	6	4	5	4	6	5	37	4.63
105	Pudding Bowl Hill	L. Riddell/I. Wilson	0	2	10	0	-	-	-	-	12	3.00
106	Takapau Track	P. Hodgson	0	0	2	4	1	3	0	1	11	1.38
107	Takapau/Pirau Rd Jn	L. M. Alston/B. Sutton/J. Mortensen/I. D. Wilson	0	0	1	1	0	1	4	2	9	1.13
108	Totara Ridge	I. D. Wilson/A. Blackmore/N. & D. Tuson/C. Miller	10	11	4	1	3	2	7	9	47	5.88
109	Waihoanga Gorge	C. & R. Robinson	3	7	1	5	0	4	8	6	34	4.25
110	Waihoanga Gorge 2	G. Adams	5	5	7	1	-	-	-	-	18	4.50
111	Walnut	A. Blackmore/G. Salt/I. D. Wilson	6	4	5	7	5	5	3	3	38	4.75
112	Stoat line 9 - Puketi	B. B. Boyd/D. O'Halloran <i>et al.</i>	1	5	0	3	1	5	13	1	29	3.63
188	Puketi Nature Trail	L. & P. Sutton <i>et al.</i>	1	1	8	5	4	4	1	2	26	3.25

#### Northern

7	Puketi	D. O'Halloran	8	7	6	10	5	4	7	3	50	6.25
8	Puketi SR	K. Aukett & S. Grimme/V. & C. Miller	17	14	16	6	8	10	5	2	78	9.75

#### Russell

59	Opito	K. D. Russell	5	5	6	5	14	8	4	8	55	6.88
15	Tikitikikioire	L. Gordon	18	11	16	14	14	15	11	17	116	14.50

Stn. No.	Station name	Listener	1		2		3		4		Total	Mean
			1	2	1	2	1	2	1	2		
170	Nikau Block	L. Gordon	18	21	30	15	23	14	28	17	166	20.75
171	Mace/Farmer	K. D. Russell	4	6	6	2	4	3	2	5	32	4.00
172	Pipiroa	M. Pasco	0	5	4	6	6	2	5	15	43	5.38
62	Uruti Road	L. Gordon	13	19	13	19	19	10	7	11	111	13.88
173	Shortlands	K. D. Russell	2	0	3	1	1	1	1	0	9	1.13
60	Te Maiki/Flagstaff (sundial)	H. Lindauer, D. McKenzie, N. Lehmann	6	1	2	6	3	2	4	2	26	3.25
174	Johnsons	M. Frankum	5	13	13	5	6	24	11	4	81	10.13
177	Solomon's Gate	K. D. Russell, N. Lehmann	8	3	9	3	4	3	7	2	39	4.88

## Appendix 4 - Major Project Annual Reports to Kiwi Coast



### Annual Report for Major Projects<sup>1</sup>

**Date of report:** 20<sup>th</sup> June 2014

**Project name:** TLC Trust/Sandy Bay Kiwi Community Pest Control

**Project contact:** Mike Camm

**Phone number:** 09 4344339

**Email address:** [Kiwicamm@hotmail.com](mailto:Kiwicamm@hotmail.com)

**Project description:** A Community based predator control project designed to protect and enhance endangered Kiwi, and Pateke present on the Tutukaka Coast. This report covers year one of a five project supported by NRC, Kiwi Coast, private landowners and volunteers.

<p><b>List major work undertaken</b></p>	<ol style="list-style-type: none"> <li>1. Maintain the existing trapping network covering an area of approximately 3500ha.</li> <li>2. Establish a trapline on the true right bank of the Ngunguru from Scows landing bridge downstream towards the old coal bunkers.</li> <li>2. Establish a trapline from Waipoka Rd along the paper Rd linking it to Old Kaiatea Rd</li> <li>3. Establish a trapline from Sandy Bay to Whananaki South</li> <li>4. Take over from DOC the trapping lines in the forestry block behind the Hugh Crawford Reserve and in the Rayonier managed Tutukaka Forest Block</li> <li>5. Establish a series of small driveway traplines to the east of the Ngunguru/Tutukaka/Matapouri Rd, and a trapline along the Tutukaka Block Rd to Wellingtons Bay.</li> <li>6. Undertake track maintenance. to enable easy quad bike access.</li> <li>7. Continue to promote local engagement through involvement with the local schools and the community with kiwi release., .</li> <li>8. Maintain the May/June Kiwi listening data for the National kiwi data base</li> <li>9. Utilise electronic listening devices where appropriate to further establish kiwi populations.</li> <li>10. Continue annual Pateke flock site counts on Tutukaka Coast.</li> </ol>
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<sup>1</sup> Major projects are those that receive more than \$10,000 in one financial year from the Kiwi Coast

<b>List main tasks completed</b>	All the above undertakings were completed to our satisfaction. In some case trap positions will be adjusted to reflect experience with the new areas, then GPS data collected to update the NRC “map of steel”
<b>List tasks outstanding</b>	It was part of our plan to establish and manage a volunteer driven rat trapping programme on the Southern Matapouri headland. Delays in the construction of the wooden trap covers will see this rolled over to the next period. The covers were made for us by the Whangarei Mens Shed, and are now to hand. Initial response to this initiative has been excellent, and seen as an extremely simple and positive way to further engage any locals with the concept of predator control.
<b>Highlights</b>	<p>At the end of November, through our association with Whangarei heads Landcare Forum, and Kiwis For Kiwi Trust, a fine male kiwi was released in the centre of our protected zone. To welcome, or farewell it, were a crowd of some 40 people who braved the pouring rain. This was after the bird had spent the afternoon visiting Ngunguru Primary school to the delight of pupils and staff. In all a very successful day.</p> <p>Equally significant, a week later a flock of 35 Pateke were sighted in the Ngunguru River. These all appeared to be young birds, and give the appearance of having established another Northland flock site. This would indicate that the scale and intensity of our trapping network is working. Also there have been reports of breeding pairs with ducklings from Sandy bay to Ngunguru, occupying a wide diversity of territory.</p> <p>February flock count of pateke in East coast Northland, from the Bay of Islands to Ngunguru reached the targeted 750 birds. This figure was the objective set in the species recovery programme established in the year 2000. It’s a significant milestone for the species and demonstrates the effectiveness of large scale area trapping networks for endangered species recovery.</p> <p>A sad but good indication was the discovery of a road kill kiwi on the main road just out of Ngunguru near the transfer station. The lady who found it handed it in to the DOC office, who tells us it was a young female in excellent condition, with no banding. Proof that young kiwi chicks are surviving in the wild to adulthood..... if you don’t count the car!!</p>
<b>Challenges</b>	Our agreement with the prime funder NRC was not signed off until November2013, so we got off to a slow start. However thanks to the multi-funding arrangement, our professional trappers were able to continue without a hitch thanks to the funds contributed by the Kiwi Coast.
<b>Proposed solutions to challenges</b>	Multi funders and a degree of flexibility in the way we can apply the funds enables groups to continue to function despite of these issues of timing that will occur from time to time
<b>Further comments</b>	What has been particularly heartening is the number of private landowners who have engaged our trappers to carry out extensive predator control on their estates. This is for mustelids, cats, possums and rats. We hope this trend will continue.as it widens the intensity and effectiveness of our programme.



	<p>Sandy Bay Kiwi has been granted a further three years NZ Lotteries funding for intensive rat and possum control in their area.</p> <p>The close working relationship we have with WHLF for the continuing annual releases of Kiwi enables us to keep the project and the species in the public eye. Where possible prior to the release of the birds we will have them visit one of the local schools in the district.</p>
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### Evidence:

List items attached as evidence of results achieved, eg. Photos, pest control monitoring results, kiwi call count summary for 2013 etc.

Attached separately are photos of : Kiwi release.at Ngunguru School and at Camm property Pateke flock in Ngunguru River

Kiwi monitoring results: 2014

We are half way through the current kiwi listening period and the results this year show a mixed result. From the call sheets received to date, the average hourly call rate sits between 7 to 8 calls per hour. The season has been a bit strange with listeners commenting that known pairs in their areas have not called during the listening period of 6 to 8 pm.

Pateke flock count Matapouri/Ngunguru district: The flock count is taken at the high tide on three days in late Feb, early March. The average number of birds sighted is 80.

Trapping catch data for the period Jan2013 to Dec 2013 ( as for the Kiwi Coast trapping data compilation)

Possums	416
Rats	654
Ferrets	nil
Stoats	41
Weasels	33
Cats	49
Rabbits	206
Hedgehogs	178

### What's next?:

What are the main tasks for the next year?

1. Establish the traplines to the west of Kaiatea Rd to Sandy Bay Rd
2. Reassess Sandy Bay Kiwi traplines.
3. Evaluate Rayonier Glenbervie forest trapping
4. Fill in strategic gaps in the network
5. Encourage rat control in local settlements of Matapouri, Tutukaka, and Ngunguru.

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**Other contributions:**

Provide total dollars that have been contributed over the last 12 months from sources other than the Kiwi Coast. Include unpaid labour costed at \$20/hour.

See separate costings.

<b>Source</b>	<b>Amount in \$</b>	<b>Purpose</b>
NRC	\$52,000	Traps and labour
Sandy bay Kiwi/ Bio funds	\$8,500	Trapping labour
QE 11 Trust	\$9,000	Admin, Advocacy
Private Trapping Contracts	\$20,000	Trapping labour
Volunteer	\$61,333	Assorted tasks inc; Admin, Predator control, Advocacy. Species monitoring.
	<b>Total \$:150,833</b>	

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**Additional comment or questions relating to the Kiwi Coast:**

I have been amazed at the positive and excited response my sharing details of this initiative has engendered in the people I discuss this project with, whether in the local community or beyond, inside or outside NZ.

Just the concept of a benevolent umbrella organisation would seem to give people the encouragement that they too can make a difference in their own back yard, confident that they are no longer operating in a vacuum.

We anticipate this attitude shift will contribute significantly to the improvement of conditions for our native biodiversity, as well as working to bring people and communities together.



## Annual Report for Major Projects<sup>2</sup>

**Date of report: July 2014**

**Project name: WHLF Backyard Kiwi**

**Project contact: Todd Hamilton**

**Phone number: 09 9748160 or 0211145385**

**Email address: [hamiltont@maxnet.co.nz](mailto:hamiltont@maxnet.co.nz)**

### **Report description:**

This report covers the WHLF Backyard Kiwi work funded by the Kiwi Coast in the period July 2013 –June 2014

**The Whangarei Heads Landcare Forum Backyard Kiwi Project** is a long term community kiwi recovery project at the Whangarei Heads that began in 2001.

The kiwi recovery work has involved:

1. A predator trapping network targeting mustelids (ferrets, stoats and weasels) and feral cats.
2. Supplementing the local population with an additional kiwi through a BNZ “Operation Nest Chick” programme.
3. Monitoring of the kiwi population through annual “kiwi call counts” from 21 listening stations and by radio telemetry monitoring of a sample of approximately 10 kiwi fitted with “smart” radio transmitters.
4. Community Engagement through the above trapping and monitoring work and also through newsletters, community kiwi releases and listening nights etc. The successful WHLF “Backyard Kiwi” project includes prominent signage, a website ([www.backyardkiwi.org.nz](http://www.backyardkiwi.org.nz)), bumper stickers and kiwi print releases has been specifically planned to engage the local community and encourage them to value and maintain the kiwi in their backyards. This has led to much improved dog control at the Heads and a dramatic reduction in kiwi deaths by dog kills.

<b>List major work undertaken</b>	<ol style="list-style-type: none"> <li>1. Maintain the existing trapping network covering an area of approximately 6000ha.</li> <li>2. Expand the trapping network at McLeod Bay to give better protection to the Eastern Manaia area.</li> <li>3. Expand the trapping network at the Northern end of the project area – Parua Bay,</li> </ol>
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<sup>2</sup> Major projects are those that receive more than \$10,000 in one financial year from the Kiwi Coast

Lamb road, Campbell Road and Kauri Mt roadsides.

4. Facilitate, plan and carryout a combined WHLF, DoC, NRC and Kiwi Coast pest control operation in the largely untrapped Mt Manaia area using a controlled pulse of 1080 toxin in bait stations.
5. Continue to monitor a sample of kiwi using smart “chick timer” radio transmitters to determine location, activity, survival and breeding success and also as an important advocacy tool through communication of this information with locals.
6. Continue to use public kiwi releases to engage locals –“seeing is believing” and leads to very positive results with dog control. The kiwi being released come from a combined (DoC, WHLF, Bream Head Conservation Trust, Tutukaka LC and Kiwi Coast) BNZ ONE project predominately funded by the Kiwi for Kiwi Trust and partially by the Kiwi Coast.
7. Continue to collect kiwi listening data from approximately 21 stations throughout the Whangarei Heads for the national data base.
8. Ongoing Backyard Kiwi Advocacy:

With uncontrolled dogs the biggest threat to the Whangarei Heads kiwi population our “Backyard kiwi” advocacy remains crucial. In addition to personal contact that advocacy includes:

- Signage - Main sign at turn off, interpretation sign at garage and 7 road signs, additional “Kiwi crossing” signs at the road kill hotspot.
- Communication includes:
  - Website – approx 300-400 hits per month
  - BYK facebook page has 278 likes and one post was seen by over 6000 people.
  - Multiple Community & School Newsletters,
  - Multiple school visits
  - Several newspaper articles.
  - TV coverage of a injured kiwi returning from Massey University treatment for release.
  - Community kiwi releases
- The sale of art prints of “Backyard Kiwi” for fundraising are ticking over.
- Our “I saw a kiwi” and “I heard a kiwi” bumper stickers feature on many cars in the district.
- Our Backyard kiwi pamphlets to help inform visitors about kiwi at the Whangarei Heads are been picked up regularly from the local cafes and shops.
- BYK caps.

<b>List main tasks completed</b>	<p>All the major tasks have been successfully undertaken and are ongoing.</p> <p>The Manaia Pest control project has been successfully facilitated and has gained surrounding landowner, community and Ngatiwai Trust Board support. Department of Conservation and MOH approval and sign off have been given for the work. The bait station network (360 bait stations) has been re-established in preparation for pre-feeding and toxin pulse to be carried out in July 2014.</p>
<b>List tasks outstanding</b>	Ongoing work!
<b>Highlights</b>	<p><b>Locally for our project:</b></p> <ol style="list-style-type: none"> <li>1. Public kiwi releases have always been a highlight of our work but the public release of 3 young kiwi at McLeod Bay in January 2014 had to be our best release ever - that is something very special! 350 locals were in attendance and were enthralled by the kiwi and the talks about the Backyard kiwi recovery work.</li> <li>2. Peter Hayden and Rod Morris kindly donated their time to come to Whangarei to present a public lecture on their book featuring Backyard Kiwi - "An Extraordinary World". 90 people attended this fascinating lecture supported by NorthTec and the Kiwi Coast.</li> <li>3. The combined Manaia Pest Control project by WHLF, DoC, NRC, Kiwi Coast and Ngatiwai Trust Board. Thanks to the hard work of Martin Hunt this team effort not only will lead to much better kiwi chick survival in the area it has also built a positive team approach by the local community to the care of Mt Manaia. 31 local volunteers spending a tough day in the bush to carry out the first prefeed was testament to this. The funding of this project by the Kiwi Coast is greatly appreciated.</li> </ol> <p><b>For the Wider Whangarei area:</b></p> <p>The establishment of the Kiwi Coast and the co-ordination and funding provided by it have been instrumental in making the Whangarei coastal kiwi corridor a reality has been the real highlight. Not only is this great for the individual projects within that area but the synergy of the groups combination through the Kiwi Coast makes for more effective predator trapping, dog advocacy and agency engagement. Ngaire Tyson has been a fantastic coordinator of this project and her passion and skills have been crucial to its successful establishment.</p>
<b>Challenges</b>	<p>Our kiwi recovery work continues to be very successful with the kiwi population at Whangarei Heads growing and expanding northwards. Last season's call count sites identified 206 kiwi and extrapolating this over the kiwi habitat at the Heads gives a population in excess of 500.</p> <p>However we can't relax - continued stoat control is still crucial for kiwi chick survival and ongoing dog control essential for adult survival, things are going well but kiwi recovery still needs our continued efforts.</p>

	<p>WHLF Backyard is now into its fourth year of 5 years of Northland Regional Council CPCA funding for trapping and kiwi monitoring. Long term funding of this ongoing work is of concern.</p> <p>Uncontrolled dogs remain the biggest threat to our recovering kiwi population – particularly lifestyle pet dogs and visitors' dogs.</p>
<b>Proposed solutions to challenges</b>	<p>Funding – a possible source of long term funding for kiwi recovery work could be a “targeted rate” to be included as part of the NRC rates charges on properties in the Whangarei Heads and other kiwi areas.</p> <p>Dogs- until effective kiwi aversion training is developed for pet dogs pet owner education and engagement remains our main means of preventing dog kills of kiwi.</p>
<b>Further comments</b>	

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**Evidence:**

List items attached as evidence of results achieved, eg. Photos, pest control monitoring results, kiwi call count summary for 2013 etc.

**Attachments:**

1. WHLF call count summary 2001-2013
2. WHLF cal counts table for 2013
3. WHLF Backyard Kiwi Predator trapping report
4. Photos

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**What's next?:**

What are the main tasks for the next year?

**On going kiwi recovery work:**

1. Maintain operating expanded trapping network.
  2. Complete Manaia Pest control operation.
  3. Maintain BNZ ONE project.
  4. Continue radio monitoring of a sample of kiwi and annual call count monitoring.
  5. Ongoing community engagement
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**Other contributions:**

Provide total dollars that have been contributed over the last 12 months from sources other than the Kiwi Coast. Include unpaid labour costed at \$20/hour.

<b>Source</b>	<b>Amount in \$</b>	<b>Purpose</b>
Northland Regional Council	\$62,600	Predator trapping – traps, some toxin, trapper and co-ordination – 10 hours/week Kiwi monitoring – transmitters, ongoing monitoring - 7 hours/week Project management - 4 hours/week
Kiwis for kiwi	\$10,000	For BNZ ONE project in combination with BHCT and TLC. Monitor kiwi dads, transfer chicks and carry out releases.
Community trappers (unpaid)	\$10,800	Community trappers -12 X 3hrs X 15 checks
Kiwi call count (unpaid)	\$16,000	800 hours - 21 stations of 2 people plus preparation, briefing, and data entry
WHLF committee and sub committee (unpaid)	\$8,400 minimum	420 hours -Meetings, meeting preparation, monthly reports, administration, website, releases, accounts etc
NRC and DoC	\$7,050	Manaia Pest control – pre-feed, toxin, labour.
Manaia pest control (unpaid)	\$9,000	450 hours -Meetings, Baitline preparation, bagging pre-feed, put out pre-feed.
Backyard Kiwi supporters	\$2,500	Local companies and individuals financial support
	Total \$:115,750	

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**Additional comment or questions relating to the Kiwi Coast:**

WHLF Backyard Kiwi and others have worked hard for a successful 13 years of kiwi recovery at Whangarei Heads. It is fantastic to now see that kiwi recovery is gaining momentum in between our project area and Tutukaka LC area and for the facilitation and co-ordination of those combined kiwi recovery efforts through the Kiwi Coast. Thank you!!