

Waikato Biodiversity Forum Ngā Kaihāpai Rerenga Rauropi o Waikato

Spring Newsletter 2024 Number 83

Kia ora tātou,

Some of the work undertaken over the past three months:

- Organisation and hosting of Biodiversity Without Borders Event, Pukekohe, November 13th
- Responded to information and support requests from WBF members and public
- Organisation of South Waikato Event, May 2025

Te Pahū Landcare Group 2024 Update

We are a small group of dedicated volunteers who undertake a variety of environmental action. Since mostly completing riparian planting along the 2.6km section of stream, around 2020, we have been meeting on the third Sunday of the month to undertake weeding along the Kāniwhaniwha stream. We also undertake trapping along the stream for rats and possums and have in-fill native planting days when required.

Our last weeding session for the year will be Sunday 15th December and new people are always welcome. We will be tackling a blackberry patch that we have been working on for the past couple of months. See photos attached. We meet at the Kāniwhaniwha Reserve carpark at 9.30am and work through to around 12pm. Bring your favourite weeding tool, gloves, wear old clothes and sturdy footwear. Bring a drink and snacks if you need, and, if it's sunny, a hat and sunscreen. I have grubbers and gloves which I will bring as well.

If you can't make it, that's fine too, it's a busy time of the year. However, it would be great if you consider taking a pair of gloves with you, so when you're out walking along the Kāniwhaniwha stream enjoying the native plantings, and you stop for a breather, you gently remove some bind weed that is climbing up a native plant. It's a win-win situation. From now and over the rest of the summer months, bind weed will start to really take off, so, any releasing we can do to help our native plants flourish is worthwhile. Wearing gloves will help protect your hands from the stickiness of this weed.

If everyone who walks along that track cleared one native plant, we'd have thousands of trees cleared of weeds and flourishing, due to cumulative actions. What a great thought! We also welcome new trappers, so let me know if you're keen and I can connect you with an experienced trapper so you can learn the ropes on how to do it safely.

We record our trapping results on Trap.NZ which is an app that allows us to put our information on a national database, but people have to request to join, so it's not automatically visible. However, you can find us by searching 'Nikau walkway' in the 'find projects' tab on Trap.NZ, or use this link: We have removed 843 pests so far (see screenshot below). Any queries, please let me know. Or check out our website here: Wishing you all a safe festive season. Nardene Berry Volunteer Chair, Te Pahū landcare group.



Figure 1: Above: before weeding | Below: weed pile



Community Push for Pest Free Hakarimata

When Greg Townsend first started trapping predators on his property and the adjoining Hakarimata Scenic Reserve in Ngāruawāhia three years ago, he was catching 50 possums a week with no end in sight.

"After that first year, and not seeing any difference to the bush, it was pretty hard to stay motivated," says Greg, who at the time was just one of four adjoining landowners on a mission to turn around the canopy collapse and restore birdsong to the Hakarimata Range.

But the small group persevered, with funding and support from various organisations (including Waikato Regional Council's Small Scale Community Initiatives Fund, Go Eco, the Department of Conservation, Waikato District Council, Transpower, Forest & Bird and Pukemokemoke Trust), and they've now got 100 locals on board to endeavour to help make the Hakarimata Range become predator free. "It's nice to go to bed at night and listen to ruru calls rather than possum screams."

Predator Free Hakarimata, which launched its Hakarimata Halo Project to the community in May, has now removed more than 5000 pest animals from the mountain – mostly possums. "I'd never trapped a possum in my life, so to reach these numbers was quite mind boggling," says Greg.

Greg's property is 40 hectares of mostly forested land, and he's planted at least 2000 native trees on the two hectares that isn't. He bought the forest block three years ago, inspired by his volunteer work for the Pirongia Te Aroaro o Kahu Restoration Society, and immediately connected with three neighbours who were already planting and trapping in the area under the name of Morepork Action Group. Greg started trapping with three neighbours who operated under the name of Morepork Action Group.

"In our first two years, we didn't see much increase in native birds, but our trees did start to bounce back. Now, we are seeing more native birds, more weta in the bush, and it feels like all the hard slog was worth it. It's nice to go to bed at night and listen to ruru calls rather than possum screams. "Last nesting season, we had six ruru fledge from three nests we were monitoring, and we now have bellbird year-round.



Greg Townsend spends two hours a day trapping on his 40-hectare property. "But when you walk up our traplines and onto the DOC reserve it goes instantly silent. I spend two hours a day trapping, doing a different ridge every day, but we're up against it with constant reinvasion from up in the mountain." According the the Department of Conservation website, the Hakarimata Range is home to 122 different species of native land snail, the ancient peripatus (velvet worm), many other invertebrate species, a population of long-tailed bats, native skinks, geckos and native fish. "All these species deserve a safe habitat and are worth any trapping efforts. We know we could grow something very special, but we need feet on the ground."

Greg says more than 200 locals turned up to the launch of the Halo project, buying traps and wanting to learn how they could help. "There are so many landowners doing amazing things, we just need to connect everyone. "The idea is we want to grow the current project area from 200 hectares to 1000 hectares to create a halo around the bottom of the maunga, in everybody's backyards.

"We now have 100 volunteers on the books, ready to help once we have a trapping network set up into the DOC reserve, so there's definitely a big community push for change out there. "Hopefully, once the halo is up and running and we have a successful buffer operating around the mountain, that'll give impetus for an aerial operation on the mountain. "And then, who knows, maybe we can even return what's been lost to Hakarimata, like kōkako and kiwi." WRC Story Hub PF Hakarimata PF Central Waikato Hub

Mangaiti Gully Restoration Trust - Eel Infrastructure

Did you know that the longfin eel / tuna is in a significant population decline? If you understand the life cycle, then you can better understand why this is the case. The adults are long lived (60 to 80 years). With species that have such long life spans, the risk is that if the population does not have natural renewal, then the population decline can be very dramatic at the end as the older ones come to the end of their natural life. The days of "lets go eeling kids" are over. Yet another of our indigenous species is at risk. Education is one way of approaching this problem. Our Trust has invested a considerable amount of time and money to support an education programme. A sign showing the life cycle of the tuna has been erected at the feeding area. The popularity of feeding the eels was putting pressure on the muddy stream bank and our plantings around the area have been trampled into the ground. To resolve this we have built a substantial feeding platform and fenced off the surrounding area of planting.



Manaaki Kaimai Mamaku - This Generation of Kaitiaki

The manu (birds) chirp louder and louder as the Ngā Mata Hiringa kaimahi (workers) follow the trapline deeper and deeper into the ngahere (forest). "They're not happy," says operations manager Whetu Apaapa (Ngāti Hinerangi, Raukawa, Tainui, Ngāti Ranginui, Ngāti Terangi, Ngāti Pukenga), "let's wrap it up". They quickly finish re-baiting the rat trap and turn around, heading back to their base at Waitaia lodge.

For a normal job, you might get a slap on the wrist for finishing early but for Whetu and his tīma (team), it's encouraged as their intrinsic Mātauranga Māori (knowledge) and listening to the needs of the ngahere guides their kaupapa (approach). "Mātauranga is part of everything we do," says the 29-year-old. "Being Māori, it's just natural. If I'm out in the ngahere, it's about following your intuition – thinking without outside influence. We start the day, tīmatanga (commence), with a karakia (prayer) and when we move through the ngahere we respect the rākau (trees)".

Pest-control projects, like this one, require a lot of interference with the rākau through 'line cutting' – cutting or trimming down any flora to make an easy track for workers to access their traps – and even nailing traps directly onto trees. Some teams would simply follow the plan –cutting the lines and putting the traps exactly where the paper tells you but for Ngā Mata Hiringa, the plan is a guide. The tīma refuse to cut into rākau they don't know. "If you don't know the name of something, don't cut it. You have to respect its whakapapa (history)," Whetu explains. "We're pretty particular about what rākau we put them [traps and signs] on. We try to keep away from big rimu and big totara. We usually try and attach traps to mid-sized rākau that are in abundance. For us, that's manono". It makes the work take longer, but Whetu says it's worth it as nailing into a tree is like cutting into an arm. "Any cut is creating an open wound. We avoid big trees as we don't want to introduce any bacteria into it. I wouldn't want to damage a 200-year-old rimu just to chuck a \$200 trap on it," he laughs.

Ngā Mata Hiringa is the name of Ngamanawa Inc's predator control project, which was launched in 2021 with funding from Jobs for Nature. A ground-based team of five, along with the wider Ngamanawa team, are working to restore the mauri (life force) of a 2000 hectare block of Opuiaki and Waitaia forest and its catchments. Te Ao Māori (the Māori worldview) is central to their approach, and most of the team whakapapa to the land they're working on. Ngamanawa general manager, Dave Nuku (Ngāti Ranginui, Ngāti Hangarau, Ngāti Motai), says Whetu has a quiet confidence that reassures the team, even on the toughest days. "In this kind of business, when your teams are out in the bush, you need people who are reliable and trustworthy," he says. "I'm proud of him and the team. It's cold in winter and stifling in summer. You have to love the mahi or you won't last. But, the quality of their work speaks for itself. We're getting good results – predators are coming down, traps and kills are up, and we're starting to see restoration of our taonga species such as kōkako."

In Māori myth, the kōkako filled its wattles, the blue area around its throat, with water and brought it to Maui as he fought the sun. Maui rewarded the manu by making its legs long and slender, enabling it to bound easily through the forest. The kōkako is a seed spreader, helping to regenerate the understorey, and an indicator species – when they are well and in abundance, the forest is well. In the 2023 Opuiaki Kōkako Survey by Amanda Rogers and Dave Bryden, prepared for Te Papa Atawhai Department of Conservation, 23 pairs and 8 territorial singles were recorded, a continued increase from 19 pairs and 6 singles in the 2021 survey, and 10 pairs and 11 singles in 2019. Ngamanawa plan to build on these results for years to come, they want their whenua to be loud with bird song. However, like most conservation mahi in Aotearoa, it's currently dependent on shrinking government and philanthropic funding.

Read more here

Click Link image to go to video;



Pikiariki Restoration, a New Community Conservation Group

Pikiariki Ecological Area is a 450 ha biodiversity hotspot within Pureora Forest Park; a remnant of dense podocarp forest and the only place in the country where there is a functioning pollination relationship between the endangered short-tailed bat and the parasitic plant Dactylanthus taylorii. It is also a stronghold of the endangered long-tailed bat, Kākā, Kārearea/falcon, Koekoeā/long-tailed cuckoo, Kākāriki/red-crowned parakeet, Pōpokotea/whitehead, Titi pounamu/rifleman and Toutouwai/North Island robin. Pikiariki Restoration has been formed to give extra protection to the forest and its wildlife by stepping up predator control. The first step is year-round rat trapping with a network of Goodnature A24 self-resetting traps to complement DOC's intermittent predator control. We have already started clearing trap lines and have several hundred A24 traps ready to install. Stoat and feral cat numbers will be followed using cameras. Lizards and Wētā will be monitored using covered shelters. The group will work in partnership with Te Hau Kainga o Pureora. Line clearing and trap placement events are planned in December and early January. If you'd like to help, contact Selwyn June 07 843306 or at selwynjune@xtra.co.nz



Map of Pikiariki Ecological Area (next to Pureora Village)

Tane's Tree Trust - Accelerating landscape scale restoration of native forest

Trees That Count (TTC) in collaboration with Tāne's Tree Trust (TTT) have initiated a project to establish a network of demonstration planting areas nationwide with seed islands as a method to accelerate restoration of native forest on a large scale.

The project aims to identify representative sites throughout New Zealand, including marginal erosion-prone hill country, to explore the concept of planting small groves of key native tree and shrub species within degraded landscapes that will act as seed islands to accelerate natural regeneration to high native forest long term. The project is being implemented in collaboration with stakeholders and other potential partners such as landowners, iwi, community landcare groups, NGOs and local authorities. It is recognised that encouraging natural regeneration must be in combination with pest browsing animal control, selective exotic weed control, and ideally bird and seed predator control.

Fieldwork undertaken in 2024 - The first year of this project has seen the selection of five demonstration seed island sites and eight satellite seed island sites. Planting has been completed for two of the demonstration sites including baseline and first year measurements. Planning is well underway for the remaining three demonstration sites to be planted during the next milestone periods.

Demonstration seed island sites - In collaboration with project partners, three sites are located in the North Island (see map below) and two in the South Island

Satellite seed island sites - Satellite sites require less intensive planning and monitoring by the project team. The project will provide some input into these satellite sites where landowners and community groups are keen to be involved. These satellite sites will extend the number of seed islands to a wider range of landscapes and regions nationwide. In Kawhia, western Waikato, with project partners Tainui-Kawhia Inc, local community and councils. Two areas of seed islands have been planted over the last two years on highly exposed back dune sites. Monitoring and maintenance is underway.



Inspection of seed islands planted with a range of native trees and shrubs surrounding a small pond within the backdunes at the Kawhia site, western Waikato.



North Island demonstration and satellite seed island sites

Methods for establishing seed islands - A run-sheet has been drafted for ensuring a consistent approach to selecting and establishing seed islands across all sites to allow comparison of performance. This has been provided to project partners collaborating in establishment and management of the sites nationwide. The design and implementation of seed islands is flexible to allow for site-specific variation in site characteristics, scale of planting, differences in species appropriate for each region, and allowance for local best practices in planting and early management of natives. The size of seed islands is determined by the gap or micro-site available for inter-planting natives, or as dictated by the density of planting where a nurse cover may already have been established. Monitoring follows the standard plot-based procedures developed by Tāne's Tree Trust and Trees That Count.

Preliminary results

An example of the data analysis, presentation of results and interpretation is provided for the first planted seed island demonstration site – the Kōkako Ecosystem Expansion Project (KEEP) – located in the western Bay of Plenty. First year performance on this site has been exceptional:

- Survival for all species is over 90%;
- Average height has tripled for most species and doubled for the remainder. The best performing species are over 120cm high 12 months after planting;
- Average plant vigour has remained excellent; and
- Damage by various injurious agents has been minimal.

Predator Free Hauraki Coromandel - Protecting the Matuku-Hūrepo: A Community-Led Initiative in the Hauraki Coromandel Region

A focal point of Predator Free Hauraki Coromandel Community Trust (PFHCCT) efforts is the conservation of the matuku-hūrepo, or Australasian bittern, a nationally critical species native to New Zealand. Despite their cryptic nature and habitat challenges, matuku face numerous threats, primarily habitat loss, and predation by introduced mammals. To address these challenges, PFHCCT initiated a region-wide matuku survey with the objectives of determining population distribution, identifying potential breeding sites, and raising awareness about the species.

While wetland conservation efforts in the Hauraki-Coromandel region have primarily focused on forests, community groups have been actively engaged in protecting wetland biodiversity through predator control and habitat restoration. The success of these efforts in forest conservation has inspired similar initiatives for wetlands.

The region-wide matuku survey, driven by local volunteer enthusiasm, seeks to fill crucial knowledge gaps about this elusive bird's population and breeding habits. By conducting simultaneous surveys across various sites and establishing a baseline for annual tracking, the initiative aims to provide valuable data for conservation planning and increase public awareness about the importance of protecting the matuku-hūrepo. <u>View full report | PF Hauraki Coromandel</u>



Biodiversity Without Borders

The Biodiversity without Borders Wānanga took place on the 13th of November at Franklin, the Centre in Pukekohe. This event was the first of its kind, in which the Waikato Biodiversity Forum and partners (Auckland Council and QEII Trust) ran an event with our Neighbouring region to the North. A major reason for hosting this event was in recognition of the growing number of restoration groups who regularly work between both regions, and therefore work with multiple territorial authorities, which may differ in approaches, rules and

opportunities offered. Having these political boundaries is needed, to help us provide autonomy in governing our distinct regions, but as we know they are only relevant to us humans. The flora and fauna we love and cherish, as well as those we are are less fond of, will take absolutely no notice of these. So there is a direct effect that we have all have on each other in terms how we manage the land and water on each side. So working together, or at least understanding each others approaches is vitally important to make our work more effective and efficient.

The first speaker, following the mihi and introduction from the Sam McElwee the WBF coordinator was Zion Flavell from Ecoquest, who spoke about the Finding Franklin Bats (FFB) project. Zion, a Ngāti te Ata decendent came into the project initially as kaitiaki ranger for the project. He admitted that he knew little about pekapeka, (NZ native bats) initially, but quickly became fascinated with the taonga species. This work then led to Zion being offered a field team leader role at EcoQuest at the end of the summer period 2022, where he has since been co-leading the pekapeka work. Zion and EcoQuest have now done an extensive five-phase survey covering several sites across Franklin, mostly on privately owned land. This project has evolved into a bat catching and tracking project with widespread voluntary community participation to learn more about Pekapeka ecology. As a lead up to the project, there was a drive to increase awareness about the project through community events, like predator control workshops, bat walks, bat hui and workshops on radio

telemetry and bat acoustics. Through this work, it was found very often the commonly available information is not necessarily scientifically right. There still seems to be gaps in the awareness about pekapeka in the region, as well as uncertainty about the role of landowners as kaitiaki of biodiversity in their backyard. Zion described how some landowners in the region are unaware that New Zealand has bats at all. This is why the project is now undertaking work to understand the remaining gaps in knowledge surrounding both FFB and the bats themselves. This will help understand what information and resources community members need, to contribute towards positive and effective outcomes for pekapeka in ways that enhance satisfaction, learning, and values of FFB volunteers.

Click here to see presentation slides.

The next speakers were, Reuben Libline and Annemarie Robb from Waikato Regional Council. Followed by Gabi Ezeta and Kelly Wootton from Auckland Council, who all spoke about pest management on each side of the border. Both councils began by introducing their regional pest management plans and how they implement these on the ground. The vastness of areas covered in both regions and the huge array of pest plant issues, accompanied by the limited resources to control the problem, means that the approach must be highly strategic and pragmatic. Eradication of a pest species completely from a region, can only be undertaken if the plant is in low numbers



Zion Flavell



Reuben Libline and Annemarie Robb

and in a small number of isolated areas. This is why weeds like woolly nightshade have been taken of the list of offensive plants in the Waikato, as the plant has become far too wide spread to enforce removal of effectively. There are also instances on both sides of the border that priority sites of significance (natural, cultural, economic) may also be focused on for intensive pest plant control, where deemed appropriate and achievable. Both sides of the border described different pest plant species that are currently on their priority lists. In fact, there are constantly more pest plants being discovered and becoming issues. Some of these have been controlled successfully, many not and complete eradication is extremely difficult. <u>Click here to see</u> presentation slides.

Lenny van Heugten was last to speak. She described the remarkable recovery of a very special, at-risk native bird, the North Island kōkako. These birds were prolific in the Hūnua Ranges in the early 1900s, but by the

1950, through habitat loss and predation. the population had been put under a huge amount of pressure. The number of birds continued to dwindle, not just in the Hūnua's, but also nationally. By 1994, only one breeding pair of kokako remained in the Hūnua Ranges. Lenny then described in detail the herculean effort by the Auckland Regional Council, the Department of Conservation and an army of volunteers to control pests in the Hūnua Ranges. These efforts have led to the area becoming the second largest mainland kokako population at more than 250 breeding pairs by 2022, with 4,000 traps and bait stations over 200 kilometres of tracks, all within an hour of downtown Auckland. Click here to see presentation slides.



Lenny van Heugten

