

Waikato Biodiversity Forum Ngā Kaihāpai Rerenga Rauropi o Waikato

Spring Newsletter 2023 Number 81

Kia ora tātou,

Some of the work undertaken over the past three months:

- Organisation and hosting of Piako/Waihou Forum event May 29.
- Participating in on-going National Science Challenge Co-design hui: Scaling collective action through shared learning
- Responded to information and support requests from WBF members and public

He tāngata, He tāngata, He tāngata – The Power of Collaboration in Waihou Piako Catchment Conservation and Restoration Projects

On the 29th of May, the Waikato Biodiversity Forum collaboratively held the "He tāngata, he tāngata, he tāngata", wānanga and hui, to showcase how collaboration between iwi, hapū, community groups and agencies is key to successful conservation and restoration projects in the Piako and Waihou catchments.

The day begun with a karakia timatanga from Mohi Korohina, of Ngāti Hinerangi, followed with a spirited mihi whakatau from Norm Hill of Ngāti Tumutumu, acknowledging Atua and ancestors, and welcoming guests to their rohe. As well to state the kaupapa and set intentions for the day. Sam Mcelwee, the Biodivesrity Forum coordinator then followed by making acknowledgements and setting the scene for the day. Basically, that the Piako Waihou catchment like many places, has been modified dramatically from its original state, which in some way, large or small, we are all responsible for, so we must work together to remedy the situation.

The first speaker was Rebecca Lee, communications manager at <u>Manāki Kaimai Mamaku</u>. Her kōrero was all about the power of "comms" for conservation. Rebecca began by explaining that we now exist in an "attention economy", with swathes of information and content getting blasted at us from all angles. This can be overwhelming and even off putting for those who just want to get on with the mahi of restoring and protecting biodiversity. But the fact is, most restoration groups must maintain and attract funding, volunteers and general support and awareness for the good work they are doing.

Rebecca then provided a clear approach to social media and content creation, which can help seasoned users to complete beginners. Her key message was to try and keep things simple, so as to not get overwhelmed by limitless options. For those just getting started, the key messages were - Pick one channel you enjoy using; Done is better than perfect; Lastly, to step outside your comfort zone and celebrate your wins. To see more detail of her presentation <u>click here</u>.



Sam helping Te Aroha show her map of the Piako Waihou Catchment

Te Aroha Drummond form the Piako Catchment Forum (PCF) and the Waihou Piako Catchment Trust was next to speak. Te Aroha's korero charted the evolution of the Forum, from the initial idea coming from passionate local parent and early childhood teacher, Anita Richmond, in 2017, to where they are now with a paid part-time coordinator, a charitable trust (Piako-Waihou Catchment Trust), and multiple projects underway. Te Aroha, set the scene by explaining all the changes that happened with the area over the last 150 years or so. Most notably the deforestation and draining of what is know known as the Hauraki Basin, to which now there is less than 2% of the original lowland forest. So it is not a stretch to say that PCF is an ambulance at he

bottom of the cliff, and this reflects the nature of their projects, which are primarily based on conserving and restoring the remaining low-land fragments. Integrated into these efforts, is the restoration and protection of cultural heritage, as well as eduction and pest control. PCF evolution and story is both heartening and inspiring. Their resilience has come of the back of some very passionate and hard working individuals coming together from a range of backgrounds and experience, to get to where they are now. To see Te Aroha's presentation <u>click here</u>. Website <u>piakocatchmentforum.co.nz</u>

Next up was Mohi Korohina, of Ngāti Hinerangi and Wairere Mahi. After his introductory mihi, Mohi spoke about returning from living in Australia to take the opportunity to support and assist his iwi in restoring the Mauri of Hinerangi whenua and people post settlement. With jobs for nature funding (running out end of June 2024), Ngāti Hinerangi Trust created the Wairere Mahi team, who took on the huge job of intensive predator control within a 1,000 Hectare area of the western Kaimai Ranges between Wairere Falls and State Highway 29. This year the team were able to get a 500ha area from 75% presence of rats in tracking tunnels down to 0%. While possums went from 24% to 10 % in leg hold traps. This was a huge achievement, particularly given the extremely difficult terrain they are operating in and the share size of area they cover. This required kaimahi to stay multiple nights in the ngahere, week on week, while sacrificing time from family in order to maximise the impact of their efforts.



Martin and Mohi talk about their mahi and whanaungatanga

Aside from the nuts and bolts of the predator

control operation. Mohi highlighted the importance of collaboration. He remarked how in the beginning he wondered what the need was to reach out and connect with other groups, but soon came to realise its importance. One such group was Predator Free Matamata (PFM). Martin Louw from PFM also joined Mohi on the stage to reinforce power of collaboration to uplift and add value, not only their work to eradicate predators, but also as people, sharing the common connection we all have to te taiao, and breaking down so many perceived barriers between different people that arise when we don't make an effort to connect. To see more about Wairere Mahi <u>click here</u>. To read more about collaboration between PFM and Waiere mahi <u>click here</u>.

The last to speak was Rebecca Eivers of <u>Friends of Waiharakeke</u> and <u>Wai Kōkopu Consulting</u>. She shared insights and research findings from the last decade of restoration efforts she been involved in on the Hauraki Plains, working with local farmers. The focus of these projects has been on reconnecting waterways, wetlands, farmers, and communities. Rebecca began by reiterating the history of the area, with reference to massive land-use change initiated by European settlement. She remarked that it took such a massive effort to clear and drain the plains, and despite the shortcomings of it's results for biodiversity, which we now know, we can draw on a similar drive to do the mahi to restore wetlands and water courses on the plains – also requiring a huge effort.

One of the projects Rebecca spoke of involved Millington Dairies Farm, where riparian wetland restoration works took place, to improve water quality, manage flood flows, and enhance biodiversity. By permanently retiring land into wetland and lowland forest, and strategically selecting plant species, they aimed to maximize biodiversity. The wetland, with a focus on sedge land recreation, saw improvements in water quality and biodiversity, as evidenced by various water quality metrics.

Moving forward, the emphasis is on scaling up these efforts across the catchment and involving the local community through initiatives like Constructed Treatment Wetlands (CTWs), raceway wetland swales, and riparian planting. An important mechanism to upscale, is the creation of the "Waiharakeke and Friends", which will link together a group of farmers who are all trying to restore wetlands, watercourses and biodiversity on farms within, or close to the Waiharakeke stream catchment. David Sing and Johan Van Ras are two farmers involved and have been active members of the Piako Catchment Forum. Amongst other restorative work undertaken on their farms, the planting of carex species (geminata in particular) on both sides of drains have welded very promising results in terms of biodiversity benefits and reducing maintenance of

watercourses (drains). <u>Click here</u> to see Carex trial research and implementation guide, and <u>click here</u> to see Rebecca's presentation.

After all the korero was finished up, the attendees which numbered over 50 enjoyed a catered lunch together and further discussion and networking took place. The plan after this where to have a guided tour of Keep Te Aroha Beautiful and Ngāti Tumutumu restoration projects within Te Aroha town, but it was called off as the weather really packed in by lunch, and much of the region experienced power outages that evening due to high winds and lightning. Despite the cancellation of the field trip, the day achieved what it set out to do by showcasing how collaboration between groups and agencies is key to successful conservation and restoration projects in the Piako Waihou catchment or anywhere

The reality is that the work achieved here so far is just a drop in the bucket in relation to what we would like to achieve to meet environmental, cultural and economic sustainability goals. But is absolutely clear that working together is crucial to make it happen, and like most worthwhile things, working collaboratively is often easier to talk about it than do. So were lucky to hear from people and groups who are actively working across cultural, organisational and many other types of barriers, to create outcomes that are greater than what could be achieved individually. Also like most worthwhile things, Its not always pretty, and doesn't always work out as planned. But only by taking actions, while being open-minded and willing to listen, share and reflect, we can grow and become more effective in our actions.

Te Nehenehenui - How the Freshwater Golden Clam would impact Te Mauri o Waiwaia.

During the summer of 2023/24 Te Nehenehenui (TNN), in partnership with Ngā Pae o te Māramatanga (NPM) and Biosecurity New Zealand/Ministry for Primary Industries (BNZ/MPI), hosted an intern to research how the Freshwater Golden Clam would impact Te Mauri o Waiwaia.

"Te Mauri o Waiwaia" refers to the life force or essence of Waiwaia. In Māori culture, "mauri" is a concept that represents the life force or vital essence that all objects, living or non-living, possess. It is what gives something its individuality and is integral to its existence. "Waiwaia" can be translated as "beautiful" or may refer to a specific context within Māori narratives or place names.

In the context of the Nga Wai o Maniapoto (Waipa River) Act 2012, "Te Mauri, ko te waiora o te Waipa ko Waiwaia" is a phrase that acknowledges the vital essence and health of the Waipa River as Waiwaia. It expresses the deep connection and significance of the river to the Maniapoto people, encapsulating the river's importance as a life-giving force and its intrinsic beauty.

We were fortunate to have Tui Barrett (Ngāti Maniapoto/Ngai Tahu) take the internship opportunity and make it a huge success. Tui is currently studying Health at Waikato University and enjoys the outdoors as part of balancing and replenishing his personal hauora. When this opportunity arose through the NPM Raumati internship, Tui was excited as it was an opportunity to reconnect with his Maniapoto whenua and whānau.

The question "How will the Freshwater Golden Clam affect Te Mauri o Waiwaia?" was posed by one of the Kaitiaki heavily involved in restoration mahi throughout the takiwā of Maniapoto. Ngā Pae o te Māramatanga was approached to partner on this journey of learning and supported Tui within their cohort of summer interns. We have thoroughly enjoyed having Tui conduct the



research for us and he has too. See the link below for a video documentation of his summary of findings for his summer internship.

Central Waikato Predator Free Hub - May workshop

The May workshop was all about practical trapping and trap maintenance. Sam The Trap Man was our predator control guru showing us bush skills, Matauranga Maori principles, trapping best practice, fine tuning and trap maintenance.

Thirty trappers from 18 different predator free groups attended. These type of networking days are invaluable to new trappers and experienced alike, as there is always information shared from korero with others. Places were limited due to the nature of the workshop, but after being suitably inspired and armed with new knowledge, participants will be able to pass on this information to their group peers.

Many thanks to the host group Predator Free Hakarimata and a big thanks to the PF2050 programme from Department of Conservation and WEL Energy Trust for providing funding for this workshop.

If you have any suggestions about what your group would like to attend a workshop on, then please get in touch with <u>Karen</u> to discuss.



Kid Greening Taupō - Awesome Volunteer Opportunities

Our Kids Greening Taupō coordinators sometimes get asked to volunteer for community conservation work. We love getting out in awesome places and getting to do some on the ground mahi. It also really helps when we are teaching students about conservation if we have had hands on experience at different types of work ourselves.

This term we were lucky to be able to work in three very special places with amazing native forest. We helped Predator Free Taupō with pest and predator monitoring on Mt Tauhara, putting out tracking tunnels, chew cards and night vision cameras.



We joined a group of wahine from DOC and Project Tongariro to do weed control work on Mt Pihanga. Being dropped off by helicopter and getting to experience the incredible views was extra special, and more than made up for the hard work on steep terrain!

We also enjoyed joining the Pirongia Te Aroaro o Kahu Restoration Society to carry out work on their bait lines through the Pureora forest. We learned so much and experienced beautiful locations doing this work. We recommend volunteering for local community groups, as you might get to have awesome experiences like this too. We live in a pretty amazing place, and love that we get to do work to make it even better! https://www.kidsgreeningtaupo.org.nz/



Owhango Alive - Lifetime Memberships Awarded

When we incorporated Owhango Alive as a not for profit society, we established rules and a constitution. Included in our constitution is the ability to award Lifetime memberships as a recognition of those who have gone "above and beyond" what is expected of volunteers. This year we awarded six of our amazing volunteers with Lifetime Memberships. Tania Dewitt and Sally Lashmar started Owhango Alive in 2012 with a handful of donated traps and gardening tools to tackle the invasive weeds and to trap mustelids and rats that were endangering our precious bird life, especially the whio. Owhango Alive grew from there and today we operate over three hundred and thirty traps both in the Ohinetonga and around the village of Owhango.

To date the traps have removed over nine thousand pests while volunteers attending working bees have removed countless trailer loads of invasive plants. Tania moved away from the area but remains in contact with us, while Sally is a committee member and can still be found every week out checking traps and keeping an experienced eye on the forest.

Mark Federicks joined Owhango Alive in its first year and put his trapping and pest control expertise to great use, today Mark is Chair of our committee and can best be described, along with Sally, as a driving force of the society. Mervyn Aitken joined in the early days, was the treasurer until recently and as a retired reverend he has made time each year to prepare a sermon for our gathering on World Rivers Day in September each year.

Marion Johnston also joined in the early days and is a regular trap checker, she was active as secretary for many years and is Owhango Alive archivist as well as serving on our currentcommittee David Johnston is our repair man, for the past 11 years he has maintained the traps, built the trap boxes and innovated.



Tania Dewitt with Mark Fredericks &





David Johnston

Pūkorokoro Miranda Shorebird Centre - The Piako Roost

For those of us in the Shorebird Centre at the time, the events of Friday 5, 2018 remain indelibly etched in the mind. The tail end of a tropical cyclone and a king tide conspired, that morning, to bring the Firth of Thames to our doorstep. The crisis passed, the tide receded, and within a few days we were back in full operation. Meanwhile, across the bay, near the Piako River mouth, there was to be another long-lasting legacy of that weather event.

Marion Johnston

A stop bank breach flooded 15.7 ha of farmland. Within a few months the site was covered in sediment and mangrove seedlings and was being used as a roost by hundreds of shorebirds. Within a year it had become one of the most important high tide roosts on the Firth, and a core area of interest for the Trust. We began to factor it in when advising visitors of what birds are around. There is widespread movement of birds to and from Pūkorokoro, depending on the tidal cycle, but we also know it can hold species of interest that may or not venture our way. Whimbrel, for instance, were being seen at Piako more frequently than Pūkorokoro. This season it was the favoured place of Sharp-tailed Sandpipers and several vagrant terns – Whiskered and Gull-billed. The wider Piako region has also been fairly reliable over the years for Cattle Egret.

All of which makes the place highly attractive to birders. Yet much to the frustration of some of them, for the last two years access to the site has been restricted. However, there was a very good reason for those restrictions, and the ultimate outcome promises to be a fantastic shorebird site. Following the 2018 flood there were questions over the site's future. Would the landowner be able to repair the breach and restore the site to farm production? That became increasingly unrealistic. Waikato Regional Council recognised the breach posed significant risks to its Piako River flood scheme assets. Allowing the uncontrolled breach to remain was not a feasible long-term solution. Defences had to prevent land erosion as well as manage the much larger volume of water expected in a future tidal surge event. So, the council purchased the land.

The council officer who informed me of the deal was careful to stress the purchase was made for infrastructure asset protection, not for the birds as such. Nevertheless, we had made council aware of the site's important biodiversity values, and they were amenable to exploring ways of retaining as much habitat as possible. The Trust has since been working with council and we are now poised to see the fruits of this joint approach. The site was part of an 830-ha area in the lower Piako serviced by three aging floodgates. The land purchase provided an opportunity to rationalise those assets nearing the end of their useful lives with one new floodgate. The council faced several challenges in designing a scheme that achieved its aims of strengthening flood defence. A glimpse into the future of coastal farming: the remains of a hay barn prove useful to Royal Spoonbills and White-faced Herons.

These included the gradual eastward migration of the Piako River and riverbank erosion on the western edge of the flooded site, and surrounding farmland being at mean low sea level. More importantly for the Trust, the land needed for the scheme covered only part of the flooded site, leaving over 10ha available for shorebird habitat. With completion of the engineering works, the area will be reopened to the tide.

Image 1.1 shows an aerial view of the site with the Piako River (top left), and the Hauraki Rail Trail extending along the eastern side of the cleared area (centre right). The lower section shows the location of flood

protection infrastructure work. The roost will be constructed in the upper centre, parallel with the rail trail. As reported in previous issues, we have been advising the council on the creation and management of high tide roosts for shorebirds. The mangroves that were steadily colonising the site were removed. A raised island covering 3.5ha is being built. To ensure it remains suitable for birds, it will need to be carefully managed. Roosting shorebirds require a wide field of view, which primarily means controlling vegetation. At Piako it is hoped to achieve this by using periodic tidal inundation, which is why the raised area has been designed to be flooded by only the highest tides in the lunar cycle. The water should still be shallow enough for waders to roost.

Ongoing maintenance of the physical assets will be undertaken by the Waikato Regional Council funded from Piako Flood scheme rates. This will include periodic removal of accumulated sediment with material reused as earth fill for stop bank maintenance. Retaining open space mud flats is essential for maintaining shorebird habitat, so further mangrove incursion will be an issue. A floating screen has been included in the tidal outlet to restrict mangrove propagules from entering the site, but it is recognised that this will not fully prevent incursion. PMNT has undertaken to assist with clearance of mangrove seedlings when required. The Trust has also been commissioned to provide plans for a bird hide along with interpretive signage.



Image 1.1 Eastern Foreshore Asset Rationalisation WAIKATO REGIONAL COUNCIL



Culvert crossing construction WAIKATO REGIONAL COUNCIL

Manāki Kaimai Mamaku - Building Hunting Capability to Control Browsers in the Ngahere

Browsers destroy understory and stop native trees regenerating, putting our nghaere under risk of collapse. Eight kaimahi from iwi-hapū led KMRP teams <u>Waitaha</u>, <u>Tapuika</u>, <u>Te Maire</u>, <u>Te Māhuri</u> and <u>Kaimai Kaponga</u>, came together to expand their hunting knowledge and capabilities with the aim to become contract hunters to control deer, pig and feral goats in their whenua.

Hosted at Tapuika's Makahae Marae, the four-day wananga was led by Lenny Sparks from the <u>Cornerstone Conservation</u> and Brad Angus, our very own Project Advisor. Students spent two days in the classroom learning firearms safety and risk management, hunting methodology, animal identification and behaviour, data



management, reporting, hunting dog management, and firearms/gear maintenance. Another two days was spent in the ngahere learning alongside professional contract hunters.

The students gained some great tips and tricks from the professionals and gained an appreciation of the big 'step up' that is required to go from being a recreational hunter to a hunting professional.

Possum pelt exchange fosters indigenous bond

A number of Ngā Iwi Topū members attended the recent Te Tīra Whakamātaki possum pelt wānanga. The aim was for Aboriginal and Māori to come together to kōrero about possums - a species seen as a pest in Aotearoa but a taonga in Australia.

<u>Mohi Korohina, Wairere Mahi Project Manager</u>, was on stage during the pelt exchange and shared his whai whakaaro | reflections about how the continual killing of possums can start to hurt your wairua | soul.

"I give thanks to the Aboriginal people for sharing their culture with us. Their korero changed the way I think about possums and how we handle their pelts. We're now starting to think about how we can work together to revive their culture," he said. <u>Read more</u> <u>about the possum pelt wananga here</u>. Image credit: Te Tira Whakamātaki/Rawhitiroa Photography



Tane's Tree Trust - Accelerating Landscape Scale Restoration of Native Forest – Demonstrating the Concept of 'Seed Islands'

<u>Trees That Count (TTC)</u> in collaboration with <u>Tāne's Tree Trust</u> (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 establishment of seed islands is a pragmatic and cost-effective option

aimed at re-introducing or boosting local seed sources of key native forest species, given the impracticality and prohibitive cost of blanket planting natives over challenging degraded landscapes at scale.

The aim is to plant intensively managed small groves of native trees and shrubs, to provide greater diversity of wind- and bird-dispersed seed across degraded landscapes or other sites where establishment of a permanent native forest ecosystem will have multiple environmental, social and economic benefits. They will become hot-spots of indigenous diversity

and will act like steppingstones, attracting birds to roost, feed and fly between groves and assist in spreading seed across the wider landscape to assist in natural regeneration of native forest.

A number of project partners have been involved during these early stages of project planning and selection of sites, from across both TTT and TTC networks. Sites identified where preliminary work has included planning, planting the first seed islands, and monitoring include:

North Island

- Tainui-Kawhia coastal forest restoration project, Kawhia, west Waikato
- Kōkako Ecosystem Expansion Project (KEEP), western Bay of Plenty



TTT trustees and local community group members undertaking the baseline assessment, first measurement post planting, at the Matariki planting on a retired farmland and pa site at Rangiuru, Te Puke, Bay of Plenty. All photos: M. Berain.

- Waikereru Ecosanctuary, Tairawhiti, Waimata River Care and Longbush Ecological Trust
- Eight Hundred Trust Kiwi Reserve, Matemateonga Range, Eastern Taranaki
- Mangarara Station, southern Hawke's Bay
- Cheltenham Downs, Manawatu.

There are a number of other sites that will be considered, with selection based on collaboration with willing local landowners and managers, extending demonstration to other regions, and evaluating the role that a seed island approach could have on a range of sites such as conversion of recently logged exotic forest to native. Mike Bergin and David Bergin



Newly established seed island at Te Kohaka o Tuhaitara, Woodend Canterbury, planted with shrub hardwoods and totara. The aim is to establish a coastal podocarp hardwood forest that is now rare.



Scoping out potential seed island sites among the Jardine Boulders on the Remarkables Station, Otago.

DOC - Getting Smitten for the Bittern

Together let's discover where the elusive Matukuhuurepo (Australasian bittern) are choosing to feed and breed!

For the west coast of the region, Wendy at LoveBittern is coordinating the Waikato Westcoast Matuku Muster: if you are interested, please contact her on 0225261972 or at <u>lovebittern@gmail.com</u>

Lizzie Sharp at DOC Waikato, is covering the of the Waikato region, and is looking for interested volunteers who could listen at their local wetland and surrounds. Guidance on how to Active Listen can be provided! Lizzie Sharp, Whangamarino Ranger, Waikato Department of Conservation, <u>lsharp@doc.govt.nz</u> M: +64 27 298 6315 www.doc.govt.nz



Key Date Sat Oct 19th 3 days each month around & including the key dates -14th Sept, Oct 19th and 16th Nov.

TIME At dusk for 30 minutes before <u>and</u> after your local sunset.

your local sunset.

Join together for a community hui, workshop or online with LoveBittern to learn how to record bittern for active listening using observers - <u>or</u> <u>download a guide here</u>

Be there

For **19th Oct** and if you can a total of 3 days in September, October and November.

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