

Winter Newsletter 2024 Number 82

Kia ora tātou,

Some of the work undertaken over the past three months:

- Organisation Biodiversity Without Borders Event, Pukekohe, Novemebr 13th (more details shortly)
- Responded to information and support requests from WBF members and public
- Assessing WBF communications effectievness results show a high and growing level of engagement.

Ōwhango Alive - Kiwi Release

In March this year, the biggest kiwi translocation to leave Maungatautari Mountain began. Two hundred and seventeen kiwi were translocated around the country and included eighty seven being released into the foothills of Tongariro Conservation Area. Jack and I were lucky enough to join DOC staff Jerome, Luke, Steven and D.J to assist and observe with their release.

The giant white van carrying the precious cargo was met at the Pumice pit with much anticipation by a local kura and a few Ruapehu locals. Each kiwi was unloaded from their wooden travel boxes with gasps and frantic camera clicks. "Ahhhs" punctuated the air while the expert wrangling of DOC workers ensured the kiwis' insidious looking talons were kept in checkwhile they posed for photos. What surprised me most was the overwhelming size difference between the kiwi sexes. Males were gently relocated from into their travel boxes looking tired and with bodies less than half the size of their female counterparts who I overheard Jerome describing as "absolute monsters." He wasn't wrong - one particularly cantankerous female snapped her beak in distaste and Luke quickly placed her into the cardboard relocation box, clearly not a fan of the conservation paparazzi - photos were declined.

Once we were loaded into ATVs with kiwi cargo balanced carefully on our knees we bumped our way along the 42nd traverse for a solid 45 minutes.

Deep in the bush DOC staff found perfect hollowed out trees where the kiwi could chill out for a bit before exploring their new location. We gently placed ferns over the entries to their burrows so they could have a well deserved nap and I couldn't help but think of their long journey to get here.

In 2005, Ngāti Hikairo ki Tongariro, one of the mana whenua of Tongariro, gifted four one-month-old chicks, two males and two females, to Ngāti Korokī Kahukura. Prior to this deforestation and predation from introduced predators like stoats had decimated the original population of kiwi that once lived on Maungatautari. Translocational releases of kiwi signal almost two decades of hard work and determination. It's amazing thinking about the crucial parts both staff and volunteers play in ensuring the success of our native bird species. Everybody has a role to play and they are all important.

Most of the kiwi's we released settled into their new abodes and we quietly left them to it. But when Steven and I released one of the last males we had trouble locating a good hollow. We settled on a snug nook that the bird clearly took exception to. He gave it approximately 3 seconds before spinning on heels and taking off full gusto, his feathery butt disappearing into thick crown ferns. I called out after him, "OK bye! Good luck!". Michelle Campbell







Photos - Michelle Campbell

Kids Greening Taupō - Miraka-Tūaropaki Riparian Planting Event

KGT were excited to get the opportunity to collaborate with Miraka, Tūaropaki Native Plant Nursery and rural schools at a riparian/ wetland planting site alongside the Mōkai Te Ure stream.

This collaboration with other organisations has enabled us to work in rural areas and strengthen community relationships. Whakamaru School and Tirohanga School joined us to participate in a riparian planting in Mōkai with Miraka dairy processing company and Tūaropaki native plant nursery. Approximately 75 tamariki from the schools joined together to plant 1500 native plants and trees in the riparian/wetland area alongside the Mōkai Te Ure stream. We were also supported by representatives from Waikato Enviroschools, Waimarino Restoration/Project Tongariro, and the Taupō District Council. The day concluded with a well-deserved sausage sizzle in the sunshine, courtesy of Miraka and Central Transport Ltd, and a beautiful waiata performed by Whakamaru school.

Prior to this planting day, our coordinators visited the schools to give presentations and lead hands-on experiments to show how wetlands protect us from flooding by acting like sponges, provide habitat for all our native species improving biodiversity, and purify our water by filtering out the sediment and impurities. We also looked at how plants on riverbanks can stabilise land, protecting the soil with their foliage and holding it together with their roots, preventing slips and erosion. On the planting day we were able to refer to these lessons and the tamariki could make connections between what they had learned in the classroom and what they were doing. They could see the value in the hard mahi and were proud to be improving their local environment for future generations.

We would like to also provide a special acknowledgement to Tūaropaki Native Plant Nursery for their generous donation of 1000 plants to be planted for our 2024 Greening Taupō Day event, and a further 100 plants which were given to schools and ECE centres for participating in our Greening Taupō Day competition. We really appreciate support like this from local businesses, as it allows us to run our programme.



Mānaki Kaimai Mamaku - Life in the Kaimai Mamaku

The Kaimai Mamaku is a taonga, a treasured place. It connects and provides for more than 300,000 people across two regions. The largest eDNA collection programme within the Kaimai Mamaku conservation park has just been completed by Manaaki Kaimai Mamaku and nine iwi-hapū conservation project groups, thanks to funding from Wai Tuwhera. WilderLab passive samplers were placed in 31 targeted catchments across



the landscape for 24-48 hours. This data was then combined with another 13 publicly available data sets, and critically analysed by an ecologist to create the report.

Diversity is important for healthy and resilient ecosystems. Sampling from the Kaimai Mamaku catchments showed an abundance of species and interesting results. In total, 366 species were identified across the project area with an average of 41 species found at each sampling site. The maximum number of species at a single site was 118 and 39% of all species found were only found at a single site.

Louise Saunders, Manaaki Kaimai Mamaku CEO and ecologist says this indicates yet again how important biodiversity is to the mauri of the Kaimai Mamaku landscape. "Every species has a place and a function in our forest ecosystems and catchments," she says.

"They are all linked in myriad ways to hundreds of other species and we still have only the most basic understanding of how they all work together. We simply cannot pick the species to save, we have to protect and restore the entire ecosystem so it thrives".

Full findings

The graph on the left shows the most commonly detected species across all test sites (publicly available data and Kaimai Mamaku Restoration Poject data). The Wheel of Life (right) shows all genus and species detected during the Kaimai Mamaku Restoration Project testing only, providing an overview the diversity of species found.

The below is a summary of common and notable species, species abundance, and prevalence of pests in the rohe.

- As expected, the most commonly detected species were mostly indigenous
- Insects and plants detected had the highest diversity of species as shown in the circle of life
- It is encouraging that a threatened species, the long-finned tuna was the most commonly detected species, found at 83% of sites
- The aquatic insects that were most commonly detected, mayflies, koura and the long-finned tuna) are all indicators of good stream health
- Possums were the only predator on the list of commonly detected species, found at just over half of all tested sites
- Although we didn't detect humans, we did detect pineapple and dogs, which show that people are present
- We were pleased that pigs weren't detected, but rats were detected at 38% and deer at 47% of sites
- It is encouraging and exciting to get threatened species detected at our sites. We detected the long-tailed pekapeka, Hochstetters Frog, pateke, shortjaw kokopu, koaro, and bluegilled bully
- Manu taonga detected included tūi, kererū, pāpango (scaup), pūtangitangi (paradise shelduck), and tauhou (silvereye)
- Our travelling friend, the spotted eel (Anguilla reinhardtii) is an occasional visitor from Australia but was found at four sites.





Pūkorokoro Shorebird Centre - Ruru at Pūkorokoro

Recently Pipiwharauroa, Shining Cuckoo was added to the Shorebird Centre species list. In June there was added another significant species. Over two weekends in June we heard Ruru, Morepork calls in and around the Pūkorokoro Shorebird Centre. Around 10pm the evening of 7 June, while astronomers were waiting in the Centre grounds for clouds to clear, a Ruru called from across the road to the north. A week later, on the Saturday of the planting weekend, Peter Fryer heard a Ruru call around 6 am from near the Centre.

The following morning Kevin Barker, Olga Brochner and Tansy Bliss spotted two Ruru hunting around Widgery Lake in front of the Centre. This surprise occurred whilst the group were on the front deck observing Matariki and Jupiter rising above the Coromandel. Kevin first spotted a bird at 5.40 a.m. as it flew silently over the lake. The owl encounter ended when two birds called to each other and flew off across the road at around 6.20 am. This is an exciting development, but is it so surprising? A quick look on eBird reveals two entries for Ruru on the Robert Findlay Reserve in 2021 and 2023. Phil Battley heard a "yeow yeow yeow" call at 11pm in March 2023 from the reserve carpark. And Russell Cannings reported a Ruru beside the Stilt Hide in July 2021 in broad daylight at 11.41 am. This was also seen by Centre manager Keith Woodley (PM News 121) Ruru have also been recorded in 2021 along nearby Miranda Road.

So, have Ruru been around for sometime? We know they have long been present in the hills immediately behind Pūkorokoro. Tansy has in recent times picked up Ruru calls during night bird surveys at Kaiaua and Taramaire. Olga and I have been observing the night sky from Pūkorokoro for a few years now, but the one we heard on 7 June is our first Ruru observation. I suspect as the native plantings have grown and the landscape returns to a more natural state, Ruru are now considering Pūkorokoro as a good place to live. So just where are they roosting in the daytime? Traditional wisdom suggests there are few trees with suitable height in our environs. Across the Robert Findlay Reserve there are not many trees to be seen. Obviously, the replanted salt marsh plants are slowly gaining hold, but aside from the man- groves there are few trees taller than a metre or two. However, the Shorebird Centre supports a dense cluster of native trees and shrubs that rise to around 6 metres tall. From the ground this outcrop of vegetation dominates the view. And, of course, the hills and base of the Hunua ranges and the ranges themselves offer good forest cover. As fellow planter Lyle Millar remarked: "I wouldn't want to walk there – but as owls fly..."

I suspect the small fragments of bush planted on DOC land across the road from the Centre and possibly some of the taller mangroves may be the daytime roosts for this pair of Ruru.

As dawn broke, we watched them fly off in that direction. However, they could also be inhabiting the dense Karo bush around the Centre. A short time after the Ruru called on 7 June, a Blackbird roosting in the Karo beside the driveway alarmed loudly. Perhaps it was responding to a visiting owl. So, we also considered if the Ruru are closer to the centre, and if they are a pair, where will they breed and what are their chances of breeding successfully? A plan was quickly hatched and a nestbox is now mounted on the Centre grounds.

The transformation of what was a bare section in 1990, is largely due to the vision of Anthea Goodwin, Esther Burgess and Norah Peachman who, assisted by many others, began planting what are now well-established trees. Maybe we will be able to help these enigmatic birds and add to a more complete ecosystem. If Ruru do stay and make Pūkorokoro a permanent part of their home range, it will be a grand legacy of that effort. Kevin Barker



ntre manager's stature is used to install the nest box OLGA BROCHNER

Purangi Conservation Trust - Update from Zoe, Our Contract Trapper

Trapping over the winter months takes a little more motivation to get you out there but when you see visible signs that your trapping is making a positive difference to the environment it makes those cold rainy days when the bush is damp and dripping all worthwhile.

Some of the highlights for me have been sighting an increasing number of banded rails out feeding just on daybreak on the reserve at the western end of Cooks Beach. Just a few years ago it was rare to see or hear a rail and they are now successfully breeding in this area.

I have been encountering more tree weta, an endemic insect preyed upon by rats, such as this beautiful female (see photo below) making its home in one of the Flipping Timmys. I suspect she was also enjoying the free meal of apple I used as bait.

The Back Bay area and parts of Shakespeare cliff are home to stands of mature kohekohe trees. Kohekohe leaves, flowers, and fruit are a favourite of possums, and they are a great indicator tree to see how well our trapping program is working - and it is. I trap in these areas and right now am seeing the kohekohe in full bloom with their beautiful sprays of lace like white flowers growing directly from the branches and trunks of the trees. Without predator control, kohekohe trees will struggle to reproduce and there will be little or no replacement of these older trees. The flowers are also an important source of food for our nectar feeding birds such as tui.

Lastly, should you be walking in the bush as this time of year keep your eye out for the array of beautiful fungi and mushrooms popping up. They are well worth getting down on your hands and knees to take a closer look.







Taiea te Taiao - Project Update

Taiea te Taiao mā Mangapiko mai i Maungatautari ki Pirongia ahu ake, "Cherish the environment, following the Mangapiko, from Maungatautari to Pirongia, and beyond", Maungatautari to Pirongia Ecological Corridor Project.

Taiea te Taiao continues to connect Maungatautari to Pirongia maunga with planting, predator control, weed control education, engagement and monitoring to enhance biodiversity across the corridor. With support from Fonterra, Taiea te Taiao is set to expand eDNA monitoring this year by incorporating more water-based samples. In collaboration with the University of Waikato, we're also looking into iDNA (insect DNA) and air DNA (collected through air filters) to gain a clearer understanding of the species present in the environment, both close to and far from the maunga. Additionally, tuna monitoring using mātauranga Māori methods will enhance our findings by providing more data on both long-finned and short-finned eels.

50,000+ plants went in this wonderfully wet and warm winter, bringing the total plantings to almost 300,000 over three years. Landowners are all on board to fence, retire land and maintain plantings with pride in the land they caretake for and the birds and biodiversity that visit. Alongside planting efforts, landowners and community members are actively managing predators throughout the corridor and on the two maunga. While there are still more areas to address and ongoing maintenance for the traps, we have surpassed our initial expectations, thanks to funding from the Waikato Regional Council. This effort enhances the remarkable work undertaken by the Pirongia te Aroaro o Kahu Restoration Society and Sanctuary Mountain Maungatautari, with 1,300 traps now safeguarding native species on private land in the surrounding region. Taiea te Taiao has successfully installed 514 of these traps with the support of landowners, Maungatautari staff, and residents from Te Awamutu and Pirongia, along with dedicated volunteers. Local Men's Sheds, Scouts groups, and schools are contributing by constructing trap boxes.

Following a presentation by Taiea te Taiao at Waikeria Prison, residents have expressed eagerness to utilise their time to build additional trap boxes on-site for use within the corridor and beyond. The support for this project has been phenomenal and has surpassed our highest expectations. Our upcoming newsletter edition will be entirely devoted to sharing the stories from <u>Taiea te Taiao</u>.



Te Ao o te Rangi Apaapa - Mātauranga Māori Facilitator

Pirongia Te Aroaro o Kahu Restoration Society - Mistletoe Seed Sowing

During the last week of august, a handful of volunteers attended two mistletoe seed sowing sessions held around the Kaniwhaniwha Reserve and Pirongia Forest Park Lodge.

Once Tupeia fruit was ripe at Lake Titikapu, DOC collected the seed to be sown on Mount Pirongia. This species, along with the green mistletoe would've once been a plentiful food source for wildlife on Mount Pirongia. Due to heavy browsing by possums in particular, the plants became locally extinct. Given the success of predator control by the Pironga Restoration Societ, translocations are underway and in their second year.

Sowing the seed involves removing the seed exocarp to reveal a sticky seed which is placed in the nodes of a select few species of host trees.

If you are interested in helping out with the mistletoe operations, this is the perfect activity for volunteers of all fitness levels. Email Cara Hansen on cara.hansen@mtpirongia.org.nz www.mtpirongia.org.nz





Mangaiti Gully Restoration - Problem Weeds In Our City

Alligator weed, woolly nightshade, old man's beard, moth plant. There are many weeds in our natural areas in Hamilton, but these are the ones to focus on because of their high reproductive rate. You should all be familiar with these weed species and not let any of them get to the flowering stage. In Mangaiti Gully the most prevalent is woolly nightshade (see photo). This is a fast growing shrub / small tree with broad furry leaves and has a strong obnoxious smell when handling the plant. The berry like pods house hundreds of seeds that are distributed by birds. Small groves of woolly nightshade can develop underneath where birds roost at night. Alligator weed is a notifiable weed. You should not attempt to control it yourself. Notify Waikato Regional Council. Good reference documents are: Weedbusters managing weeds and Waikato Regional Council pest plant identification.



