



# Waikato Biodiversity Forum Newsletter

## February 2018 Number 57

### Kia Ora/Greetings

An update on some of the work undertaken over the past three months:

#### *Waikato*

- Wrote a report on the biodiversity forum event in South Waikato (to be released shortly), with a focus on sustainable management of plantation forest.
- Organisation of pest management workshop (at Go Eco Hamilton March 3rd 5:30-6:30)
- Organisation of Waikato District event May 2018
- Attended Bio-blitz, Lake Roto Piko
- Responded to enquires from 0800 BIO DIV service
- Chaired biodiversity focus group meetings
- Updated the bio-forum website and established an improved email format for forum updates.

#### *Coromandel*

- Provided article for the Mercury Bay Informer Summertime newspaper
- Provided input into 3 day visit by DOC Partnership Manager for guidance on being "Investment Ready" for Predator Free Coromandel large scale funding
- Attended the Moehau Environment Group AGM
- Met with new General Manager of MEG to share and provide information about agencies and community groups
- Provided assistance to the Predator Free Hauraki Coromandel Community Trust
- Preparing a report on Otama Wetland Reserve for the Otama Beach Reserve Group
- Wrote article for the Mercury Bay Informer on Bittern and the Otama Reserves Group
- Collated feedback from groups for the proposed workshop in May
- Obtained and prepared articles from Coromandel groups for the Forum newsletter

### Trust Annual Funding Round Now Open

The Waikato Catchment Ecological Enhancement Trust is now seeking applications for its 2018 funding round for ecological enhancement projects in the Lake Taupo and Waikato River catchments. Applications close on 31 March 2018. Funding will go towards assisting organisations, agencies and individuals with projects that foster and enhance the sustainable management of ecological resources in the Lake Taupo and Waikato River catchments.

Since 2004, WCEET has distributed over \$4.85 million throughout the Waikato catchment with a further \$1.5 million committed over the next five years. WCEET supports projects throughout the catchment that maintain and enhance indigenous biodiversity, sports fisheries and game bird populations. Projects funded previously have included riparian fencing, improved fish passage, pest trapping, native tree cultivation and planting.

“Members of the Trust include representatives from Royal Forest and Bird Protection Society, Department of Conservation, Fish and Game New Zealand, Mercury and the Advisory Committee for the Waikato Regional Council”, she said.

To obtain an application form or further information about the Waikato Catchment Ecological Enhancement Trust email: [enquiries@wceet.org.nz](mailto:enquiries@wceet.org.nz) or visit [www.wceet.org.nz](http://www.wceet.org.nz)

For further information contact either:

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## Forest & Bird Maps Reveal Extent of Wetland Loss

Dramatic new maps have revealed the enormous loss of our natural wetlands - and undoing the damage will take years, Conservation Minister Eugenie Sage says. Around 90 per cent of these soggy refuges - vital for supporting plant and animal life - have vanished in the face of development.

Home to an abundance of species like shorebirds, eels, whitebait, mangroves and kahikatea, our wetlands once stretched across 2.2m ha of countryside - that had now dwindled to 249,776ha. Sage described wetlands as kidneys that captured sediments and nutrients, and slowly released water in drought-prone areas. To mark World Wetlands Day, Forest & Bird has released maps that showed the extent of wetland loss, comparing the situation before human settlement, with few remnants.

Of all regions, Nelson had by far lost the greatest proportion - 99.2 per cent - while Waikato had lost the largest area: a total 328,290ha.

Rare and threatened species that relied on our remaining wetlands include the Australasian bittern or matuku, and the Canterbury mudfish. The *Corybas carsei*, or swamp helmet orchid, now only has one population remaining, at the Whangamarino Wetlands near Te Kauwhata in northern Waikato.



The Waikato Freshwater strategy advocates for the recreation and augmentation of wetlands in groundwater recharge areas not just outflow zones for hydrological and water quality reasons with there being recognised and tangible biodiversity and carbon sequestration co-benefits.

### Small Scale Initiatives Fund

Are you a volunteer or community group undertaking animal or plant pest control? You may be eligible for a grant from the Small Scale Community Initiatives Fund. The fund (SSCIF) is opening on Wednesday 28 February at 9:00am

More info at [www.waikatoregion.govt.nz/sscif](http://www.waikatoregion.govt.nz/sscif)

### Pirongia Te Aroaro o Kahu Restoration Society

We have been busy over the summer with another very successful baiting season for our pest control projects on the maunga and at Okahukura, Pureora. After the first 20 kokako were released last year there has been ongoing monitoring confirming that kokako are already breeding on Mount Pirongia. After initially thinking a nest had failed there turned out to be a fledgling still present, and not long after a second nesting pair was found with three eggs! Preparations are in train to translocate more kokako around May and June which include birds with Pirongia DNA currently on Tiritiri Matangi Island. *Dactylanthus* has also been a focus, with a research project undertaken by student Monique Hall from Waikato University, to determine the flowering period for this rare plant on Mt Pirongia and look into potential pollinators. More plants were found during a trip to monitor the population, indicating that the outlook is also positive for this important forest species. Susan Emmitt



**Monique Hall at a caged dactylanthus plant**

### Protecting kauri

Kauri are precious taonga for many New Zealanders. They naturally exist in a line approximately Kawhia – Tauranga north. This means we are exceptionally lucky to have some pretty magnificent trees in the Waikato region. A lot of healthy kauri.

Heartbreakingly, kauri are dying in the hundreds from a microscopic, incurable, auto-immune killer called *Phytophthora agathidicida* (kauri dieback). For the Waikato this disease isn't very prevalent with only a couple of small pockets of dieback on the Coromandel in Whangapoua and Hukarahi.

Therefore, it's incredibly important to protect against this disease getting into any other areas. This disease is spread by soil movement, the main way it can spread is by people and animals such as cattle and pigs. Here's what you can do to protect kauri:

### ***On trail***

- Arrive clean with all soil and organic material removed from footwear, and equipment.
- Use the cleaning station.
- Keep to the track.



### ***Off trail***

- Arrive clean with all soil and organic material removed from footwear, and equipment.
- Keep away from kauri. Best protection is to not go near or through kauri trees/stands (keep outside 3x the drip canopy of the kauri)
- If you do encounter kauri on your travels, make sure you clean between stands (remove all dirt and spray with Sterigene, *sterigene can be purchased from Chubb*)

## **Natural Heritage Fund update**

In the last couple of months, four projects have received confirmed Natural Heritage Fund grants from the Waikato Regional Council.

Mahakirau Forest Estate Society Inc. (MFESI) has received \$154,990 over four years for predator control work in the Mahakirau Forest Estate near Whitianga. The estate comprises 600 hectares of native forest divided into 24 privately owned lots, providing habitat for a number of species including the Coromandel striped gecko, Hochstetter's and Archey's frogs, kiwi, Helm's butterflies, painted cave weta, longfin eel and kokopu. MFESI intends to expand and upgrade its existing trapping and bait station network to ensure strong defensive buffer zones against re-infestation and to intensify efforts in the known habitats of endangered species.

Waikato Raupatu River Trust/Nikau Whanau Trust has received \$84,000 towards the purchase of 13 hectares of the Matahuru Wetland at Lake Waikare. The land purchase will complement the 20.7 hectares of wetland already owned and administered by Waikato-Tainui and Matahuru Papakainga Marae, and they have been doing ecological restoration on their land since 2015. The Matahuru Wetland provides habitat for a number of threatened species including bittern, grey duck, NZ dabchick and fernbird and is a significant part of the Matahuru catchment which in itself represents over half of the entire catchment of the lake.

Project Tongariro has received \$126,750 over three years for restoration planting along the Waiotaka River. The Waiotaka River Restoration Project aims to restore ecologically appropriate vegetation – alluvial kahikatea, matai, totara and ribbonwood forest, and small areas of wetland vegetation – within the Waiotaka River corridor. Currently the river margins are infested with crack willow, blackberry and other weeds. The restoration will help improve the water quality of the Waiotaka River and Lake Taupō by creating a wide indigenous vegetation buffer, and ensure access to the river for the public. Project Tongariro plans to work with Rongomai Marae and Tongariro Prison, with the prison producing eco-sourced trees for the project and the labour to plant most of the trees. The project complements historic willow control works undertaken by the regional council 8-10 years ago.

Maungatautari Ecological Island Trust have been granted \$1.4 million over four years to assist the cost of maintaining the 47km predator-proof fence, pest surveillance and incursion response. This grant from council continues a 10- year-plus commitment to the mountain sanctuary and will help to secure the future of the sanctuary and the many threatened species within. Sanctuary Mountain Maungatautari is the largest remaining area of native forest in the Waikato basin at 3363 hectares in size, and contains 46% of the indigenous forest within the Waipa District. Thirteen species have been re-introduced to the maunga, with a number of new species proposed including kakapo.

The Natural Heritage Fund has been in place since 2005 and is derived from the natural heritage targeted rate of \$5.80 per property.

## **Trapping for Success in the Peat Lake Catchments workshop**

Almost certainly the first World Wetland Day event on the planet occurred Friday 2<sup>nd</sup> February, with an early morning breakfast workshop on predators and peat lakes held at Windy Ridge, Ohaupo. Thirty or so dedicated volunteers from a number of peat lakes across the Waikato region got together with a handful of experts from DOC, Waikato Regional Council and Auckland/Hamilton Fish and Game to share experiences and "top tips" on introduced predator control and biodiversity monitoring.

Hosted by the NZ Landcare Trust and the National Wetland Trust and sponsored by the DOC-Fonterra Living Water Partnership, the event was a valuable gathering of individuals, community groups and agencies all working towards a common goal.

A winning top tip for trappers was to try a range of baits, including "nutella", white chocolate, dried apricot and cheese to attract Ship and Norway rats. To attract mustelids (stoats, weasels and ferrets) try fresh or dehydrated rabbit.

Attendees agreed to meet again to look at forming a peat lake collective to continue sharing ideas and resources, and potentially look at joint funding applications. A future goal to reintroduce patake (brown teal) back to the Waipa lakes was also outlined, with a habitat assessment currently underway.

Follow up - On Wednesday 21<sup>st</sup> February, those willing and able to continue the discussion about forming a peat lake alliance met at Lake Ruatuna to discuss where to from here. If you would like to be involved in checking trap lines around either Rotomanuka or Lake Ruatuna, please contact:



Brian Sullivan – 0274 805 146 Lee Kimber – [kimberwrite@gmail.com](mailto:kimberwrite@gmail.com)  
Mike Paviour - [mpaviour@doc.govt.nz](mailto:mpaviour@doc.govt.nz)

**Participants enjoy breakfast at Windy Ridge, Ohaupo while discussing trapping pest animals, including Norway and Ship rats. Photo: Karen Denyer**

## Opoutere Residents and Ratepayers Association -Ginger Annihilation

Four working bees were carried out over the break with a total of 80 people hours worked. The groups aim is to clear the spit of ginger. Over 1200 litres volume worth of baby plants were pulled from the ground and placed in 20 rubbish bags – which are being left to decompose and, in a year or two they will be returned as compost for future native seedlings. During these 4 working bees an excess of 50,000 ginger stems were cut and pasted, over 20 litres of Cut N Paste Piclorum Gell was pasted onto these 50,000 stems. The 3<sup>rd</sup> massive working bee was a monster effort with around 20,000 stems cut and pasted by 14 people over 2 hours. We used a brush



cutter followed up by people pasting the cut stems. This really speeded up the process. The group are also trapping at Pokohino just north of Onemana to protect pohutukawa trees. They have installed 8 Good Nature A12 traps. On the first check 15 dead possums were lying under the traps. To date 50 possums have been caught. The trees in the area have fresh growth and there are a lots of seedlings appearing. Chris Woudenberg

## Walk Tairua Society Pepe Loop Walk



After many years of planning, dedication and perseverance of a few locals our walk was finally opened on Sunday the 10th of December.

We feel very lucky to have a resident population of Fern birds along the walk. We recently had a report from a resident that they had heard and seen 3 Fern birds in the

same spot. It is unusual not to at least hear one or two whenever walking. Sometimes you are even lucky enough to see them.

Also we have a population of Banded Rail which can sometimes be seen early mornings on the grass along Pepe Road. Two vigilant local women saw a family with 3 babies one morning while walking and on their way home noticed the Mother had been run over. They found the 3 babies which they rescued and delivered to Kuaotuna to be raised by an experienced and locally known bird rescuer. When they were large enough to fend for themselves Marilyn and Janet collected them and released them back on the Pepe estuary.

On the 27th of June we set out 11 DOC 200 traps around the walk continuing on from the Regional Council trap line. We check them on a regular basis as we do the walk often and change the eggs once a month. Our eggs are sponsored by plastic free Tairua group which is much appreciated. We have so far caught 7 rats the beginning of the trap line being the most successful. Our target is stoats but so far no stoats.

We also set out some wasp lures to ascertain if we had a wasp problem and are happy to report that no wasps were found. Lynette Adlington and Cherry Ladd.



## Here's an update on the GPS workshops

GPS Workshops - an initiative of the Forum in 2017 - have expanded to include the Tasman and Bay of Plenty Regions. Workshops were held over a three-day period in Richmond, Motueka, and Takaka. The multiple venues meant that participants had to travel 30 minutes or less to attend their local workshop. A customized workshop which included the Garmin RINO series of GPS devices was developed and presented in Whakatane to a large audience.

Overall the workshops have been well attended and received. Comments have included "thoughtfully put together", "I learnt heaps", and "I'm less likely to throw it in my bag and say 'It's broken!'"

The GPS Workshop takes about 7 hours and can accommodate an audience of 20 or so people. See the website at [gryphonsubsea.wixsite.com/gpsworkshops](http://gryphonsubsea.wixsite.com/gpsworkshops) or contact Jeff Williams ([gryphonsubsea@gmail.com](mailto:gryphonsubsea@gmail.com) or 027 580 4500) to inquire about a workshop for your group or region.



## Biocontrol – a better alternative for managing weeds?

**What is biocontrol?** Biological control is the use of living organisms to depress the population of a pest. A good example that has been very successful in New Zealand is Ragwort flea beetle – which has reduced ragwort to very low levels in most areas.

**How do you deal with your weeds?** Most weed control is done using agrichemicals. Chemical control is expensive, almost always needs to be repeated every year and has the potential to damage native species. Certain countries have already banned certain chemical sprays due to their health risks to humans.

**The future?** Looking for better and safer ways to do things, the Waikato District Council (WDC) Ecologist has been working with Landcare Research and the Waikato Regional Council to establish a biocontrol programme for serious plant pest species throughout the Waikato District.



**Woolly nightshade lacewing are breeding and spreading well.**

**Benefits of biocontrol** The beauty of biological control agents is that they are designed by nature and fit in to very specific ecological niches. Being living organisms they will increase and decrease their populations in response to the number of host organisms in the environment. So a small release in a large weed infestation can multiply to levels to effectively reduce the weed infestation, and then reduce correspondingly in population numbers as the weed is reduced.

Also, being living organisms they will actively seek out hosts and therefore a release at any point in a catchment is likely to spread throughout the catchment to deal with all weeds in the area. This programme has found a better way to deal with some of the most aggressive pest plants in New Zealand.

Biocontrol is more cost effective than spraying, it is safer for the environment and handlers, it is a long term solution and is very target specific.

**What is being controlled?** WDC has been involved in the use of insects that target woolly nightshade, *Tradescantia fluminensis*, Chinese privet and, very recently, Japanese honeysuckle.

All releases are doing well and producing offspring, and in all cases the number of weeds available for the insects is far greater than the number of insects available. So, as expected, there will be a lag time of a number of years as the insect populations grow to match the number of weeds available.



**Tradescantia beetles have literally a mountain of Tradescantia weed to get through, so it will take a number of years....**



**...but Tradescantia biocontrol damage is easy to spot.**

**Where can I find out more?** Landcare Research is spearheading the research and breeding of biocontrol in New Zealand, and further information can be found on their website: <https://www.landcareresearch.co.nz/science/plants-animals-fungi/plants/weeds/biocontrol>

For local information on biocontrol, contact your Regional and District Councils or your friendly Biodiversity Forum Advisor

- Ben Wolf, Waikato District Council Ecologist.

## Wild fish - Worrissome Creeks, A little native fish sampling of Tararu Creek, Thames.

It is not often that a visit to a local swimming hole leads you to meet one of your idols, but that's what happened when my daughters and I visited "The Black Hole" on Tararu Creek on hot summer day.

A squeal of delight rang out from under the waterfall where half a dozen fish were clinging onto the sheer wall. I took photos and video to send them to native fish expert Stella McQueen - author of Freshwater Fishes of New Zealand.

That night I uploaded the shots to Stella's Facebook page and asked if they were Galaxids. Her response was quick and definitive - redfin bully. Then she made my day by saying she would like to come and take a closer look. We set the date and I could not wait to the following Sunday to have the chance to meet her. My budding naturalist daughter Lillian (13) was keen to join us too.

It was another hot day and we were rewarded for our efforts, Stella caught a koaro, Lillian a koura and I caught a couple of redfin off the waterfall.

Downstream, Stella caught a torrent fish (below), Lillian some freshwater shrimp and I caught more redfin. We saw inanga but they were far too quick for us. So ended an unscientific but thoroughly rewarding expedition.

Ric Balfour - Parks Project Officer: Thames-Coromandel District.



**Stella McQueen (left) and Lillian Balfour (right) fishing the last pool at "The Black Hole"**

