



Waikato Biodiversity Forum Newsletter Winter 2019 Number 62

Kia ora tātou,

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

- Co-organised and hosted Hamilton Urban Restoration Event
- Co-hosted lizard workshop with Maungatautari Mountain Sanctuary
- Edited, published and gathered articles for Winter edition of Bio forum Newsletter
- Supported and attended inaugural gully restoration meet with Go Eco and WRC
- Attended Project Echo meeting and strategic planning session
- Responded to 22 enquires from email and 0800 BIO DIV service
- Chaired and took minutes for biodiversity forum focus group meetings
- Edited and supplied article to Hamilton News for Hamilton restoration groups
- Attended and participated in HCC biodiversity strategy community day
- Began planning for South Waikato Forum event in November 2019
- Updated the bio-forum email blog, website and facebook

Project Echo Seeking Bat Surveys

Project Echo/Waikato Regional Council are currently collating bat records in the Waikato region which have not already been entered into the national DOC database. If you have carried out any bat surveys at your site then please send the details to kate.richardson@waikatoregion.govt.nz, these will be collated and sent into DOC so that all records are stored in one place. Even if you did not detect any bats, this is still really useful information that can help prioritise sites for monitoring. If you are interested in carrying out

a bat survey at your site then contact Kate on the email above or 021 526 864.

New Home for bats in Mangaiti Gully

The NZ Long-tailed bat *Chalinolobus tuberculatus* threat status is classified as “nationally critical”. Hamilton is fortunate to have these bats within the city, mainly located in the south. In the 2018 city- wide survey a bat was monitored in Mangaiti Gully (in the north). We therefore decided to install bat homes in tall trees to encourage bats to establish in the area. This project fits in very well with our Trust’s overall goal of enhancing the native and indigenous biodiversity of Mangaiti Gully.

The overall plan is to install twelve (12) bat homes along 1.6km of gully. For groups that may be considering a similar project it is a lot more than getting a local lad that is good at climbing trees to nail a box to the trunk. The bat homes retail for \$100 at Go- Eco. We made our own out of donated macrocarpa and



cedar timber (it should not be treated pine because of its toxicity properties). The design is the Kent Bat Home. A pdf is available from Waikato Regional Council on request. The installation is for an experienced arborist due to the height, type of trunk and that there is usually trimming of branched to be done which requires a chainsaw. This is serious tree work. Budget on installing only four or five per day. We used Greenfootprint, Tim Newton, a Hamilton arborist.

Above and beyond the bat home, aluminium sheeting is attached around the trunk to prevent rat attacks on any bats. We have found we use approximately four (4) metres per tree. The aluminium is available from Ullrich (Their code COILO.4560025). It is sold by the weight but a coil has approximately 37 metres costing about \$391 including GST plus freight.

If you would like more information on ideal sites to install bat homes contact either Kate Richardson WRC or Gerard Kelly HCC. Rex Bushell, Co-ordinator, Mangaiti Gully Restoration Trust, 854-0973 021-237-3857 <http://gullyrestoration.blogspot.co.nz>



Arborist attaches Tim Newton installing one of the Mangaiti constructed Bat Boxes.

Volunteers help peat lake wildlife

Boosting the number and variety of birds around the unique Waipā peat lakes is a key motivator for dozens of keen locals who regularly patrol the lakes checking traps for rodents and other predatory pest animals. Near Ōhaupō, the Rotopiko Catchment Care group has been up and running for three years now, trapping pests around two of the three Rotopiko lakes. Local volunteers, supported by the NZ Landcare Trust and the National Wetland Trust started trapping around South Lake in 2016 and North Lake in July 2017.

The North lake group is comprised of hunters who shoot on the lake, i.e. the Hunters User Group (HUG) and is coordinated by representatives from Hamilton Fish and Game. The South lake volunteer trappers come from the local community and as far away as Hamilton and Te Awamutu, and is coordinated by the NZ Landcare Trust, supported by the National Wetland Trust who manage a pest-free enclosure around East Lake. South Lake is the biggest of the three lakes in the Rotopiko Lakes Complex and there are two sets of volunteers who usually check, clear and reset half of the traps around the lake each. There is no formal walking access around either lake, so forming a rough route for volunteers was the first task. The land is a mixture of Crown land and Waipā District Council esplanade reserve land. HUG have permission to cross private land to access North Lake for their trapping lines. As with any wetland, there are seasonal issues with weeds and water levels, with it being very boggy in places during winter.

While North and South Lakes have no formed walkways, visitors are welcome to walk around East Lake, with boardwalks built by the National Wetland Trust and Waipā District Council. This lake is enclosed in a predator proof fence to create a showcase site for wetland conservation, where unique associations of plants and animals can be experienced and enjoyed by visitors, and to provide opportunities for education and research. While East Lake is now a safe place for birds to breed, all of the birds that currently live around the lake can fly, and if they leave

East Lake, they now have a greater chance of surviving around South and North lakes. The trapping around these lakes has indeed brought predator numbers down, as a recent chew card survey showed no rats detected around either lake, just mice and possums. This confirms the rat control is working, which is why the mouse numbers are higher. It's not just birds that are helped by the predator control. At East Lake the number of copper skinks and wētā have been steadily rising, and a recent survey revealed the presence of the threatened long-tailed bat.

Anyone can volunteer to help with trapping, or with other tasks such as planting, weed control, environmental education or looking after the wetland discovery trail built for families around East Lake.

Contact Nardene at nardene.berry@landcare.org.nz if you would like to get involved.



A recent chew card survey showed no rats detected around either Rotopiko North or South Lake, just mice and possums

Pirongia Te Aroaro o Kahu Restoration Society

Rifleman (Titipounamu) numbers have increased substantially since community pest control began in 2006 on Mt Pirongia, and now Pirongia is being considered as a possible source population so they can be re-established on Maungatautari. We have been collaborating with MEIT to complete an

abundance survey within our 1,000ha pest control area. About ½ was covered on 18 May with 28 volunteers helping. There were 147 sightings with 100% certainty, and a further survey is planned for 20 July.

Preparations for trapping of mustelids and feral cats are continuing, although we still don't have the traps deployed as yet. Dates for our bait station filling have been set for 31 August and 7 September for Mt Pirongia and 14/15 September and 12/13 October for Okahukura. A massive thank you to Waikato Regional Council for a \$5,000 grant for our Okahukura pest control costs.

New volunteers are always welcome; please contact our volunteer co-ordinator Dianne June on djune@xtra.co.nz.



Above :Pirongia rifleman survey volunteers Photo: Laurette Strude.
Below: A rifleman on Mt Pirongia by Kaye Turner



DOC at Fieldays 2019

Last week DOC was featured at Fieldays, the largest agricultural event in the Southern Hemisphere which attracts over 130,000 people to its gates over four days of action-packed farming and agriculture.

The Waikato project team planned for months in the lead up to the event and created an amazing exhibition with the key message: small actions count. Staff showed visitors how to create change on their properties and farms for better biodiversity outcomes.

The DOC tent was designed to take visitors on a personal journey. Visitors entering the tent were shown that New Zealand's Biodiversity is in crisis. Then taken on a tour through our major habitats, marine habitat, freshwater, threatened species and 1080.

The section of the government's Predator Free 2050 goal and 1080 was popular with young and old. Staff educated people on the array of trapping techniques and resources available, and in some cases learned new techniques from our visitors.

Waikato Regional Council supported the key messages and featured daily in the DOC tent, bringing with them a range of information about weeds, freshwater and waterways.

The activity area was a popular with children and parents. Kids were asked to draw a picture on their terracotta pot, of what they would like NZ to look like in future. Then they chose between a Kowhai, Mapou, Miniature Harakeke or Miniature Toitoe to plant and take home.

DOC asked visitors to make a pledge to perform an action that will help turn the tide on biodiversity loss. Rangers stuck the pledges to the wall so other people could become inspired by them.

The Toyota Kiwi Guardians NZ Biodiversity Scavenger Hunt went down a treat with kids and parents, as they were taken on an adventure throughout the Fieldays event. Kids needed to go to a marked location on their map and write down the threatened species that they found there.

DOC teamed up with Toyota and got on board AgResearch, Farmlands, PGG

Wrightsons, Hunting and Fishing to name a few, to get kids and their families to go on cool adventures together. The scavenger hunt was a huge success with the first champions receiving their certificates on the morning of day 1. Ngā mihi, Christina Harris Pakeho, Advisor Communications | Hauraki-Waikato-Taranaki Region



Doc Staff in action at Field Days 2019 Photos; Christina Harris Pakeho

Ferret Frenzy – Owhango Alive

On 4 January this year we started catching what would end up being a frightening amount of ferrets. In 5 weeks a total of 16 had been trapped, caught or shot in and around the Ohinetonga Scenic Reserve. And then another one was trapped on 22 May. In the preceding 7 years, a total of 4 ferrets had been caught, so we feel this is significant. Was it due to being such a good breeding season for many animals, especially rabbits? Or just a coincidence that we intercepted the juveniles

leaving their dens in search of their own territories?



Mark, Jerome and Sally with trapped ferrets.

Lessons we have learnt :

Try to think like a ferret – follow the natural tracks and contours that a migrating young ferret may follow. Trap accordingly, at the right time of the season. Research (The Handbook of NZ Mammals – Carolyn M. King) indicates that the kits will emerge from the natal den at around 6 weeks and then move out to find their own territory another 5 – 6 weeks later. In a good season the female may produce 2 litters of up to 8 kits. Given that breeding commences around October/November, early January is a good time to start targeting the ferrets on the move.

So, to summarise, be on the lookout for signs in late December and start trapping from then, in known tracks and habitat. Ferrets apparently like to climb a post in a corner, so as to have a look around and “survey the scene”. Given the ferret incursion on the Kiwi in Tongariro Forest Park last year, we hope that the despatching of 17 ferrets this season will help in some small way to halt the killing, by ferret predation, of our local Kiwi population. Danial Van der Lubbe, DOC’s Biodiversity Threats Ranger, has been a huge help and support to Owhango Alive in this endeavour, providing us with live capture traps, DOC 250’s, fresh rabbit bait (in convenient bite sized pieces) and lots of advice and encouragement. Acknowledgement is also due to Mark Fredericks who put in many k’s on his motorbike and hours of his spare time on trap placement, checking live capture traps daily, rebaiting, and trying to “think like a ferret”. DOC

have placed more than 300 DOC 250’s in the Forest Park, which are being checked at least monthly, but often fortnightly.

From the Mighty Waikato – Whakaupoko Landcare

Stu Muir has had two corporate days to help plant over 2000 native trees. Regenerating miro, matai and rimu as a seed source for the district, as well as a dozen other native species. Confirmed tomtits are thriving on Pakau across the river and we have done 3 refills of bait stations up there. This is most encouraging to have another native bird species so close to our area

There has been a great response from duck shooters and whitebaiters re bait days for the river with servicing some of the 1200 bait stations on the islands and river edge. There will be another hit in July just before whitebait season. Bait and other pest supplies are also being distributed to people living on the river during whitebaiting.

Tawera Nikau visited to discuss koi carp control and put in an application for 200k with Pest Free NZ to look at developing koi carp as a lure for mustelids.

Hosting Ngati te Ata tamariki day on Sunday to reconnect to the awa and share matauranga Maori about flora and fauna, importance of pest control and restoration of wetlands / bush blocks etc. Stu comments that weasels and stoats are still being trapped along the river where uncontrolled. They are prolific in this type of environment and highly destructive Stu is developing a proposal to Young Farmers NZ via a role as director on Donald Pearson’s farm to engage them and Manurewa high school in restoration and pest control. There has been a pledge from Trees that Count to do their planting. (Hunua).

Below is a picture with no explanation. Some thoughts were that it was the latest in fishing techniques to scoop ‘the big one’. Others are thinking it may be to do with creating channels for whitebait restoration areas and suitable areas for revegetation.



Te Awa o Waikato, "Photo with no explanation".

The Friends of Te Whanganui a Hei Marine Reserve Trust - 'if we look after the water from the mountains to sea, it will look after us.'

This year's Experiencing Marine Reserves (EMR) saw over 215 area students along with parents and teachers completing the programme. The schools involved were: Harataunga, Coroglen, Moanataiari, TeRerenga, and Whangamata.

The focus of EMR is to provide quality education opportunities, increasing awareness, encouraging action and support for marine conservation in New Zealand. Our coordinator provides guidance, direction and coordination of classroom exercises and field trips to Te Whanganui A Hei Marine Reserve. The concept of EMR is to engage schools and communities by providing the equipment and expertise for a hands-on learning experience in the ocean.

The 18th annual EMR Poor Knights competition trip took place on Friday the 17th May. The trip was organised by Experiencing Marine Reserves (EMR) and made up of representative students from each school that participates in the programme throughout the county.

This competition offers the students an added incentive to produce projects and positive actions towards marine conservation within their community. It also gives the students with their parents or guardians a chance to experience the magical Poor

Knights. Aria Macdonald from Coroglen School was chosen from this region for her Action project on expanding the Marine Reserve. Rosa Ballard, from Te Kura Kaupapa Maori o Harataunga was chosen for her art project; a turtle made from rubbish she collected on the beach.

The Trust is excited to be offering for the first time in our region The Whitebait Connection (WBC). The Whitebait Connection is a programme of experiential learning about freshwater conservation and catchment restoration.

Our Coordinator Amber Boyd is working with early childhood through to year 8 students in our region offering tailored Whitebait Connection Programmes. Coromandel Area School and Mercury Bay Area School have participated in the programme to date. The Friends of Te Whanganui-A-Hei Marine Reserve Trust are the regional provider for The Mountains to Sea Conservation Trust in the Hauraki/Coromandel region and are extremely pleased to be able to provide the funding needed to deliver the Trust's Experiencing Marine Reserves (EMR) and Whitebait Connection (WBC) programmes to local area schools. We are a Charitable Trust. Anyone wishing to make a donation towards the EMR or WBC programmes can contact the secretary - Barbara Ritchie at barbritchie@xtra.co.nz For more information about your school participating in EMR and WBC in this area contact Amber Boyd amber@emr.org.nz



Damon and Aria Macdonald on left. Tanya Popp and Rosa Ballard on right

Waikato Biodiversity Forum Biocontrol Workshop

The first Waikato biodiversity Forum workshop of 2019 took place on March 22nd and focused on the exciting field of “biocontrol”, which is the use of biological means (bugs, fungi etc) rather than herbicides to control pest plants. Biocontrol offers a cost-effective, environmentally friendly, and permanent solution to weed control. Carefully selected biocontrol agents target only weeds. They don't harm desirable plants, and don't pollute the environment. Once established, they travel wherever the weed spreads and can return again and again to kill off new weed growth—all without human input.

We were lucky to have Lynley Hayes to lead our workshop. Lynley is one of NZ's leading experts in the field, and is the main spokesperson for biocontrol from Landcare Research, who carry out all the research and development of Biocontrol agents in NZ. We also had Ben Wolf and Hamish Hodgson from the Waikato District and Regional Councils on hand to lead our field trip proportion of the day, as it is they who are in leading implementation of biocontrols in our region.

The workshop began at Landcare's offices in Hamilton, where Lynley gave a very comprehensive analysis of the biocontrol process. The story began with pest plants being introduced to our shores, then over a 50-100 year process becoming an established problem, and eventually to how these same plants' biocontrols are discovered, tested and implemented in NZ. Not surprisingly it is a long, somewhat complicated and extremely fascinating process, involving international collaboration with countries where pest plants originate from, as well as those who also are affected by the same kinds of weeds.

After lunch the workshop moved to Edgumbe Park for a Tradescantia stem and leaf beetle collection workshop. The beetles were released there about 4 years ago and are now well enough established for harvesting of these bioagents to take place. The group collected about 200 beetles which were enough for 4 releases to be taken by workshop participants for releasing at their own sites. The

beetles are able to spread on their own accord, but by collecting and re-releasing the beetles, this process is significantly accelerated.

The workshop then split into two groups, one headed out to Waingaro to view a tradescantia fungus release site which is spreading well, while the remainder went to Karapiro to view privet lace bug, and gorse weevil.

To learn more about the biocontrol please follow this link to [Landcare Researches Biocontrol page](#) which offers a wealth of information on this very exciting and effective weed control strategy.



Lynley Hayes (centre) points out gorse weevil damage to workshop attendees at Karapiro Dam.



Workshop attendees harvesting Tradescantia stem and leaf beetles at Edgumbe Park, Hamilton.