Waikato Biodiversity Forum Newsletter

Spring 2019 Number 63

Kia ora tātou,

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

- Organised and hosted Bat Workshop at Waikato museum
- Edited, published and gathered articles for Winter edition of Bio forum Newsletter
- Building of new forum Website with Digital Stream
- Supported and attended inaugural gully restoration meet with Go Eco and WRC
- Responded to 29 enquires from email and 0800 BIO DIV service
- Attended and participated at Bat Fun Day
- Chaired and took minutes for biodiversity forum focus group meetings
- Edited, published and gathered articles for Spring edition of Bio forum Newsletter
- Organisation of South Waikato, River Trails Forum event in November 2019
- Attended and participated in Ngati Haua Mahi Trust open day
- Attended and participated in HCC biodiversity strategy drop-in day
- Attended and participated in National Biodiversity Strategy Workshop
- Attended Acre Meeting
- Organised and took minutes for Project Echo Meeting
- Updated the bio-forum email blog, website and facebook

Biking and weeding along the Nikau walkway

The weather on Sunday 15th September 2019 was just fantastic for a Conservation Week event, biking and weeding along the Nikau walkway in the Pirongia Forest Park. Organised by Nardene Berry from the NZ Landcare Trust, in partnership with DOC and the Te Pahu Landcare Group, around 20 volunteers came to help out. Some people biked directly to the Reserve, and then carried on up to the Kaniwhaniwha Campground on their bikes to weed around the native plantings up there. These plantings have been undertaken over the years by volunteers, mostly from the local community with assistance from DOC.

Other participants started weeding along the Nikau walkway itself, which is a beautiful riparian margin planted with native plants by volunteers over a period of sixteen years. The flowering kowhai was a highlight on the track. However blackberry, Himalayan honeysuckle and gorse are coming in, so we tackled these weeds on the day.

One of the trickiest parts of the day was carrying grubbers and biking at the same time. Certainly being on bikes let us achieve more in the time we had though, so if we do this again, we might have to figure out easier ways to transport the tools.

A special thank you to Cara and Ben from DOC who organised the bbq and lovely celebratory cake. That was pretty special. We all sang “Happy Birthday” for 50 years of Conservation

Week and sixteen years for the Te Pahu Landcare group, ate cake and enjoyed sharing each other's company in the scenic reserve.

The biking and weeding crew enjoying a well earned BBQ and celebratory cake

Kaitiakitanga Trust, Okete Restoration

The first project came about following 10 years of public land at Okete being cleared of gorse, blackberry, convolvulus, privet and hawthorn with thousands of native plants being their replacement (See Photo A). The weed control is an annual job which is critical in the first 3 years after planting and requires constant monitoring until a good canopy is achieved after 6 to 7 years.

The volunteers who helped with this project 10 years ago are still involved. They are now joined by men referred through Prison Care Ministries, local barristers, Oranga Tamariki and Youth Justice. One consistent element in this work is the satisfaction experienced by the participants after working with nature.

One 22 year old father of three spoke of the calm he felt and joy at learning "how to plant flowers". He spoke of Wairua and the importance of Whenua to Maori. His co-worker also talked of Maori myths, legends and oral history making it a great day of exchanging knowledge between Maori and Pakeha.

Each man receives venison sausages or meat at the end of the day as well as coffee, a café lunch or pies. The feedback from attendees has been very positive and close to 1,400 trees have gone in this year, with 300 to go. Plenty of gorse and blackberry has been removed and left to decompose to form better soil.

Common invasive weeds to be removed in this picture include gorse, blackberry and Argentinian pampas.

The Ecological Plant Shield

Description: The Ecological Plant Shield is a protective sleeve for plants. It is made from materials that do not have a negative impact on the environment and can be left in-situ to naturally degrade over time, leaving no harmful waste in the environment.

Uses: *Habitat restoration / plant protection:* The Ecological Plant Shield is designed to protect plants from negative environmental and other factors, including destruction by Leporidae (rabbits and hares) and birds (such as pukeko) by creating a physical barrier from the ground to up to a height of around 320mm. This allows the plant to grow out and above the plant shield until it is big enough to reduce the risk of destruction by these animals. The

Ecological Plant Shield also helps to protect the plant from wind and spray (salt or chemical), helps to retain ground moisture around the protected plant, provides a reflective surface for light to penetrate the growing areas, is easy to install, helps with maintenance and is easy to spot in long grass.

Background: Having worked on planting and habitat restoration for over 10 years, there are a number of issues that affect the establishment of plants once they are planted. These issues include damage and destruction by pukeko and rabbits, encroachment by weeds, damage during maintenance and weed control activities, spray drift, drying due to excessive wind and other climatic factors. A variety of plant shields exist, but they are either made of plastic and therefore become an unwanted waste product, or are made from cardboard type materials which are simply not as robust as plastic and deteriorate fairly rapidly in the environment.

Plant shields made from natural materials do exist, but are priced much higher than the plastic or cardboard ones. The Ecological Plant Shield solves the negative issue found with other plant shields in regards to degradation and waste and achieves the positive outcomes a plant shield should exhibit with regards to longevity and positive environmental impacts.

Purpose: The Ecological Plant Shield aims to be a cost effective solution to achieve a plant shield that is a robust product, has no negative impact on the environment and achieves the aim of protecting plants.

Detailed description: The Ecological Plant Shield is a physical barrier to be placed around a plant (generally a range of sizes from root trainer to PB5 size) after the plant is planted in the ground. The volume of the Ecological Plant Shield is around 5 litres with a height of 320mm. It is made from a rock-paper material that is licenced by Environmental Choice New Zealand (licence number 2611089 and 1011090) and is recyclable with Number 2 plastics. It will degrade to materials that have no negative impact on the environment and can be composted. The method of installation requires a rod place holder such as a bamboo cane.

Highlights of the Ecological Plant Shield:

- creates a protective barrier for plants planted outdoors that is composed primarily of rockpaper
- will withstand environmental degradation for a minimum of 12 months (including rain and UV)
- has a reflective internal surface to enable more light to reach the plant
- has a reflective external surface to make it easily located and visible in a field
- is compostable
- leaves no inorganic waste product on the environment
- is recyclable with Number 2 plastics
- helps to maintain a suitable internal microclimate to aid plant growth
- is priced competitively in the market
- is less prone to de-lamination compared to cardboard plant shields
- leaves no plastic waste in the environment
- offers the most robust design for weight of any plant shield

- low weight allows for cost effective transportation and reduces carbon footprint

Contact details: If you are interested in the Ecological Plant Shield please contact me via email or phone – natureproducts2019@outlook.com or 027 265 8189. We are trying to keep costs as low as possible, (currently somewhere between $1.60 and $1.80 a shield, depending how many are ordered, plus GST and shipping). Ben Wolf, Ecologist, Waikato

Plants with and without the Ecological Plant Shield

Pirongia Te Aroaro o Kahu Restoration Society update

Pirongia Te Aroaro o Kahu Restoration Society was thrilled to secure almost $300,000 recently from Waikato Regional Council's Natural Heritage Fund, as well as financial support from the Department of Conservation, Trust Waikato, Waipa District Council and Waipa Networks. The grants will collectively be used to cover ongoing pest control costs for the coming years as well as a paid project coordinator role to support all the fantastic work the group is doing to protect our native wildlife up on the maunga.

We have been fairly busy over the chilly winter months seeing the completion of a number of projects: to determine the feasibility of a translocation of a small number of tītitipounamu, (aka rifleman) to Maungatautari, a survey using volunteers from our group and MEIT located 357 confirmed birds; we checked seed-set of Dactylanthus Taylorii populations near Pirongia summit, but only modest levels were found; and working bees tackled upgrading work at our envirocentre building.

Bait station filling has begun on Pirongia and at Okahukura, Northern Pureora Forest, with excellent support from volunteers and DoC. Initial kokako surveys at Pirongia have found 12 birds including 4 pairs. One of those pairs is unbanded, meaning both birds were hatched on Pirongia! Mustelid traps and feral cat control are also now in place to ensure we are giving our kokako the best possible breeding success. As always, we are on the look-out for extra helping hands, so please contact Dianne June on djune@xtra.co.nz if you'd like to be involved. Parva Zareie.

View from high on Pirongia Maunga.

Predator Free New Zealand Map

"Predator Free New Zealand (PFNZ) maintains a map of predator control in New Zealand with the goal of telling the national story for those curious about the big picture, while also being a helpful tool in a local "find a group" sense. We

encourage any groups undertaking predator control to add themselves to PFNZ's map here https://pfnz-geoform.azurewebsites.net/. The PFNZ map helps depict the scale of effort being put into making NZ predator free and they want to know about all efforts big or small. If you have any trouble email Zoe at PFNZ, zoe@predatorfreenz.org." Zoe Heine, Predator Free NZ Trust www.predatorfreenz.org.

Conservation Week in the Waikato

Conservation Week 2019, the 50th Anniversary of Conservation Week, turned out to be the biggest conservation week celebration yet with hundreds of events around the country. In the Waikato region, as usual, there was a fabulous community effort.

The week was kicked off with a weeding biking day at Kaniwhaniwha, organised by Nardene Berry of Te Pahu Landcare with support from DOC Rangers Cara and Ben. The first of our 8 “Nature needs us” Conservation Week cakes was devoured here. The week wound up in style with Hine e Hine at the Meteor Theatre in Hamilton. This event, organised by Go Eco and the Meteor Theatre included a weeds workshop facilitated by DOC biodiversity expert, Lucy Roberts - and Minister of Conservation, Eugenie Sage, dropped in for a chat.

Some highlights were Waiwhakareke Schools Day, where DOC Conservation Dog Handler, Greg Van der Lee, wowed the kids with his knowledge of dog behaviour. The dogs were stars of the show, getting cuddles before demonstrating how to sniff out a stoat. It was very rewarding to see a few students who had attended last year noticeably interested, engaged with conservation messaging and alert for new understandings.

Another Conservation Week highlight was the massive effort by 100 or so school students aged from 5 to 18, who planted 2900 trees and plants on public conservation land near Lake Whangape as part of the Lake Whangape Restoration Project. Students, staff and whanau from Huntly College, Te Kauwhata Primary, Te Kauwhata College and Ruawaro Primary School were joined by DOC, Waikato Regional Council, Waikato Tainui and local farmer, Oliver Saxton, who provided the plants, access and parking. The Project, funded by the DOC, Waikato Regional Council, Waikato-Tainui, the Waikato River Authority and Ministry for the Environment through the Government’s Freshwater Improvement Fund aims to improve water quality at Lake Whangape and the natural habitats that adjoin it. After the schools left, contractors put in another 3000 trees and plants. Kerry Bodmin, Project Manager for the Lake Whangape Restoration Project, is excited that project planting has got off to such a good start.

Greg Van der Lee, wowing the kids with his knowledge of dog behaviour.

Biodiversity Forum Lizard Workshop

The second Biodiversity Forum Workshop of 2019 took place on the 16th of April and was focused on our Aotearoa's endemic lizards. The workshop was hosted by Sanctuary Mountain Maungatautari, who also helped with organisation of the event. The bookings for the capacity of 50 workshop attendees were reached in a short time, demonstrating the strong interest held in the community for our native lizards. Monique Nelson Tunley (WRC) began the workshop with a very thorough and informative presentation on NZ lizards. Her talk began by explaining some basic biology which makes lizards distinct from other reptiles. Then she went on to describe Aotearoa's endemic lizards, which are made up of over 110 different species of geckos and skinks. Many of the attendees were quite surprised by the variety and beauty of our native species, particularly when Monique actually brought out a live Duvecel Gecko, which she has a licence from DOC to breed. This was a big hit with adults and children alike!

Andree Hickey-Elliott & Kathryn Longstaff of Tonkin & Taylor then talked about projects that they had worked on in the Waikato involving lizards. The most recent was the ecological surveys done on the southern links section of the Waikato expressway. Andree said that they had used various techniques such as laying Onduline, (lightweight corrugated roofing iron like product), using pitfall traps and placing tracking tunnels to survey. But because of the highly modified habitats within the survey zone, there was only the presence of a small number of copper skinks detected. These were then moved into a predator proof enclosure within the Manga O Gully.

After morning tea, the workshop moved into the Maungatautari enclosure, where we split into two groups, led by Monique and Kathryn. The two groups went looking for Lizard habitat and discussed monitoring techniques. The likelihood of actually seeing lizards was low, being that it was daytime and that no Onduline or pitfall traps had been placed. Monique explained that if you are lucky, you will see lizards sunning themselves on the fence surrounding the enclosure, but you would spotlight at night to give yourself the best chance of seeing these cryptic creatures. Although we didn't see any wild lizards on the day, everyone was full of enthusiasm and wonder of native lizards and the knowledge of them they had gained. After the workshop, many attendees stayed on and took the opportunity to see our largest and most famous of Aotearoa's reptile family– the Tuatara. Which reside within the Sanctuaries wetland enclosure. Thanks to Sanctuary Mountain Maungatautari as well as all the speakers and attendees for making it such an enjoyable day.

Monique Nelson Tunley giving the lowdown on lizard monitoring at Sanctuary Mountain Maungatautari.

Planting for Kereru in Mangaiti Gully

This long-term programme is underway. It is based around the Miro tree because of its berries being so palatable to the Kereru. First we identified existing Miro in the gully and GPS plotted them onto a map. Now we are following up by selectively planting Miro so that we fill in the gaps. This is being done over the entire

thirty hectares of Mangaiti Gully. With the sum of what is already in the ground and what plants we have to go in will total more than forty.

In addition, around each Miro we are planting Tawa, Pigeon Wood and Nikau. The theory is that we will develop forty attractive feeding stations for Kereru within Mangaiti Gully. We do stress that this is a long-term project in that these trees take a considerable number of years to mature.

Hamilton Kereru. Photo: Kemble Pundney