

Kāpiti-Mana Forest and Bird

Newsletter May 2022

Chair's opinion: Start something

We should all start projects no matter whether we think they will succeed or not. We should be bold even if we can hardly believe what we say and we should be confident. We will not have to complete these projects alone. Volunteers, employees and even the odd councillor will jump on board. Things will happen that the initiator will never become aware of. Some people will take an action that is crucial yet never becomes public knowledge. If the project has merit, it will grow. Here are some examples.

When I re-engaged with Lower Hutt Forest and Bird about 20 years ago, I wondered what I could do to make a difference. LH had lots of forest and good wetlands. I had been reading about eco corridors and decided to try to link up all the ecological treasures in Hutt City. To link the treasures on the eastern side of the Hutt Valley to those on the west (Belmont Regional Park and Akatarawa) I needed a corridor across the Hutt Valley. The obvious place was Silverstream at Hulls Creek to the east, and the top of Manor Park Golf Course to the west. MPGC gave permission to plant a small area and planting by F&B started and continues today. We found that much of the area had been a hardfill site but carried on (Location, location etc.) Just last year, LHF&B were disturbed to hear that a large pipe line was needed through the area taking out a 10 metre wide belt of planted land. If the project had not been going for years, LHF&B would not have been consulted. The consultants wrote "... At Silverstream the hillside spurs extend close to the east and west sides of the river. Native plantings of the riverbank at this location is seen as a point where native birds and wildlife might inhabit and travel across the river corridor to each side of the valley. The vegetation and the river corridor is therefore an important part of regenerating native forest and ecology of the wider Hutt Valley and the Hutt River corridor."

The outcome is that the pipe corridor has been reduced to 7 metres and a planting plan including ripping some of the difficult hardfill land will be professionally done as part of the project, the size of the area has increased on both sides of the river (Picture below). The idea of an eco-corridor across the Hutt Valley is now part of the Hutt's expectation. The land, now owned by GWRC is secure, the project will be completed earlier than LHF&B could have and the corridor now includes all the land we hoped eventually to get. The LH eco-corridor project covered many other areas besides this one and has been extraordinarily successful.

John McLachlan, I understand, initiated the Kaitawa Reserve project and when it started, it was anything but beautiful. F&B volunteers still work to improve it.

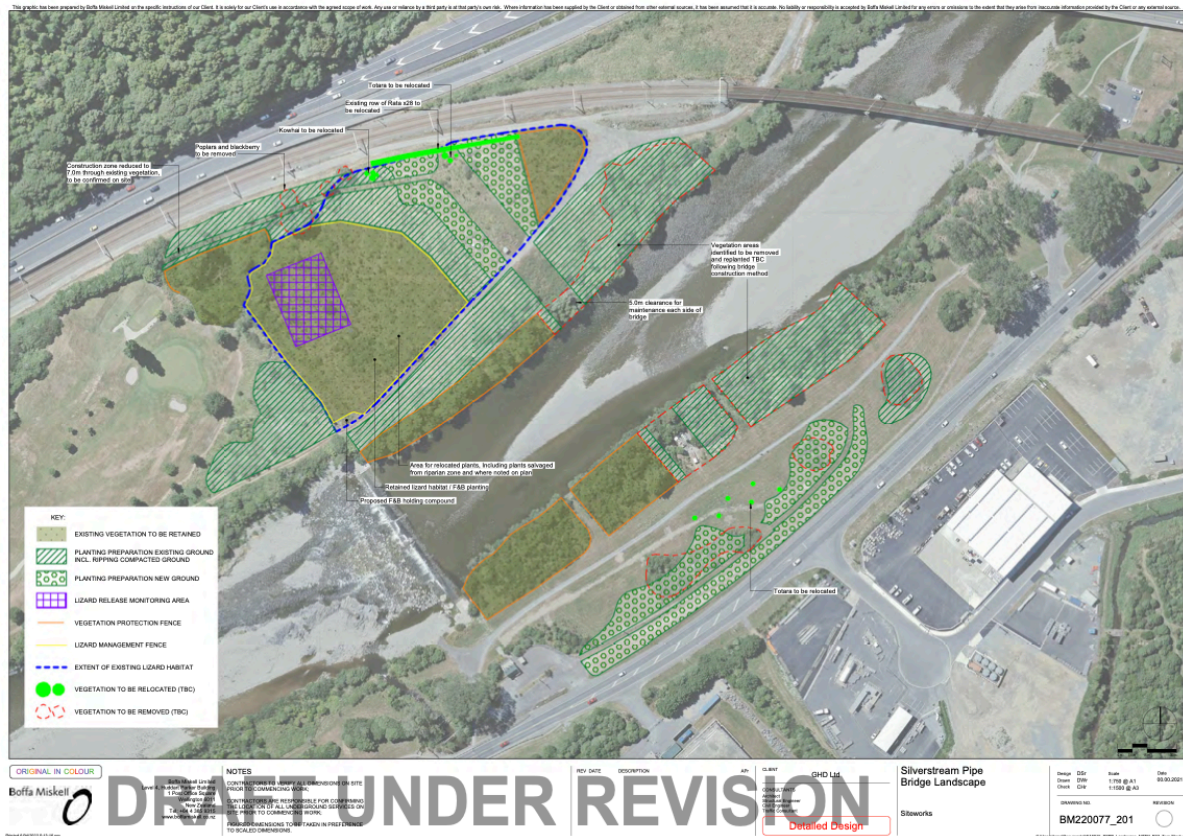
Rewetting and restoring the peatlands of QEP as proposed six years ago was audacious. Now it is accepted and soon to happen.

Te Maara Roa Project (see article below) is another such project. It started in 2000 and will one day connect to Korokoro.

Ken Fraser, instigator of the Paekakariki Escarpment track, kept persisting throughout the project. Because of the deep gullies, this project really was impossible. Yet there it is and thousands walk it each year.

Finally, Paul Callister has been working on a lizard protection fence in QEP. It is nowhere near happening yet but we are planting and taking other actions that will make it a better habitat for lizards for when the fence goes up. Soon the project will be sufficiently socialized and people will contribute. That is the way these projects seem to work.

Russell



Restoring the Long Garden

Drivers using the Te Ara o Toa bridge on the Transmission Gully Motorway can glimpse the Long Garden – Te Maara Roa – where 22 years of extensive plantings have restored the once scrub-covered middle section of Cannons Creek.



Transmission Gully can just be seen – and heard – at the far end of this May 2022 view along the Cannons Creek Valley from “The Volcano” lookout in Maara Roa.
Photo: Janet Tyson

By the end of this year, the Friends of Maara Roa (FMR) will have planted some 90,000 native trees between the bridge and the Cannons Creek Lake Reserve.

FMR grew from the Cannons Creek Protection Group, formed in the late 1990s by a group

of mainly Porirua East residents. They were alarmed by frequent fires on the gorse-covered hillsides and the neglect of an area earlier known as Te Awa-Iti, the site of healing springs where a woman named Te Hine Awhinanui once cultivated gardens. The once bush-clad hills were cleared by sawmiller William Cannon, and the springs were buried during the development of land to build Porirua City in the 1950s and 1960s.

Four people have been honoured as founders of FMR with conservation awards and on a memorial seat: Retired Presbyterian minister Sylvia Jenkin* (Wellingtonian of the Year in 2006); Neil and Juliet Bellingham, teachers at Porirua College; John Hodges, a teacher at Brandon Intermediate where he worked with pupils for over 20 years to beautify the Lake Reserve area behind Cannons Creek shops.

Over 200 other people, from Porirua and further afield, have contributed to the restoration – among them members of Kāpiti-Mana Forest and Bird and the Friends of Belmont Regional Park (FOBRP). Church groups and corporates have taken part in planting days, Honda Motor Company and

the department of Corrections have named sites because of their involvement. The Greater Wellington Regional Council and rangers have been a constant source of support, advice, and funding.

Four of the current committee have been members since the earliest days: Chairman Sef Truyens, Treasurer Keith Nicoll, Paul Guiniven and Brenda Johnston. Their involvement over the years ranges from pest control to guiding walks, supervising volunteers and ordering and locating plants. Each week they can still be found working at tree care or planting, or at the nursery.

Maara Roa project quickly captured the public imagination, with people volunteering to collect and raise seeds in their own homes, help with gorse clearance and planting, and service the 56 possum bait stations. Baseline surveys were carried out for plants and bird life. Ten local schools were invited to Adopt a Spot to be planted. A 20-year staged revegetation plan was developed: in the first two years, some 3000 young trees were planted.

Then came heartbreak. In March 2003 a deliberately lit fire swept across the planting area and surrounding gorse, leaving only a few of the existing tawa trees standing.



Aftermath of the fire. Photo: Sylvia Jenkin Next photo: The same spot in 2019. Photo: Mel Tyson

This setback served to spur on the volunteers and the range of activities increased, as great efforts went in to clearing away the burned scrub. A Trees for Survival nursery was set up at Porirua College. Increased numbers of people got to know the site through guided walks and new tracks were created.



"Human birds", using tennis rackets, hit seed balls into inaccessible sites. Increased efforts went into ways to combat rabbits.

John Hodges introduced the idea of green fire breaks, where trackside plants were chosen for their resistance to fire.



In November 2003, a group of volunteers take a tea break after planting up the area cleared after the devastating fire. They are sitting in the area known as "The Beams" because the seats are made from the beams of an old bridge. Photo: Sylvia Jenkin

Compare this picture with the one below taken in 2017 Kathy and Mike Peers are pictured with Des Drummond.. Photo: Mel Tyson



FMR's original vision was to retain public access to the restored land for "quiet enjoyment", with the long-term plan for a green corridor linking the east and west side of Belmont Regional Park. (*From a discussion between Sylvia Jenkin and I many years ago - Ed.*) This was threatened by the likely sale of Landcorp's farmland, with the potential of housing development and a windfarm. In 2004, Sylvia Jenkin prepared the strategy to campaign for purchase of the land.

In March 2005, 11,500 people signed the petition launched by FMR and FoBRP "praying that Greater Wellington Regional Council secure into public ownership for the purpose of conservation and recreation that part of Belmont Regional Park currently owned outright by Landcorp and known as Waitangirua Farm." In August, the government agreed to purchase the land for \$6.27 million, with contributions from Greater Wellington (\$2.8 million) and Porirua City Council (\$335,000). Landcorp continued farming as leaseholder.

FMR and FOBRP now turned their efforts to having the land gazetted for protection in perpetuity, as a scenic reserve. Renewed efforts went to protect the catchment from flooding and other degradation, and to progress the "green corridor" to Korokoro.

By 2010, when FMR celebrated 10 years of existence at Kowhai Grove, planting was at a rate of 5-6000 trees a year, and the first bellbird was heard. Bird numbers were rapidly increasing thanks to effective pest control, and kereru were nesting.

Heritage trees – kahikatea, kohekohe, matai and rimu, first planted in 2007 were becoming established.



Flourishing rimu trees, planted in 2007 by two French agronomy students who spent a season with the Friends of Maara Roa, hosted by Des and Libby Drummond. Photo (May 2022) Paul Guiniven

Further good news came with a final decision on the route for Transmission Gully – to save \$275 million and reduce the impact on the environment, there would no longer be an interchange from Takapu Road down to Warspite Avenue, the effects of which had been a concern to FMR.



Sylvia Jenkin, the driving force behind many of the initiatives of FMR, pictured in 2018 at the annual picnic. With her are Keith Nicoll, chairman from 2002 to 2013 and now Treasurer, and nursery and planting volunteer Jonathan Boyes. Sylvia, responsible for multiple tasks as convenor of the Friends of Maara Roa, stepped down from the committee in 2013. Photo: Janet Tyson*

These were the heydays of FMR with active members like Des and Libby Drummond, Kim Livingstone, Jonathan Boyes and Mel Tyson joining the group, and long-time pest controllers like Adrienne and the late John Gibbs and Glenys Evans maintaining the bait stations. In recent years, numbers have fallen but the core of volunteers, supported by a strong nursery team, has maintained plantings of up to 2500 a year.



From left: Royce Johnston, Kim Livingstone, Sef Truysens, Paul Guiniven and Sue Guiniven. They have expertise and experience in clearing and planting, tree care, pest control and the plant nursery. Photo: Janet Tyson

In 2018, with the original 100 ha fully planted, activity moved east to the area behind Porirua College. A remote-control mulcher made short work of clearing a site named The Golden Hectare and now, with help from groups including Porirua College and Caritas, it is almost fully planted.



In 2018, first plantings at the Golden Hectare, newly cleared by remote control mulcher. Photo: Mel Tyson

Further clearance has opened another large area of land. However, most of the planting

will be done by contractors. With a maximum of six members active at weekly working bees, their efforts are needed for weeding and other tree care. With the team at the nursery (at Aotea College since 2012) also getting on in years, their work will scale back too. Community Environment Funding, has been used to create a protective wall of self-resetting traps to control rats and stoats, and more recently, possums. Most bait stations are hard to access so only one is still being serviced manually on a regular basis.

There is plenty to do but it is maintenance now rather than planting. Changes coming include new access points under the motorway, reconnecting the southern entrance to Maara Roa from Takapu Road - cut off for 8 years, the end of grazing on Waitangirua Farm, the ideas of new group, Ngahere Korowai, including the revival of the planned green corridor to Korokoro.



The nursery at Aotea college. Photo: Janet Tyson

This is a very brief version of the story of Maara Roa and some of the many people who were key to its 22 years of development. To read more about current activities, or to volunteer visit website www.maarararoa.org.nz, where the archives also contain a treasure trove of historic photos, and news clippings.

*As this story was being completed, we had the sad news that Sylvia Jenkin had died. We hope this short history can serve as one of what will be many tributes to Sylvia, who was literally the heart and soul of Maara Roa. Without her vision, energy and strategic skills this restoration project would not have taken the successful form it has.

Janet Tyson (Secretary of FMR)



The vista from the lookout site locally known as "The Volcano" in 2019 is a valley of trees. Photo: Janet Tyson

Climate change action for the home garden.

Urban Soil Health. A Biodiversity /Carbon Storage initiative.

The science

Go into an old piece of our NZ native forest and take a look at the soil. It is dark, moist, soft, sweet smelling and hopping with life. 25% of earths biodiversity is made up of life in healthy soil - Insects, worms, fungi, and invisible micro-organisms. This life exists as long as there is an available carbon source. That source is soil organic matter (SOM) and is made up of the "Living" (microorganisms), "Dead" (fresh residue), and "Very Dead" (Humus) fractions.

The "Living" and "Dead" active carbon makes up 35% of the SOM and provides food for the microorganisms. The "Humus" is the long-term, passive fraction that can be thousands of years old, is resistant to decomposition, so locks up carbon. This passive matter makes up 65% of the SOM in healthy untilled soil. The soil microbes are mostly populations of fungi and nematode. These biodiverse rich

healthy soils hold water, regulate temperature and store nutrients, freeing them up as needed for plants that grow and thrive in them. These stable ecosystems are significant existing carbon storage areas of high value.

When SOM is disturbed, humus levels decrease (it breaks down faster than it builds up) and large amounts of nutrients are released. Initially growth (including weeds) will be great, but with continued disturbance, humus becomes depleted and the soil becomes less productive. Less productive soil increases the need for fertiliser, and increases use of herbicides as weeds grow too, and increases the need for pesticides as plants lose their natural resistance. As the soil has less capacity to hold water, it increases the need for irrigation, and is more susceptible to drought and flooding. Excess fertiliser leaches into waterways.

On the farm

On farms, less productivity means the need for additional animal feed for stock. The whole system is less carbon dense. This soil depletion results in higher costs to maintain productivity and fix things when things go wrong. The flow on effect is more carbon emissions. In the rural sector there is a growing movement toward regenerative farming, including keeping forest and wetland remnants -

Can we do the same in urban spaces?

The Ministry for the Environment advises that soil biodiversity is not routinely monitored in NZ. Why Not? Monitoring stable high soil biodiversity ecosystems will give value to our natural environment. This would help measure and understand the biodiversity and carbon loss in depleting soils.

What can we do at home

Home gardens make up a significant amount of city space. Dunedin has 76% home garden space. Auckland currently has 36% garden space. Developers scorched earth policy, and garden management that is depleting, are damaging. As long as urban garden spaces are not stripped right back, concreted or tar-sealed over, covered with weed mat, these garden areas have the potential to increase soil health, biodiversity and carbon storage. It is time to think of our soil as a biodiversity and carbon storage unit.

I plan to improve the soil health, biodiversity, and carbon storage capacity in my 400 sq. metre garden in Waikanae. This garden is new to me. The soil is clay. I thought it was rich and dark but found weed mat at 100mm depth. The soil has been locked up pretty much all over the garden. Underneath the so called biodegradable (not) weed-mat, the "soil" looked lifeless, grey, anaerobic, sodden, and stinking. Little biodiversity or carbon here. I do have one large old badly hacked oak that is full of carbon.

Action - I have been:

- removing weed mat - challenging with the plants growing over top, but do-able around them,
- adding microbes and carbon, (well composted mulches, - 6 cu. metres so far to the front, compost, product from the worm farm, seaweed, well composted

horse manure, hay to the back. Its cheap, light and easy.

- creating an undisturbed, closely planted and mulched corridor of permanent plants around the boundary. Very little weeding is needed. This corridor includes low, increasingly native shrubs where visibility is needed, taller shrubs and trees, including the - to be well managed - old oak, for my native and food forest area to the south, dwarf orchard trees with bee fodder plants beneath; to the north, native naturally occurring wetland planting in the boggy bit, and herbs, flowers and hebe's further round. The veges are in raised beds.

Weeding is easy. N.B. Herbicides would be counterproductive as they destroy soil microbes.

Pesticides will not be used. If my plants are stressed they may be the wrong plant for the soil.

If not composted, my chopped down woody prunings and hedge clippings are distributed discretely and tastefully in the undisturbed edge. Strategically placed log rounds will act as stepping stones and seats until they collapse with fungi and beautiful bugs. Over time I will have sweet smelling, soft, warm, dark soil buzzing with life. My biodiversity and carbon storage score, though never as good as old forest, should be much improved.

Next steps

I plan to - lower my water use, up my composting and natural pest control measures and am looking forward to an increase in birds, butterflies, and hopefully gecko's and skinks in the garden. But that is another story.

Eraena Catsburg (K-M F&B Secretary)

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Your feedback on this newsletter would be most welcome as would contributions to future newsletters.