

Open Space

STEWARDSHIP IN ACTION



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Word from the chair May 2022

I can only describe the first few months of 2022 as a sprinting start for QEII. The team picked up where they left off after the holiday break, with annual planning underway, Jobs for Nature preparations coming to fruition and an ever-growing number of covenant proposals coming through.



Our team has continued to adapt, with many changes on our regional representative front and growth in our head office team. Our regional representatives are our team on the ground and for many of you, your regional representative will be your main QEII contact – you might even see them in person during their monitoring visits.

Most of our regional reps stay in the role for many years, so when they finally decide to hang up their QEII rep hats, it is a tremendous change for the team at QEII and our covenantors. In recent years, we have had a few resign from their rep duties after a considerable number of years of service including Nick Matich (Kaipara, 14 years), Robin Thomas (Coastal Otago, 7 years), Bill Wallace (Taranaki, 15 years), Wayne O'Keefe (Eastern Bay of Plenty, 10 years), Rob Fraser (Western Bay of Plenty, 6 years) and Neil Phillips (North Taranaki, 22 years) and we prepare to say goodbye to Lynette Benson, who will be finishing with the Trust at the end of June after 10 years as our regional representative for Waikato-Hunua.

Whilst this level of change is higher than normal, we have benefitted from considerable stability among our reps for a long time and with the average time spent with QEII for the above reps an impressive 12 years, we have no complaints that people are looking for change and new adventures.

One of my greatest joys of being on the QEII board is working with people who are passionate and dedicated to the work that the Trust does, like all

our regional reps. I would like to thank our recently outgoing reps on behalf of the whole QEII whānau, for their role in helping landowners protect and improve special places all over Aotearoa New Zealand with open space covenants. While they may have left QEII in a professional capacity, we know that being part of the QEII whānau forms a lifelong connection to the Trust.

In contrast, the Trust has seen continuity with the outcome of the 2022 director elections earlier this year. Members re-elected Donna Field and Graham Mourie to serve as Directors on the QEII board. A full run down of the election and more information about Donna and Graham can be found on page 10. I would like to thank Murray McKee for standing in this election. Members were given three strong candidates for this election and the quality of candidates underscores the passion and commitment our members and covenantors have for the work QEII does.

We have a lot of great reading for you in this issue, including a story about mudfish in Taranaki on page 6, a pest control highlight on page 12 about wallabies and a story about how a flax wetland in Southland has inspired creativity on page 20. This story highlights the benefits that having natural spaces like open space covenants can have on our mental wellbeing, especially as we go through another unpredictable year.

Bruce Wills
Chair

Introducing digital subscriptions for Open Space

Open Space has been regularly published for over 40 years and we're pleased to be able to now offer a digital subscription to help our members read it in the way that suits them best.

The very first issue of Open Space was published in March 1979. Since then, we have seen many changes including the size, layout, length, publication month and content.

This latest change comes from feedback from our readers, who requested a digital subscription option to replace the traditional mail subscription. Although we do upload a digital version of each new issue of Open Space for members to view on our website, we had some work to do to be able to pivot this to a digital subscription.

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If you have any questions about the new digital subscription or have any other feedback about Open Space, please feel free to contact us at **editor@qeii.org.nz**.

Thank you to those who provide their feedback on Open Space – we feel fortunate to produce a magazine that highlights the passion and commitment of landowners across the country.

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SAVING BROWN MUDFISH IN TARANAKI

“Mudfish are an extremely specialised group of freshwater fish and a unique part of New Zealand’s natural heritage”

Mudfish are small, native freshwater fish found in swampy lowland habitats, such as wetlands and slow-flowing streams. Regional representative for South Taranaki Jake Goonan and local long-term mudfish conservationist Dean Caskey talk to us about mudfish and what Taranaki landowners are doing to bring them back to the region.



"Admittedly, mudfish aren't the most spectacular of our native fish fauna, but they are endearing and have a trump trick to outlast their bigger competitors – they can survive weeks without surface water," says Dean Caskey. Their preference for shallow, quiet, standing, or slow-flowing water also works in their favour and their size helps with this too, with the average mudfish measuring 130mm and the occasional larger fish reaching up to 180mm. "People might not know that they have a mudfish population, as they are known to be sneaky and cryptic. They can remain undetected until surveying is done," says Dean.

There are five species of mudfish in Aotearoa New Zealand. Brown mudfish (*Neochanna apoda*) are the most widespread mudfish species in New Zealand, found in Taranaki, the lower North Island, and the West Coast of the South Island. Brown mudfish have a conservation rating of 'At Risk – Declining' and are regarded in Taranaki as 'Regionally Distinctive' due to their very sparse and limited distribution in the region. Historically, brown mudfish would have been widespread in Taranaki. "They would have been abundant in wetlands and wetland forests, especially the large peat swamp areas in central Taranaki near Eltham" explains Dean.

Although only tiny areas of habitat remain, these small remnants provide important habitats to resident populations of mudfish. The protection and enhancement of these habitats is key to ensure the future of these small creatures in the Taranaki region.

"Mudfish are an extremely specialised group of freshwater fish and a unique part of New Zealand's natural heritage, so enhancing their habitats and encouraging the population to grow is important to ensure their survival," Dean says.

Over the past twenty years there has been some success in Taranaki to conserve, protect and enhance mudfish habitats, with four landowners protecting these habitats further with QEII open space covenants. QEII regional rep Jake Goonan has seen interest grow with landowners. "Usually when landowners find out they have mudfish on their properties and realise how rare they are, they become champions for them. They want to do their bit to protect them and increase the population of mudfish," Jake says.

ABOVE
Setting minnow traps for brown mudfish. Photo credit: Jake Goonan

The Moore family near Rawhitiroa have two covenants, registered in 2012, that are home to brown mudfish. One of these sites started as an attempt to recreate brown mudfish habitat from what was previously a rough bull paddock. Thanks to drain digger work and planting, a series of small ephemeral ponds with emerging overhead shade have begun to establish. Mudfish were released into this site and monitoring has found that they have settled in and begun to breed. It has also become home to several native bird species and reptiles. "While it is still early days, the Moores are hopeful that this will keep improving and become a significant mudfish population," says Dean.

The Moores also have an established mudfish habitat on their property, located along the fringe of the old Ngaere Swamp. The original swamp forest previously had little understorey, and the mudfish population was limited to the property boundary drain. The habitat has also grown and improved, with digger work done on the grassy margin to enhance it, along with extensive planting, done with support from the Taranaki Regional Council. "The area is thriving and recovery within the old forest area is spectacular," says Dean.

The Willy family is another Rawhitiroa success story. The farm has a long history in the Willy family and the once thriving 1.9 hectare wetland opposite the cow shed had become dominated by willow.

The family were keen to restore the wetland and the willows were targeted using aerial and ground control with assistance from the council. The site reverted to native vegetation and covenanting, fencing, and planting also helped the wetland recover. "When we monitor for mudfish here, we can see that the population is thriving," says Dean.

The farm and the wetland have remained a family affair, with three generations of the Willy family taking part including Ray Willy, his daughter Ange and grandchildren William and Zachary. Dean notes that the Willy family are the perfect example of landowners who have become mudfish champions. "They started not knowing much about mudfish and are



now advocates for the species and even host school visits to the site."

Interest in mudfish is growing in the area, including among the neighbours. Opposite the Willy farm, another landowner has covenanted forest areas on their property, including one with a small pool that contains mudfish. "They are another enthusiastic landowner, who is exploring options to enhance the habitat on the fringes of the covenant to benefit the mudfish population," says Dean.

Further south, in Kākaramēa, another landowner with a 1.7 hectare raupō wetland covenant has been working to improve the wetland, says Jake. "Excluding stock and new plantings

have helped the wetland thrive and we've seen a good population of brown mudfish there, as well as other notable fauna such as spotless crane, bittern and giant diving beetles."

While the future of brown mudfish is still precarious in Taranaki, the protection of these few known populations is a significant step in ensuring their best chance of survival. "In most cases, we've seen that it takes a keen landowner and a bit of a team effort to help protect and enhance these habitats for brown mudfish and other species," says Dean. "Hats off to the landowners, QEII National Trust, Taranaki Regional Council and the Department of Conservation for their efforts and collaboration. Long may it continue."



ABOVE

Three generations of the Willy family helping on the wetland. Photo credit: Ray Willy.

BELOW LEFT

TRC Freshwater Scientist Paddy Deegan undertaking monitoring. Photo credit: Dean Caskey.

BELOW

A view of Moore's bush. Photo credit: Dean Caskey.



QEII NATIONAL TRUST 2022 BOARD DIRECTOR ELECTION RESULTS



We are pleased to welcome Donna Field and Graham Mourie back for another term on the QEII board of directors. Both Donna and Graham have been re-elected by members of the QEII National Trust and will continue their time on the board, with their next three-year term effective from March 2022.

This will be Donna Field's third term serving on the board. Graham Mourie has also been re-elected to serve on the board, this will be his second term as a director.

The QEII National Trust board comprises of six members, four appointed by the Minister of Conservation and two elected by QEII National Trust members. There were

three candidates for the two positions, Donna Field, Murray McKee, and Graham Mourie.

The voting return was 24.39%, being 2,155 voting papers, of which 57.49% voted by post and 42.51% voted online.

Thank you to everyone who took the time to make nominations and vote in the 2022 QEII Director Elections.



LEFT

Members of the QEII team and board of directors on a field day, visiting the stone wall in Empson's Bush.

Left to right: Alan Livingston, Dan Coup, Kathy Williamson, Bruce Wills, Karen Schumacher, Kat Longstaff, Neil Cullen, Graham Mourie, Donna Field, John Williamson regional rep for Manawātū-Kapiti

Director profiles

Donna Field

Donna comes from a background in resource management and has a strong interest in the conservation of plants, ecosystems, and landscapes. As a director of Cleardale Station, a 1400 hectare sheep and beef property in Rākaia Gorge, Canterbury, and co-Chair of the Whitcombe Landcare group, she has experience at sourcing, allocating and governing funds, weed and pest control, and ensuring the protection of vulnerable ecosystems.

Donna is also a representative on the High Country Advisory Group, a trustee of the Coleridge Habitat Enhancement Trust and is an initial founder of the Millerton Plateau Protection Society on the Stockton Coal plateau. She has worked extensively with Department of Conservation, Environment Canterbury and Ashburton and Selwyn district councils on biodiversity enhancement projects and has established an interpretive walking track in conjunction with Arowhenua on their Gorge property.

Donna is serving her third term on the board, originally being elected by QEII National Trust members in 2016 and re-elected in 2019.

Graham Mourie

Graham was raised on a Taranaki dairy farm and has a strong connection to the environment and to QEII. He has been involved in establishing QEII covenants on his family farm since the late 1980s. Being an early adopter of riparian planting and pest management, his current farm partnership was recognised with a Taranaki Regional Farm Environmental Award 2012.

Graham is a shareholder and Executive Director of farming for dairy fund Southern Pastures and has worked with the Department of Conservation, Walking Access Commission and regional councils on conservation management projects including access to the Mokaihaha Kōkako conservation area and access along the Rākaia River.

He is also a trustee of the Rugby Foundation and The Graeme Dingle Foundation Wellington and is a former director of New Zealand Rugby and the International Rugby Board where he chaired the Rugby Committee. He is serving his second term as a director; he was originally elected by QEII National Trust members in 2019.



*Bennett's wallaby.
Photo credit:
Environment Canterbury.*

PEST CONTROL: WE NEED TO WORRY ABOUT WALLABIES

Wallabies were originally introduced to New Zealand in the late 1800s and have become a significant pest, causing damage to native plants and farms. Our regional representatives Rob Smith from South Canterbury and Hōri Barsdell from the Eastern Bay of Plenty share their knowledge about these imported pests, as well as their experience and tips for controlling wallabies.

A growing concern on the pest animal front in New Zealand is the wallaby. These small marsupial animals look like miniature kangaroos and although they are small in stature, they make up for it with their big appetites. Their size also helps them be elusive in the wild and many of the general population may be unaware that these small creatures even exist in New Zealand. They breed from an early age, so populations can build quickly if not managed effectively. It is estimated that wallabies spread 0.8km in the North Island and 1.9km in the South Island every year. If left unchecked, the spread of wallabies would be devastating both ecologically and financially.

Most wild wallabies in New Zealand can be found in the wider Rotorua Lakes area and in South Canterbury, however in more recent times, they have been spreading into neighbouring areas.

Wallabies were first introduced to New Zealand around 1870 by Sir George Grey, when they were released onto Kawau Island and like

other introduced pest animals, they were hunted for sport and valued for their skins.

Five species of wallaby can now be found in New Zealand: Bennett's, dama, parma, brush-tailed rock and swamp. Dama wallaby from Kawau Island were subsequently liberated near Lake Ōkāreka in 1912 and since then their distribution has been steadily expanding. As wallabies breed and disperse, they can become established in new areas.

Bennett's wallabies were released into the Hunter Hills around Waimate for hunting purposes in 1874. They have since multiplied and are a huge problem. Up north, dama have become established in both exotic and native forest and scrub. Since 1912, they have spread west to Rotorua, east to Kawerau and south to about Rainbow Mountain; an area of approximately 200,000 ha. They prefer to live where they can find cover, such as in tussock, scrub, or bush, and usually come out to feed at night. They can be hard to see and find, which is a challenge when undertaking control.



Bennett's wallaby. Photo credit: Environment Canterbury.

Damage

Wallabies have a huge appetite for many of our native seedlings, shrubs, ferns, and grasses which can prevent regeneration and change the structure of our forests, reducing their ability to support native wildlife. Like rabbits, wallabies also love pasture grasses, which means they compete with livestock for food, so they are also pests on farmland.

They are especially devastating where deer are also present, as both species prefer different layers of the understorey. In areas where both wallabies and deer are rampant, this can result in a severely depleted forest understorey, and we have seen this happen in some covenants in the Manawahē and Rotorua areas. Covenants that have had decades of pest control for possums, rats, and mustelids may have a lush canopy and diverse bird life, however, it is only the top half of the forest that is thriving. The bottom half is missing thanks to wallaby and deer.

Wallabies are also the cause of significant browsing damage in QEII National Trust covenants that are found along the Hunter Hill eastern slopes in South Canterbury. They browse to chest height and will take all edible natives, resulting in the loss of an understorey for these covenants. This loss of understorey will mean that these remnant bush patches are being turned into museum pieces of bush. The loss of regeneration will eventually mean that when the canopy trees die then there will be no understorey to fill the light wells. Eventually, we will be looking at deforestation of erosion prone slopes, loss of local biodiversity and loss of local bush enjoyment by many.

The Bennett's wallaby, previously found in South Canterbury, is starting to spread into Otago, threatening native ecosystems, farms, and forests in the area. If wallabies are not controlled, they could spread across one third of both the North and South Islands over the next 50 years and could cost New Zealanders \$84 million a year by 2025 (includes lost farm production and ecosystem services).



Ringbarking caused by wallabies in Hook Bush. Photo credit: Rob Smith.

Keeping wallabies under control

As wallabies are nocturnal and cautious, they can be hard to find, which means that they can be difficult to control. Exclusion fencing is a great option in areas with high wallaby numbers to keep them out of protected blocks. For Bennett's wallaby, deer fences of 1800 mm high with the deer netting reversed so the smaller holes are at the top with mesh below will keep most out. For other species, shorter fencing of at least 1200 mm can be effective. Fencing should have mesh approximately 100 mm measured diagonally and with a 300 mm toe of netting in front of the fence along the ground. Netting should be tightly stretched and pegged to the ground to ensure there are no gaps for them to get under and netting should also be placed over drains and depressions.

Although fencing can keep them out, active control should also be undertaken where possible. Night shooting is an effective option, particularly on private farmland. Generally, using a scoped .22 LR is adequate, however, a .22 Magnum has been shown to be more effective. Centrefire rifles in .222 and .223 calibers can also be used. Effective night shooting is a skill and should only be attempted by licensed, experienced shooters, so landowners may need to contract a shooter to undertake this method of control.

Limited poisoning options are available as only two pesticides are registered for use on wallabies: 1080 and Feratox Cyanide. Both options require the handler to hold a Controlled Substances Licence and use is restricted by the Medical Officer of Health, which means landowners might need to find someone experienced to undertake this work.

Although they are highly vulnerable to aerial or hand broadcast baiting, wallaby can be reluctant to take bait from some types of bait stations. In areas where they co-exist with possums, wallabies are likely to be excluded from accessing bait stations by the smaller, yet more aggressive possum.

Although a popular method for other pests, trapping is not an appropriate or effective control method for wallabies. Leg-hold trapping (commonly used for possums) is not appropriate for wallabies as they have

powerful hind legs, so will either suffer severe injuries or pull out of leg hold traps. Cage or fence traps can be used to capture wallaby, although this method is unlikely to control an established population. Additionally, the Animal Welfare Act 1999 requires live traps to be checked within 12 hours of setting and then once every day afterwards, so this needs to be considered when choosing leg-traps as a control method.

Although the spread of wallaby has been slowed by physical barriers such as lakes and rivers, sometimes overcoming these barriers has been aided by people, even with the removal or release of live wallabies being an offence under the Biosecurity Act (1993).

Locating individual wallabies and wallaby populations can help control wallabies and prevent their spread. If you see any signs of wallabies – dead, alive, paw prints, or droppings, especially in any areas not usually known for wallabies, you can report these to the Ministry of Primary Industries via their website: reportwallabies.nz, or directly to your regional council. If you need more information or advice about controlling wallabies, contact your regional representative or reach out to your regional council.

Note: *While our reps have shared their experience with various pest control methods, we support landowners to make pest control decisions based on what is right for them individually.*

OUR PEOPLE

Hōri Barsdell

New rep happy to be close to people and land

Hōri Barsdell has strong roots when it comes to the land and people of the Eastern Bay of Plenty and his connection with QEII National Trust has recently become deeper.

Nearly five years after buying a 14 hectare bush covenant from the previous Eastern Bay of Plenty QEII rep Wayne O'Keefe, Hōri has taken over Wayne's job too.

"It's so funny how life goes," Hōri says with a laugh. Since starting work in his new QEII job in October 2021, there have been all sorts of echoes from the past.

"My first (new covenant) proposal came from the people who were our neighbours when I was growing up. On some monitoring visits, people will say I know your dad or mum, things like that, there's connections happening all the time. It's quite cool to work in your home patch and have those links."

Hōri has deep connections in the Bay of Plenty through his Te Whānau-a-Apanui, Whakatōhea, Ngāti Awa, Ngāti Rangitīhi and Ngāi Te Rangi heritage. He has a strong love for the land and sea of his region, growing up on the edges of Ōhiwa Harbour.

"Our front yard was the harbour and the Pacific Ocean and our backyard was the hinterland of the Eastern Bay. Being brought up between those two environments developed my huge love for the ocean and the bush," he says.

"I'm the second oldest of six children, and our parents instilled in us their love and respect for nature and a responsibility to look after what we have left."

After achieving an Honours degree at Otago University, he worked with youth, researched historic pā sites for the Department of Conservation and did biodiversity monitoring on Māori land. Now he's looking forward to helping landowners achieve their ambitions on their QEII covenants.

"I think the importance of looking after what we have left is increasingly being recognised. There's definitely an awareness growing around the importance of biodiversity to us and to everything else," Hōri says.

"We face a lot of issues in the region, including water quality, weeds, deer, wallabies — the issues are endless. I'm really looking forward to working with the landowners, their buy-in will achieve a lot of things."

Hōri's previous role was biodiversity monitoring for the Ngā Whenua Rāhui programme, which funds kawenata (25-year renewable covenants) on Māori land.

"It took me right around the country but that gets difficult after a while when you've also got a home to look after and give your energy to."

His home with partner Steffi is the property with the 14 hectare covenant he bought from Wayne and his partner Mei. The bush block had previously been selectively logged but still contains large numbers of mature trees. Established in 1988, the same year Hōri was born, by Ernie and Jean Alspach, the covenant includes

a majestic northern rātā at its heart, pūriri trees over 1,000 years old, pukatea, kohekohe, tawa, kahikatea and a ridge of hard beech.

"The Alspachs identified Wayne and Mei as the next guardians, kaitiaki, for the covenant, so they put their energy into the place for 12 years and then identified me as the next guardian to hand it on to."

"When they first brought me into the forest, it just hit my heart, I knew I had to follow that feeling. I knew it was special and I'm really grateful for that opportunity. I'm going to have that dilemma one day, finding the next guardian to hand it over to."

Three decades after the block was fenced off, predator and weed control and revegetation around the edges have ensured the block is in excellent health. "There's a really good feeling in the place that you can't describe."

Hōri wants to continue the hard work of the previous three decades, expanding predator and pest control and continuing planting around the bush fringes. He also intends to bring the same ambition to his role as regional rep.

"I want to work with landowners to help them achieve their goals. I also want to help grow the number of areas under protection. QEII's protection is renowned for being robust and it's an awesome option for landowners wanting to protect their remaining treasures and natural features."

"I think the importance of looking after what we have left is increasingly being recognised."



“I want to work with landowners to help them achieve their goals. I also want to help grow the number of areas under protection.”



FROM TOP

Hōri and former Eastern Bay of Plenty regional rep Wayne with Hōri's home covenant in the background. Photo Credit: Malcolm Rutherford.

Photo 2 & 3 – Hōri helping out on kea survey Hawdon Valley. Photo Credit: Laura Young.

Connecting youth to the bush in Rotoiti. Photo Credit: Bless Maxwell.

Grey-faced petrel monitoring on the East Coast. Photo Credit: Summah Te Kahika-Heemi.

Jessica Reaburn

New rep ambitious for Auckland covenantors

The new rep for north-west and east Auckland, Jessica Reaburn, loves working with landowners to accomplish the ambitions they have for their covenants.

"I want to help landowners improve the health of their covenants but also encourage the engagement they have with their covenants so they can enjoy and appreciate them more," says Jessica, who started in her new role in October last year.

Her area is a new one created as a result of the growth in covenants in the Auckland region in recent years.

Auckland's Covid lockdown disrupted her start in the job, and it was six weeks before she could get out to meet covenant holders. But Jessica has been making up for lost time and is loving her new job, especially meeting landowners.

"I saw the role with QEII as a great opportunity to go back to covenanting and biodiversity protection and because it's on a voluntary basis, there's some reassurance that people want to do it," Jessica says.

"It's a lot more rewarding, working with the willing, rather than making people do things they don't want to do."

North-west Auckland is familiar territory to Jessica, who was brought up in Massey and now lives just a couple of kilometres from her childhood home.

Her region includes the north-west of Auckland up to South Head, the North Shore, Waiheke Island, and east Auckland as far south as Clevedon. The area contains 81 covenants, mostly around 2-3 hectares on lifestyle blocks.

Most areas are regenerating bush, although there are also some remnants of mature kauri, pūriri and other species. There are some wetland covenants too, including some larger ones around the South Head area, which provide excellent habitat for rare bird species such as mātātā/fernbird and matuku/Australasian bittern.

Jessica says she can help landowners come up with plans to tackle any issues related to managing their covenants in a way that fits the time they have available. Many lifestyle block owners juggle working on their land with fulltime jobs.

She adds it's very rewarding to see landowners' enthusiasm for their covenants grow as they become more engaged.

"It can seem quite overwhelming, especially for some of the landowners who have only moved to the property in the last couple of years and the covenant isn't in the best condition or living up to it's potential."

Since graduating with a Masters in Conservation Biology from Auckland University, Jessica has worked in a number of roles in Auckland as an ecologist and consultant, focusing on restoration and managing native vegetation and habitats.

Outside of work, Jessica loves tramping and being outdoors and

she has an ambition to complete all of New Zealand's great walks. She's completed three so far, including two in the last year.

Until Covid struck Jessica also enjoyed travelling, experiencing new environments and cultures around the world.

When she finished her master's degree, her travels included a two-month spell volunteering for the Crees Foundation at the Manu Biosphere Reserve. Located in the Peruvian Amazon, Manu is the largest rainforest reserve in the world and among the sites that have the highest biodiversity.

"It was challenging. I was so used to working in the bush in New Zealand and all of a sudden, you've got spiders that could bite you and kill you, snakes and jaguars – a completely different experience. It was really hot and humid, there were storms all the time."

"My background is in plants, and it was really cool to be able to work with new species groups. They were also doing quite a big butterfly study when I was there, so I got to do lots of butterfly trapping and it was great to see a different side of biology."

Jessica's Auckland covenants are certainly less dangerous than the Amazon, but she is thrilled to share the excitement of landowners when they discover the special things in their covenants.

"I want to help landowners improve the health of the covenants but also encourage the engagement they have with their covenants."



*"I want to help landowners
improve the health of
their covenants"*

CLOCKWISE FROM TOP

*Jessica with a butterfly in the
Amazon rainforest.*

Jessica Tramping at Mt Pirongia.

*Taking in the sights on the
Queen Charlotte track.*



*Purei and harakeke on the wetland edge.
Photo credit: Jesse Bythell.*



CREATIVITY IN COVENANTS

From plein-air paintings to poetry and screen printing, we know that the special places protected by open space covenants can often be the subject of many creative outlets. In this new series, we look at creative projects inspired by covenants and learn a bit more about the people behind the pieces.

Do you have a creative project that you would like featured in a future issue of Open Space? Get in touch at editor@qeii.org.nz.



Ann with her mixed medium quilt and screen prints

Artist: ANN IRVING
Inspiration: Castle Downs (Dipton) Wetlands
Medium: Mixed medium quilting and screen printing



TOP RIGHT
 Ann (red hat) and volunteers at the wetland on one of the regular weeding bees.
 Photo credit: Jesse Bythell.

Purei and harakeke on the wetland edge.
 Photo credit: Jesse Bythell.

From an early age, Ann realised that using her hands and getting creative was part of her make up. "My mother was a keen painter. She loved painting and my sisters are both creative, it was just part of who we were. It went further than just making clothes, we always liked to use textiles in new and enjoyable ways," she says.

Her fondness of trees and nature also goes back to her upbringing, and she credits her love for trees to her father. "I remember my father and his friends being part of an organisation called the Men of The Trees. They would get together to plant trees, which was such hard work but I just recall the sense of friendship that they had."

It was no surprise that Ann became involved with the Castle Downs (Dipton) Wetlands in central Southland, since Rural Women New Zealand took on ownership of the site in 1948. From early on, they were encouraged to plant trees, initially grown by seed, in the forest. This labour of love continued, and the area went on to win the Landcare Innovation in Sustainable Farm Forestry award in

2012. "We hosted a site visit shortly after we received the award and we were asked what we were doing with the bit of swamp and since then, we've been inspired to make it the best it can be for the benefit of the Southland community," Ann says.

The cause became close to Ann's heart, and she became the co-ordinator for the flax wetland, reaching out to the community to get involved. Since then, there has been a steady group of enthusiastic volunteers who come and help in the wetland and in 2015, the wetland became one of the few in Southland with public access.

The work that has gone into restoring Castle Downs Wetlands is not dissimilar to the art of quilting. Like



a quilt, made up of many pieces, the work that has gone into restoring the wetlands have varied in skill and size but forms part of the bigger picture. "We have to do things like cut tracks, planting, pest and weed control. Sometimes you have to use machinery or hand tools to get the job done, it's hard work but it feels like fun," Ann says.

The beauty of the wetland has inspired Ann creatively and she first realised how deep her love for the wetland was while on an art course. "We were asked what our passions were, what inspired us and mine ended up being the wetland. It's always come to me naturally when creating a new piece."

Her pieces are inspired by what you can find in the wetland and reflect her knack for using unconventional materials to create art. "When I was young, we used what was lying around. For a lot of my quilting, I use whatever I have and I interpreted the leaves and trees without the need for pretty materials."

Some of her other work inspired by the wetland includes a quilt made of mixed materials, including paper and screen-printing which represents the pond, surrounded by pūrei (*Carex secta*) with vegetation over the water.

Ann also often reflects on the positive effects that being in nature has had on her creativity as well as her wellbeing. "Being in the environment has been good for my mental health. It makes me feel good to be contributing to something bigger and knowing that we are making a significant difference together."

As for her favourite thing about the wetland, Ann's answer is reminiscent of the same feeling she had seeing her father and his friends plant trees. "The fact that it is a joint thing is fantastic. You are connecting with people, working together, creating social networks and friendships."

ABOVE
Celebrating the registration of the covenant on a wet spring day.

PHILANTHROPY IN ACTION

Our donors play a vital role in making QEII National Trust the respected charity it is today, allowing us to protect our shared natural heritage in partnership with landowners for life.

The team prepare to scale the steep terrain to put the new traps on site.





LEFT
Elly Buswell
with a double
stoat catch.

One of the ways that we support landowners is through the Stephenson Fund. The Stephenson Fund provides support for established QEII covenants, for things like additional weed and predator control, enhancing visitor facilities and revegetation.

Each year we receive more applications than we can fund and in 2022, we received more applications than any previous year. Thanks to a generous anonymous donation, we were able to increase the amount we gave in 2022 by \$50,000 and fund more projects. One of our key fundraising priorities is to continue to increase the amount of funding available through the Stephenson Fund as we know that it helps encourage stewardship in covenants.

Grants provided through the Stephenson Fund support covenantors like Elly and Keith Buswell in Taranaki. The Buswells applied for a grant through the Stephenson Fund to help with a predator control project in their covenant. The funding they received went towards materials to make new traps to replace old rusting ones and allowed them to further their efforts to protect the kiwi, whio/blue ducks, and other endangered species in their covenant. They have also recently undertaken extensive monitoring of the kiwi population and have reported finding a significant breeding population.

Get involved and join us on the frontlines of conservation

Donor support is critical to our success as a country in ensuring our unique biodiversity and cultural heritage is not lost.

Making a financial contribution to support QEII's work is one of the best ways you can help preserve Aotearoa New Zealand's natural and cultural heritage.

Every dollar you give will help grow the network of land protected in New Zealand in perpetuity.

Get involved and help ensure that biodiversity in New Zealand remains intact and safeguarded for generations to come.

Inspiring Protection – Kaitiaki

Donors who give an annual contribution of \$250 or more are acknowledged for inspiring conservation by supporting our day-to-day activity.

Support us and ensure that Aotearoa New Zealand's open spaces are forever protected.

We've made giving easy and effective so that your contribution goes directly where it is needed.

You can donate now online at qeii.org.nz/donate

You'll also stay in the loop as our fundraising manager, Bryna O'Brien, sends regular updates to all our donors to keep them up to date with all the great work happening at QEII.

If you have any questions, contact Bryna at bobrien@qeii.org.nz or 027 295 5369

THE IMPACTS OF **FORESTRY**

Changes to the fabric of land-use across Aotearoa New Zealand's rural 'primary industry' landscape are driven over time by a mix of many factors including export market prices, consumer demand and societal expectations, technological changes, environmental factors, and government policy and subsidies.

High wool prices prompted conversion of forest to pasture in the 1950s and with support from government policy and subsidies, this industry continued to grow into the 1970s. Deregulation and the removal of subsidies in the 1980s meant significant change for the rural sector and by the early 2000s massive conversion to dairy farming was underway. A more recent trend in land-use change is conversion to exotic forestry, first for timber as a resource and now increasingly as an investment to earn money from carbon credits through the Emissions Trading Scheme (ETS) or voluntary carbon market.

On private land across the country, in the spaces in between ongoing productive land-use changes, native forests, wetlands and tussock grassland have survived. This is the space we, in partnership with thousands of covenantors, work to protect and restore remnant indigenous biodiversity.

All productive land uses can have negative impacts on adjacent native plants, birds, insects and fungi. While the impacts of forestry are not all bad (for example forestry can provide habitat for some native species), as exotic plantation forests have spread across rural Aotearoa New Zealand

our regional reps are beginning to observe more negative impacts on biodiversity and landscape values of nearby covenants. Forestry activities have always had some impact, but as the carbon market continues to drive large scale exotic afforestation, we expect to see these at a greater scale.

An important part of our role is to uphold the objectives of all covenants and honour the original covenantors' intentions and vision for protected areas. Where these objectives include protection of landscape or biodiversity values, exotic forestry can in some cases threaten to undermine this goal.

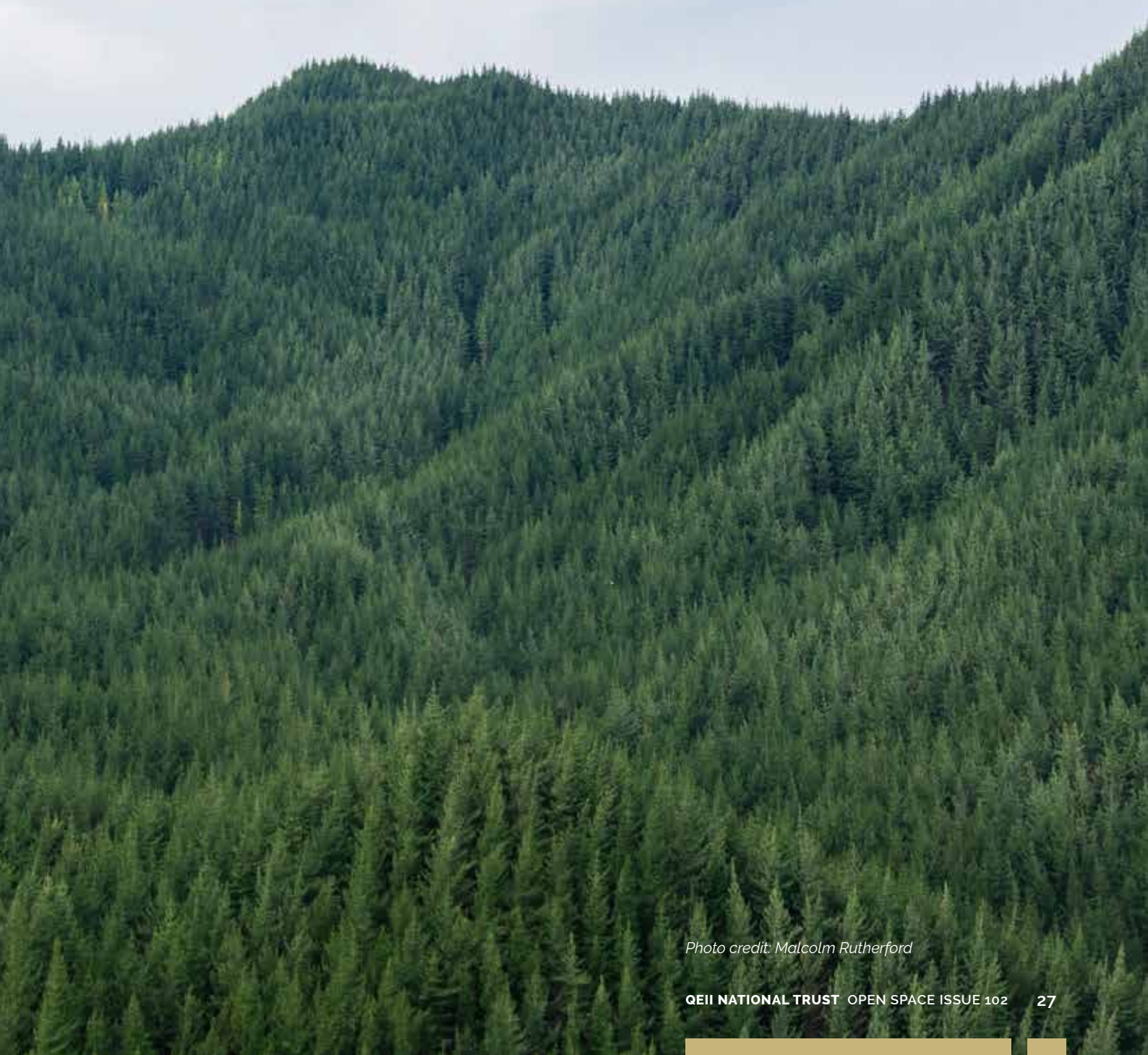


Photo credit: Malcolm Rutherford



ABOVE
Douglas Fir invading
tussock grassland.
Photo credit: Jesse Bythell.

Impacts of forestry to covenant biodiversity and landscape values

The following describes some of the impacts on covenants our regional reps have observed.

Wilding seedlings

Wilding seedlings of many exotic tree species can spread into and take over covenanted areas by shading out tussock grassland, wetlands, drylands and native forest. This risk is exacerbated for open areas like wetlands and regenerating native forest.

Some exotic species can establish and grow in low light and can gradually shade out and take over native trees. Many exotics can grow more readily at higher altitudes than natives and so can invade alpine ecosystems that would be above the native treeline. Douglas fir is the main culprit here, but a few pine species – such as *Pinus contorta* – also have this ability.

Alongside ecological impact, wilding seedlings can have huge impact on landscape and 'open space' values. Some areas in Central Otago are good examples of this, where wilding pines can gradually cover iconic Central Otago dryland and tussock slopes with exotic forest, if not carefully managed.

Other pest plants (weeds)

With no stock grazing, the edges of plantation forests are often reservoirs of weeds (e.g., sycamore, old man's beard) that if not managed well, spread into adjacent covenants.

Pest animals

Without ongoing management, forestry plantations can give rise to increasing populations of pest animals such as pigs, possums, goats, and deer that eat and destroy native forest in adjacent covenants.

Weedy fungi

Plantation forests don't just impact what you can see. Below ground the exotic conifers accumulate weedy

fungi like fly agaric, slippery jack and boletes, crowding out native fungi and making areas more susceptible to reinvasion by exotics.

Freshwater – ground and surface water

Plantation forestry adjacent to covenants can change surface and groundwater flows. This is particularly problematic for wetland covenants and reductions in soil moisture can prevent survival of native seedlings and saplings, especially in dry areas.

Fence management

When plantation forests are planted adjacent to covenant areas, this can result in fence damage and also raises challenges regarding how the area can be accessed for maintaining the fence. If the plantation area is fenced and there is no longer stock present adjacent to the covenant, this might not be too much of an issue, but where covenants are deer fenced to exclude feral ungulates (as is increasingly the case), plantation trees can fall across covenant boundaries and damage covenant fences, making them more vulnerable to intrusion by pest animals. Accessing fences to ensure they are in good state can be challenging when woody weeds such as gorse colonise these areas; access to spray gorse can be more difficult when adjacent land is planted in exotic trees.

Shading

Where forestry adjoins a covenant, the spreading crowns of the planted exotic trees can shade out the indigenous vegetation. This can result in changes to the indigenous cover such as dieback of the canopy or edge species which tend to be light demanding species. This edge effect is more pronounced when the protected area is small in relation to its perimeter, for example small gully systems.





Unfortunately, these are big issues that are often outside the control of individual covenants. We are currently working on some guidelines for both covenants and forestry owners to help minimise the risk of plantation forestry to covenants. We're also continuing our advocacy around balancing forestry land-use, climate change mitigation, and impact on biodiversity – this includes engaging in local Regional Pest Management Plans, changes to the ETS and a National Policy Statement on Plantation Forestry. There'll be more on this to come in future editions of Open Space, but for now, there are a few things to consider.

If there's already plantation forestry nearby your covenant, your management options are pretty limited. Try your best to keep on top of wildings, other weeds and pests, and keep an eye on covenant fences (especially if stock is still adjacent to your covenant, or your covenant fence is a deer fence). In lieu of more comprehensive guidance around this, you can always reach out to your local QEII rep or local council for advice.

If you're thinking about planting exotic forestry in an area with indigenous biodiversity, consider using lower-risk plantation species, situating plantation areas down-wind and down-stream of areas of indigenous biodiversity (to mitigate wilding risk and water supply effects), and leave a set-back between the exotics and the covenant to help avoid shading and impacts to fencing (setbacks should be minimum 10 metres).

**CLOCKWISE
FROM LEFT**

Pinus radiata invading alpine tussock shrubland, above the natural tree line for Aotearoa New Zealand. Photo credit: Jesse Bythell.

Pinus radiata seedling in tussock grassland, above the natural tree line. Photo credit: Jesse Bythell.

Spraying wilding pines. Photo credit: Rob Wardle.

Wilding conifer. Photo credit: Rob Wardle.

THE AUCKLAND COUNCIL FUND

A new contestable fund to support covenants in the Auckland region was established in 2020 through our partnership with Auckland Council. In the first round, 15 projects received funding which helped enhance biodiversity values in registered QEII covenants in the Auckland region.

Thanks to the support of Auckland Council, we were able to run the contestable fund for a second time in 2021, providing further support to covenants in the Auckland region. The fund opened for applications in September 2021 and like the Stephenson Fund, all applications were put through an assessment and allocation process. Those second-round projects are currently underway.

We are glad to be able to support our Auckland covenantors with the help of Auckland Council. Covenantors in the region will receive an email when the 2022 contestable fund opens later this year.

Controlling weeds on Waiheke

Kerry Titchener received a grant from the Auckland Council Fund to support a long-standing weed control project on the family's Waiheke Island covenant.

The 26 hectare covenant protects well-established coastal vegetation, with a deep valley running to a wetland sitting behind Te Wharau Bay. Younger regenerating areas are recovering well and suppressing weed populations, but in some areas of light, pest plants have continued to dominate.

The Titchener family have self-funded their weed control efforts in and around the covenant for many years, investing thousands of dollars annually. However, they did not have the resources to really get on top of the infestations. The funding that they got from the Auckland Council Fund allowed them to increase the level of control to get on top of the worst weed areas.



The Titchener's engaged Weedfree Waiheke and decided to target invasive species, including specific plans to target the moth plant and *Rhamnus*. They saw some impressive results, with all the adult populations of the moth plant controlled by removing pods and follow-up seedling control on juvenile populations is planned. The *Rhamnus* and woolly nightshade was controlled and reduced to a size that should be able to be controlled with ongoing surveillance. They also worked on clearing blackberry and Japanese honeysuckle from the gully clearings. Brush wattle – including three large adult trees – were treated or removed and *Ageratina adenophora*, commonly known as Crofton weed, was controlled in a head of raupō wetland, with a focus on eradication.

Kerry and Nona Banks from Weedfree Waiheke were pleased with the weed control achievements and proudly hosted an Auckland Botanical Society field trip in February 2021.



Predator control in Paparimu

Waytemore Farms received a grant from the Auckland Council Fund to support the control of animal pests on their farm in Paparimu, adjacent to the Hunua Ranges. Covenant owners Shirley-Ann and Rick Mannering were able to use the funding to kickstart their journey toward making the farm a haven for native fauna and flora.

The grant allowed them to create a long-term plan for the control of animal pest and predator species across the Waytemore properties, which will be a helpful resource for many years to come. They were also able to purchase the hardware and tools needed to control the animal pest and predator species, which has helped them get closer to their goals sooner.

They established 20x2 metre vegetation plots and photopoints for monitoring. Presence/absence monitoring was also used to gauge possum and rat population size before and after control work was carried out. Initial chew card monitoring for possums had 31/50 cards marked, compared with 13/50 cards marked after the initial round of control. This information was useful in working out the layout of traps and bait stations and frequency of checking.

The Waytemore Farms team are continuing their pest control work with trapping and pulsed toxin application to keep possums and rodents under control. They have been able to build on the bonus of possum control work undertaken by Auckland Council as part of the Hunua Halo project.

LEFT TO RIGHT:
Nona Banks from
Weedfree Waiheke
describes the control effort
to the Auckland Botanical
Society field trip.

QEII's permanent
photopoint in 2017 shows
the area dominated by
moth plant.

The same photopoint post
control, in February 2021.

“Covenant owners Shirley-Ann and Rick Mannering were able to use the funding to kickstart their journey toward making the farm a haven for native fauna and flora.”

Supporting stewardship with the Stephenson Fund

The process of protecting land with a QEII covenant is robust, however landowners also understand that the hard work continues well after a covenant has been registered. The importance of good stewardship cannot be underestimated and in 2017, The Stephenson Fund was established to support this.

Named after key founders of the QEII National Trust, Gordon and Celia Stephenson, the aim of the fund is to encourage stewardship on QEII covenants and strengthen our partnership with landowners by providing funding for projects that will enhance these protected places. Two examples of stewardship made possible through the Stephenson Fund are highlighted below. Both projects received funding in the sixth round in 2020.

The last round of funding opened in August 2021 and closed in September 2021. Applications for the next round will open later in 2022. An email will be sent to members when the funding round opens. If you need to update your contact details, please let us know.



Sycamore trees are a problematic species in QEII covenants. Photo credit: A. B on Unsplash.



Weed and wasp control in the Manawatū

The Te One Family Trust received a grant through the sixth round of The Stephenson Fund to support a weed and wasp control project on their Manawatū covenant.

The covenant contains an area of regenerating bush and mature old growth forest, which was left uncleared because of its visual appeal and the protection it provided to the house. Unfortunately, the covenant also has several invasive plant species, including sycamore, oak and elm, which have proven to be persistent weeds.

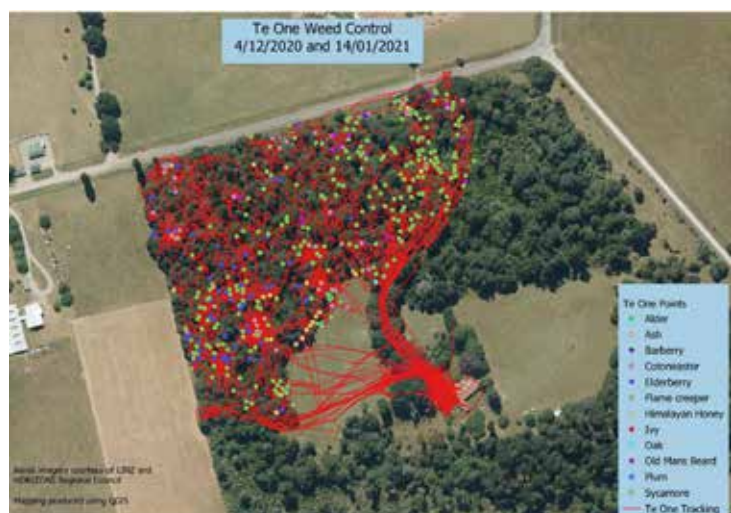
They engaged a contractor who came to survey the site, mapped out a plan and weeded as much of the covenant as possible to deal with the main culprits – Chilean flame creeper, old man's beard, blackberry, sycamore, and cotoneaster. Four volunteer working bees were held to continue the weed control work and a wasp baiting project was undertaken by covenantor Sally Pearce to deal with various nests around the covenant.

The funding has helped the landowners deal with several invasive species and there is now an established plan to keep them under control in the future.

ABOVE
Blackberry are a common weed, as they spread easily by birds.
Photo credit: Elizabeth George on Unsplash.

BELOW LEFT
Old man's beard control.

BELOW
Te One Weed Control.





Creating a conservation classroom

Te Ranga School in Te Puke borders a two hectare tract of native forest, owned by covenantors Megan Richards and Peter Marks who have protected the forest with a QEII covenant. Peter and Megan have a long history with the neighbouring school, as their children and Peter were all pupils there. Building on this relationship, the school established a care group to help look after the covenanted forest, and recently the group worked with Peter and Megan to create an educational space inside the covenant.

The funding was used to create an open-space bush classroom on the covenant for conservation education. The bush classroom focuses on fostering an appreciation of the bush and biodiversity, encouraging sustainable inter-generational practices and promoting an attitude of kaitiakitanga (guardianship). It has become a space for children to learn about native flora and fauna, with local experts attending to assist in education pathways. A track and boardwalk have been built and the landowners have worked with the students to fence off additional areas for forest regeneration.

"The bush classroom is an invaluable resource for students to take action and see outcomes in real life, with the end goal of the tract becoming a part of a bush corridor between two local kōkako projects. The children are actively working towards this and are motivated by the prospect of enticing kiwi and kōkako to the area," says Sarah Peake from Te Ranga School.

LEFT AND RIGHT

Children from Te Ranga School enjoying the outdoor classroom and helping out with pest control efforts. Photo credit: Te Ranga School.



Weed control: the rise of new pest species

Weed control is key when it comes to improving biodiversity in covenants and over the years, QEII has published many articles about weed control in Open Space to help landowners tackle the weeds in their backyards, covenants, or local reserves.

In 2016, we compiled all the articles that we had previously published about weed control together into one booklet 'Weedbusting Tips' which is available on our website. The booklet covers all kinds of weeds, like exotic ground covers such as *Tradescantia fluminensis* (common names include tradescantia or river spiderwort), shrub weeds such as *Solanum pseudocapsicum* (Jerusalem cherry), climbers like *Clematis vitalba* (old man's beard) and seeds from exotic trees.

Since then, new weed species have begun to emerge and some of these are beginning to spread to new areas. Two of our regional representatives, Jesse Bythell, Southland and Tom Stein, Nelson-Marlborough have noticed sightings of Chilean myrtle (*Luma apiculata*) coming up in new places through reports on iNaturalist, a network that anyone can contribute to that helps map observations of biodiversity.

This hardy, smaller evergreen tree has dark green, waxy foliage set against contrasting orange trunks and is often planted around the country in gardens, parks and on streets. However, it can spread into forests and displace native plants. Also, since it is part of the myrtle family, it has the potential to be a carrier for myrtle rust, a pathogen which threatens native myrtle species such as rōhutu (*Neomyrtus pedunculata*). It is spread by birds so can easily move about and detection and control within forested environments is harder, especially since it's not that obvious to the casual observer and might be mistaken as a native tree. "Sometimes newly emerging weeds get picked up in covenants by landowners, volunteers or reps while we are on our site visits," says Jesse. "If we can spot new weeds before they become a widespread issue, that is extremely beneficial because we can do something before it becomes too difficult or costly to control." Jesse explains.

With imported species like the Chilean myrtle known to be naturalising in New Zealand and the potential for it to become a serious emerging weed, it is likely that there are other species out there that people need to be watching out for. "If you spot something new or see a plant that looks out of place or like it's taking over, my advice is to first identify the species. There are a few resources including iNaturalist, NZPCN (New Zealand Plant Conservation Network) or contact your regional rep to see if they can give you any pointers. Taking a specimen in to your regional council's biosecurity team is great step to take too." says Jesse.

A recent review published in November 2021 by the Parliamentary Commissioner for the Environment 'Space invaders: A review of how New Zealand manages weeds that threaten native ecosystems' highlighted that we do not have the full picture when it comes to the scale of the pest weed issue nor a good national reporting mechanism for this. "The best thing to combat this is by nipping something in the bud. Not only is this the most cost effective approach but it will also save time. The old saying '1 year seeding, 7 years weeding' comes to mind," says Jesse.

An old school pest: old man's beard

Old man's beard (*Clematis vitalba*) may look like our native clematis, but it is a destructive weed that can dominate the canopy when it is left to establish. An easy way to tell the difference is to count leaflet numbers. Leaves on old man's beard are arranged in opposite pairs on the stems and are made up of five (rarely three) widely spaced leaflets that fall in autumn. The native clematis leaf has three leaflets.

Controlling it

This hardy climber is not difficult to keep under control, but due to its rapid growth and ability to spread, it is important to monitor and carry out control before it becomes a significant issue. There are two common methods: cut and paste and spraying.

Thick stems can be cut all year round, at just above ground level and then at about shoulder height. The higher cut makes it easier to see where you have been in following treatment years and will prevent aerial roots attaching from hanging stems. Paint cut stumps with Cut'n'Paste or vigilant gel or spray the cuts with a 50% glyphosate water mixture - a trigger bottle sprayer is handy for this. The gel or spray needs to be applied to the cut stumps within seconds of making the cut to allow the

plant to draw the herbicide down into the stem. Leave the remaining stems in the trees to dry out and die. This will also help to prevent damage to the host plant. Keep any cut material off damp ground to prevent it resprouting.

It is best to spray the vines in spring-autumn with glyphosate at 20ml/L. If it has climbed high into trees, you can cut through its vines at near ground level and again at around shoulder height using hedge clippers. Wait for the stumps to sprout new growth, producing plenty of foliage, and then spray. At least three years of follow-up spraying at 6-monthly intervals will be needed to treat new growths sprouting from unaffected root tips. This plant loses its leaves in the autumn so spray when new healthy foliage reappears.

Another alternative for smaller, scattered plants is to pull or dig out the stem and hang it in the trees to die. It is important to remove the stem base/root crown, but plants cannot regrow from the roots alone.

Ongoing control is needed and you should check for new seedlings and missed plants at least 6-monthly. In some parts of the country this weed is not common and careful efforts are being made to ensure this remains the case. Check with your regional council, you may be in an area like this, and the council may undertake the control work for you. Manaaki Whenua - Landcare Research are currently investigating the use of a biocontrol agent, a leaf-galling mite *Aceria vitalbae*, to help with control efforts.

The original version of this article appeared in issue 81 of Open Space, October 2011. It has been updated to reflect new best practice control methods.



*Old Man's Beard.
Photo credit: Sophie
Walker on Unsplash.*

District Council	Location	Covenant Name	Area (ha)	Main open space type
New Plymouth	Korito	N & M Johnston Wedding 13012004 Forest Block	4.0841	Lowland secondary forest
Waipā	Roto-o-rangi		0.2824	Lowland modified secondary forest
Waipā	Roto-o-rangi		1.9852	Lowland secondary forest, modified secondary treeland, revegetated treeland and flaxland
Westland	Bruce Bay	Kōkopu Bush	80.2857	Lowland modified primary forest, shrubland and pākihi peatfield
Waitomo	Kopaki	John Brown Covenant	13.3022	Lowland modified primary and modified secondary forest
Queenstown-Lakes	Kawarau Bridge	Mee Covenant	167.6076	Lowland modified farmland landscape comprising cultivated flats, oversown and top-dressed hill country dissected by a series of deep gullies containing some native remnants including mature kōwhai trees
New Plymouth	Upper Vogettown	Te Ngahere O Manu	1.0349	Semicoastal modified primary and secondary forest
Taranua	Alfredton	Weweia Wetland	3.6461	Lowland modified secondary forest, sedgeland, open water and exotic grassland
Marlborough	Kapowai	Holmes Pidgeon Block	8.0517	Coastal modified secondary forest and treeland
Christchurch	Little Akaloa Bay	Horopito Hideaway	11.7305	Montane secondary forest, secondary scrub, and wetlands
Auckland	Ahuroa	Rengaru Ngahere	34.524	Lowland modified primary forest; Lowland modified secondary forest, scrub, flaxland & sedgeland; Lowland revegetated scrub; Lowland exotic forest & grassland.
Wellington	Makara	Mary Warren Wetland	2.8634	Lowland modified secondary grassland, sedgeland and forest and lowland primary mossfield.
Ashburton	Methven	Broadleaf Gully	9.6914	Lowland and montane modified primary treeland and modified primary and secondary shrublands, grasslands and rockland
Kaipara	Paparoa	Mary and Ken MacKenzie Woodland	1.9345	Lowland modified secondary (kahikatea-totara-matai) forest
New Plymouth	Bell Block	Whatamataruru	2.5796	Semicoastal modified primary forest, secondary forest and revegetated shrubland
Southland	Haldane	Slope Point - Coastal Block	15.4555	Coastal primary and secondary shrubland, and modified secondary forest and herbfield (coastal turf)
New Plymouth	Kaimiro, Egmont Village	Broadmores Bush	1.6084	Lowland modified primary forest
South Taranaki	Ōpunake	Fisher Family Bush (additional blocks)	4.7793	Lowland modified primary forest

District Council	Location	Covenant Name	Area (ha)	Main open space type
Whanganui	Parikino	Julie Ann	12.88	Lowland modified secondary forest
Tasman	Upper Moutere, Tasman	Ngā Uruora o Mahana	0.788	Lowland revegetated shrubland and sedgeland
Marlborough	Seddon	Doug and Wendy Avery Wetland	2.6456	Lowland modified secondary wetland, exotic grassland
Rangitikei	Pukeokahu	Middle Bush	36.1767	Submontane modified primary forest
Gisborne	Tiniroto	Tawaroa	33.764	Lowland secondary, advanced secondary and modified primary forest
Stratford	Huiakama	Eco Blue QEII Covenant	5.0947	Lowland modified primary forest
Grey	Marsden	Marsden New River	3.0818	Semi-coastal modified secondary forest and shrubland
Far North	Whangaroa Harbour	Motukauri Island	0.3415	Coastal (small island) modified primary pōhutukawa forest
Grey	Barrytown	Canoe Creek Conservation Project	33.1685	Semicoastal modified primary forest, secondary scrub and exotic grassland
Wairoa	Whakaki	Tahere	1.8343	Semi coastal modified primary podocarp-broadleaf forest



Remembering our people **Malcolm Piper, 1939 - 2022**

We were saddened to hear of the passing of Malcolm Piper. Malcolm passed peacefully on April 2, 2022, at Gisborne Hospital, aged 83. Our thoughts are with his friends and family.

Malcolm was a QEII regional representative for 16 years, in the Gisborne area. He took on the role in 1995 and during his time 130 covenants were registered covering 3,800 hectares. Among the areas protected were local landmarks Te Kuri a Paoa, Tuahine Point, and Sistrion Lagoon. While in his role as regional rep, he worked closely with his wife Olive. They were a team; Olive did a lot of the paperwork while Malcolm conducted the covenant visits. Malcolm will be remembered fondly as a natural people person and as someone who had the respect of his peers – when he offered his opinion, he was listened to.

Malcolm was farewelled with a last muster at Bushmere Estate in Gisborne on Wednesday 20 April, with family and friends in attendance.



QEII NATIONAL TRUST

Ngā Kairauhī Papa Forever protected

QEII NATIONAL TRUST OPEN SPACE ISSUE 102

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