



QEII National Trust
Open Space New Zealand
Ngā Kairauhi Papa

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UN year of family farming: Celebrating collaborating | Succulent and bulbous weeds
Pest control and citizen science | Lifestyle: Featuring Richard and Anne-Marie Hutchinson
and Barry Brickell | Wasps, eels and more...



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COVER PHOTO

Safe passage for coastal kiwi.
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Photo Malcolm Pullman.

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From the Chair



I am delighted to announce that His Excellency Lieutenant General The Right Honourable Sir Jerry Mateparae GNZM, QSO, Governor-General of New Zealand has agreed to become Patron of the National Trust. The Governor-General's patronage is a great honour and a splendid endorsement of the work that the Trust and its members do for the benefit of all New Zealanders. It is fitting that our organisation, named in recognition and celebration of the 25th jubilee of the coronation of Queen Elizabeth the Second, has the Queen's representative in New Zealand as its Patron.

I am less than delighted to announce that the Trust has had to take a covenantor to court for causing extensive damage to covenants on his property. The action was not taken lightly as it goes against our principle of working in partnership with landowners, both to protect special places on their land, and to work through any issues together to reach a satisfactory outcome. In this case the level of damage caused is unprecedented in the history of the Trust, and our extensive efforts to find a resolution and way forward were unsuccessful, leaving us with no other option. More information about the case is provided under the *Legal News* section on page 4 of this magazine and on our website www.openspace.org.nz.

James Guild

TRUST CHAIR

TRUST PATRON



His Excellency Lieutenant General The Right Honourable Sir Jerry Mateparae GNZM, QSO, Governor-General of New Zealand.

Guest Editorial – Kevin Milne

The value of covenants

It's funny how we all think differently. I was brought up to accept, indeed value, differing perspectives. But sometimes I'm utterly frustrated and perplexed by an opposing view. One of them is landowners' common excuse not to covenant special tracts of native bush on their property. This particularly applies to lifestyleers like myself who live on the edge of town.

Because my association with the QEII National Trust has been so fruitful, I tend to preach a bit when I'm with others who could covenant but don't. I shouldn't, but I can't help it. I'm so proud to be a covenantor. I'm proud that we were supported by the Trust to protect our beautiful native forest. Every time I drive up my drive and look at the QEII Protected Private Land sign my heart swells. If I were to be looking to buy a property and it had a sign like that at the front gate I would consider it a huge plus.

So when a landowner says to me, "I could covenant part of this property but I don't want to *put off any future buyer*", it drives me nuts. Why, in heaven's name, would a potential buyer not want a property with a covenant? Would such a buyer be intending to take an axe or a chainsaw to the property's greatest asset? Of course not. Why would they not be attracted to the assistance they'd get from the Trust with fencing, pest control, weed control, and expert advice on maintenance?

The funny thing about it is that the least meritorious reason I had for covenanting my forest was that when the time came to sell the property I could see among the headlines "*Property contains stunning tawa forest remnant covenanted with the QEII National Trust.*"

Now, I know you shouldn't covenant just to add sexiness to your eventual Property for Sale ad, but the thought did go through my mind and I don't think it was a silly thought. Apart from the odd misguided person, I'm certain most potential buyers would jump at the chance of owning native bush considered important enough for a QEII National Trust covenant.

And that's why when someone says "*I don't want to covenant because it might put off a future buyer*" it drives me nuts. I just don't get it. Unkind thoughts enter my mind but I just nod and think of my mum and dad, and what they said about differing perspectives.

I reckon those who use the re-sale argument don't even believe it themselves. I think it's something much more basic and actually, much more understandable. They simply don't want to give up any rights to anything they "own". But that would sound pretty selfish given they're talking about our national heritage. So they pass responsibility onto someone else...an amorphous "future buyer".

But I shouldn't judge!

Kevin Milne is the former presenter of New Zealand's iconic TV programme *Fair Go*. He and his wife Linda live on a lifestyle property near Waikanae, north of Wellington. The Milnes' covenant protects a "burgeoning" tawa/tikoki forest remnant, sheltering a large and varied number of birds. It is an important island block, providing a link to other covenants and forest blocks within the area, and an aesthetic and protective screen for a section of the Waikanae river, which runs through part of it.



QEII covenantors get funding boost

QEII National Trust covenantors will be able to do more for New Zealand's biodiversity with \$313,000 worth of grants received from the Department of Conservation's latest Biofunds round.

Twelve projects on Trust covenanted land have been given the go-ahead for a range of conservation initiatives now that funding support has been secured.

"Biofunds recognise the importance of conservation efforts on private land and we are thankful for the support the fund gives to covenantors who are protecting biodiversity for the benefit of all New Zealand," says Genevieve Bannister, Trust funding co-ordinator.

Funding is prioritised to support projects which specifically cover national priorities for protecting rare and threatened native biodiversity on private land. The latest grants will support a range of projects including weed and pest control and threatened plant monitoring and propagation in a number of sites around New Zealand, and restoration programmes in wetlands located in Southland and Hawke's Bay.

Covenantors are encouraged to contact their local QEII representative to discuss covenant conservation projects and to check if they are eligible for external funding grants.



Redcliffs wetland in Southland has received funding for restoration work.



High Court ruling favours the Trust

A High Court judge has ruled in favour of the QEII National Trust in a case that took a Canterbury farmer to court for breaching an interim injunction order.

The purpose of the injunction order was to "hold the fort" while the Trust progressed its claim to restore woodland covenants extensively damaged by the landowner in early 2013. It subsequently lodged an application with the High Court after it obtained clear evidence the injunction conditions were being breached.

The landowner's actions have severely damaged one of the last remaining pockets of undisturbed kanuka woodlands on the Canterbury Plains. Kanuka woodlands are only found in semi-arid, low nutrient environments such as the Canterbury Plains. 99.7% of this type of woodland ecosystem has now been lost on the Plains.

In her written decision Justice Rachel Dunningham found that the defendant was in contempt of the Court by "repeated and deliberate breaches of the order" by allowing irrigators to pass through and/or water the covenanted land, and by allowing fertiliser to be spread without taking precautions to avoid covenanted areas. The actions are detrimental to the natural conditions required for the restoration and regeneration of the damaged covenants and directly violated the Court injunction.

"I have no doubt that this was conduct which was wilful, reckless or contumacious on the part of the defendants... [The landowner] should be in no doubt that imprisonment is an available option to punish a wilful or reckless disobedience of a Court order," Justice Dunningham said.

Justice Dunningham recognised that the Trust's action was taken only after its strenuous efforts to come to an agreement with the landowner to halt damaging activity and reinstate the covenants had failed.

"It is an aggravating feature of this case that the Trust has had to escalate its response to the alleged breaches of the (...) covenants, from informal advice, to formal undertakings and then to seeking interim orders from the Court," she said.

Trust Chair James Guild said the interim case has reinforced the Trust's position as the perpetual trustee and defender of open space covenant agreements.

"While we are still to have our day in court for the original covenant breaches, this interim case shows that the measures we have had to take to defend the covenant are legally justified, and breaches of court injunctions issued on our behalf are taken seriously and can have serious consequences.

"We look forward to the day when work to restore this rare woodland ecosystem can start in earnest," Mr Guild said.

The case seeking full restoration of the covenanted areas is to be heard in the High Court later this year.

About the covenanted area

Only about 0.3% of dryland ecosystem is now left on the Canterbury Plains and of that only 0.1% is under formal protection. Each remaining remnant is rare and unique, with its own assemblage of plants and animals, and is essential for conserving the original biodiversity of the Plains. The kanuka woodlands in this case sheltered native shrubs, clematis, small herbs, ferns, and a carpet of mosses and lichens and, importantly, unidentified flora and fauna species. Of equal importance is the abundant insect population of native moths, beetles and spiders that inhabit this type of ecosystem, with some species found living only on dryland kanuka. One of the cleared areas had been recognised as *an indigenous vegetation and habitat site with significance* by the Waimakariri District Council, in addition to being protected by a covenant. The Council has also lodged an action in the District Court for the damage caused to the site.

Covenantors support mayfly research

Canterbury University PhD student, Steve Pohe, specialises in stream invertebrate ecology and is looking at the diversity and distribution of a group of aquatic insects called mayflies. Mayflies are the most primitive group of winged insects still living today and are particularly sensitive to changes in their environment. Some of New Zealand's mayfly fauna are important to science because they are the most ancient mayflies on the planet. In an ecological setting, mayflies are an important food source for predatory aquatic insects, eels and other freshwater fish, and insectivorous forest and riverine birds. To investigate New Zealand's mayfly distributions, Steve will survey 110 streams and rivers across New Zealand. A number of covenantors have welcomed Steve to their properties to assist him with his research.



Slow walking



Representatives of the Taiwan Thousand Mile Trail Association with Trust CEO, Mike Jebson.

You may have heard of the slow food movement, where people are encouraged to take time to savour meals, prepared using local ingredients, hearty recipes and traditional cooking methods. Well, a similar concept has been initiated in Taiwan, only there it's the slow walking movement!

The Taiwan Thousand Mile Trail Association is establishing walking trails in Taiwan, using traditional pathways, and creating new ones, that cross farmland, pass by villages and take in remnant natural areas. The goal is to encourage the enjoyment of the "slow walk" (or cycle), a concept that is quite alien in a land populated by 23 million people in an area about the size of Canterbury, and where getting from A to B as quickly as possible is a prime objective.

The Trust welcomed representatives from the Association to share information about private land management and protection mechanisms in New Zealand, how our Act works, attitudes towards conservation and outdoor recreation, and managing public access.

The Association is confronted with prevailing attitudes towards walking and cycling, nature appreciation, and the establishment of trails that do not accommodate fast vehicles. Despite that, they have successfully developed 3,000 km of trails over a six-year period and support is slowly growing for the initiative. We wish them the very best in their endeavours.

Move over hobbits and make way for the Na'vi

"The trees and plant life of Pandora have electrochemical connections between their roots that effectively act as neurons, creating a planet-wide "brain" that has achieved sentience, which is known to the Na'vi as Eywa..." (From the film Avatar). The stuff of cinematic fiction... or is it? Tararua's QEII representative, Bill Wallace, noticed this odd-looking stump when out on a monitoring visit. The kahikatea tree was cut down around 60 years ago. Before it was felled it had obviously grown into the tree beside it at the base, their phloem layers (the layers that carry the tree sap) connecting in the process. The centre of the stump has rotted away but the outside has stayed alive by receiving sap from the tree beside it. The cambium layer (the cell dividing layer below the phloem layer) has continued to grow, hence the growth bulging up and over the old saw cut. The stump is living and growing, increasing in girth each year just like its neighbour.



Wetlands, wildlife and weeds theme for covenantors' day in Marlborough

A field day was organised for Marlborough's covenantors in November, where guests got to visit two very different covenant types, and learn about weeds and wildlife management along the way.

PHOTOS: ALISTAIR WEBB

The day started with a four-wheel drive adventure through Vernon Station, passing its 171 hectare forest covenant and on to the station's summit for stunning views over Wairau Valley and lagoons, Awatere Valley, Richmond Range and Cook Strait. The Vernon Station covenant protects part of one of the largest pieces of dryland forest in Marlborough. Station manager, Paul Leedom, talked about the trials and rewards of managing Vernon Station and the success he has had with QEII initiated funding support to control old man's beard and wilding pines. Guests then moved on to Will and Rose Parsons's property for lunch and a walk around their wetland. The Parsons shared the story of their restoration project, their battles with weeds and ferrets, and the excitement they feel when noticing new avian visitors to their covenant.

Dr Peter Williams, one of New Zealand's pre-eminent weed experts, was invited along to speak about weed control and best practice. His key tips are: pick your fights and, when presented with diverse weed issues, start from the bottom up!

Guests were treated to a close encounter with a New Zealand falcon, brought to the event by the Marlborough Falcon Conservation Trust. Falcon handler, Diana Dobson, together with Trust members Phil Bradfield and Adam Manawatu, talked about the Trust's breeding and release programme. Landowners were invited to contact the Trust if they were interested in hosting falcon releases on their property. Properties close to Blenheim were unsuitable, however, given the proximity of some 3,500 uninsulated transformer boxes, which are a major cause of falcon deaths.



Uninsulated transformer boxes are a major cause of falcon deaths.

2014 – United Nations International Year of Family Farming



One of the aims of the United Nations International Year of Family Farming is to encourage the sustainable development efforts of farmer families and their communities.

The following stories celebrate collaborations with covenantors to support sustainable practices and encourage appreciation of the environment through the care and enhancement of their covenants.

Plantings support research

On a sunny Sunday morning in late August last year, 20 volunteers from the QEII National Trust, Forest and Bird, the Greater Wellington Regional Council and neighbouring farms, gathered for a planting day at Michael and Karen Williams' 2 hectare covenant in central Wairarapa, one of only a couple of podocarp forest remnants left on the Wairarapa plains.

Eco-sourced plants were purchased with funding from the Sustainable Farming Fund (SFF) for a project administered by

the Foundation for Arable Research (FAR) entitled *Building Better Biodiversity on Cropping Farms*. SFF is run by the Ministry for Primary Industries to support farmer-, grower- and forester-led projects that deliver economic, environmental and social benefits to New Zealand's primary industries. Amongst other things, the Foundation's research projects support innovative, sustainable farming practices. Working in conjunction with Plant and Food Research, FAR is aiming to enhance biodiversity on arable farms as well as



The Williams family.

establish durable habitats for beneficial insects. The intention is that establishing good host plants will increase desirable insect populations, reduce unwanted pests and introduced bird populations, and ultimately reduce reliance on agri-chemical use on cropping farms.

The Williams' 224 hectare arable lamb finishing and beef unit, Ahiruhe Farm, collected the Supreme Award in the 2013 Greater Wellington Ballance Farm Environment Awards and was described by judges as a very well organised business "run by an inspirational young couple". The judges commented on the effort they have put into protecting and enhancing their forest remnant, which they first stock-proofed, before tackling weed infestations with gusto – particularly old man's beard, with which they have a constant battle.



Popular presenter hosts planting day

Zane Moss of Fish and Game, and Gary Morgan and Nathan Cruickshank from Environment Southland, were the chief advisers for restoration plantings at Jamie MacKay's wetland covenant in Riversdale, Southland. Each agency provided funds for the plantings and Jamie's duck shooting mates volunteered a day to give him a hand planting over 500 natives. You might recognise the name...Jamie is the presenter of Southland radio's popular programme, *Farming Show*, and writes for a number of rural magazines.



Family wetland restoration efforts recognised



Regional councils around the country nominate wetland-friendly farmers for the Wetland Champions award. Greater Wellington Regional Council nominated winner Jane Donald and her daughter Paula in 2014.

A Wairarapa farming family has been named the 2014 Wetland Champions of New Zealand for their conservation efforts.

The Donald family have farmed alongside Lake Wairarapa for more than 150 years and are held up as role models for wetland restoration in New Zealand. For generations the family has protected and restored more than 300 hectares of nationally significant wetland, a large portion of which is covenanted with the QEII National Trust.

"This farm ticked just about all the boxes for environmental best practice," said the judges of the National Wetland Trust (NWT) and Department of Conservation competition, held to celebrate World Wetlands Day in February each year.



"The Donald family are excellent role models for farmers and I am delighted to see that they share what they've learnt on their farm with the wider community," judge and NWT founder Gordon Stephenson said.

The Donalds' wetland is linked in to the Wairarapa Moana Project, an exciting initiative that aims to protect and restore the ecology, recreation and cultural opportunities around Lake Wairarapa. Many individuals and organisations are involved, including Greater Wellington Regional Council, Department of Conservation, South Wairarapa District Council, Ngati Kahungunu ki Wairarapa, Rangitane o Wairarapa Inc., Papawai and Kohunui marae, neighbouring landowners and covenantors, schools, friends of Onake Spit, the South Wairarapa Biodiversity Group, Ducks Unlimited, Fish and Game, Forest and Bird and many volunteers. The project has benefitted from funding support from the Ministry for the Environment.

Thanks to their hard work, royal spoonbills were recorded nesting in Wairarapa for the first time last year. The Donalds' wetland is also home to an array of native fish and the rare Australasian bittern. *Article courtesy of Wairarapa Times Age.*

Work in progress on the Fowler farm

Six years ago Eric and Janine Fowler decided they'd like a change of lifestyle, so they sold their dairy farm at Ohangai near Hawera and bought a 41 hectare property near Urenui. There they graze 140 or so yearling heifers and calves for dairy farmers, and have about 20 beef cattle and a few sheep of their own.

They've spent \$100,000 of their own funds redeveloping the property after consultation with Taranaki Regional Council land management officers, focussing on planting to control erosion. Almost 12 hectares of their property is now covenanted with the QEII National Trust.

Funding to help with the development has included \$17,200 from the Taranaki Tree Trust, \$5,500 from the Afforestation Grants Scheme, and \$20,000 from the QEII National Trust as a half-share of the cost of fencing the covenanted land.

"Planting is a costly exercise because you spend at least \$5 to buy and transport each plant before you even put it in the ground," said Janine, a tutor in resource management, human resources and business and finance for the National Diploma in Agribusiness at DairyNZ Training Ltd at Stratford.

The Taranaki Women's Rugby Team has been helping out with the three-year planting programme, getting a dollar for each tree they plant as part of a fundraiser exercise.

Janine says, "We're doing this for conservation, but also for ease of farming.

"We're getting the ecosystem going. We want to provide a good habitat and keep control of the gorse, and with the good fences around the native bush, we don't lose any stock."

Around 20,000 shrubs and trees have gone in so far, including wineberry, karamu, toetoe, broadleaf, koromiko, flax, kohuhu, totara, pseudopanax, karaka and kowhai.

The redevelopment project includes the creation of two dams filled by run-off. The couple have also removed old buildings and fences, developed new contours in paddocks, re-sown pasture, installed a new water supply, and built new fences. On the property's perimeter, fences are resistant to feral goats and pigs.

Janine says there is always more to do, so the project remains a work in progress. *Article courtesy of Taranaki Daily News.*



Janine Fowler



Blenheim park gets a makeover

Blenheim locals are giving Shep's Park a makeover. Around 40 people turned up for a working bee and in no time planted 600 trees and shrubs in the urban park, a great example of many hands making light work.

The enhancement project is a true community effort. The property is managed by Marlborough District Council, which is working on the site's development with Marlborough's Arbourbank that in turn organised the community planting day with support from the Marlborough Landscape Group.

The park was gifted to the QEII National Trust by the Shep family for public use and enjoyment. It is becoming increasingly popular with locals as a picnic spot, and its large open field is perfect for informal Sunday cricket matches.

Native plants, including cabbage trees, flaxes and Marlborough's very own rock daisy (*Pachystegia insignis*), are forming the landscape design. The Trust contributed \$5,000 towards the enhancement project.

Three cheers for Conservation Volunteers

Robyn and Paul Gedye are returning their small farm on the Waikato River to its natural state with the help of Conservation Volunteers. Bluff Farm is owned by Te Ere Trust and covers 36 hectares, with a one kilometre boundary on the Waikato River. The property has two historic sites (Bluff Stockade and a pa site), stands of 120-year old kahikatea, regenerating bush remnants and a wetland.

In 2002, the Gedyes began covenanting blocks with the QEII National Trust. Currently 22 hectares are covenanted.

A plan is in place to restore grassy open areas around covenant fence lines.

Robyn says that while she had a grant from the Biodiversity Condition Fund for plantings, she needed to get people to help her prepare the terrain and plant the trees. Conservation Volunteers came to the party, sending a team of enthusiastic helpers who tackled gorse and tradescantia infestations before starting on the plantings. No chemicals were used to control weeds near waterways, so a huge pat on the back to the volunteers for putting in the hard yards on that job. Environment Waikato also helped the Gedyes through its Rivercare programme.



Conservation volunteers behind a mountain of tradescantia.

Safe passage for coastal kiwi



PHOTOS: MALCOLM PULLMAN

Todd Hamilton, approved kiwi handler, Backyard Kiwi project manager for the Whangarei Heads Landcare Forum, and QEII covenantor, introduces Goldie to Owhiwa locals. Goldie is the progeny of a kiwi from a QEII covenant at Purua, who was later released into Marunui, a large QEII covenant on the south side of the Brynderwyns. The release was funded by Kiwi for Kiwis.

Coastal kiwi are on the move in eastern Northland thanks to Kiwi Coast, a unique project that includes 80 QEII covenants in its start up area.

Initially the Kiwi Coast project is concentrating on predator control to allow safe passage along natural corridors between kiwi strongholds at Whangarei Heads and the Tutukaka Coast.

Kiwi Coast is part of the Reconnecting Northland programme which is backing community-led ecological restoration across the north. The programme is delivered by the New Zealand Landcare Trust and WWF-New Zealand.

The larger Reconnecting Northland project is backed by the Tindall Foundation and the ASB Community Trust.



Ngunguru School kids get up close to a kiwi before it was released into the bush behind Matapouri.



QEII covenantor Ian Page and his first trapped stoat.



Tahere and Whareora landowners learn all about pest control from Northland Regional Council's Steve Henderson.

Weeds – taking on sneaky succulents and rampant rhizomes



Controlling weeds with rhizomes, bulbs or corms is a tricky process and takes a long time – ask anyone who has tried to get rid of oxalis from their garden! If using herbicides, the product needs to last long enough in the plant to get to the underground storage system to kill there as well as the foliage above ground. Expect to treat this weed category several times for lasting results, and make sure you use the right method. Check out the Weedbusters website www.weedbusters.org.nz for control options.

Sneaky succulents

They may be often delicate looking, but a number of succulents have started making their unwelcome presence felt in New Zealand's natural areas. They are a particular problem on "poor" ground (sandy, rocky, gravelly soils) where they can spread rapidly to form large infestations.

Weedy succulents are spread mainly by fragments moved in soil or by people dumping garden waste. They can form extensive mats, smothering other plants and crowding out native species that would normally grow in the infested areas.

Pig's ear (*Cotyledon orbiculata*) is a common offender, followed closely by the exotic iceplant (*Carpobrotis edulis*). These are often found near beaches where they have "escaped" from holiday home gardens to invade the dunes nearby.

Other offenders include fairy crassula (*Crassula multicava*), often found in gardens in the northern parts of New Zealand, and a growing problem on northern off-shore islands where they have been planted around baches that are located close to natural areas.

At the other end of the country, stonecrop (*Sedum acre*) is spreading into dry grassland and rocky landscapes in Canterbury and Otago.

While pig's ear and fairy crassula are now banned from sale, propagation and distribution in New Zealand, stonecrop and exotic iceplants are still available. There are plenty of other non-weedy succulents that can be used in their place, so ask your local garden centres for some environmentally-friendly options.

Rampant rhizomes (and bulbs and corms)

Weedy species that form bulbs, corms, or rhizomes (swollen root systems resembling tubers) are particularly hard to kill, for even if the foliage is completely removed, the underground "survival units" allow the plant to resprout and continue growing.

This weed category has a wide range – from the small delicate (on the surface!) montbretia (*Crocsmia x crocosmiiflora*) and aristeia (*Aristea ecklonii*) to the large and leafy wild gingers (*Hedychium* species) and arums (*Zantedescia* species), including the green-tinged "green goddess" arum lily. In between there are the clumping weeds like the yellow flag iris (*Iris pseudacorus*) and stinking iris (*Iris foetidissima*).

These rampant weeds can thrive in a variety of conditions. Some (for example wild ginger) are shade tolerant, making them particularly dangerous in bush areas where they can infiltrate the undergrowth. Others, such as the yellow flag iris, are happy to grow with very wet feet, making them a threat to waterways and lakes, as well as surrounding areas that get occasional or seasonal flooding. Arums lurk on the edges of wetter areas, and will spread into wetlands without much encouragement at all.

As well as spreading by their underground structures, many of these weeds also spread by seed, making them doubly effective at invading areas where they don't belong.



Aristea in flower



Arum lily



Ice plant (exotic)



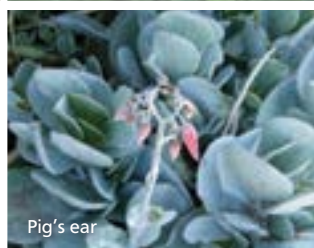
Fairy crassula



Kahili ginger flowerheads



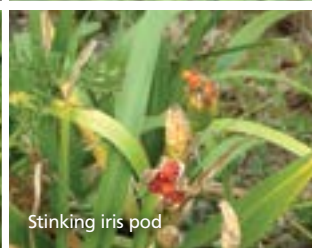
Montbretia



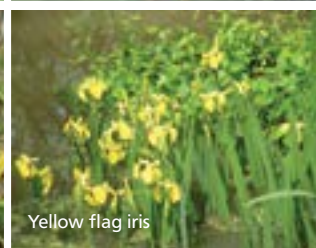
Pig's ear



Sedum acre



Stinking iris pod



Yellow flag iris

Feeling the sting: Invasive wasps in New Zealand

Dr Elizabeth Heeg, QEII National Trust

New Zealand has some of the highest wasp densities in the world. This is partially due to our mild winters and because wasps have no natural predators here. Within New Zealand, the central and north of the South Island are most affected, particularly in honeydew beech forests. In some of these areas wasps drive away native birds and numbers can swell to up to 350 wasps per square metre of tree and 30 to 40 nests per hectare¹. Covenantors have reported seeing invasive wasps carrying off native insects, or a decrease in native flora and fauna associated with their arrival.

The financial impact of invasive wasps on industry and recreation in New Zealand has been estimated at more than \$10 million per year (Landcare Research).

Invasive wasps are a widespread problem, but, unfortunately, control methods for them are limited.

Know your wasps

German and common wasps are the most universal pest wasps, but some landowners also report problems with the two accidentally introduced paper wasp species.

The first paper wasp species to come here was the Australian paper wasp (*Polistes humilis*), introduced in the 1880s, and the last was the Asian paper wasp (*Polistes chinensis*) in 1979. Paper wasps build nests out of regurgitated woody materials and are distinguishable from German and common wasps because their legs dangle low when they fly.

German wasps (*Vespula germanica*) arrived with aeroplane parts shipped from Britain after World War II, and quickly became a pest species. Common wasps (*Vespula vulgaris*) are thought to have arrived in the late 1970s from Eurasia, and subsequently have grown in numbers to become the most abundant pest wasp species.

There are 29 native New Zealand wasp species which are easily differentiated from these invasive species. They are solitary wasps, meaning that they do not nest with other wasps, but build individual nests, often from mud or in the ground. They are not known to be naturally aggressive to humans, and only sting when highly provoked.

You can learn more about wasps at <http://www.landcareresearch.co.nz/science/plants-animals-fungi/animals/invertebrates/invasive-invertebrates/wasps>.

What is being done to control wasps?

The QEII National Trust was recently invited to participate in a workshop at Victoria University of Wellington, hosted by the university, the Department of Conservation and Landcare Research, to identify a pathway to wasp control. The Trust will continue to serve on the *Wasp Tactical Group*, created out of the workshop as a representative of covenantor interests in controlling the wasp problem.

Before attending the workshop I spoke to regional representatives and they referred me to some landowners who have struggled with wasp issues on their property. Many mentioned that wasps pose a problem for volunteers and labourers on farms, and in late summer some covenantors found that wasp densities were so high that they could not visit their covenants. I relayed our concerns to the other workshop participants, and found landowner concerns were shared by other interest groups like the National Beekeepers Association, regional councils and iwi.

Some landowners had mentioned using pet flea medications for wasp control, but this is not a recommended course of action by any agency. The only licensed control options currently recommended are insecticides that are labelled specifically for wasp control.

The Trust recommends you contact your council if you have questions about wasp control. Most councils have pest control officers who can advise on control methods. We will continue to participate in the *Wasp Tactical Group* to help develop control methods that are effective and affordable for our landowners and will keep you informed of our progress through this magazine.



Asian paper wasp



Australian paper wasp



Common wasp



German wasp

¹ <http://www.radionz.co.nz/news/national/227006/wasps-wreak-havoc-on-flora-and-fauna>

Exciting discovery for possible biological control of wasps

Landcare Research is re-visiting a biological control programme for invasive Vespulid wasps due to the serendipitous discovery of a seemingly devastating mite in wasp nests in New Zealand. To assess the mite as a biocontrol agent, Landcare Research and associated researchers applied to MPI's Sustainable Farming Fund in November 2013. We will find out in late April if the bid is successful. The Sustainable Farming Fund provides grants for projects of up to 3 years, and we hope to get this project funded to begin in the upcoming financial year (2014-15). Watch this space! Ronny Groenteman, Landcare Research. E: GroentemanR@landcareresearch.co.nz.



PHOTO: DR BOB BROWN

Effective electric fences

It is a big leap from fencing with barbed wire to fencing with power. Instead of being bitten when untangling the dog from the barb, you can now be bitten AND electrocuted!

There's no doubt that electric fencing has come a long way, and the regimes we use for controlling stock would not be possible without this option. It is quick, cheap, and can now be pretty well employed anywhere. However, its limitation is the very power it relies on. If it's off, it's not going to work, and stock learn very quickly when it's off. They seem to test it regularly with a whisker.

One and two wire fences hold cattle easily while the power is on, but they are quickly through when it goes down. Nowadays electric fences are regularly considered a permanent fencing option. Adding two or three more wires makes them much more robust, and cattle tend to think twice about pushing through, even when the power is off.

As with all fences, maintenance is paramount for them to work as intended, and electric fences need just a little bit of extra attention. Power can go down for a number of reasons, from a short under the gateway that the dog always finds, to a branch down after the last big wind. But the most common fault is that it just simply hasn't been turned on. This leads to the headache of mixed stock, tomorrow's breakfast consumed the night before, or cattle on the other side of the QEII gorge covenant, which are going to take a day to get out.

An efficient electric fence needs regular maintenance, good wiring and a reliable power supply. The pay back is effective stock management, and a much happier dog.

John Williamson – QEII representative.

This well-maintained electric fence has 7 wires and 30 metre post spacings. It has never been breached in its 20 years.

Trees for Bees – be careful with karaka

An article published in *Open Space* issue 84 (March 2013) included a list of trees to plant to support bee populations. The list included the karaka tree which is in fact toxic to honey bees. Beekeepers should not plant karaka near their hives, as the flowering karaka is not safe for honey bees. If karaka is present, beekeepers must keep their bees out of the area until it finishes flowering.



A honey bee has a foraging area of around 5 km radius from the bee hives and so all neighbouring farms within 5 km that want to use honey bees for pollination or honey harvesting will need to be considered in any planting programmes. Consideration should also be given to any future uses of the land within the 5 km radius zone.

Regional lists of safe bee plants (most of which are natives) that are practical to plant on farms are available at these links (<http://www.treesforbeesnz.org/farms>, and <http://www.fedfarm.org.nz/membership/Industry-Groups/Trees-for-Bees.asp>).

Freshwater eels in New Zealand

At first glance, all New Zealand freshwater eels look the same. But you might be surprised to learn there are three species, each unique in its own way.

PHOTO: PHILIPPE GERBEAUX

What's the difference?

The two main species of freshwater eel found in New Zealand are the longfin eel (*Anguilla dieffenbachii*) and the shortfin eel (*Anguilla australis*).

On a longfin eel, the dorsal (top) fin extends a lot further forward than the anal (bottom) fin.



Longfin

The dorsal fin of a shortfin eel only extends a little further forward than the anal fin.

A third species, the spotted eel (*Anguilla reinhardtii*) is an occasional visitor from Australia.



Shortfin

A species in decline

The longfin eel is ranked as "At Risk—Declining" in the New Zealand Threat Classification System listings (2009). It is only found in New Zealand. The shortfin eel is "Not Threatened" and is found in New Zealand, Australia and some Pacific Islands.

Longfin eels, as well as being rare, are less able to cope with changes to their environment than their shorter-finned relative. They are heavily affected by human activities, such as pollution, the building of dams, loss of vegetation near their habitat, and overfishing.

PHOTOS: RODMORRIS.CO.NZ

PHOTO: ALTON PERRIE



An eel is *probably* a longfin if it's:

- very dark in colour
- more than a metre long
- living in a high-country river or lake, or a clear, cold, spring-fed stream at any altitude.

If in doubt, there is a very reliable way to tell the difference: a longfin's skin forms big, loose, obvious wrinkles when bent (left), whereas a shortfin's skin wrinkles are much smaller (right).



PHOTOS: NICOLA ATKINSON

SUMMARY OF DIFFERENCES

Shortfin eel

Found in New Zealand, eastern Australia and some Pacific Islands

Range of colours, often light brown, olive

Grows up to 1 m long and weighs up to 3.5 kg

Small wrinkles on the skin when bent

Lives mostly in lowland areas

Relatively pollution tolerant

Lives for an average of 18–23 years and up to around 60 years

Longfin eel

Found only in New Zealand

Usually dark brown/ black

Often more than 1 m long and can grow up to 2 m long, and can weigh up to 20 kg, sometimes more (although this is now very rare)

Big, loose wrinkles on the skin when bent

Lives at a wide range of altitudes, including very high elevations

Relatively intolerant of pollution

Lives for an average of 35–52 years and sometimes up to 100 years

Wild eels can be hard to spot, so many wildlife parks and zoos have “tame” eels you can get up close to and sometimes even feed. It's a great way to educate the whole family about how special and unique New Zealand's freshwater eels are.

These tame longfins live in a stream that runs through a cafe in Motueka, where they have been fed for many years.



PHOTO: JOE POTANGAROA



PHOTO: ALTON PERRIE

Did you know

New Zealand freshwater eels can live up to 100 years and breed only once at the end of their lives. In order to breed, they undergo mass spawning migrations, leaving the familiarity of lakes and rivers to swim all the way up to the subtropical Pacific Ocean, where they spawn en masse in very deep water.



If you're really lucky . . . you might spot a rare “golden” longfin. This colouration is thought to be caused by a condition called leucism—similar to albinism but it causes yellow skin, instead of white.



PHOTO: MIKE JOY

Information source: Department of Conservation and Massey University

Give the longfin a helping hand

- Avoid catching them, and if you do, return them to the water unharmed.
- Fence stream banks to keep stock out.
- Plant trees along stream banks to create shade (certain trees also provide a food source).
- Don't let pollutants enter waterways.

Scientists at Landcare Research and the Human Interface Technology Laboratory, University of Canterbury (HITLabNZ) in conjunction with Driedfrog, a game development company, have come up with a new way of making forest-pest-management models available to everyone, action heroes included and no techie experts required.

Want to have some fun, contribute to real research, and help biodiversity in New Zealand? Read on to find out how.

Harnessing citizen science via online gamers

and making the science of forest pest management fun!



Researchers in all fields of science are increasingly using complex computer models to manipulate very large quantities of data to mimic the real world and assess the consequences of various actions. One example is pest management to protect New Zealand's biodiversity. Models often have some sort of feedback loop, whereby the outcomes of various simulated scenarios are used to tweak the model and its input parameters, and so over time the model evolves and improves. A great thing about models is that they provide a vastly cheaper and faster way of finding the best course of action for a problem - and if things really turn to custard, one always has recourse to the restart button.

The problem, however, is that computer modelling is highly technical and, for most people, not the most thrilling of tasks. But now scientists at Landcare Research and the HITLabNZ at the University of Canterbury in conjunction with Driedfrog, a game development company, have come up with a new way of making forest-pest-management models available to everyone, action heroes included and no techie experts required. *Ora – Save the Forest!* is an online, fun-filled ecosystem adventure game that is based on real-life data and forest-pest-management models.

Are you ready to play?

Inside the virtual forest world of *Ora*, players can set up and run management operations using tools based on those available in the real world, except these tools are immediate and fun! For every decision that a player makes there are budget, biological or regulatory



consequences. Players must create strategies to beat the budget and save the forest – or, if you want to be really perverse, feed the possums and watch them devour and destroy the trees. Players' actions earn Science Points that move the Hatch O'Meter closer to hatching a kiwi for the virtual sanctuary, and collecting possums in a pest storage facility. The first version of *Ora* will be released later this year.

If *Ora* still sounds too serious for you, then there is *Possum Stomp!* As every gamer will tell you, games should have rewards to keep you playing. The mini-game, *Possum Stomp*, is unlocked when the storage facility explodes with possum pressure, but it was so much fun making it that the team decided to release it as a mobile app for iPhone, iPad and Android.



Possum Stomp!

Stompy the kiwi is peacefully guarding his nest when marauding zombie possums start to chomp their way through his forest. The zombies represent invasive pests throughout New Zealand. Mercilessly rampaging their way towards a nest of eggs, the zombie possums represent our native biodiversity under attack. Players must help Stompy stomp through multiple waves of zombies on three levels of attack, by day and by night. Successful stomping activates “power-ups” like the Slow Bomb (slathering zombie possums in icy-cold goo slowing them down so that Stompy can squish them flat), or a rain of Decoy Eggs (zombies crave these so badly that they forget about the real nest). A big one-footed stomp wipes out all zombies at close range (local eradication). The ultimate weapon is the two-footed MEGA STOMP, a large-scale eradication that gets you one step closer to an epic win. All revenue from *Possum Stomp* sales goes straight back into the *Ora* project to fund the release and running costs of the *Ora* game. Get it now via playora.net/possumstomp (cost \$1.29).



Citizen science and crowd sourcing – the serious side of fun

The *Ora* and *Possum Stomp* games are elements of a wider research programme aimed at developing new technologies for pest control. There is little point in researching new technologies if the public don't know about them, or more importantly, don't accept them. *Ora* is designed to make the problem of pest control personal – it's your forest, so what do you want to do? Players' strategies will be tracked and analysed by the *Ora* team, giving players the opportunity to influence real management decisions in the future, and they can contribute to finding management solutions for specific problems as they play. Preliminary results from the first user study suggest that the game really does get people thinking; players reported an increased awareness of the impacts of pest species in New Zealand forests, felt more informed about possum impacts, and said that they cared more about forest health. What's not to like about that?

Go to playora.net to read more about *Ora* and *Possum Stomp*, follow developments as they happen, sign up to take part in user tests, and be notified when the first release of *Ora* is available.

Understanding freshwater inhabitants

Landcare Research has developed two resources to help with the understanding and management of freshwater inhabitants.

Freshwater algae identification, information and action resource

This new web resource is aimed at helping members of the community answer three questions:

- 1) How do I find and collect freshwater algae?
- 2) How do I identify freshwater algae?
- 3) How do I interpret the results?

Freshwater algae are natural, essential, and often beautiful inhabitants of lakes, ponds, wetlands, and streams. However, they can also cause problems when they occur in abundance, resulting in toxin production or unsightly growths, and may be obvious indicators of contamination. This website will be useful to anyone interested in observing and identifying algae, and who has access to a compound microscope (even a very basic one). It is aimed at the level of community groups with little previous knowledge, such as school classes or volunteer groups. The identification key, with illustrated glossary, will enable you to detect nuisance algae, such as potentially toxic cyanobacteria or Didymo, and will help you explore this fascinating – and incredibly diverse – microscopic world.

The resource was completed with funding from MfE's community environment fund. Find it at <http://fwalgae.landcareresearch.co.nz>.

Freshwater invertebrates guide


This web resource is designed to assist community groups monitoring freshwater invertebrates in New Zealand.

Freshwater invertebrates (insects, crustaceans, snails, worms and other small critters) are often used as indicators of the state of streams, rivers, lakes and ponds. In Auckland alone there are approximately 100 community groups monitoring stream invertebrates under the Wai Care programme, and thousands more school students taking part in stream studies every year in a programme run by Watercare.

If you've collected freshwater "bugs" from your local stream, you'll hopefully be able to use this site to identify them and learn about what they may reveal about their habitat. Such information can indicate whether a stream should be preserved in its existing good condition, or whether there may be a need for some form of restoration.

The creation of this web resource was funded by the Ministry for the Environment's Community Environment Fund, Auckland Council and Taranaki Regional Council. Find it at <http://www.landcareresearch.co.nz/resources/identification/animals/freshwater-invertebrates>.

Encouraging the concept of giving back

A full-page photograph of a man standing in a forest. He is wearing a blue jumpsuit, a blue cap, and glasses. He is holding a long, thin stick in his right hand. The forest has many trees and dense foliage. The ground is covered with dry leaves and twigs.

Since retiring, Bay of Plenty covenantors Richard and Ann-Marie Hutchinson have been on a mission to restore native habitat on their lifestyle property near Whakatane. Here is their inspiring story.

Words by Richard Hutchinson

Caption

After 28 years working with the New Zealand Wildlife Service, up until its demise in 1987, my position on the environmental costs of “progress” were set in concrete. Reading Geoff Park’s book, *Nga Uruora* also reinforced just how extensively we have altered the natural environment of this country. With these thoughts in mind, and as I approached retirement in the 1990s, I developed the idea of a restoration project as a “pay-back” for the enjoyment I got from all those years working for the New Zealand Wildlife Service.

In June 2004 my wife Ann-Marie and I signed the *Environmental Programme Agreement* with Environment Bay of Plenty. We then set about planting some 4,800 plants provided by the Council. That took 2 years. Our son helped with clearing and planting during those first 2 years and he makes sure to have a good look around the gully whenever he visits home.

Unfortunately we lost more than 60 percent of our plantings due to a drought in 2005. The following year we set up our own shade house and propagated around 2,000 plants a year, up until the end of 2008, all of which went into the covenant. I hesitate to include a full list of the species we established but as at late last year and using J.T. Salmon’s *The Native Trees of New Zealand*, I tallied up more than 70.

We started the project with the expectation of just planting the trees, and then standing back and watching them grow. I can recall being told at the outset, “plant them at 1.8 metre spacings and you should have canopy closure within three to four years”. No way! I’ve found the soils here to be extremely deficient when it comes to growing native plants and they become incredibly dry in drought conditions. I found that the most important thing when planting in grass paddocks, as we did, is to prevent the summer

sun from directly striking the soil surface during the first two years after planting.

To see canopy closure really start to happen during the past 3 to 4 years has been very satisfying. It has been the revelation to me just how quickly the native birds have taken up permanent residence – tuis, bellbirds, fantails, grey warblers, pigeons, moreporks, long-tailed and shining cuckoos, waxeyes and even regular visits from a female New Zealand falcon.

Keeping on top of the Chinese privet and barberry seedlings is an ongoing challenge, as is the annual rabbit invasion. The Environment Bay of Plenty programme applies for 99 years and is then reviewed. While it is unlikely that anything will change during that time, I wanted to remove all doubt, and a QEII covenant offers that security. The outcome of the Trust’s recent litigation (i.e. indefeasibility of the covenant agreement – see *Open Space* issue no. 84, page 4) provides additional reassurance. I simply do not believe that as a nation we have any right to in any way modify any portion of our remaining natural habitats.

This project has been a glaring revelation to me of the massive challenge our indigenous ecosystems face with invading exotic plant species. But I am also amazed by the resilience of those same indigenous ecosystems if we could collectively give them the encouragement they need!

Too often today, when it comes to environmental and ecological issues, the first question asked is: “how can we make some money out of it?” In a nutshell, my advice is: start as young as possible and spend as much as you can afford. Giving back life to our native habitats is the pay-back.





The art of conservation

Words by Barry Brickell

My parents were keen for me to follow a profession so in 1955 I secured a place as a technical trainee in the then New Zealand Forest Service. A year's field work at my chosen state forest based near Whangamata gave me an insight into the ecological damage done by over one hundred years of forest clearance for farming, the consequent erosion and siltation of estuaries, not to mention the destruction caused by kauri log-driving dams (a process where rivers were dammed to build up a volume of water large enough that, when released, would take logs along with it). I left the Forest Service disillusioned by the large-scale planting of commercially based exotic pine forests on steep erosion-prone hills.

In 1961 at the age of 26 I moved permanently from Auckland to Coromandel after earlier visits to the Peninsula for family and tramping holidays. Having just retired from teaching, and armed with university studies in geology and botany, I felt well-prepared for my new life as a full-time stoneware potter and conservationist in this familiar yet special place.

With life now fully in my own hands as a potter I was able to study the social, ecological and geological history of the Peninsula. Research took me to libraries and respected historians, in particular the late Alastair Isdale of Thames. I compiled a fact sheet in the mid-1980s which I circulated to potentially interested groups. The fact sheet pointed out that ecological damage done by the early gold diggers and miners was insignificant compared with the ecological damage done by the fires of gum diggers and farmers.

Fortune shone upon me in 1973 when my present 23 hectare property became available at a price that I could afford. My piece of land had suffered a fate similar to the surrounding landscape; colonial bush burn-offs followed by an invasion of scattered pines and gorse. It was by now covered mainly in kanuka scrub and bits of taller forest that had grown up after farming was abandoned during the Great Depression of the 1930s. Burned out kauri stumps surrounded by baked clay that had been transformed into a crude terracotta provided evidence of what had gone before.

The land was ripe for the reintroduction of kauri, podocarps, rewarewa and other native tree species that grow well on humus-poor, clay soils. In the early 1970s Mary Hovell in Kennedys Bay started the first native plant nursery on the Peninsula, which supplied all my tree stock.

My plantings started in 1975. Twenty eight years on young kauri, rimu and totara trees boast trunks of 20 cm or more in diameter. This first native forest restoration project on the Peninsula set a good example with groups such as Kauri 2000, which has planted many thousands of trees, mainly on public conservation land.

In 1994, thanks to Euan McQueen (with whom I shared an interest in railways), I learned of the QEII National Trust and its covenanting process. So my first covenant was established that year to protect ongoing plantings in perpetuity.

The plants were being looked after but the indigenous fauna also needed a hand. In 1999 I set aside a 1.7 hectare valley and stream on the front of my property as a wildlife sanctuary and donated this land to the newly set up Driving Creek Wildlife Sanctuary Charitable Trust. This area was protected with a QEII covenant in 2005.

A pest-free enclosure was needed to keep wildlife safe while reducing the reliance on constant trapping and poisoning. But what was a truly vermin-proof fence? In 1998 Cambridge farmers David and Juliet Wallace began research on a suitable fence design and established the Xcluder Pest Proof Fencing Company a year later. Fund-raising for a major planting programme and the predator-proof fence took a few years, but with much generous support, the Xcluder fence around the sanctuary was completed over the summer of 2007.

This was a first for conservation on the Coromandel Peninsula and we are thankful for the help and advice from DOC ranger, Rob Chappell. Today there is an interpretation centre and a viewing stand within the sanctuary, and over half a kilometre of mown pathways wending through it. Reflecting in the lake from the earth dam are some massive terracotta sculptures made from our local clay. When it suits them a pair of pateke (endangered native brown teal ducks) may be seen, gently cruising around the lake. My final aim is for the sanctuary to host a pair of takahe. They would be a great visitor attraction as well as effective lawnmowers to keep the path-side grass at bay!

My passion for conservation is shared with a passion for railways and engineering. When I first moved to the property I built a short train line for bringing clay and pine firewood down from the hills for my kilns. Over the next 30 years I extended the line considerably and eventually established the Driving Creek Railway experience that takes passengers through the sanctuary on a mountain narrow-gauge train. The railway attracts thousands of visitors annually. We celebrated our one-millionth passenger in December 2011. Every passenger receives a free pamphlet on the sanctuary and the conservation projects being carried out there.

My greatest passion though, is art. It is the sense of art that has been my impulsive and compulsive driver, but how can I explain this? I need to leave it to others, but I can mention it here with the wonderful analogy of gorse growing on burned-over farmland. Gorse is the most wonderful introduced weed we have. It thrives on depleted soils and fertilizes them with nitrogen, but it needs strong sunlight in order to do so. Just let some equally strongly germinating kanuka seed in and then we see a fascinating competition over in just a few short years, with the kanuka emerging as the victor. So with my art, I thrive in my old age on the rich soil built up by a hundred or more years of colonial and post-colonial art whose perpetrators include Van der Velden, Nairn, Weeks, Perkins, Field, McCahon, Woollaston, Hanly, Petterson, Maddox, Fomison et al. I have drawn inspiration from these painters and from potters, sculptors, poets and writers as well, but above all, it is my studies of earlier human culture in this fair land together with its uniquely rich natural heritage that has proved the most inspiring. My art has been likened to gorse until just lately. May I now leave behind some rich, fertile soil.



A predator-proof fence protects the Driving Creek Wildlife Sanctuary.



The Driving Creek Railway complex.



A massive clay sculpture (left) and the train at Driving Creek Railway.

PROPERTIES FOR SALE

Banks Peninsula

Near Little River, Banks Peninsula. 10.5 hectare covenant with remnant and regenerating montane Hall's totara/hardwood forest, shrubland and grassland. Well-maintained one-bedroom bach with lovely views over the valley. Wilderness feel although only 40 minutes from Christchurch. Excellent tramping opportunities. Surrounded by DOC land and another covenant. Contact Ben Turner, Bayleys, 027 5301400.



Blue Mountains, Wellington

Striking architecture and unrivalled native forest views will lift your spirits in this thoughtfully designed home. The 6.06 ha property incorporates 3.79 ha protected by a QEII open space covenant, is rich with birdlife and features two streams and luxuriant beech/podocarp forest including 300+ year old rimu trees, 11 species of native orchid and a dense understorey of shrubs, ferns and tree-ferns and is interlaced with walking tracks. Situated 10 minutes from Silverstream village, 40 minutes from Wellington CBD.

View www.bayleys.co.nz/412041, Agent Pete Bell 0274 422 634, Bayleys Real Estate Limited (Licenced under the REA Act 2008)

Northland

Riverlands Landcare Group, in the Ngunguru area, seeks green, energetic, pest-controlling forest lovers to buy either of 2 riparian blocks (24.28 hectares and 16.3 hectares). The first property includes an earth-block home. The area and its wildlife is described in the book *Bringing Back the Birdsong* (see review on facing page). Join our conservation efforts. Contact Wade Doak at w.doak@xtra.co.nz for more information.



The Trust now has its own Facebook page to share news, promote events and link to anything else of relevance to covenantors, members and friends.



Like us on Facebook and receive regular posts from the Trust. Got something you want to share? You can post your news directly onto the site or contact us at info@openspace.org.nz to upload it for you. All posts will be approved by the Facebook administrator before they are visible to the public. Find us at www.openspace.org.nz (click on the Facebook icon) or www.facebook.com/QEIINationalTrust.

Support the Trust

The Trust is helped greatly by money or assets gifted in people's wills or in their lifetime. Bequests and donations form a vital part of the Trust's funding and help with the important work it does in partnership with New Zealand landowners who want to protect sites of significance on their properties with open space covenants.

If you believe open space covenanting is the best way to protect nature and rural heritage on private land and want to help, visit www.openspace.org.nz for information about the Trust and gifting or contact the Trust's CEO, Mike Jebson, on 04 474 1683 (0800 467 367) to discuss any aspect of contributing to the work of the Trust.

All donations over \$5 are tax deductible.

Letter to the editor

The news item describing the desecration of one of Canterbury's last historic and scientifically precious remnants of covenanted Plains native vegetation reminds me of H. G. Wells's prophetic novel, *The Time Machine*, in which our planet's biodiversity has been destroyed and the human race is reduced to groups preying on each other. Sadly, with the current level of ignorance, selfishness, greed and irresponsibility, our descendants may have to face such a reality.

Isabel Cookson

Book review: *Bringing Back the Birdsong*

Reviewed by Gareth Eloff, QEII National Trust

As Wade and Jan Doaks' story unfolded, documenting their shift from many years of marine exploration and conservation to focus on terra firma, I found myself not only engrossed in a very good read and amazed by the book's superb imagery, but also grateful for the insight I got into this country's natural history and the passion New Zealanders like the Doaks have in its stewardship.

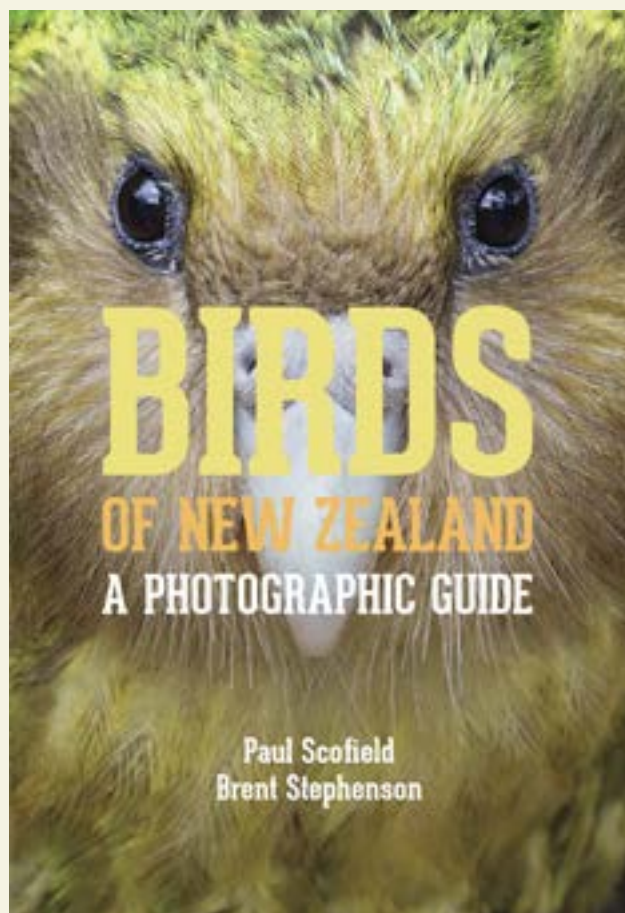
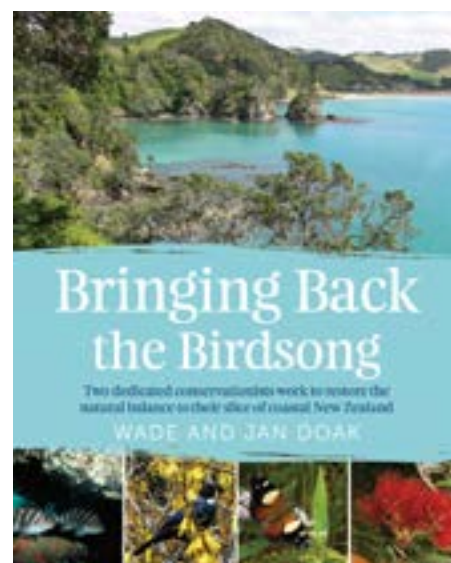
As a relative newcomer to New Zealand, I could not help but draw parity with the many moments of personal discovery highlighted in the book. Just as Wade's amphibious escapades opened up a whole new world of land-based discovery to him, I too found myself "discovering" the natural characteristics, challenges and threats that shape Aotearoa, still so unfamiliar and far removed from my origins in African ecology. I have enjoyed a perspective that no field guide, wildlife book or journal has yet been able to give me.

Covenant stories in Open Space

Our new Lifestyle section in the *Open Space* magazine is a chance for you to tell your covenant story in your own words. Let others know what you are up to by contacting editor@openspace.org.nz with your story and photos. Covenant management tips also welcome. All material accepted for publication is subject to editing at the discretion of the editor.

Wade is a highly respected marine naturalist and conservationist, but this account of his expanding terrestrial knowledge and the conservation efforts undertaken by him and Joan in their 18 hectare bush block in Northland documents a lifestyle philosophy we can all take inspiration from.

In engaging narrative style, *Bringing Back the Birdsong* details the Doaks' pest control programmes and records the consequent resurgence of native fauna and flora on their property, serving to illustrate what can be accomplished by any New Zealander wanting to help "cope with the slow decline of our biodiversity". The book highlighted for me that fascinating discoveries and opportunities exist for all of us in our day-to-day lives to do something and get Aotearoa heading back "towards Gondwana" – and away from bird silence.



This essential guide to the birds of New Zealand belongs in every back and backpack.

'Overall, this book gets an A+! ... It is a "must have" extremely current resource for the naturalist, avian enthusiast, novice bird watcher and serious birder alike.'
– Jodi Salinsky, *Southern Bird*

- Latest information on New Zealand's 365 species
- More than 1000 colour photographs and maps
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- App for Android (2.1 and over) available from the Play Store, \$36.19

'Two fantastic talents involved – Brent Stephenson the photographer and Paul Scofield the natural historian. That's a great collaboration.' – Jim Mora, Radio NZ National



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SUPPORT THE TRUST



Many of New Zealand's special natural and cultural features are found on privately owned land and the protection and enhancement of these features relies on the goodwill and actions of landowners.

The QEII National Trust works in partnership with landowners to help them protect these special places in perpetuity with open space covenants. Covenants protect forests and wetlands, threatened species habitats, landscapes and many other sites that shelter our heritage.

The Trust is helped greatly by money and assets gifted to it by its supporters. If you believe the National Trust and its covenantors do important work and would like to help, you can by becoming a member, making a donation or making a bequest. Visit www.openspace.org.nz for information about the Trust and gifting or contact the Trust's CEO, Mike Jebson, on 04 474 1683 (0800 467 367) if you would like to discuss making a bequest.

JOIN QEII National Trust

Your benefits as a QEII Trust member

- Help protect New Zealand's natural and cultural heritage
- Receive two issues of *Open Space* magazine a year
- Enjoy free or discounted entry to properties owned or administered by affiliated organisations overseas: National Trust (UK), National Trust for Scotland, National Trust of Australia, Barbados National Trust, Bermuda National Trust, National Trust for Fiji, Georgia Trust for Historic Preservation, Gibraltar Heritage Trust, Japan National Trust and National Trust for Zimbabwe.
- Nominate and vote two members onto the QEII National Trust Board of Directors.

To be eligible to nominate and vote members onto the QEII National Trust Board of Directors, membership must be current at 31 December of the year preceding elections (voting papers are sent out in December) and not expire before 31 March of the election year itself. Elections are held every 3 years. They next election will be held in 2016.

To join the Trust: post the membership application to QEII National Trust, PO Box 3341, Wellington 6140, email it to info@openspace.org.nz or call the Trust on 0800 467 367 (ask for memberships) to join over the phone.

Membership application form

Title _____ Name _____

Address _____

Postcode _____ Phone _____

Email _____

Membership type

- ☐ Individual \$ 30 ☐ Family \$ 45 ☐ Life \$550
☐ Corporate – business \$ 75
☐ Corporate – non profit organisation \$ 50

Subscriptions include GST. Financial members should normally have a residential address in New Zealand.
(QEII open space covenantors automatically become members).

Make a donation (optional)

Donations over \$5 are tax deductible

☐ \$100 ☐ \$50 ☐ \$20 Other \$ _____

Method of payment

☐ Cheque ☐ MasterCard ☐ Visa

Credit card details

Number:

Cardholder name _____ Expiry date _____

Signature _____

Total \$ _____ ☐ Please send receipt

For direct debit options please email info@openspace.org.nz

Please send me more information on:

☐ Making a bequest ☐ Open Space covenants

Gift membership

Gift membership to (name and address) _____

☐ Send next year's subscription to me or ☐ to the recipient

Recently registered covenants

A summary of covenants registered from 22 August 2013 to 20 February 2014

Region	Name	Main type	Approx. area (ha)
Canterbury	Hailes	Forest and wetland	18.00
Canterbury	Marshall	Forest	4.00
Canterbury	Macfarlane Estate Limited	Forest	19.13
Canterbury	C.D & E.M Jaine Limited	Sedgeland	7.27
Canterbury	Bleasdale	Boulderland and forest	3.00
Canterbury	Wiffen	Forest	26.10
Coastal Otago	Lawson	Forest, scrub and grassland	18.00
Coastal Otago	Murphy	Forest	6.00
Coromandel	Tukituki Barm Farm Ltd	Forest	21.23
Coromandel	Morrison Hills	Forest	2.95
Eastern Bay of Plenty	Bradly & Goldsmith	Forest	163.16
Gisborne	Tauwhareparae Farms Ltd	Forest	19.56
Gisborne	Timbergrow Ltd	Forest	29.90
Gisborne	Moanui Farms Ltd	Forest	90.03
Hawke's Bay	Landcorp - Paeroa Stn, Kanuka bush	Forest and treeland	3.16
Hawke's Bay	Landcorp - Paeroa Stn, Greengrass	Forest and treeland	4.73
Hawke's Bay	Landcorp- Waitere Farm	Forest	166.69
Hawke's Bay	Ellison	Forest	5.17
Hawke's Bay	Landcorp - Paeroa Stn, Bibbys Bush	Forest and treeland	23.14
Manawatu	Short, Reay & Clark Reynolds	Forest	0.86
Manawatu	McKellar	Forest	1.80
Nelson/Tasman	McLean	Forest	0.50
Nelson/Tasman	Filmer & Stephens	Forest	0.40
Northland	Landcorp - Mangatua Stn	Forest	212.48
Northland	Kingi	Forest	35.56
Northland	Boyd & Walberg	Forest	5.19
Northland	Pike & Prince	Forest	6.00
Northland	Moehau Community	Forest	88.06
Southland	Bulleid	Forest and shrubland	5.50
Southland	Smith	Forest and wetland	1.30
Southland	Ward & Deveron Trustees Ltd	Forest	1.60
Taranaki	Schrider & Campbell	Wetland	10.80
Taranaki	Nukuhau Carbon Ltd	Forest	58.50
Taranaki	Blue & Jordan	Wetland and lake	2.16
Taranaki	Miller	Wetland	0.12
Taranaki	Sextus	Forest and wetland	6.27
Taranaki	Harrington & England	Forest	101.31
Taranaki	Tarrant	Forest	2.81
Taranaki	Mangaotea Farms Ltd	Forest	1.53
Taranaki	Dwyer	Forest	4.41
Taranaki	Rerekino Farm Ltd (No.2)	Forest	34.32
Taranaki	Willis	Forest	1.05
Taranaki	Newton	Forest	7.85
Taranaki	Coleman	Forest	5.16
Taranaki	Cox	Forest	1.94
Taranaki	Goonan	Forest	15.04
Taranaki	Schrider & Campbell	Wetland	1.71
Taranaki	Rae & Richards	Forest	0.05
Tararua	Thornycroft	Forest	130.00
Waikato	Buckley & Alleman	Forest	2.89
Waikato	R & M Lupton	Forest	5.88
Waikato East-Taupo	George	Forest and wetland	30.17
Wairarapa	Labone & Young	Forest	5.30
Wairarapa	Bunny & MRI Wairarapa Trustees Limited	Treeland	1.96
Wairarapa	Bunny	Treeland and sedgeland	3.13
Total Area			1424.80

Selling your property? Contact details changed?

Covenantors are required to provide the Trust with change of ownership details if their property has been sold. This is so it can fulfil its role as perpetual trustee efficiently, and get change of ownership of the covenant registered as quickly as possible. The Trust also wants to establish a supportive partnership with the new owners early on, so

information is shared and ongoing care for the covenant is on track. You can use the online form at www.openspace.org.nz/About us/Contact to update the Trust about the sale of your property (or any changes to your contact details). You can also call your local QEII representative or the Trust's Wellington office on 0800 467 367 to advise changes.

2014 forest mast

A predator plague that will pose a serious threat to our endangered native wildlife is being predicted by scientists this autumn.

High levels of seed production (mast) in our beech forests are expected to trigger a rodent and stoat explosion later this year.

When seed supplies run out these predators will turn on endangered birds such as mohua, kaka, kea, whio and kiwi along with other at risk species like bats and land snails.

Mountain beech/*Fuscopora solandri* variety *cliffortioides*

PHOTO: HERB CHRISTOPHERS

What is a forest or beech mast?

Mast events are prolific flowering bursts among forest trees, like beech, over spring and summer. This flowering in turn leads to a bumper seed fall in the following autumn and the widely available seed on the forest floor drives a rapid increase in rat and stoat numbers.

Rats and stoats both prey on native species and the surge in the predator population puts vulnerable natives species under extreme pressure, particularly during the spring when birds are nesting and raising chicks.

In anticipation of this year's mast, the Department of Conservation will implement a special predator control programme called *Battle for our Birds*. You can find more information about masts, the programme and where control is being targeted on DOC's website www.doc.govt.nz.

Landowner action

Private landowners and covenantors can also take extra steps to knock back predator numbers after forest mast events. If you are already doing seasonal predator control work, Trust pest control experts recommend an earlier start (early September) followed by more regular checks of bait stations and traps. If your beech forest area is contiguous with a larger beech forested area, then a buffer zone should be established, if permitted.

If your covenant is affected by a mast event, contact your regional representative to discuss a pest control regimen that will help you target rodents. For rat control tips and toxin options refer to *Open Space* magazine issue 80, March 2011 (magazine also available on our website www.openspace.org.nz).

NPCA (New Zealand Pest Control Agencies) also have a number of helpful resources available at this link <http://www.npca.org.nz/index.php/publications/a-best-practice/157-a-series>.



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