



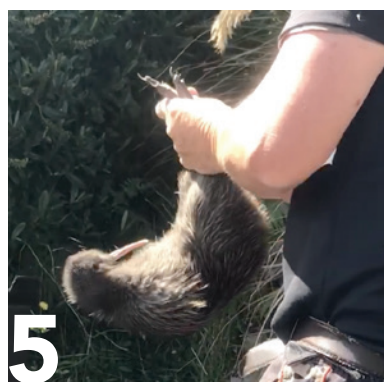
New Zealand  
Biosecurity Institute

the magazine of the NZBI Autumn - 2021

# Protect

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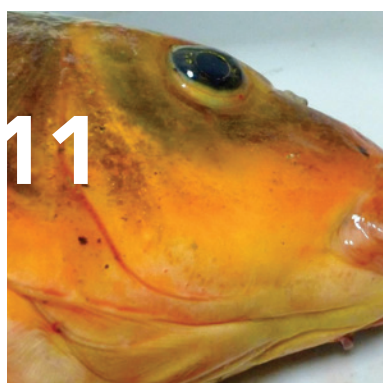
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New Zealand  
Biosecurity Institute

Working together to ensure New Zealand is protected from the adverse impacts of invasive species

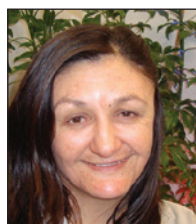
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## Wallaby curry and the good the bad and the ugly

Stories about communication feature heavily in this issue. There are items on interesting ways of getting the biosecurity message across, even including recipes - possum pie or wallaby curry anyone?

As well, there is a good-the-bad-and-the-ugly story about social media.

Not so long ago, in the early days of the internet, I was involved in a survey of rural residents about how they preferred to receive their information. Overwhelmingly they wanted to get their information in print, in the body of a newspaper, not the bits that fell out when you opened it. A bit has changed since then in terms of opportunities for getting messages across but there is still a need to keep all channels open.

There have been a few hefty fines at the border, but are they big enough? These are not for small indiscretions; they are for knowingly breaching the rules. The rules are clear and not in any way ambiguous? Any of the activities mentioned could have cost the country dearly in the blink-of-an-eye.

There is also a story featuring ballooning, and not in the recreational or economic sense.

CHRIS MACANN  
PROTECT MAGAZINE EDITOR

## The importance of coming together

**Business as usual - sort of: NETS 2021 - Save the date**

The New Zealand Biosecurity Institute is pleased to announce that it will hold its annual national education and training seminar (NETS) online on July 28, 29 and 30.

The NZBI Executive believes that the ongoing uncertainty around Covid-19 requires us to minimise the risks that would be associated with an in-person NETS conference this year.

However, **we are acutely aware of the importance our members place on coming together** to share knowledge and discuss how we can collectively minimise the risk of biosecurity threats to New Zealand.

Save the date now for July 28, 29 and 30. We will let you know more details in the near future, but we expect the conference to run morning and afternoon sessions during all three days – so please block out your calendars accordingly. The NZBI AGM will be on Thursday, July 29<sup>th</sup>.

Because of the constraints of an online conference, we are approaching speakers individually this year instead of issuing a general call for abstracts. We would also like to incorporate our ever-popular GEMS sessions featuring five-minute presentations from students working on cutting edge biosecurity projects.

NETS 2021 will be free for NZBI members or most likely \$60 for non-members, which also will entitle them to a one-year NZBI membership.

The Executive met on 8 April for a full meeting, however a number of mini executive meetings have been carried out early in the year to discuss the implications of postponing the in-person NETS2021.

We were joined by an independent contractor who offered advice on hosting a virtual NETS.

We invite suggestions through our branch representatives for topics and hope members will access the conference from whatever platform, as if they were attending in person.

We still plan Biosecurity Week activities in the Monday to Friday of the same week which should function undisrupted, as it does every year.

On behalf of all the NZBI executive members, I look forward to seeing you online on July 28, 29 and 30.

ALICE MCNATTY  
NZBI PRESIDENT



## More to encourage landowners to embrace biosecurity: The 2020 NZBI Scholarship

**The winner of the 2020 NZBI Scholarship is Britney Ford.**

She is studying towards a Master of Environmental Management at Massey University. For her thesis, Britney will undertake a catchment-based study to understand what is needed for landowners in the Motu River catchment which spans the Gisborne and Bay of Plenty regions, to protect and enhance biodiversity, including plant and animal pest control measures. The thesis will be broken down into three parts:

### The current state of biodiversity

Britney plans to assess the current state of biodiversity in the Motu River catchment. This will be done by mapping the catchment and creating a spatial/ecological mosaic of the state of existing biodiversity and animal and plant pests.

### Understanding barriers

Britney will conduct interviews with landowners and other stakeholders in the catchment to understand what barriers may be stopping them from protecting and enhancing the volumes and diversity of biodiversity. **Landowners will also be questioned about what they feel they need in order to effectively enhance and protect biodiversity through plant and animal pest control.**

### What is needed to encourage landowners

Based on the interviews, Britney plans to determine what is needed for landowners and stakeholders in the catchment to enhance the volume and function of biodiversity (e.g. is it financial incentives, improved knowledge), and based on the spatial mosaic, determine what would be the most effective way to enhance biodiversity in the catchment. This will involve a targeted and specific recommendation around what is needed including plant and animal pest control options, and the most effective and efficient way to implement them.



Britney's study is relevant to the objectives of the New Zealand biosecurity institute as it will shed light on what is needed to encourage private land owners to get involved in working together to ensure New Zealand is protected from the adverse impacts of invasive species.

"My thesis will be able to assist in the creation of targeted programmes and incentives that can encourage private land owners to undertake plant and animal pest control regimes on their land," Britney said.

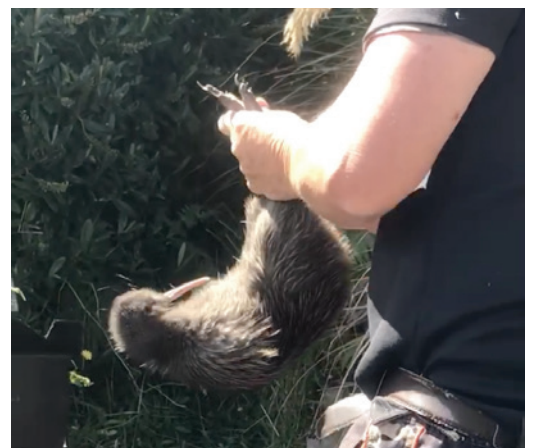
### About the area

"The Whinray Scenic Reserve **within the Motu Catchment is one of the only areas in the North Island where kiwi and weka co-habit**, so protecting areas such as this one through animal and weed pest control measures is imperative. While this area is extensively controlled, the surrounding pastoral land is not necessarily controlled to the same extent. This is why it is important to understand landowners' perspectives on the motivators, barriers and enablers of biodiversity protection.

"There are some amazing biodiversity areas within the catchment, and thus we want to make sure these areas and their surrounding areas are protected," Britney said.



Motu Falls and Whinray Scenic Reserve.



A North Island Brown Kiwi being weighed and released into the Whinray Scenic Reserve.



## What looks different in your back-yard?

The Institute prepared this article to promote the work of its members over the summer holiday season: People who work to manage invasive species threats to New Zealand are asking kiwis to play a game of spot-the-difference these holidays.

Key biosecurity sector group, the New Zealand Biosecurity Institute is asking kiwis to see what they can spot in their own back-yards that looks like it might be out of place.

Institute president Alice McNatty said "With many staying close to home this holiday season, **the Institute is asking people to keep an eye on anything they think is unusual, or just looks different** in their own gardens or while out-and-about.

Ms McNatty said "Covid 19 has shown how well we can knock a serious threat early if we really want to.

"It's no different with invasive species.

"There are many biosecurity threats to be aware of and the same basic practices occur - constant vigilance," she said.

Some of our worst invasive environmental weeds are garden escapes like old man's beard and Japanese honeysuckle. Among other pests are plague skinks or Argentine ants."

She said community websites and apps like Weedbusters, iNaturalistNZ and Find-A-Pest are helpful to get information on any organism that may be unusual. Regional council, Department of Conservation and Ministry for Primary Industries websites are also helpful.

Anyone who thinks they have seen something potentially out of place should contact a regional council or the Department of Conservation.

**"We encourage people to investigate before phoning immediately,** Ms McNatty said."

Ms McNatty said the Institute's members' ongoing battle against invasive species will be greatly helped this summer if kiwis observe a few simple actions. Key among them are:

- Getting to know the local environment and spotting differences
- Checking and cleaning equipment that has been in the outdoors, particularly waterways
- Disposing of garden waste or aquarium contents in the compost or at a waste management site
- De-sexing pets, particularly cats.

"Every year Institute members spend thousands of hours controlling or managing the risks to the economy and the environment from the effects of invasive species."

"This is work which costs the country hundreds of millions of dollars each year through control, research and border control budgets. This money is coming out of all New Zealanders' pockets, Ms McNatty said."



Argentine ant  
(*Linepithema humile*)



## Old man's beard biological control: the past and the near future

Research continues on biological control agents suitable for old man's beard, and as this item from Manaaki Whenua Landcare Research reports, there are some positive signs for the road ahead.

Four biocontrol agents have been developed for old man's beard (*Clematis vitalba*) in New Zealand, three of which were released two decades ago in the late 1990s.

The first agent, a leaf-mining fly (*Phytomyza vitalbae*), established and spread rapidly. Unfortunately the fly accumulated native parasitoids, which maintain the agent populations at low densities, and damaging outbreaks are now quite rare. The second agent, a fungus (*Phoma clematidina*), did not persist and is believed to be outcompeted by native fungi.

The third agent, a sawfly (*Monophadnus spinolae*), was released over several years from 1998 at multiple localities, but due to adverse weather and human disturbance many sites were lost. In 2015 a few sawflies were spotted at an old man's beard site near Nelson, confirming they are established but persisting at very low numbers, having remained undetected for almost 20 years.

The discovery was nevertheless encouraging, and the project was revived with the importation of a new sawfly population from Serbia into containment at Lincoln in 2019.



Arnaud Cartier

Mass-rearing methods were improved and geared towards obtaining a more balanced sex ratio. In late 2019, thousands of sawfly larvae along with mated adult females were released in Amberley in the Waipara district in Canterbury.

Later in the season, in February 2020, the release site was visited by both technicians working on the project at the time, Arnaud Cartier and now-retired, Lindsay Smith. "It didn't take us long to see adults flying around, which would have been second generation adults. We even saw some larvae feeding on the leaves," said Arnaud.

The site was checked again this summer, and both adults and larvae were observed. "Given the complex life history of this agent, **it was fantastic to see adults this summer for the second year in a row,**" said Arnaud. "We are now very hopeful that sawfly numbers will steadily increase, which will eventually allow for collection and redistribution of adults and larvae to other old man's beard infestations," he said.

The fourth and last agent approved for release against old man's beard is an eriophyid mite. Feeding by this leaf- and bud-galling mite stunts plant growth and reduces shoot production. This has been another very difficult agent to work with, and the first few attempts at establishing a viable laboratory colony failed. However a mite colony was finally established with the importation of new material, again from Serbia in 2019. The microscopic mites were painstakingly transferred on pinheads to fresh plant material and finally... success. After receiving MPI approval to remove the mites from containment, the infested plants were transferred to an outdoor shade house for mass-rearing.

Over the past 18 months the mites have slowly transferred to fresh plants placed alongside the original mite-infested plants removed



Female old man's beard sawfly.

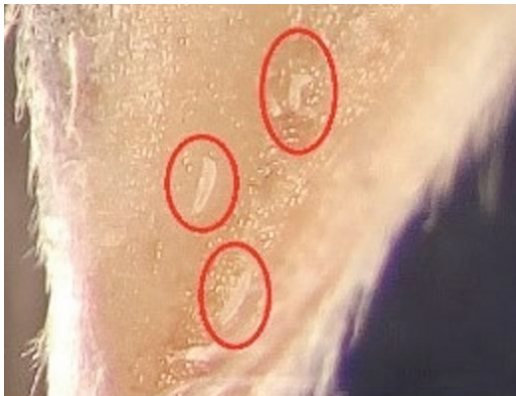
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from containment. "I regularly dissect buds to monitor the population and have found that even a small number can effectively stunt new growth. The damage has become more obvious this summer, presumably due to increasing numbers, with plants now showing galled and deformed leaves," Arnaud said.



Old man's beard mites.

Even more encouraging, the mites have been found on old man's beard plants growing in other shade houses, and on wild plants growing on the Lincoln campus. "At first, I was very surprised that they had dispersed so far and so quickly. However, since eriophyid mites disperse passively on winds, a phenomenon known as 'ballooning', it isn't really surprising that they have established themselves on nearby plants. These **early findings suggest natural dispersal in the field should be good,**" he concluded.

The first official field releases of the old man's beard mite will go ahead later this year in spring," Arnaud said.

## Newspaper advertising still important

Environment Canterbury has been using a traditional method of getting its plant pest message to the public over summer.

It has been taking out full and half-page advertisements in local papers. The advertisements ask people to keep an eye out for mainly pests in its exclusion or eradication programmes. ECan's principal advisor, biosecurity, Laurence Smith said there have been no reports that people have seen the plants. "They are plants we wouldn't expect people to see which is good, but we have had feedback that people have seen the advertisements."

Laurence said **it takes a really engaged audience to visit a website** to identify or report plants. "We are filling a gap for people who aren't large users of the internet and social media."

As well as the internet ECan uses targeted newsletters and regular communication with rural and other interest groups for its biosecurity communications.

Plants promoted in the large newspaper advertisements include knotweed, moth plant and phragmites.





## Monumental move: Hoverfly and beetle coming to NZ to join war against invasive wasps

The Tasman District Council has been given the green light to introduce two European insects, the hoverfly and wasp-nest beetle, to tackle the country's chronic wasp problem.

Landcare wasp researcher Bob Brown said the introduction of the two new organisms, in a bid to reduce plague populations of invasive German and common wasps in New Zealand is "monumental" for conservation.

In the 1980s and 1990s, an attempt was made to suppress wasp numbers with the introduction of smaller wasps from Israel and North America, but it didn't work.

**Beech forests at the top of the South Island have the highest densities of wasps in the world.** It's estimated invasive wasps cost the NZ economy \$133 million a year.

Tasman, with its honeydew covered beech trees, has the highest density of wasp nests in the entire world, with around 30 nests per hectare with each nest containing thousands of wasps. The invasive German and common wasps thrive on the honeydew, restricting the food source for native insects and birds, while disrupting the ecosystem and costing the economy \$133 million a year in damages and management.

The TDC applied for permission to introduce the insect bio-control agents last September and has now been granted permission to use them. The Environmental Protection Authority has assessed the impact of bringing in these non-native species and ruled it safe.

"The reason why it's safe is because **these two insects only attack wasps and that's been established both where they come from in Europe and elsewhere,**" said Chris Hill, general manager of hazardous substances and new organisms.

Both the hoverfly and beetle will attack wasp nests. The hoverfly will lay eggs in the nest which, in turn, eats the wasp larvae.

The new insects will need to be bred here in New Zealand, and it's thought it will take around two years before they are ready to be released into nature.

"We have to collect larvae in the wild from the UK," said Paul Sheldon, the Tasman District Council's biosecurity and biodiversity co-ordinator. "Then get it back here into a suitable rearing facility. As they are coming from the Southern to Northern hemisphere, they need to retune and breed in cycles which will reset their clocks so that when they hatch, they are being useful at the right times, in the correct seasons. That will take a while.



*German wasps feeding on honeydew  
[Simon Hayes]*

"The attempt at bio-control isn't new," said Paul. "You can never be certain how much impact the new insects will have. **They won't eliminate the problem, but they will weaken the wasp population,** so it will be interesting to see how well they establish and what effect that has across the country."

ADAPTED FROM INFORMATION SUPPLIED BY  
MANAAKI WHENUA LANDCARE RESEARCH  
AND COMMUNITY NEWSPAPER WAIMEA  
WEEKLY.



## Council targets abandoned pet turtles in Cooks Beach ponds

Turtles residing in ponds at Cooks Beach on the Coromandel Peninsula now have their own basking platform designed to trap them.

Waikato Regional Council is asking visitors and residents to please stay clear of the floating trap which is made from downpipes around a basket and was installed after Waitangi Day.

"It's not rubbish," said Biosecurity Officer Andrew McConnell. "We're asking people not to go near the trap; the more undisturbed it is, the more likely we'll catch turtles. The turtles need to become accustomed to it."

The regional council has had reports from locals for a number of years about red-eared slider turtles basking on pontoons in the ponds. Andrew said red-eared sliders are highly adaptable and can tolerate a wide variety of aquatic environments.

"Essentially, they're another competitor in an already stressed environment."

**Pet turtles were allowed for sale in New Zealand because it was thought the climate was too cold for their eggs to successfully incubate and hatch.**



However, turtle eggs and hatchlings have been sighted at Cook's Beach.

"Pet sales of red eared sliders took off a number of years ago when they featured in a Spark ad," said Andrew.

"But a cute baby turtle can grow up to the size of a dinner plate, requires great effort to look after in a tank, and can live 20-30 years. As a result, **their cuteness and easy-care factor ends pretty quickly... when they let them go into the wild.**"

The floating platform has ramps so turtles can get up on it. Catching a turtle will then depend on which way it slides back into the water.

Concerned residents are helping the regional council to check the trap regularly.

"With a little luck and the help of locals, we should be able to catch these turtles and nip the problem in the bud. We've caught ten turtles [at May 1<sup>st</sup>] and volunteers are checking traps daily. There are still some big ones there to catch."

Andrew was keen to emphasise that this work was not possible without the great work of volunteers.

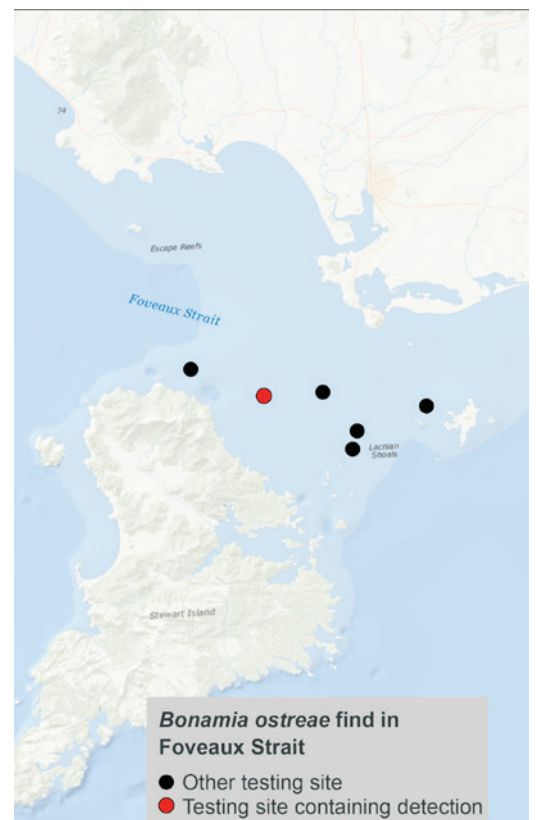
## Rāhui to protect Bluff oysters

Awarua Rūnanga in Southland and Biosecurity New Zealand enacted, at the end of March, an indefinite rāhui and a Controlled Area Notice to help protect the Foveaux Strait oyster fishery from potential spread of the parasite *Bonamia ostreae*, which was recently detected in the area.

That small 30.9km<sup>2</sup> area is located east of Saddle Point on Stewart Island.

The measures create a 'no-take' zone around the area where three oysters found to be infected with the parasite were sampled from.

MPI said the controlled area is small and hasn't been fished in the past five years, and the controls will not affect the availability of Bluff oysters.





## Solitary koi carp hopefully

In mid-February The Northland Regional Council appealed for sightings of a koi carp after a young kayaker reportedly saw one while out on Lake Taharoa, the largest of Northland's environmentally precious Kai Iwi Lakes group.

Quick thinking by the 10-year-old boy's parents – who immediately reported the sighting to the Department of Conservation (DOC) – may have given officials their best chance to capture the fish and determine its sex and reproductive status, a key concern as a fertile female could be disastrous for the deep 197-hectare dune lake.

Northland Regional Council reported that based on the 10-year-old's description of the mystery freshwater fish – and its behaviour – it appeared it could indeed be a koi.

**A multi-agency team responded to the incident and was grateful to the boy and his family for their prompt action in reporting the incident.**

Koi are already known to be in at least three of Northland's major river systems and in many farm dams but would be disastrous in the ecological



*A koi carp recovered previously in Northland and showing the fish's distinctive feelers.*

and culturally important jewel that was Lake Taharoa, north of Dargaville.

**"A mature female is able to produce more than 300,000 eggs in a single spawning season."**

The Council said drones, environmental DNA detection, and purpose-designed koi nets are among tools responders planned to use in what was likely to be a time-consuming and expensive hunt to locate the mystery fish.

At this stage how the fish came to be in the 197 hectare Taharoa – at 37 metres the deepest dune lake in Northland – is not clear; possibilities include an accidental transfer of pest fish eggs or fry via a boat trailer or equipment or a deliberate illegal release.

Assuming the mystery fish is a koi, staff have pinned their hopes on it either being a solitary male or an infertile female so there's no risk of it breeding, and so are keen to catch the fish to determine its gender and reproductive status.

The council reports that no fish have been caught however staff are maintaining a watching brief over the winter.

### Koi: why the fuss? - a recap

Globally, koi have become a pest fish on every continent except Antarctica and are legally classed as an unwanted organism and a noxious species in this country.

They're thought to have been accidentally imported into New Zealand in the 1960s as part of a goldfish consignment and were later illegally released on a larger scale.

The illegal release of koi into the Waikato River in the 1980s has had extremely damaging consequences.

The population of koi has subsequently exploded to the point where they alone reportedly now account for 80 percent of the total biomass in the lower Waikato River catchment.



## It's official: stoats, ferrets and weasels are a pest

Stoats, ferrets and weasels have officially been declared 'pests' in Taranaki and a new rule introduced to control them.

In February Taranaki regional councillors voted to amend the Regional Pest Management Plan for Taranaki to add stoats, ferrets and weasels as pests and a new rule to control them.

The Council began rolling out a 10-year rural mustelid trapping programme in 2018, as part of Towards Predator-Free Taranaki project.

About 75,000 hectares have been covered with more than 6,000 traps so far, including a trap barrier all the way around Te Papakura o Taranaki (the national park).

In those areas the council reports there has been a 90% reduction in mustelid populations.

Towards Predator-Free Taranaki is also working to eradicate possums from a 4,500 hectare area from the Kaitake Range down to the coast while its urban project focuses on rats.

Under the new rule, the Council will identify Predator Control Areas where land occupiers agree to participate. It would then set up trapping networks on their properties. After initial trapping work, the occupiers will be required to take responsibility for the traps and maintain mustelid numbers at a reduced level.

At the same meeting Forest and Bird asked that the Council do more to control feral cats in the region. **While there are no requirements in the Plan to control feral cats, the Council does work with landowners wishing to undertake this control**, as part of its Key Native Ecosystem biodiversity programme.

As well as threatening biodiversity, mustelids can also carry parasites and toxoplasmosis, which can cause illness in humans and animals, as well as bovine tuberculosis.



## Rabbit Virus for Marlborough

Marlborough District Council is planning to release the rabbit haemorrhagic virus strain RHDV1 K5 in early May in areas around the town fringes of Blenheim and at neighbouring vineyard properties.

Rabbits are causing extensive damage to the stop banks along parts of the town's Taylor River and to amenity plantings and adjacent vines. Stop banks are essential for maintaining Blenheim's flood protection defences. The area has high numbers of wild rabbits and **conventional control methods such as shooting are challenging to undertake in this area**, which is open to the public and popular for recreation.

Parks and Open Spaces Officer Robin Dunn said the K5 strain has been successfully used in New Zealand since 2018.

"While it's not the total answer for rabbit control, we anticipate that the new strain will greatly assist the control of these populations by supplementing traditional pest control methods."

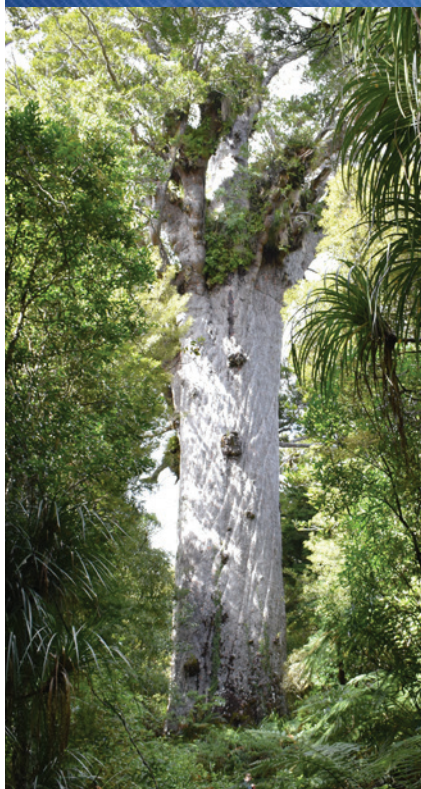
**"The optimal time for effective release of the virus against wild rabbits is in May** and our controlled release will use a high-quality commercially prepared product at selected sites," he said.

"It is one of the only safe tools to use in these high public use areas."

Carrots will be used to convey the virus and pre-feeding of at least two feeds of carrots will take place up to two weeks before the RHDV1 K5 release. Pre-feeding trains the rabbits to eat bait and allows the amount of treated baits required for each site to be estimated, to ensure high bait uptake. The impact of the RHDV1 K5 release will then be monitored.







## First kauri dieback prosecution

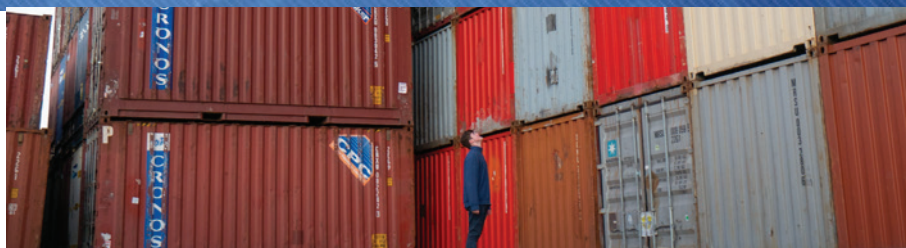
Auckland Council reported at the end of March that the first person to be prosecuted for entering closed tracks in the Waitakere Ranges has been found guilty.

The tracks have been closed since May 2018 to protect kauri trees, some of them hundreds of years old, from the spread of kauri dieback disease.

Chair of Auckland Council's Environment and Climate Change Committee, Richard Hills welcomed the court's verdict in finding the defendant guilty.

"This is the last thing we want to do, take legal action; we would prefer hikers and walkers respect the rules and stay on the open tracks. But if they fail to, we will use every tool possible to protect our native taonga, we only get one chance.

"Most Aucklanders are doing the right thing and staying on the open tracks. However, we have had to issue 139 trespass notices and 168 warnings because some people don't seem to care about the consequences of their actions and the effects these have on the environment and the rest of the community."



## Man fined \$30,000 for biosecurity breaches

An Auckland businessman has been convicted and fined \$30,000 for breaking biosecurity rules, and trying to cover it up.

The manager and owner of Divine Logistics Limited, was sentenced in March. He pleaded guilty to three charges related to the offending.

Sea containers imported into New Zealand must be sent to registered sites and opened at approved transitional facilities to ensure any biosecurity risk is addressed.

The man broke both requirements and compounded the offending by providing Ministry for Primary Industries (MPI) investigators with falsified documents.

MPI said attempting to cover up activities by **providing MPI investigators with falsified documents made the offending much more serious.**

In December 2018 an off duty MPI senior quarantine officer observed an imported sea container being unpacked outside a private address in Auckland, which was not an MPI Approved Transitional Facility (ATF) and was not authorised to receive imported sea containers.

The officer made some initial enquiries before launching a thorough investigation. MPI discovered that the man redirected containers from Approved Transitional Facilities 22 times between 21 June 2018 and 31 January 2019. The man admitted to opening and unpacking 12 of these containers.

MPI also found that the man had falsified 20 of the container log sheets he gave to the MPI investigators.



## Rotorua bus driver fined \$4,500 for smuggling cigarettes and seeds

Earlier this year a Rotorua man has was fined \$4,500 for attempting to smuggle seeds into New Zealand.

In September 2019, the man returned to Auckland from Korea. He had ticked "no" to the question on the form regarding whether he was carrying goods on behalf of another person; "no" for "plants or plant products", and "no" to bringing in more than 50 cigarettes.

His bag revealed 100 hidden cigarettes. The search was upgraded and five different packets of vegetable seeds were found concealed in a zip pocket of a pair of trousers in his bag. All products were seized.

He admitted to trying to hide the seeds in his trousers so they wouldn't be discovered by the quarantine officers.

The man also received a fine from New Zealand Customs for undeclared cigarettes.



## Maintaining our Social Licence

# My experience: The Influence of Social Media on Biosecurity

Sian Reynolds has seen first-hand the impact that on-line exchanges can have on perception and behaviour in the real world; and shares the positive and negative aspects.

Social media is truly a force to be reckoned with. It has empowered the rapid sharing of information (whether it be true or false), and can greatly influence the way we see the world. Social media can influence thoughts, behaviours and trends in a matter of hours. The speed at which information can spread has been likened to a virus spreading through a community; and 'viral communication' may have a positive or negative impact on how an idea is perceived.

New Zealand's biosecurity industry has not escaped this, as social media has transformed the way consultants undertake their day-to-day work.

New Zealand boasts some of the most unique and biodiverse ecosystems in the world. You only have to jump in your car and travel an hour in any direction, and you'll find yourself in a completely different ecosystem from where you started. But species introduced by Europeans in the late 1800s – pines, possums, rats, mustelids, feral pigs, and scotch broom to name just a few – all pose significant threats. The drive to protect New Zealand's ecosystems is what spurred me into a career in biosecurity; but **I had no idea the impact that social media would have on this industry and on my career.**

In 2010, at the beginning of my career, the public knew very little about the ways introduced pests are controlled in New Zealand. Biosecurity information was confined to conferences or scholarly journal articles; and even with the development of the internet you had to search high and low to find an article relevant to the discipline. Ten years ago, few people knew what a stoat trap looked like. Now, you're lucky if you can find an urban garden without one residing amongst its bushes.

The target of 'Predator Free 2050' is a great example of how a biosecurity goal can be disseminated virally and gain traction. Even if we never achieve a fully predator-free country, awareness of the issue is now second nature. **The number of community groups, towns, cities, and schools with the aim or title of 'predator free' is phenomenal.** Before the predator free movement, one could argue that many New Zealanders were unaware of the issues facing our endemic flora and fauna, and 'rat' and 'stoat' were not common household words.

However, false or unverified information is circulated just as easily, and **this misinformation is threatening our social licence to control pests.** The biosecurity industry's social licence to use certain



BY SIAN REYNOLDS, BIOSECURITY CONSULTANT, BOFFA MISKELL



control methods underpins conservation efforts throughout the country. Without these control methods, species such as scarlet mistletoe, whio, and rowi or orange-fronted kakariki would be extinct. There are many people who are against the use of toxins, traps, chemicals and other methods. Social media has enabled the unification of individuals with alternative ideas, into groups of people who actively rally against the use of specific biosecurity control methods.

**It would be fine if the computer screen is where it stopped;** however, this is not the case. In 2019, the Department of Conservation (DOC) reported 23 cases of abuse or injury of staff to the New Zealand Police. In a wave of anti-1080 hostility, DOC staff were threatened, vehicles (both work and private) were vandalised, and staff were assaulted.

It didn't stop there. Contractors undertaking operations were also targeted – sabotage of helicopter fuel, threats to shoot down helicopters from the sky, protestors trying to gain access to load sites – compared with previous years, threats had escalated.

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## A passion for people and protecting the environment

Remembering Dean Roughton 1.3.1973 - 1.3.2021

It was with deep sadness that the NZBI Executive Committee announced the passing of Dean Roughton on March 1<sup>st</sup>.

Dean has been a long serving, passionate and dedicated part of the biosecurity family for over 20 years having worked in the private sector, as an independent contractor, and for the Hawke's Bay Regional Council for 17 years as a Pest Animal Advisor and most recently as a Catchment Management Advisor.



*Dean Roughton in his element.*

Dean has always had a passion for people and protecting and enhancing the environment, both through his work and in his private life.

Dean was a keen supporter of the New Zealand Biosecurity Institute. For many years he organised and presented the annual clay bird shooting competition which was for many years a fixture at the Institute's National Education and Training Seminars.

Here is a collection of tributes to Dean from his colleagues:

Dean started with the Regional Council in April 2004 as a Biosecurity Officer, and for nearly 17 years, has been a highly skilled, professional and exceptionally hard-working team member.

Witnessing this first-hand, it soon became apparent that the dissemination of false information through social media channels, and the congregation of like-minded individuals, meant that **threats and abuse moved beyond the digital realm and into real life.**

Feeling on edge while trying to do your job is not something we should be subjected to. Social media and the ease with which it can spread misinformation, has a lot to answer for when it comes to biosecurity operations now conducted in New Zealand.

As an industry, we all need to be smarter with how we use social media to get our messaging across. Combating misinformation will be key moving into the future. It is a powerful tool and we have had some great wins through its use. The 'Check, Clean, Dry' campaign has been very successful at informing the public and changing behaviours. Targeted social media advertising was pivotal in creating this change with often sub-conscious advertising targeting users of boat ramps and raising awareness of didymo and lagarosiphon; or National Parks alerting visitors to the threats of kauri dieback and myrtle rust.

But social media is a double-edged sword. Whether we like it or not, it is here to stay. Maintaining our social licence will be imperative to protecting our indigenous flora and fauna. New tools, ideas, and methods are currently being researched and developed for New Zealand's biosecurity industry; and some of these may be controversial in the public arena.

We need to think hard about the way we portray what we do, how we do it, and the successes we accomplish. How can you ensure we keep that social licence so that we can continue to protect our beautiful country?

Think twice before you share an article or picture on Facebook. Is it the truth? What message does it send? What behaviour might it encourage?

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For Dean it was never just a job, **he was truly passionate about his work and was always willing to go the extra mile to achieve results.**

One of Dean's proudest work moments was winning the Air New Zealand Excellence Award for Environmental Impact at the 2015 Local Government Awards. This was for the great work he and his colleagues did reducing possum numbers on Napier Hill, bringing back native birds and reconnecting the community with the nature that had been lost.

Dean made an impact wherever he went. His disarming style and down to earth approach made him connect easily with colleagues and the public.

He was an innovator and a man of initiative.

He had a great sense of fair play, no airs and graces, plain speaking, kind, considerate and always willing to stick his neck out for a just cause.

Hospitality was in Dean's DNA.

Colleagues recalled their first days at the Council when Dean went the extra mile to make them feel welcome and supported. Often with the pot of tea he was so famous for. It was important to Dean that everyone was made to feel at home.

Dean was well known nationally across the biosecurity community for his passion for pest control and for spinning a good yarn at conferences. He was also a crack shot with the shotgun, often winning the New Zealand Biosecurity Institute clay bird competition.

**For his colleagues in the Waipawa Office Dean will be dearly missed for both his big personality and the little things like the "pot of tea" he would make every smoko.**

Dean was the quintessential kiwi bloke, who loved his family, his hunting, a good yarn and a bit of dry banter.

He represented the fabric of the organisation and everything great about it. Whatever Deano was into was done at 150%."

Dean was a Force of Nature and a champion for any cause that was lucky to have him.

Some shared their thoughts in a poem:

"We started out as colleagues that soon turned into friendship  
You dropped your guard and we got to know you and your family  
You let us see another side of you, a husband, father and friend  
We saw a proud man who lived for his family and loved life."

"For our passionate friend of whom we miss.

Thank you for your encouragement, dependability, integrity and trust.

Your tenacious love of the land is inspiring.

Your enthusiastic hunting tips, arms tuition and trap design sketches are treasured."

Thank you for always making time for each and every one of us unconditionally.

You are truly a loyal friend Deano and will be forever in our hearts."

There are literally tens of thousands of native trees that will tower into the sky for centuries to come because of the work Dean did. Those trees will be full of beautiful bird song that he helped protect. He worked hard to make the world a better place for his family and for all.

**We couldn't ask or want for more from such a loyal soldier.**

Job well done, mate.

## Getting to know farmers better than a heavy hand:

### Remembering Ian Frizzell

Life member of the Institute of Noxious Plants Officers Ian Frizzell has died aged 83.



*Ian Frizzell in 2013*

Ian was one of the past members the NZBI interviewed for its oral history project in 2013. Ian was a noxious plants officer for the Amuri County Council in North Canterbury then for Environment Canterbury, from 1971 to 1991. He served as an executive member, vice president and treasurer of the Institute of Noxious Plants Officers and served as president and secretary of the Canterbury branch. He said that **getting to know farmers was as important as getting to know the weeds**. He said it was important to get on with the landowners rather than be heavy handed. He said much of the training in those days was from chemical firms. A key weed he was trying to stay on top of was nodding thistle. There was an emphasis on agricultural pests rather than environmental weeds back then but some old man's beard featured in his work.



## Vital Communications

Readers may be interested to learn that discovering the location of the offending plants was no accident and that the [events leading up to their disposal reflects the quality of cooperation synonymous with membership of our institution](#), and which I think is worthy of note. It seems that a person from Te Aroha who attended a seminar at the Howick property, suspecting the presence of water hyacinth advised Bob Dodd of Matamata [NPO Piako County], who in turn alerted the editor of "Protect". Austin [Gate], who lives nearby, checked this and advised Geoff Burnside of Manukau City Council.

Cooperation such as this is invaluable, is appreciated and is to be encouraged.

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PS and to make sure that I don't get a reminder from MAF, I must note that they were immediately informed and approved the ultimate destruction of the offenders.

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## Wild food for thought in Northland (and elsewhere)

Wallaby curry with poppadum and pickled cucumber was to be this year's free wild food treat to attract visitors to the Northland Regional Council's Northland Field Days marquee.

Unfortunately, the event was cancelled because of Covid 19 and the wallaby wasn't served to the public on that occasion.

The council has transformed all sorts of pest animals, plants and even [insects](#) into edible field days treats over the years. Among other delights, [possum pies](#) have proved popular.

As with last year's [deer jerky](#) field days treat, this year's wallaby was designed as a fun way to spark added public interest in the council's broader, more serious biosecurity work.

The council said [wallaby curry](#) was chosen for this year's event after several unconfirmed sightings in recent years of the pest in the north.

Despite intensive searches, no wallaby were found in the region, but the council is keen to see them kept out of Northland because if they were to become established they could completely destroy the understorey of its kauri forests.



## Rabbit not eggs at Easter

Environment Canterbury took up the culinary idea one Easter Show, giving away **Easter Bunny** sausages, especially made from real **rabbit**. Rabbit was the most appropriate wild food in that instance because the Easter Show is held in the town of Fairlie, billed as the gateway to the Mackenzie country, which has suffered more than most, the ravages of rabbits.



New Zealand  
**Biosecurity** Institute

Find us on the web at  
[www.biosecurity.org.nz](http://www.biosecurity.org.nz)

