



New Zealand
Biosecurity Institute

the magazine of the NZBI Summer 2025/26

Protect

ISSN 1175-043X

inside



4



5



5



6



7



9



10



11

NZBI Contacts	2
Do we still have the same purpose as we did fifty years ago?	3
VIGILANCE VIGILANCE VIGILANCE	3
Chilean Needle Grass Education at the Top of the South	4
Yellow-legged hornet watch	5
Lagarosiphon: an ambitious weed biocontrol project	5
Yellow flag iris biological control	6
Aviation breach no small matter	6
It only takes one animal to cause a problem	7
Knowingly swapped tags on infected cattle	7
Serious number of stock in movement breach	8
Confidence of absence: Mycoplasma bovis progress	8
Heidi Pene: Falling in love with the ngahere and fighting the good fight	9
To Promote And Maintain A High Level Of Efficiency:	10
Listen to this	11



New Zealand
Biosecurity Institute

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

NZBI CONTACTS



Diane Fraser
President



Rowan Sprague
Immediate Past President



Shane Hona
Vice President



Wendy Zapart
Secretary



Briar Cook
Membership Officer



Nick Ward
Auckland/Northland



Hamish Hodgson
Central North Island



Mark McAlpine
Lower North Island



Brad Chandler
Canterbury/West Coast



Sarah Irvine
Otago/Southland



John Sanson
Ministry for Primary Industries



Sarah Thwaite
Website Manager

Diane Fraser	President		nzbipresident@outlook.com
Rowan Sprague	Immediate Past President		SpragueRo@landcareresearch.co.nz
Shane Hona	Vice President		shane.hona@tronm.co.nz
Duncan McMorran	Treasurer		nzbtreasurer@outlook.com
Wendy Zapart	Secretary		nzbisecretary@outlook.com
Briar Cook	Membership Officer		nzbimembership@outlook.com
Nick Ward	Auckland/Northland		nicholas.ward@mpi.govt.nz
Hamish Hodgson	Central North Island		hamish.hodgson@waikatoregion.govt.nz
Mark McAlpine	Lower North Island		mark.mcalpine@gw.govt.nz
Rob Simons	Top of The South		Rob.Simons@marlborough.govt.nz
Brad Chandler	Canterbury/West Coast		bchandler@doc.govt.nz
Sarah Irvine	Otago/Southland		Sarah.Irvine@orc.govt.nz
Sarah Thwaites	Website Manager		sarah.thwaites@boffamiskell.co.nz
Other Officers			
Chris Macann	Protect Editor & Archives Co-ordinator	021 878 001	chrismacann@hotmail.com
Seconded Members			
John Sanson	Ministry for Primary Industries	(04) 894 0836	john.sanson@mpi.govt.nz

The New Zealand Biosecurity Institute can be found on the web at www.biosecurity.org.nz



■ FROM THE EDITOR

Do we still have the same purpose as we did fifty years ago?

Fifty years ago, the Institute, or at least a significant predecessor, announced where it was heading, going forward. The item from the NZBI Archives lets you be the judge as to whether it's done what it said, and how much it's grown, and whether the song remain the same.

In a good example of preparedness, Tasman biosecurity staff availed themselves of an opportunity to learn from neighbors Canterbury and Marlborough, about Chilean needlegrass, the notoriously hard plant to identify by all but the trained eye, just in case it leapt the fence.

We learn how amazing stories of biosecurity inspired one person to fight the good fight.

An item on biocontrol might introduce to many, the word 'multivoltine'. Seems, to be multivoltine is quite an advantage in some matters.

There's a brief update on the fast-evolving story on the hunt for the yellow legged hornet.

There's good news that, with the finishing line in sight, *Mycoplasma bovis* is likely to soon be a thing of the past. Sadly, this issue notes some breaches of the rules designed to protect this country from such outbreaks. They are not accidents or misinterpretations of complicated-but-necessary regulations. They are deliberate actions. The penalties are relatively severe, but are they enough? and are there others still slipping under the radar or through the net? While these situations are uncommon, these penalties send a strong message to others tempted to get around the law.

Read on. Learn, enjoy, spot the lazy overworked cliché, and count the deliberate others.*

CHRIS MACANN
EDITOR

**The Editor deliberately steers well clear of using it.*

VIGILANCE VIGILANCE VIGILANCE

To celebrate the year's biosecurity successes and to encourage kiwis to help support its members efforts, the NZBI released this media note over the 2025-26 Summer holiday period.

The agencies charged with managing the country's invasive species could not have done their job this year if it wasn't for the public reporting of their sightings of species of concern, according to the New Zealand Biosecurity Institute.

Institute President, Dr Diane Fraser, said **it is reports from the New Zealand public that has so far helped authorities with the identification of major invasive threats** this year.

She praises members of the public for reporting sightings of the recently detected yellow-legged hornets, the invasive freshwater gold clams and *Caulerpa*, the invasive seaweed, which have been crucial in assisting the appropriate agencies in their control efforts of these highly impactful species.

Dr Fraser said that these agencies need all the help they can get this summer in their efforts to protect New Zealand.

She encourages everyone to be constantly vigilant throughout the summer and the rest of the year so that these invasive species can be managed.

If any member of the public finds unusual plants or animals, she asks that these are reported to the Ministry for Primary Industries on their Pest Hotline.

Dr Fraser said that other simple actions kiwis can do are: clean and dry all recreational gear, including footwear, bikes, boats and other water craft, dispose of garden waste appropriately, and be responsible pet owners. **These simple actions can help stop the spread of harmful pests** and diseases and protect the environment.



Chilean Needle Grass Education at the Top of the South

On 28 November, Tasman District Council Biosecurity officers travelled to Marlborough to learn about a looming threat to Tasman – Chilean needle grass (*nasella neesiana*). This grass species is an Exclusion pest in the Tasman Nelson Regional Pest Management Plan. **It is not known to be established in Tasman, but is knocking on the door due to significant infestations in Marlborough.** The possibility of spread from Marlborough across to Tasman is very real, so we wanted to get our eye in for effective surveillance over our side of the hill.

Chilean needlegrass (CNG) is listed as a Sustained Control pest in Marlborough, subject to several rules aimed at minimising spread through pathway management. Mostly it is present in vineyards, so contaminated machinery such as harvesters and mowers is a spread risk, especially if it travels between Marlborough and Tasman. Contaminated properties that have stock are subject to stringent rules, such as not being allowed to transport sheep outside of the property, unless directly to slaughter.

We met with Hayden Nott from Marlborough District Council and travelled to a vineyard where CNG is rampant. Hayden explained the unique distinguishing features of the plant – in particular the seed. CNG is a highly invasive, rapidly reproducing grass species. It is generally unpalatable to stock, but the real issue is the seed heads. These have evolved with some incredible features that give it every chance of spreading. The seed is needle sharp and contains a tufted barb near the tip. I was astounded to learn that when the seed gets wet it rotates one way, and as it dries it rotates the other way. **The barb near the tip ensures that whichever way it rotates, it is always burrowing itself deeper into its chosen substrate.** With this in mind, imagine the impacts on a flock of sheep. Say a seed gets picked up in the wool, over time it will burrow its way through the wool, into the skin, and eventually into the meat below. CNG can cause blindness, severe discomfort and infections for animals and reduce the quality of pelts, meat and wool.

As mentioned, each seed has a tufted barb, a dark red/brown collar around the base of the seed and a tail that is longer than any other grass species. Seed heads flicker in the wind, and appear a shiny golden colour in the sun. We discussed the similarity with other grass seeds (like ripgut brome) and quickly realised once you got your eye in for CNG it was quite distinctive.

Having had the ID lesson, we then travelled to a site with active plants at low density, to see if we could spot them ourselves. We discovered that it's all about the angle of the sun! We were almost on top of a plant Hayden had spotted, but it took us circling it until the light really shone off the seedhead for it to become obvious. All in all a great day was had, and we all learned a lot about this highly invasive pest. This has given us great motivation to get some surveillance of likely sites in place and make sure we keep it out of Tasman.

Contributed by Briar Cook. Tasman District Council



Nathan Greenough, Briar Cook, Mitch Seek and Hayden Nott

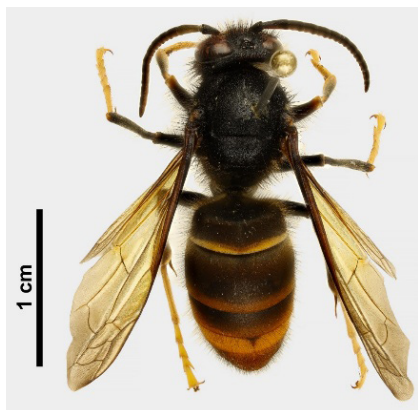


CNG in the vineyard rows



CNG seed showing brown collar, sharp tip and feathery barb

Yellow-legged hornet watch



As the year drew to a close Biosecurity New Zealand encouraged Kiwis to continue to keep an eye out for yellow-legged hornets (*Vespa velutina*) over the holiday season.

"Intensive ground surveillance work and operations across Auckland's North Shore to find hornet nests has been working well, reported Biosecurity New Zealand at the time of writing on December 22nd.

"Based on overseas experience, the science tells us that **we may find more hornets over in the next few months and we're prepared for that**," Biosecurity NZ said.

"The international experts guiding our response are providing the most up-to-date advice and information about the hornet and that is feeding into our work."

"As the weather continues to warm, hornets can start to make bigger nests high up in trees.

"We'll continue to adapt our work to what we see over the summer in line with our Technical Advisory Group's advice. The group draws on the expertise from New Zealand scientists and our overseas colleagues with extensive first-hand experience of the hornet," Biosecurity NZ said.

Lagarosiphon: an ambitious weed biocontrol project

More than 10 years after first proposing to target the pest aquatic plant lagarosiphon (*Lagarosiphon major*) for biocontrol, the Bioeconomy Science Institute (incorporating Manaaki Whenua - Landcare Research Group) is now preparing a release application for the Environmental Protection Authority (EPA) on behalf of the National Biocontrol Collective. The candidate agent is a leaf-mining fly (*Hydrellia lagarosiphon*) whose larvae mine the leaves of lagarosiphon.

It's one of our most ambitious weed biocontrol projects ever," reports the BSI.

Currently available control methods include herbicides (mainly Diquat), mechanical and suction dredging, and the application of weed matting to shade-out the plant. However, these are costly, time-consuming, labour intensive, potentially have adverse environmental impacts and only provide a short-term solution.

Biocontrol offers the potential for sustained long-term management of lagarosiphon with low environmental risk. **The *Hydrellia* leaf-mining fly proposed for release is multivoltine, which means it has multiple generations per year**, with many overlapping generations throughout the warmer months.

Worldwide, biocontrol of submerged aquatic plants has only been attempted three times.

Will it work? Research in South Africa done in conjunction with Manaaki Whenua, suggest that it will.

Is it safe for our native plants? Host range testing of the leaf-mining fly was completed in Ireland in the early 2010s and included representatives of New Zealand's most closely related native aquatic flora. "So we know that the fly won't attack them instead" the Group said.

"We now have all the information and data required to build a strong case for release approval for the leaf-mining fly for lagarosiphon. However, before submitting the application to the EPA, work is needed to consult and engage with stakeholders and Māori, and to conduct a full assessment of the economic, environmental and social risks, costs and benefits.

"As we know from other very successful and highly cost-effective weed biocontrol projects we have run – good things are well worth waiting for," the Group reported.



Yellow flag iris biological control

An application to the Environmental Protection Agency (EPA) is being prepared to introduce a beetle as a biological control agent for the wetland plant pest yellow flag iris *Iris pseudacorus*.

The application to release a leaf-feeding chrysomelid beetle, *Aphthona nonstriata* as a biocontrol agent will be made by Waikato Regional Council, representing the National Biocontrol Collective; a consortium of regional councils, unitary authorities and the Department of Conservation. The Manaaki Whenua - Landcare Research Group of the Bioeconomy Science Institute is the science advisor to the Collective for the application.

Yellow flag iris has a wide distribution in New Zealand and is particularly weedy in the lower Waikato River catchment and along the Avon River in Christchurch. **It has not yet reached its full potential distribution across New Zealand.** Floods can spread its seeds and root fragments over long distances, enabling new infestations in vulnerable wetland and riparian areas.

From Information supplied by The Manaaki Whenua - Landcare Research Group of the Bioeconomy Science Institute.



Aviation breach no small matter

In December MPI reported that an aviation company was ordered to pay a penalty of \$150,000 for breaches of the Biosecurity Act.

The company operated two MPI-approved transitional facilities at Auckland Airport for handling imported airfreight, containers, and packaging, where uncleared risk goods go through the necessary biosecurity clearance.

"MPI ordered the aviation company to ensure its goods were wrapped in plastic, with no gaps or holes, to prevent any potential and unwanted pests that might be present from escaping," MPI said.

MPI found six consignments of uncleared risk goods improperly wrapped.

MPI also found the inspection room and facilities were not fit for purpose. There was no biosecurity equipment present to deal with risks and no records available to document required cleaning of the room and training of staff.



It only takes one animal to cause a problem

In March, a Kaikōura dairy farmer was fined \$35,000 for failing his National Animal Identification and Tracing (NAIT) responsibilities involving hundreds of cattle.

The movement of all cattle or deer must be declared to OSPRI (Operational Solutions for Primary Industries) within 48 hours. Additionally, **all animals must be fitted with a NAIT tag and registered in the NAIT system by the time the animal is 180 days old, or before the animal is moved off farm.**

MPI's investigation found significant failures including not registering 269 NAIT animals, failing to declare 571 NAIT animals that were being moved off farm, and failing to declare movements of 83 NAIT animals onto his farms. For each of these failures, the farmer was fined \$11,666.

"It only takes one animal to cause a problem," MPI said.



Knowingly swapped tags on infected cattle



A Taranaki farmer and livestock agent who illegally swapped NAIT tags from cows infected with a bovine disease in an attempt to sell the cows was fined \$15,000 in December.

"The 4 cows the man attempted to sell were affected by bovine viral diarrhoea (BVD)," said MPI and NAIT.

"He knew this but directed one of his workers to replace the NAIT tags on these animals with new NAIT tags so he could sell them with a clean history."

On the same day the man sent the animals to the saleyards, but a NAIT officer intervened and stopped the animals being sold.



Serious number of stock in movement breach

A Southland calf rarer who failed to declare the movements of **753** cattle or register **52** other animals under the National Animal Identification and Tracing (NAIT) Act, was fined \$35,000 in November.

MPI found **52** tagged cattle had never been registered. Another **197** cattle that came from various other properties were not declared as being moved and a further **556** cattle were sent to five different locations in the South Island without declaring the movements.

"This was hundreds of animals, and it only takes one animal to potentially cause a biosecurity problem, as we have learned from our experience with Mycoplasma Bovis," said MPI and NAIT.

Bovine Biosecurity: Who's who

OSPRI (Operational Solutions for Primary Industries) is a partnership between primary industries and government. It manages three national programmes, each one a company:

- NAIT Ltd: the agency for National Animal Identification and Tracing
- TBfree Ltd the agency for the National Bovine Tuberculosis Pest Management Plan
- MBfree Ltd: the agency for the National Mycoplasma Bovis Pest Management Plan

"This was hundreds of animals, and it only takes one animal to potentially cause a biosecurity problem."

Confidence of absence: Mycoplasma bovis progress

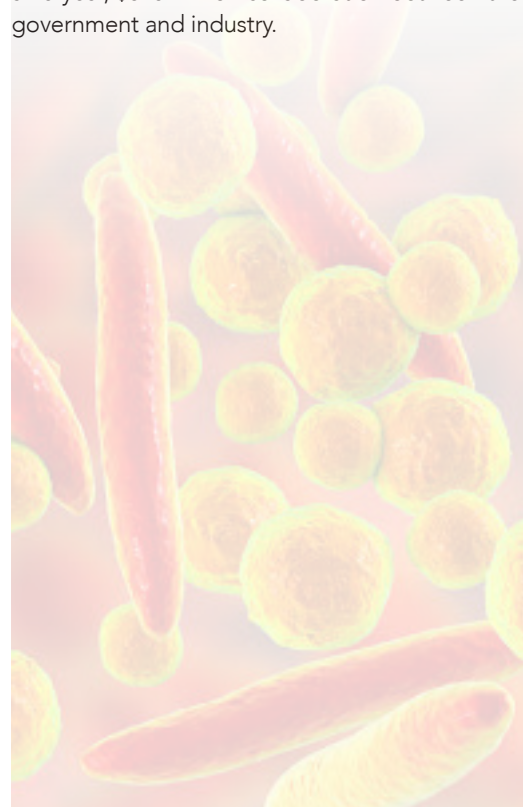
At the beginning of December, the Ministry for Primary Industries (MPI), OSPRI, and the country's dairy and beef sectors marked that New Zealand is on the home straight to eradicate Mycoplasma bovis.

MPI reported that there has been no new M. bovis infection detected for two years and that it can now enter the very final phase of the eradication programme called 'confidence of absence'.

OSPRI said the 'confidence of absence' phase requires a further couple of years of testing to gather sufficient data to prove M. bovis has gone from the national herd, and to declare eradication.

"At that point, **we'd be confident to declare freedom from the disease which will be a world-first eradication,**" OSPRI said.

The Mycoplasma bovis eradication programme is a 10-year, \$870 million collaboration between the government and industry.



Heidi Pene:

FALLING IN LOVE WITH THE NGAHERE AND FIGHTING THE GOOD FIGHT



NAME

Heidi Pene

ORGANISATION

Waikato Regional Council

JOB TITLE

Senior Biosecurity Officer

TIME IN THE JOB

26 years

What motivates you to be involved in biosecurity?

I have a passion for New Zealand's unique indigenous flora and fauna and our beautiful landscape and want to be a part of protecting it. I also feel an obligation to do my bit for the health of our primary industry which is crucial to the NZ economy, but constantly under threat from pests and diseases.

Hearing the amazing stories of biosecurity champions inspires me to fight the good fight!

What has been your career path to your current position?

Coming from a timber town (Tokoroa) I began my tertiary study doing a Bsc Tech - forestry specified programme. This four-year degree involves two work placements. My second placement was with the indigenous species department at Scion, which led to a part-time position that continued while I still studied. I was researching windfall data in the amazing Whirinaki Podocarp Forest and this is where I fell in love with the ngahere and great outdoors.

I was offered sponsorship from Waikato Regional Council to undertake a master's thesis studying the threat of pampas grass in the Waikato Region. Whilst studying I was offered a role as a biosecurity officer and stayed in the role 25 years before being taken in house at Waikato Regional Council.

I love my job and couldn't imagine a more suited position for my skill set.

What makes up a normal day for you?

I love the variation. **There is hardly a 'normal' day!** I could be walking bush tracks one day and farm blocks the next, or surveying a river by boat, or field on horseback! I have recently been involved in running eradication and tracing workshops and providing technical advice for Weedbusters. Education and awareness are a key part of the role. There is a less enjoyable enforcement component of the job, but it's part of what makes up our exclusive skill-set as pest plant officers.

My new (current) role will focus on emerging threats, pathway management, surveillance and assistance with Waikato's delivery of the national wilding conifer programme.

What do you enjoy the most about your job?

I enjoy communicating with a diverse community and love to make people feel that they are getting good value for their rates, and to support or inspire them to do their bit to protect te taiao.

We have a great team here at council and it's a privilege to work with like-minded people who share my passion for biosecurity. Long may it continue.



TO PROMOTE AND MAINTAIN A HIGH LEVEL OF EFFICIENCY:

Address To Conference By The President Of The Institute

At this stage, ladies and gentlemen, I would like to say a few words regarding the Institute and where we are going. ...

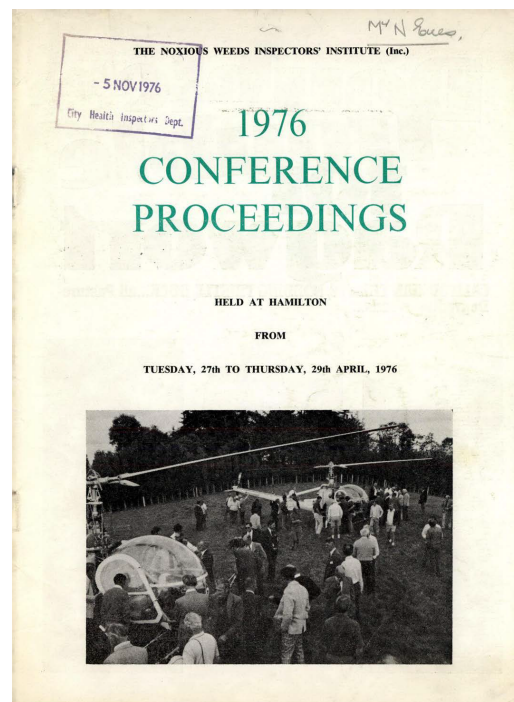
... I will take this opportunity, on behalf of the members of the Institute, to welcome to this Conference all visitors, wives and invited guests. As I mentioned before, this is our 27th Annual Conference and the thing that is often lost with respects a conference is just what we're gathered together for. What is the Noxious Weeds Inspectors Institute?

The Institute is a group of men made up from inspectors employed by local authorities throughout New Zealand carrying on the inspection of noxious weeds. They started from a small beginning when several inspectors of counties in the north island banded together and formed a small group. From that group has grown an Institute covering the whole of New Zealand and involving all county inspectors. Now we embrace the urban inspectors within our ranks as well. It is a voluntary membership. The aims and objects of the Institute as laid down in our rules are **to promote educational facilities and the exchange of ideas which will lead to a uniformity of approach** to noxious weeds problems. ...

... The reason for us getting together is to promote and maintain a high level of efficiency among our members. Something we are always attempting to achieve. I say the word 'attempt' as I suppose a lot of us take things in and a lot of us don't. Nevertheless, **we have always tried and succeeded in getting a very high calibre of people to our Institute.** We have had very willing co-operation from people, recognised in their fields, who show no hesitation in coming along and giving us the benefit of their knowledge. ...

... We feel that we are above the dictates of commercialism. We have a job to do, virtually for the Government, which we endeavour to accomplish to the best of our ability. Obviously criticism is levelled at anybody and everybody at some time or other. No doubt some of it is deserved but much is not and in our case I think that a lot of the criticism comes through the legislation we are trying to administer.

President Darby Finlayson's address (abridged) to the Noxious weeds Inspectors Institute 1976 Conference Hamilton 27 - 29 April



Cover photo: Field Day at Ruakura Agricultural Research Centre

Listen to this

A selection of clips from the NZ Biosecurity Institute's ongoing Oral History project is now available in the members' section of the NZBI website. These clips are extracts from interviews carried out as part of the Institute's ongoing Oral History project. Most are stored in perpetuity with Archives New Zealand. The NZBI Executive Committee is considering ways of making the full recordings more accessible to members.

Representative clips include:

Ray Clary, former Senior Biosecurity Officer, Pest Animals with Wellington Regional Council, based in Wairarapa was involved with pest animal control in the Wellington region and elsewhere for more than fifty years.

Walter Stahel (29.12.1942 – 19.8.2020) was a Noxious Plants Officer, at the Bay of Plenty Regional Council. He began his biosecurity career in 1974 as a Rabbiter with the Hawkdun Pest Destruction Board in Central Otago.

Jack Powell (14.6.1925 – Nov 2013) began rabbiting in the 1930's. At the time of his retirement in 1985, he was a Senior Field Officer with the Agricultural Pest Destruction Council, dealing with Pest Destruction Boards throughout the country.

Zoe Battersby talks about her experiences as the wife of a pest controller. Zoe is the wife of **Les Battersby**, who was Supervisor of the Kaikoura Pest Destruction Board at the time of his retirement in 1989. He began his pest control career in the mid-1950's.

The soundbites are available at:

<https://www.biosecurity.org.nz/members/oral-history-audioclips>

