

BIOSECURITY 2025

Making it happen

Issue 4 | December 2017

Welcome

Welcome to *Biosecurity 2025: Making it Happen*, where we'll keep you regularly updated on what's happening to implement the [Biosecurity 2025 Direction Statement](#).

It's your gig too

Biosecurity 2025 has given clear direction – we are now putting together the detail on how to get there. The only way we're going to achieve the goals set out in Biosecurity 2025 is for the community to work together and share information and ideas.

This e-newsletter has been developed to capture and share this information, so we're really keen to hear what's happening out there and welcome your input and ideas for future issues.

A message from Graeme Marshall, member of the Biosecurity 2025 Steering Group and Chair of the Biosecurity Ministerial Advisory Committee.



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***Got a story to share?** We'd love to hear from you. If you'd like to be profiled or have a story included in the next issue, please [email us](#).*



Draft strategic direction work plans

The five Working Groups and the programme have now finished the initial draft of their work plans. These draft plans have now gone to the Steering Group, Working Groups, External Reference Groups and selected other system partners for feedback.

This feedback will be incorporated into the draft plans early next year to inform the development of the draft Implementation Plan.

There is still a lot of work to complete on pulling the draft Implementation Plan for the biosecurity system together and 2018 should see significant progress.

Over the next six months we will report on the:

- findings of the governance review;
- actions falling out of the draft work plans;
- implementation of the Engagement Plan for Strategic Direction 1;
- finalisation of the Implementation Plan.

The Biosecurity 2025 Direction Statement is available to download from the [Ministry for Primary Industries website](#).

Profile: Lorin Lima, Myrtle Rust Response

A native of California, Lorin Lima moved to New Zealand because she wanted to be at the sharp end of biosecurity. She wanted to be right there at the beginning and to truly make a difference.

The myrtle rust Response Manager got her wish as she joined the Ministry for Primary Industries (MPI) just before myrtle rust was identified on Raoul Island in the Kermadecs.

Before joining MPI she was a Geographical Information System (GIS) under graduate at the University of Redlands, studying native ecosystems and native species and the pressures the global economy puts on them. Her main focus was on how those impacts affected the natural environment and how to stop that from happening.

“A much ‘smaller world’, has allowed invasive species to move from one part of the globe to another very quickly,” commented Lorin. “After attending a semester at the University of Victoria, it was obvious to me that New Zealand had the ability to lessen the impact on its environment, more so than other countries with convoluted borders and multiple pathways of invasion.”

Returning to California she tried to apply Victoria University learnings, but kept coming up against the same issues: the pest is already here, it is already wide spread, and we can only try to reduce its impact. New Zealand on the other hand has the ability to identify threats early and try to prevent them from getting established.

Landing a role at MPI has met Lorin’s need to making a difference: “It is incredibly exciting to see my everyday working life making a difference. When I worked at the University of California - Agriculture and Natural Resources - by the time we knew about a problem it was already well established, so it was more about research and suppression than anything else,” commented Lorin.

“When I started at MPI myrtle rust had just been found on Raoul Island. Three weeks later it was detected in mainland New Zealand. The whole thing was incredibly fast! I was in at the sharp end...the place I always wanted to be, where it mattered.”

Lorin used her GIS training to interpret MPI data and outside information to pull together the different aspects for the response in a geographic sense. She used information from field activities to understand where they were, what they were doing, and what the environment was like around

“**...This information allows the team to understand how myrtle rust might move across the country...**”

them. By pulling this together the response team could paint a picture of where known myrtle species were in New Zealand and what pathways the disease could take as it moves across the country.

A lot of GIS data had already been collected and was used to create a picture (literally) of what was happening, when, and where. MPI contracted the National Institute of Water and Atmospheric Research (NIWA) and Plant & Food Research (PFR) to develop a wind model to show how myrtle rust could have reached New Zealand from known infection sources (Australia, New Caledonia and Raoul Island). This information allows the team to understand how myrtle rust might move across the country. Particularly important was the negative data (i.e. no myrtle rust or no myrtle species recorded by the field teams). This information allowed them to see where it was and use GIS to analyse the hard data, so the scope of the problem could be worked out.



Lorin Lima, Biosecurity Response Manager, MPI.

The response management team used the GIS analysis alongside other information from different work streams to make informed decisions on what to do next. Lorin explained: “I find it such an invigorating concept to have all of that information at your fingertips. It is powerful to have that ability and to be able to apply it in real time.”

A Masters in GIS

Lorin is working on her final dissertation for John’s Hopkins University and is pulling together the information collected to analyse the use of it during the response. In particular, she is interested in using air data collected by NIWA over the last 10 years as myrtle rust is airborne.

It is her intention to model what has happen and what could happen in the future. Then to, analyse known infected sites and how the weather will influence what will happen in the future, and what areas we should be focusing on to slow the spread.

“The ability of the fungus to survive is incredible. The fact that it arrived on Raoul Island after surviving days in the atmosphere over the open sea and was able to establish on host plants is incredible. The jump from Raoul Island to mainland New Zealand was a breeze in comparison,” concluded Lorin.

What is a Geographical Information System?

A geographic information system (GIS) is designed to let you visualize, question, analyse, manage, and interpret data to understand relationships, patterns, and trends of geographical data. The key word is Geography – meaning a portion of the data is spatial (i.e. referenced to locations on the earth).

This is then paired with tabular data (i.e. actual things); like a school (the actual location of the school is the spatial data) whereas the school name, level of education taught, and student capacity would make up the attribute data. It is the partnership of these data types that makes GIS such an effective problem solving tool, as it can manage large datasets and display the information in a map/graphical form for easy interpretation.

How can the biosecurity system use GIS?

- As tool for problem solving and decision making.
- Visualisation of data in a spatial environment.
- Helping biosecurity teams to determine:
 - where things are — the location of pests and diseases and the relationships to other pests and diseases;
 - the quantities — where the most and/or least number of some pests or diseases are located;
 - densities — the density in any given space;
 - what is happening inside that area;
 - what is happening nearby;
 - mapping the change — how a specific area has changed over time (and in what way).

NEW ZEALAND BIOSECURITY AWARDS

Recognising our biosecurity team of 4.7 million

Biosecurity excellence

The Biosecurity Excellence at Port of Tauranga initiative received the Industry Award at the inaugural 2017 New Zealand Biosecurity Awards.

The award recognises groups or organisations in industry that have demonstrated a significant contribution to improving New Zealand's biosecurity integrity, and celebrates the efforts of people who are doing their bit for biosecurity every day and showing a real commitment to protecting New Zealand.

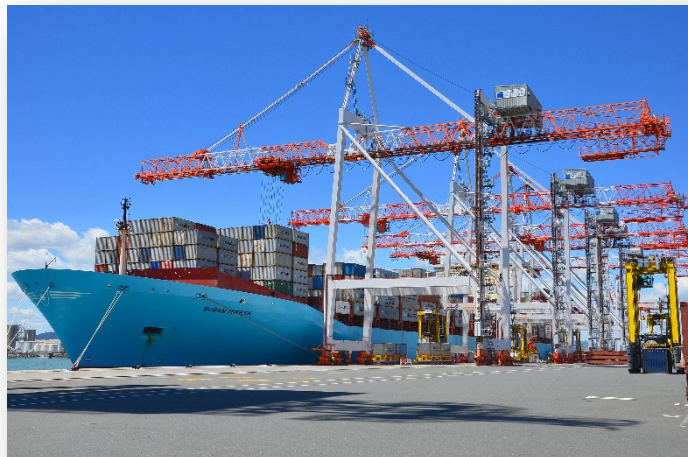
"The Port of Tauranga was honoured to receive the inaugural Industry Award in the Biosecurity Awards for its biosecurity operational excellence programme because it's about everyone doing their bit and working together," says Port of Tauranga Chief Executive, Mark Cairns. "We have a responsibility as the Port to protect the industries we are serving."

"We also need to acknowledge our partners in the initiative: Kiwifruit Vine Health (KVH), the Ministry for Primary Industries (MPI), industry organisations, service providers, the freight and logistics sector, government agencies, everyone who works around the port and the local Mount Maunganui community."

The first phase of the award-winning initiative involves sharing data between the organisations, establishing reporting systems and identifying the biggest risks. One simple move was to make sure the MPI hotline staff had a good knowledge of the Tauranga wharves and could grasp the location of a reported hazard and act appropriately.

The working group for the partnership is currently looking at initiatives that support the current screening and inspection programmes of MPI including site signage and detector dog use for cruise ship visits.

A key focus is to develop a biosecurity model that can be adapted and applied across all New Zealand ports. KVH and the other partners believe this can realistically be achieved by 2025.



Port of Tauranga aiming to be the Biosecurity Capital of the world.



Port of Tauranga staff member and MPI border staff inspect imported machinery for potential hitch-hikers.

The second phase focuses on educating port employees and the wider community. Activities include:

- a biosecurity induction for all port workers;
- awareness campaigns focused on key pests;
- events such as Biosecurity Week;
- giving staff a calendar illustrating the biggest risks;
- other useful information and alerts that highlight potential pests;
- regular biosecurity engagement with the wider port community.

"We need to understand what we're dealing with, where to look and what to look for," says Mark.

The company says there is a lot of enthusiasm for the initiative among port workers, many of whom have links to the horticultural and agricultural communities. There is also a proactive approach to pursuing improvements in innovation in areas such as port surveillance, and understanding how the use of modern technology can improve biosecurity performance.

Port of Tauranga is New Zealand's largest and fastest-growing port handling more than 22 million tonnes of cargo annually and more than 1650 ship visits. It directly employs around 200 people, but ten times that number work on the wharves or at associated businesses.



OPINION: Boardroom, bugs and biosecurity

New Zealand is bombarded daily by potentially invasive pests and diseases which could, quite literally, devastate our lifestyle, our livelihoods, our unique environment and our economy.

Our strong biosecurity system is the only thing that keeps them out or in check. But it won't be enough as new trade routes open and more people come visit our beautiful country.

The Biosecurity 2025 partnership between government, business, Māori, local and regional councils, and primary industries will help us protect our taonga and the things we value.

To make sure we take action together, businesses and boardrooms across the country are going to need our help to understand how biosecurity fits within their risk profiles so they can consider biosecurity alongside other strategic business issues. We need to help business understand why they need to take ownership and action: to be ready and watchful.

One only has to look to the serious effects and impacts – *Pseudomonas syringae* pv. *actinidiae* (Psa) had on the kiwifruit industry in 2010. Growers incomes dropped and land values plummeted from highs of over \$450,000 to less than \$100,000 per ha almost overnight. It also seriously affected the suppliers in to their industry and their local communities.

We have brokered some great international trade deals over the last 10 years with countries where pests and diseases that would be harmful to us are prevalent. This positive increase in global commerce also has a potential downside when we are trading with countries and suppliers we have not dealt with before. It requires greater vigilance, understanding of the biosecurity risk and an obligation to ensure we and our suppliers understand our responsibilities to protect this country's economy and livelihood. Mitigating biosecurity risk should be a top priority when we are travelling internationally or purchasing products from overseas.

“...mitigating biosecurity risk should be a top priority...”

Businesses can prepare and limit the risk of biosecurity events. They are in a very powerful position to influence the behaviour of suppliers, customers and their staff.

Government alone cannot protect us from biosecurity risk when it is us, through our travel and consumption of goods from overseas, are a major part of the problem. We all need to be part of the solution and we must all own that responsibility.

The success of the Government Industry Agreement (GIA) which brings government and industry groups together to manage pests and diseases, shows that people want better biosecurity results. At the same time, community groups are deeply involved in keeping their communities' pest and disease free.

Businesses can actively demonstrate corporate responsibility by working with other businesses, councils, communities and government. For example the Port of Tauranga, in conjunction with Kiwifruit Vine Health, are working towards 'Biosecurity Operational Excellence', a model that can be adopted by every port, airport, international airline and shipping line.

Businesses which actively own biosecurity as a risk are making a strategic decision to protect their business and protect New Zealand's future.

Graeme Marshall, is Chair the Biosecurity Ministerial Advisory Committee and a member of the Biosecurity 2025 Programme Steering Group.

New Zealand BMSB Council visits Chile

As part of the Brown Marmorated Stink Bug (BMSB) Council's joint readiness efforts, seven representatives from Horticulture New Zealand, Ministry for Primary Industries (MPI), NZ Winegrowers, Kiwifruit Vine Health, and Plant & Food Research (pictured below) recently visited Santiago, Chile: the site of the first report of BMSB in the Southern Hemisphere.



In New Zealand, MPI and industry undertake BMSB readiness and response activities in partnership under the Government Industry Agreements (GIA) and the BMSB Council.

Although the BMSB has not yet arrived in New Zealand it poses a significant biosecurity risk to New Zealand horticulture.

While in Chile, the group met with representatives from the Servicio Agrícola y Ganadero

(SAG), the Chilean equivalent to MPI, growers, scientists, and industry representatives to discuss the current situation and how they could contain the pest. The visit also served as an opportunity to test BMSB surveillance traps in an urban setting, and understand how they will work when the pest is at low densities.

Based on available information, the detection appears to be restricted to a small area in urban Santiago, and there is no evidence to suggest that the pest has spread to Chile's horticultural production areas. Ongoing work with the Chileans will allow New Zealand to assess whether this risk changes in future.

The trip provided the New Zealand delegation with first-hand experience of the early stages of a BMSB incursion, and an understanding of some of the practical challenges posed by surveillance in an urban setting. Lessons from the trip will be incorporated into New Zealand's ongoing readiness activities against this pest.

Australia gets ready to sing

As part of their campaign to promote the need for biosecurity to 25 million Australians, the Australian Department of Agriculture and Water has created a ['biosecurity song'](#).

The song is a collaboration between Aboriginal and Torres Strait Island people, governments, producers and communities to inform people how they should protect their lands and waters.

It is performed by aboriginal and Torres Strait Islander, Indigenous artists Rochelle Pitt Watson, Naomi Wenitong, Patrick Mau and Andrew Miller. The video showcases the iconic countryside and coastline of northern Australia, and its people.



The department used these popular Northern Territories singers as they are well known in the sparsely populated area and they felt people would be encouraged to listen to the song.

The project is trying to safeguard and protect the 10,000 kilometre Northern Territories coastline. Funding was received through the [Australian Government's Agricultural Competitiveness White Paper](#) to produce the video. Funding was allocated across northern Australia to organisations that actively involved local communities, agricultural producers and all tiers of government.

New pests and diseases getting established in Australia could cost their agricultural industries around \$60 billion.

This campaign is very similar to our 4.7 million campaign which aims to build a movement of people 'doing' biosecurity every day.

[The Frontline song - word document](#)

Got a great video you can share of biosecurity in action? Is your local community doing great things? Let us know and we will profile your video here *in the next issue*, please [email us](#).

Working Group Member James Trevelyn tells his story

Eight years ago, my wife and I purchased a kiwifruit orchard and 12 goats in Te Puke.

A year later, I received a devastating call to say Psa-v, a crippling bacteria specific to kiwifruit, had been found at an orchard 3kms up the road. This is when I thought my livelihood could depend on those goats.

The sound of chainsaws hacking out the vines still haunt me. Today I manage a post-harvest facility that packs and cool stores 11% of the kiwifruit and avocado industry. During peak season we employ 1,600 staff.

As Psa-v spread, post-harvest facilities cut their margins and struggled to maintain profitability. Some laid off staff, others toughed it out. Many of us provided social support to the growers as they struggled under the pressure of a business about to go bust.

The impact on the community was huge. School roles declined as the labour force moved on, which in turn, brought tension around whether the schools could afford extra staff. The true cost of biosecurity events are always high, but the social costs are hidden and difficult to measure.

Since that outbreak, I have reflected on the journey the kiwifruit industry has taken. Right now we are in a great space, but in my opinion, it is due mainly to luck, rather than good planning.

With traveller numbers growing year on year, internet shopping taking hold and containerised traffic growing I ask myself what are the chances to this happening again? ***The answer always is: when.***

As a business owner I cannot think 'it won't happen again we have safeguarded against that'. Businesses, industry and every New Zealander must play their role. We must be ready and willing to take action and not rely on government to shoulder the burden like we used to.

As a post-harvest operator and an orchard owner, I need to get involved and partner up with the biosecurity network of tomorrow. This network will initially be built up around the Biosecurity 2025 direction statement and its five strategic directions, which are building work plans to help protect our taonga.

Operating a horticultural business, I need to sit in the flow of information: as it happens. Not be fed information a month old. It must be real-time and relevant so, I can play my part of this biosecurity movement.



James Trevelyn in a Kiwifruit Orchard in Te Puke.

...I need to sit in the flow of information – as it happens...

This information will help me understand where the pressures are coming from so I can prepare and safeguard my business and my staff. If I know that the Brown Marmorated Stink Bug could head to Te Puke on imported machinery I would run a work shop for the staff and orchardist so they know what to look for.

I'd encourage our suppliers to ask questions when purchasing machinery: "Was this machinery checked when being unpacked?" I'd ask importers to train their staff on the pending risks, and give them the right tools to make those checks the right way.

My plan is for our staff to take their new biosecurity skills to their communities and mentor others. They will show their neighbours how to use their phones to analyse the bug they found in their backyard. We must all be connected to make sure New Zealand is protected.

As a business owner I have the ability to influence a whole range of people to do the right thing. I can train my staff, encourage my supply chain, work with the local community and be an active member of the Biosecurity 2025 movement. I take this very seriously so I have devoted my time by joining one of the five Working Groups developing the work plans, which will become the Biosecurity 2025 Implementation Plan for our country.

“..As a business owner, I have the ability to influence a whole range of people to do the right thing...”

The structure of the network will be important and we need to support everyone to work effectively within their own part of the system. Slowly the network of the future will grow, the hardest thing is to start. It won't be perfect, but let's get going as tomorrow is here now.

James Trevelyan, managing director of [Trevelyan's Pack and Cool](#), is a member of the Working Group for Strategic Direction 5: Tomorrow's skills and assets. This group is developing a plan around creating a capable and sustainable workforce, which is supported by world-class infrastructure that we will need for the future.

If you have a story you would like to share about how an invasive pest or disease has change what you do every day then please get in touch. [We want to hear your story](#).

Biosecurity in action: be aware, be proactive, be sure

A four generation, family run company [Farmgard](#), has stepped up to show other businesses that it means “business” when it talks about biosecurity in action. They have just launched their [Big Stink Bug campaign](#).

Mark Capper, Managing Director of Farmgard says that it is all about taking their share of responsibility in the supply chain.

“As one of the leading distributors of machinery supplied to horticulture, Farmgard, like many family owned horticultural enterprises, has built its success on the primary industries and knows that behind this success a lot of hard work goes into keeping things clean, green, free of pests and sustainable,” explained Mark Capper.

“While New Zealand’s physical position in the world gives us some protection from a lot of threats that other large continents have been exposed to, we can’t be irresponsible and dwell in a fool’s paradise.

“We take our role seriously as suppliers of machinery to such a key export market. If anything goes wrong with it – we risk losing one of NZ’s main income earners, so we decided to make, a ‘*stink*’ about protecting our nation,” concluded Capper.

The team have developed their campaign around the Brown Marmorated Stink Bug (BMSB), with a five-point biosecurity checklist, which explains how it could get here, what it looks like and what you can do if you see one. They [have created a video](#) to show how they check the containers and machines they import. This is supported by MPI’s factsheet.

Remember, if you think you’ve seen a BMSB: catch it, take a photo and call MPI pest hotline **0800 80 99 66**. For more info: www.mpi.govt.nz/stinkbug



A worker at family run business, Farmgard, pressure washes imported farm machinery with special detergent.

Seen any other great stories in your industry or know that we should profile here? [Send an email to us](#) and we will get right back to you.

Advertising to keep biosecurity risk out

MPI has launched three new advertising campaigns aimed at keeping pests and diseases out of our country during the busy summer tourist season. The campaigns focus on the local Indian community, the Chinese market and Trans-Tasman travellers.

Indian community campaign

Running until the end of January 2018 the campaign is aimed at the Indian community to get them to advocate to friends/family before they come to New Zealand so they understand what to 'Declare or Dispose'. Local Indian media, digital and radio (including interviews with Auckland Indian Quarantine staff) will be used alongside a trial of digital advertising in India that will target visitors arriving in the next three months.

Visiting Indians often bring in pickles, tonics, pulses and religious offerings from temples. The key message is to ***leave these things at home, or declare them*** to MPI when you arrive.



Chinese campaign



Running until the end of March 2018 the annual Chinese campaign will encourage potential visitors in mainland China to leave risky items at home. The campaign will use popular travel/booking sites, Chinese search engine Baidu (equivalent of Google) and a data platform that shows adverts to travellers with confirmed travel to New Zealand within the next 30 days.

There are two adverts:

- One encourages positive behaviour
- The other advert showcases risky items and the damage they could do to New Zealand.

The key motivator is an instant \$400 fine.

Trans-Tasman campaign

Trans-Tasman travellers will be reminded again to check their bags for fruit before boarding. There is signage in the international pre-departure areas in Sydney and Brisbane airports, and at gates used for Trans-Tasman flights.

Running now until the mid-February 2018 the advertising focuses on fruit and the fruit fly. It encourages travellers (business travellers and young families) to check bags (mainly carry on) so they do not get held up on arrival.



Canterbury 155th A&P Show and 4.7 million



Thousands of people gathered at the 155 annual Canterbury A&P show — some to show their prize cows, dogs, chickens, duck, sheep or horses or to test out the latest combine harvester or spa pool. For many however it was the opportunity to have a good day out.

The three day show consistently attracts over 100,000 visitors, who come to find out about new ideas, innovations and technologies for rural and urban buyers. With close to 600 trade exhibitors displaying the latest in agricultural products and services all in the one location it is an event that is eagerly awaited.

School children, teachers, parents, farmers, grandparents, businesses and industry people all stopped by the MPI exhibition to take a picture with our Detector Dogs, see if they could beat Dad at the Paua Challenge, or ask the MPI crew manning the stand a variety of questions. This meant the show was an ideal event to test what people knew about Biosecurity and whether the concept of a “Building a biosecurity team of 4. million” was understandable.

There is a good general awareness of the need for everyone to take part in keeping New Zealand a great place to live but people do not necessarily call it “Biosecurity”. Most of the visitors knew the rules about what to do and not do.

Strategic Direction 1 is currently undertaking baseline research to guide the focus on building a movement 4.7 million biosecurity risk managers across the system.

The Banks Peninsula Conservation Trust

The Banks Peninsula Conservation Trust – Biosecurity in action Community Award 2017 winner was showcased as good biosecurity action at the show. It is the:

- longest running (30 years) landowner driven project in New Zealand;
- is landowner-led working with government agencies and the Wildside community to control stoats, ferrets and wild cats;
- is focused on protecting: white-flipped little blue penguins, yellow-eyed penguins and the Titi or Sooty Shearwater.

The new Biosecurity Minister, Damien O’Connor, met Marie Hayley from the Banks Peninsula Conservation Trust to congratulate the Trust on its win.

Celebrating a pest free port

Hundreds of people took part in activities organised for the 2017 Port of Tauranga Biosecurity Week. Port staff and locals got up close and personal with bugs at events hosted by “The Bug Man” Ruud Kleinpaste. Biosecurity experts showed people how the port has worked with the community and local businesses to develop a pest-free environment.

Port of Tauranga Chief Executive, Mark Cairns, says that there are many passionate people who work on and around the port who know biosecurity is a critical issue, affecting everyone in some way.

“Everyday 10,000 people operate on the frontline of the wider ‘port community’ so we have lots of eyes constantly looking for unwanted pests,” says Cairns. “The port dealt with over 22 million tonnes of cargo last year and 80 plus cruise ships will arrive this season so we all need to be ready, vigilant and watchful.”

“Biosecurity matters at ports and the people we engaged with during the week are the best placed to notice and report anything unusual.”



“Our key message is, if something happens there will be a cost to you, your job or your business, and you need to know what you can do to stop it.”

The port and Kiwifruit Vine Health (KVH) are partners in making sure biosecurity preparedness is a coordinated effort. “By working together, we can protect the kiwifruit industry - and other horticultural industries - from unwanted biosecurity risks. The port community knows they make a difference by being vigilant and aware,” says KVH Chief Executive Barry O’Neil.

“We all remember how Psa devastated not only the kiwifruit industry but the community and supply chain, so knowing what to look for and reporting anything unusual will help protect businesses and the future of the kiwifruit, avocado and forestry sectors.”

As part of the week biosecurity staff from the Ministry for Primary Industries (MPI) visited transitional facilities across the Bay of Plenty to share information about managing risk and to learn about what biosecurity systems organisations have in place.

“**... tour bus drivers were briefed on what to look out for...**”

The first cruise ships for the season coincided with Biosecurity Week so KVH took the opportunity of briefing tour bus drivers so they knew what to look for, how to make reports, and to share this with the international cruise ship passengers. It proved very successful and will become part of future Biosecurity Weeks.

Visits were also organised for the Bug Man with a local polytechnic, primary school and post-harvest facility, where he talked about the importance of keeping our local communities, industries, and environment free of unwanted threats. This interactive format will be used and expanded during 2018 across the Bay of Plenty region.



Myrtle rust appears in west Auckland

In November myrtle rust was found for the first time in the Auckland region with a serious infection of several hundred *Lophomyrtus* (ramarama) plants at a commercial plant production property in the Waimauku area of west Auckland.

Myrtle rust response controller Dr Catherine Duthie says the facility owner reported suspected myrtle rust to Ministry for Primary Industries (MPI) and movement controls were immediately placed on the property to stop any myrtle plant material being moved off site. A response team is in place removing infected plants which are grown for ornamental foliage.

"Visibly infected plants will be safely destroyed as quickly as possible and we will begin to check neighbouring properties to identify any other potential infections," said Duthie.

The response team is working closely with the owner to manage the infection. This is a significant new find given the new location and the extent of the infection, but it was also expected to happen. The fungus is dormant over winter and begins to release spores as the temperature rise.

MPI is now considering the implications of the new find, will review its tactics and prepare for a longer term approach to managing it in partnership with others, including local authorities, iwi, plant production industry and interested individuals.



"We will be keep everyone up to date about any decisions on how we are fighting this disease," Dr Duthie says.



More information can be found on [MPI's website](#).



We want your feedback

The newsletter has now published four issues and it is about time we got feedback from our readers. We would like to know if the stories are hitting the mark and if there are other ideas, stories you would like us to feature. [Send an email to us with your ideas.](#)

Upcoming events

[3rd B3 Conference 2018](#)

Tentative dates 7-8 May 2018, Te Papa, Wellington



Pass it on

Feel free to forward this newsletter through your networks, or anyone you think would find it useful. They can also [subscribe to it through our website.](#)

We'd love to hear from you

If you've got any stories or updates you'd like to share in our next issue, please [email us](#). Although the newsletter is published by MPI, it's a collaborative effort.

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