



Biosecurity New Zealand

Ministry for Primary Industries

Manatū Ahu Matua

Collated Presentations from MPI/FOA Joint Forum

4 June 2020

JOINT BIOSECURITY FORUM

DATE:	4 June 2020
VENUE:	Zoom, Meeting ID: 502 658 344, Password: 009540 https://zoom.us/j/502658344?pwd=Ym9Lb3NCT0xHbGk1cWdROW1VNUxEz09
TIME:	2:00pm – 4:30pm.

Speaker sessions are scheduled 10-15min plus time for initial questions.

TIME:	AGENDA ITEM:	SPEAKERS:
INTRODUCTION:		
2:00pm	1. Welcome by Chair - Session overview	Angela Brownie <i>Acting Director Readiness & Response Services</i>
PRE-BORDER/BORDER:		
2:05pm	2. Timber Import Health Standard Review	Gillian Stone <i>Plant Product Imports</i>
2:25pm	3. Update on Methyl Bromide	Ken Glassey <i>Treatments & Inanimate Pathways</i> Emmanuel Yamoah <i>Plant Exports</i>
2:45pm	4. Pathway Research and Emerging Risks	Michael Ormsby <i>Science and Risk Assessment</i>
POST-BORDER:		
3:05pm	5. Update from Incursion Investigation on E-commerce	Laura Goudie <i>Biosecurity Surveillance & Incursion Investigation (Plant Health)</i>

3:25pm	6. Readiness Group update	<i>Angela Brownie</i> <i>Acting Director Readiness & Response Services</i>
3:45pm	7. Response Group update	<i>John Brightwell & Priscila Freitas</i> <i>Biosecurity Response</i>
WRAP-UP:		
4:05pm	8. Additional time for questions <i>To be submitted through the chat function.</i>	<i>All</i>
4:25pm	9. Meeting close by Chair	<i>Angela Brownie</i> <i>Acting Director Readiness & Response Services</i>

CLOSE OF MEETING SCHEDULED FOR 4:30PM

How to join a Zoom meeting from your web browser

Please see the below link for instructions on how to join the meeting from your web browser (for those who do not have the Zoom application installed on their device). You do not need to have a Zoom account to join.

<https://support.zoom.us/hc/en-us/articles/201362593-Launching-Zoom-from-a-web-browser>

Joint Biosecurity Forum

The MPI/FOA joint biosecurity forum is an interactive session that aims to promote discussion and debate on issues across the biosecurity system. It is an opportunity for both organisations to share what they been working on in the past 12 months, and to plan future collaborations.

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Joint Biosecurity Forum

4th June 2020, Rotorua



Gillian Stone, Adviser Plants and Pathways

Forest Products Review

MPI is reviewing the biosecurity requirements for seven forest product import health standards.

Combine seven standards into one standard.

Review why treatment requirements are limited to only certain products.



Seven into One

- **Bamboo, cane, rattan and willow from all countries**
- **Bark from all countries**
- **Poles, piles, rounds and sleepers from all countries**
- **Sawdust, shavings, wood chips and wool from all countries**
- **Sawn wood from all countries**
- **Wooden panels from all countries**
- **Woodware from all countries**

Shared Requirements

Requirement	Bamboo	Bark	Poles	Sawdust	Sawn Wood	Wooden Panels	Wood ware
Freedom from live pests	✓	✓	✓	✓	✓	✓	✓
Packed / shipped to prevent contamination	✓	✓	✓	✓	✓	✓	✓
Treatment pre-export or on arrival	✓	✓	✓	✓	✓	✓	✓
Verification of treatment options undertaken	✓	✓	✓	✓	✓	✓	✓
Treatment certificate OR	✓	✓	✓	✓	✓	✓	✓
Phytosanitary certificate with treatment details	✓	✓	✓	✓	✓	✓	✓
Filletted	✓		✓			✓	✓

Shared Treatments

Requirement	Bamboo	Bark	Poles	Sawdust	Sawn Wood	Wooden Panels	Wood ware
Fumigation	✓	✓	✓	✓	✓	✓	✓
Heat	✓	✓	✓	✓	✓	✓	✓
Vacuum fumigation						✓	✓
Chemical preservation	✓		✓	✓	✓	✓	

- Vacuum fumigation treatment is limited to wooden panels and woodware
- Chemical preservation treatment is offered to all products but not bark or woodware

Questions ?

Gillian.stone@mpi.govt.nz



Biosecurity New Zealand

Tiakitanga Pūtaiao Aotearoa

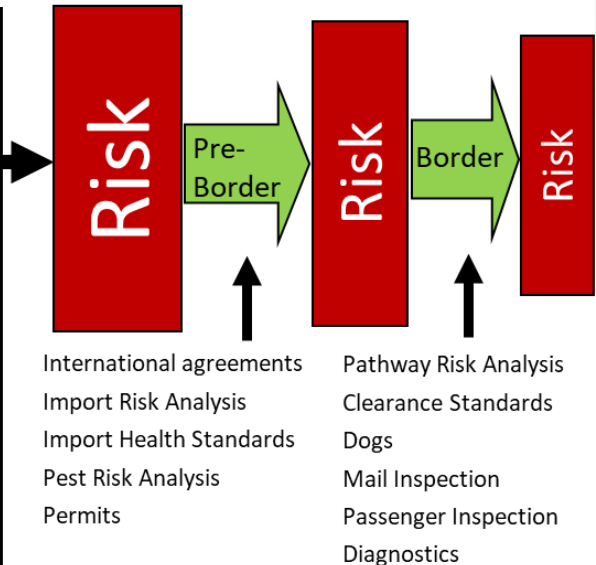
Incursion Investigation update on E-commerce

Laura Goudie – Plant Health Incursion Investigator

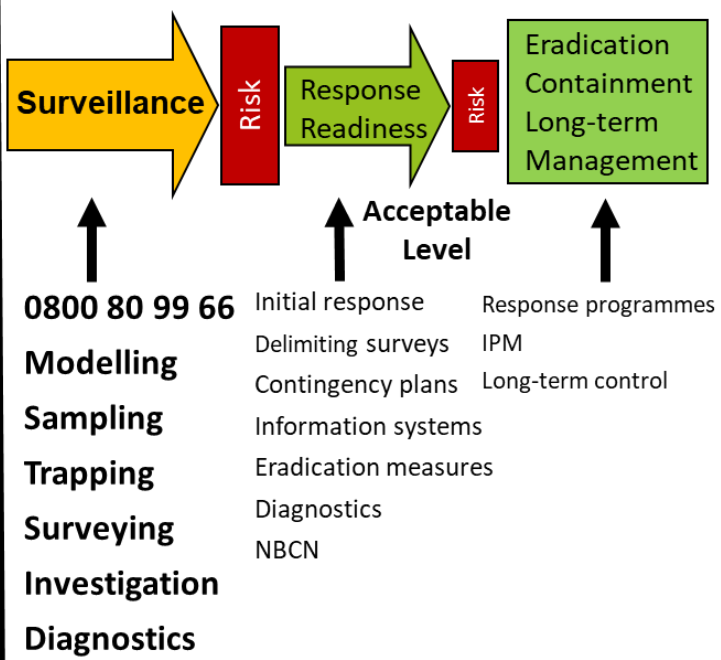
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Passengers
Air
Sea
Imports
Vessels
Ecommerce

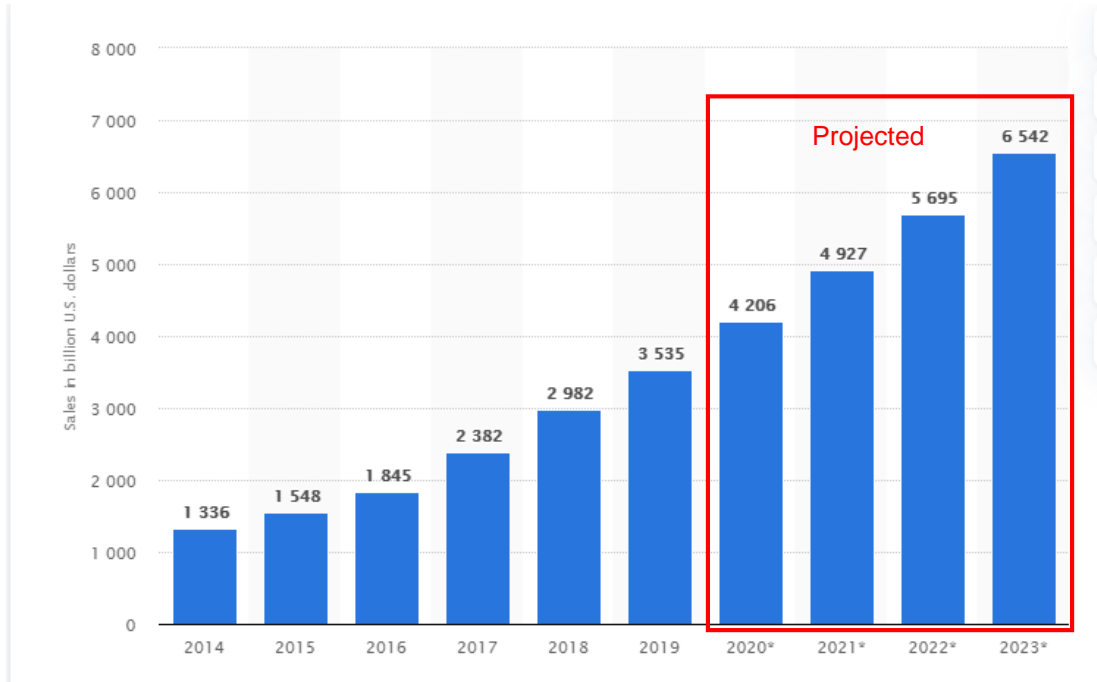


POST BORDER



Diagnostic and Surveillance
Directorate

E-commerce on the rise: the global picture



Source: Clement, J. 2019. Retail e-commerce sales worldwide from 2014 to 2023



E-commerce on the rise: 2018 - the NZ picture

- 1.8 million kiwis shopped online
- 8.9% of retail spend
- Growth in online spend 16% > offline spend only 2%
- Growth largely driven by increased shopping frequency and basket size



Source: The Full Download: 2019 New Zealand eCommerce Review



E-commerce on the rise: the NZ picture



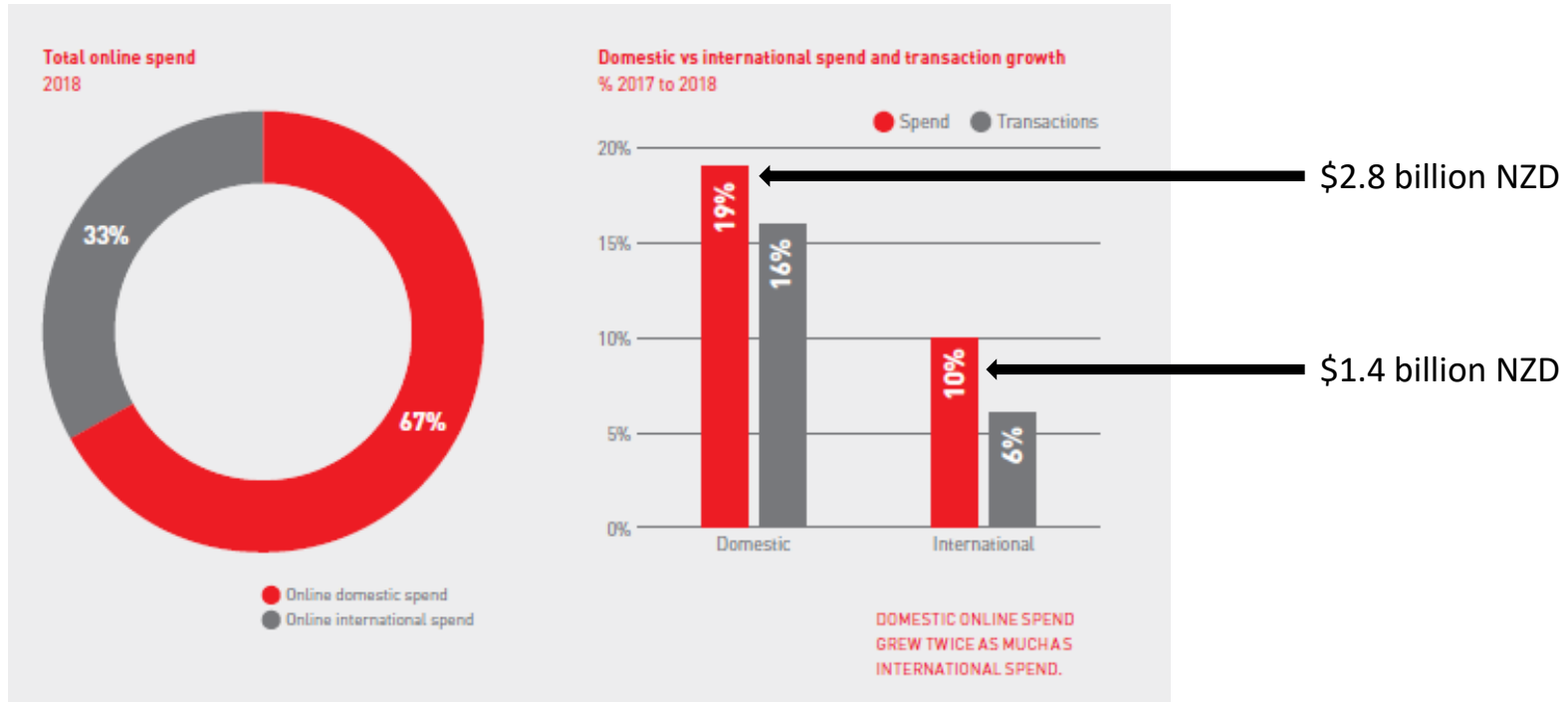
Comparison of key online shopping metrics 2017 vs 2018

● 2017 ● 2018

Source: The Full Download: 2019 New Zealand eCommerce Review



E-commerce on the rise: the NZ picture



Source: The Full Download: 2019 New Zealand eCommerce Review

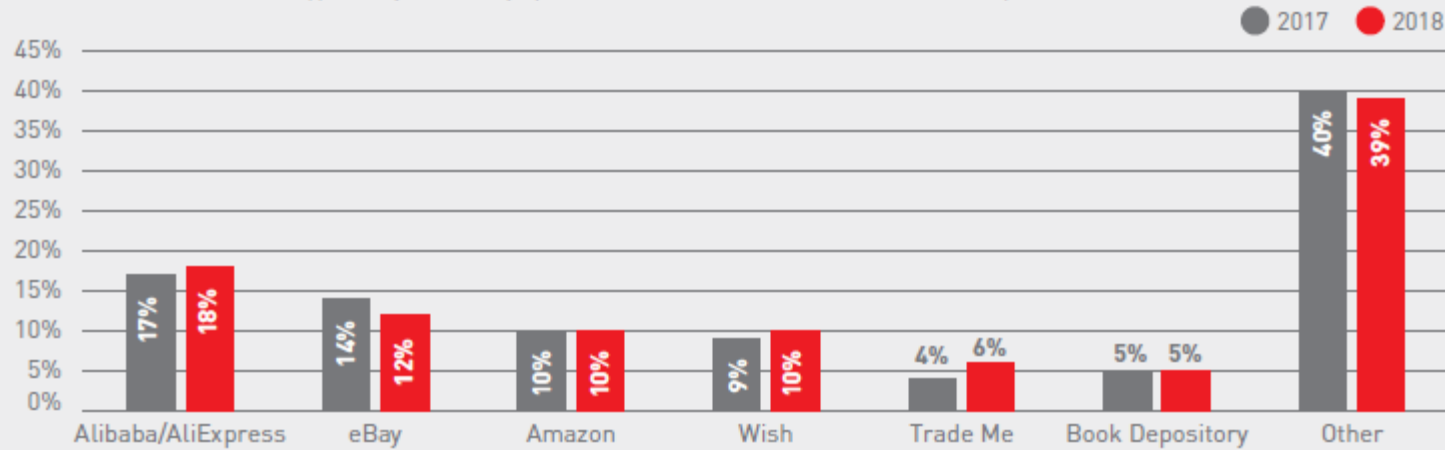


E-commerce on the rise: the NZ picture

Websites New Zealanders bought from

2017 vs 2018

Source: Cross-border eCommerce Shopper Survey 2018, Country report – New Zealand (December 2018), International Post Corporation



E-commerce on the rise: marketplaces

- 7% growth in domestic and international basket size
- Global marketplace revenues are expected to double by 2022

The Amazon logo, featuring the word "amazon" in a bold, black, lowercase sans-serif font with a curved orange arrow underneath it pointing from the letter 'a' to the letter 'z'.The eBay logo, consisting of the word "ebay" in a lowercase sans-serif font where each letter is a different color: 'e' is red, 'b' is blue, 'a' is yellow, and 'y' is green.The trademe logo, featuring the word "trademe" in a lowercase sans-serif font with "tra" in blue and "deme" in yellow, followed by a blue cartoon bee icon.The Alibaba.com logo, featuring a stylized white "A" icon on an orange square background with the text "Alibaba.com" in white below it.The Wish logo, featuring the word "wish" in a white, lowercase, rounded sans-serif font on a blue rectangular background.

Source: The Full Download: 2019 New Zealand eCommerce Review



E-commerce on the rise: a pathway risk



Misdeclared risk goods



Disregard for MPI's Import Health Standards



Hitchhiker pests

E-commerce on the rise: a pathway risk

The screenshot displays the Wish e-commerce interface. At the top left, there are tabs for 'Overview' and 'Related'. The main product listing is for '2018-Fruit Seeds Rainbow Tomato Colorful Rare Vegetables Seed Good Quality Plant Seeds Colorful Tomatoes', priced at \$11. Below the product title, there are star ratings and a 'Buy' button. To the right, a 'Related Products' section features several items with discount tags and 'Almost Gone!' labels. The products include: 1) '90%' off on a vegetable seed pack for \$3 (5,000+ bought); 2) '91%' off on purple eggplants for \$3 (1,000+ bought); 3) '91%' off on a strawberry for \$3 (20,000+ bought); 4) '82%' off on '4 Kinds Fruit Seeds' for \$3 (20,000+ bought); 5) '82%' off on a grapevine for \$3 (1,000+ bought); 6) '90%' off on purple grapes for \$3 (10,000+ bought); 7) '82%' off on a banana plant for \$3 (1,000+ bought); and 8) '82%' off on a tomato plant for \$3 (20,000+ bought). A large image of a white egret is overlaid on the bottom left of the product listings.

Wish

Overview Related

2018-Fruit Seeds Rainbow Tomato
Colorful Rare Vegetables Seed Good
Quality Plant Seeds Colorful Tomatoes
20PCS 60PCS 120PCS 200PCS
★★★★☆ (123 reviews)
\$11
GST included
Size: rainbow (200 PCS)
Buy

Related Products

- 90%**
\$3 ~~\$40~~
5,000+ bought this
- 91%**
\$3 ~~\$44~~
1,000+ bought this
- 91%**
\$3 ~~\$44~~
20,000+ bought this **Almost Gone!**
- 82%**
\$3 ~~\$17~~
20,000+ bought this **4 Kinds Fruit Seeds**
- 82%**
\$3 ~~\$17~~
1,000+ bought this
- 90%**
\$3 ~~\$40~~
10,000+ bought this **Almost Gone!**
- 82%**
\$3 ~~\$17~~
1,000+ bought this
- 82%**
\$3
20,000+ bought this



Illegal moss balls brought into NZ by artist 'have potential to ruin' lakes and rivers - judge

19:59, Mar 26 2018



Miranda said she bought the moss balls through the Chinese online retail site AliExpress and sold them on Trade Me and through stalls at the Sumner Summer Market and Riccarton Market.

Miranda said she had studied horticulture at university and had been in New Zealand nine years where she worked as a botanic artist.

"I didn't know they were prohibited. Because other things I bought [online from overseas] came through, I didn't really think about it," she said in her recorded DVD interview, which was played in court.

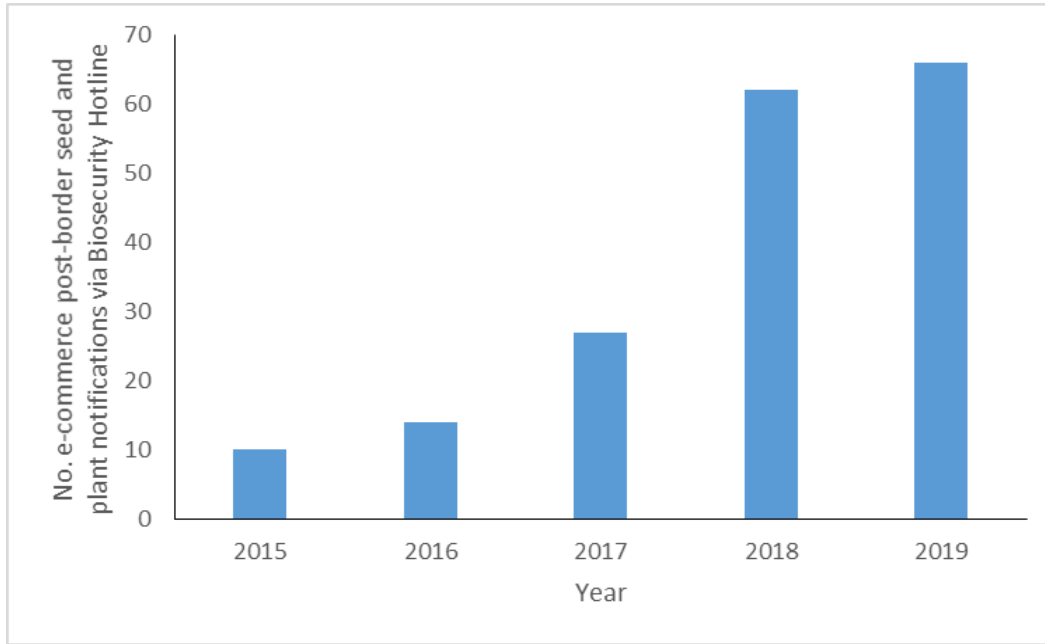
She said she did not make any checks on whether the moss balls were legal to bring in.



123RF.COM



E-commerce on the rise: a pathway risk



Source: Data extracted from MPI's Surveillance Information Management System



E-commerce on the rise: a pathway risk

Vast majority of nursery stock intercepted at International Mail Centre is non-compliant, seized and destroyed

Qmail Nursery Stock lines	01/7/19 -03/08/19							
Week	1	2	3	4	5	6	7	
Budwood/cuttings (stems only)		2		1	1			4
Dormant bulbs/corms/tubers/rhizomes	1	1		1	1	1		5
Other nursery stock	1	1	1		3			6
Plants (including rooted cuttings in leaf)	6	8	4	3	7	3	2	33
Grand Total	8	12	5	5	12	4	2	48



Growing interest

Worldwide Google searches for selected house plants, 100=peak

String of pearls



Devil's ivy



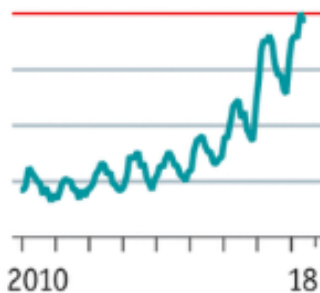
Succulent



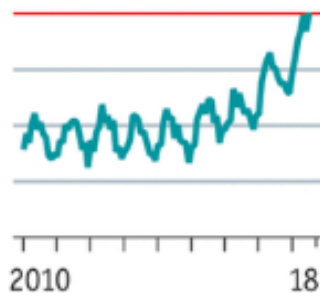
Swiss Cheese



Aloe Vera



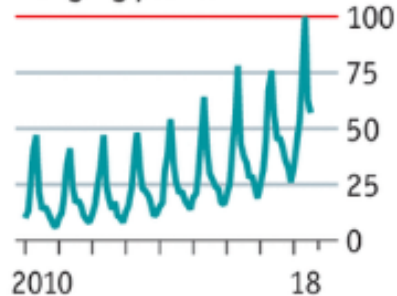
Jade



Cactus



Hanging plants



Sources: Google Trends; *The Economist*





ALD

Carlee November, 19, admits she's "obsessed" with her houseplant collection.



ALDEN WILLIAMS/STUFF

As her collection has grown, she's increasingly looking for rarer and more unusual treasures.

November mainly sources plants online from Trade Me and Facebook's Marketplace, or from another member in any one of the myriad social media plant groups to which she belongs. She's part of a few Christchurch groups, as well as nationwide ones, and also in specialist hoyo, cacti and **carnivorous plants** online societies.



MONEY ●

Interest in monstera plants reaches new heights online

25/02/2020 Priscilla Dickinson



Following the sale of this one-meter-tall variegated monstera for \$4930 in January, searches for monstera have surged. Photo credit: TradeMe.

THE SPINOFF

Monstera madness and fiddle-leaf frenzy: why we go crazy for indoor plants



Jihee Junn | Staff Writer

“The prices these kinds of listings will go for is crazy, it’s like the Auckland housing market!” says Goh, who experiences the demand first-hand when he sells spare cuttings online via his Mr Homebody account on Instagram. “At the moment I think New Zealanders are so crazy about it and they’re willing to pay quite a lot of money, especially for rare varieties.”

“At the moment, plants are playing a huge part in interior design. People want them pre-grown [which is why] plant prices keep going up. But it doesn’t happen straight away, and not everyone grows it nice.

Blue strawberries seeds auction pulled by Trade Me, leaving grower forlorn

AUG 2, 2018 • SOURCE: 1 NEWS



A viewer of TVNZ's Seven Sharp is upset Trade Me has suspended his auction of seeds for blue strawberries.



E-commerce on the rise: what is being done?

- Plant Health Team investigate seed and plant imports to determine biosecurity issue
- Deliberate and serious breaches referred for prosecution consideration
- TradeMe contacted to remove and trace illegal listings
- Ongoing work with Alibaba/AliExpress
- MPI Import Health Standards reviewed
- International collaboration with NZ representation - QUADS e-commerce group, IPPC e-commerce network



E-commerce on the rise: what is being done?

- General Surveillance Engagement Project underway to improve public awareness of biosecurity regulations
- Other communications:
 - contact with www.flowerseeds.co.nz
 - magazine article in development for raising awareness



Biosecurity New Zealand

Tiakitanga Pūtaiao Aotearoa

Thank you!

Any questions?

Ministry for Primary Industries
Manatu Ahu Matua



To report a suspected exotic pest
or disease call

0800 80 99 66

Ministry for Primary Industries
Manatū Ahu Matua



Biosecurity New Zealand

Tiakitanga Pūtaiao Aotearoa

Methyl bromide situation update

Emmanuel Yamoah

Ken Glassey

Ministry for Primary Industries
Manatū Ahu Matua



NZ methyl bromide use

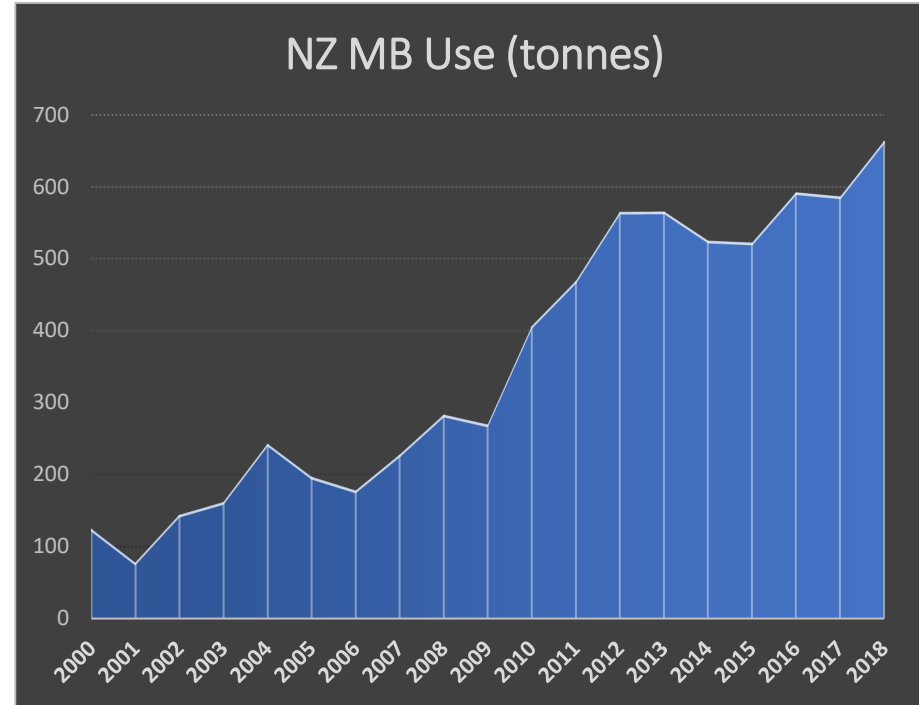
Increase in New Zealand's MB use is due to increased log exports.

Fumigation of forest products for export accounts for 94% of MB use.

Fumigation of other export goods & imported goods to manage biosecurity risks account for 6%.

NZ is the worlds 6th biggest user

Source: UNEP Ozone Secretariat 2018 data.



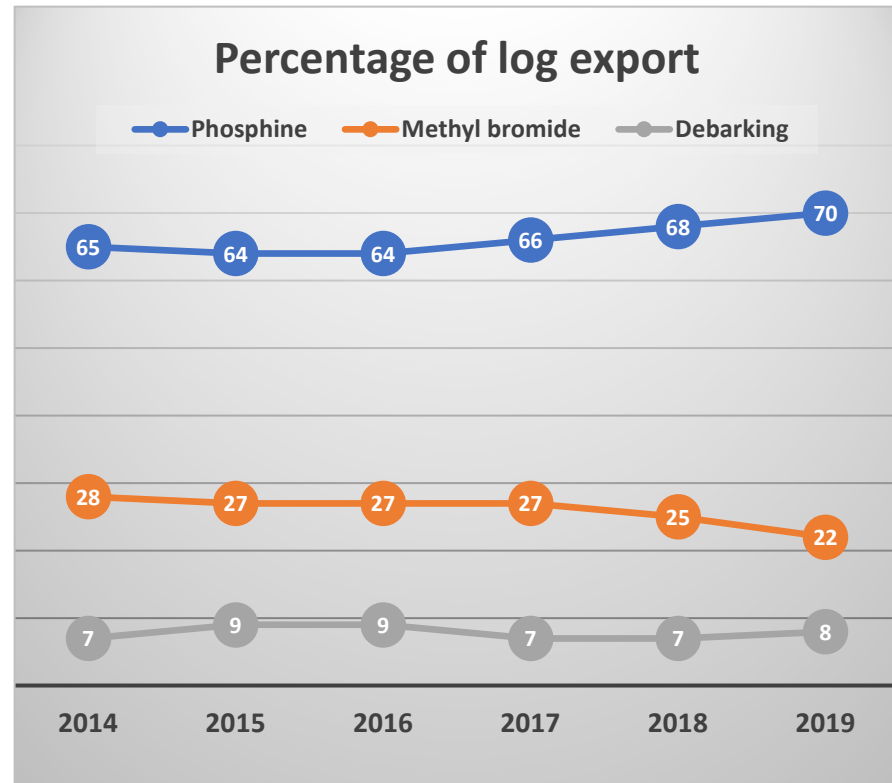
NZ Methyl bromide use

The percentage of logs fumigated with MB has decreased from 28 to 22%.

Due to increase in phosphine use.

Have fumigated some ship holds with 50% less MB using new monitoring

2018 - \$905 million of export products and \$1,650 million imports treated with MB. * Added after presenting



EPA Regulation on MB

- From 28 October 2020, all MB fumigations must use recapture technology.
- Export of logs to markets like China & India would be affected without an efficient recapture process or a substitute treatment available that is accepted by trading partners.



Work progress: EDN and reduced MB

- Research into an effective alternative, ethanedinitrile (EDN) and reduced MB rates has been completed by STIMBR.
- Results show that EDN is effective against common pests associated with NZ logs, and the current MB application rates can be reduced.
- MPI has submitted the research results to China & India for assessment & negotiation.



Work progress:

- A New Zealand delegation visited China for discussion on EDN and reduced rates of MB in Dec 2019.
- Meeting with India has been delayed by Covid-19.
- An application to register EDN for use on logs is being progressed with the EPA since 2017. Does not cover ship hold or container fumigation.
- A draft Safe Work Instrument for the use of EDN was released for public consultation early this year. Recapture is not required.



Work progress

- MPI is investigating and supporting work into alternative fumigants to control pests associated with import goods such as BMSB and to respond to biosecurity incursions.
- MPI has initiated research into verifying available MB recapture technology on various commodities (logs, timber, fresh produce, equipment, etc.), results late 2020.
- The EPA MB recapture target cannot be achieved for logs.



Reassessment of MB controls

- EPA is reassessing the controls around the use of MB, including the recapture requirement following STIMBR application.
- A hearing will begin on 27 July 2020
- Only 4 more months to the Oct 2020 deadline
- Fumigators need at least 3 months to prepare
- STIMBER has submitted an application for a waiver of the time frame for recapture by 6 months in order for a decision on the reassessment to be reached



MB availability post 2020: scenarios

EDN NOT APPROVED (either TP or EPA)

1. *Worst case:* Stop MB use; no effective recapture technology.
2. *BAU:* Continue to use MB with effective recapture technology.

EDN APPROVED (both TP & EPA)

3. Replace MB fumigation of undercover logs with EDN; no effective MB recapture technology for many other uses.
4. *Best case:* Continue to use MB with effective recapture; plus EDN on logs.



Scenario 1: No MB, No EDN

- Our ability to manage pests detected at the border in imported goods and to respond to biosecurity incursions could be significantly affected.
- Log trade to China & India and horticultural exports, will be significantly affected. MPI has estimated the value of this trade (fumigated with MB) at NZ\$905 million, \$1,650 million imports* treated with MB in 2018. * Added after presenting

Scenario 2: MB only

- MB use continues with added costs of recapture with current equipment with revised EPA requirements.



Scenario 3: EDN only

- Our ability to treat imports, some exports and to respond to biosecurity incursions could be significantly affected.
- Log trade to China continues, except for containerised cargo.
- Log trade to India continues, except for containerised & ship hold cargo.



Scenario 4: MB & EDN

- Our ability to treat imports, exports and to respond to biosecurity incursions continues with some added costs.
- Log trade to China and India continues
- NZ use of MB is reduced significantly.



Biosecurity New Zealand

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Forestry Industry Update

Science and Risk Assessment Update
on Emerging Risks, Research, and Risk
Assessment Work Program

Dr Mike Ormsby

Ministry for Primary Industries
Manatū Ahu Matua

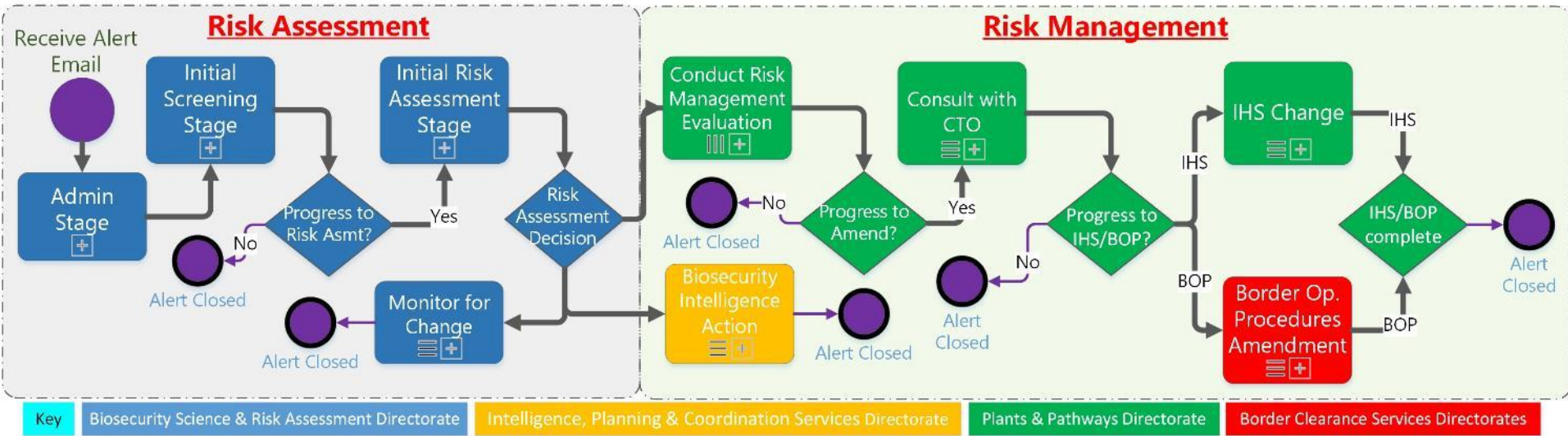


Biosecurity Emerging Risks System Overview

MPI's Biosecurity Emerging Risks System (ERS) is designed to proactively identify potential and emerging biosecurity risks to New Zealand, and to track their assessment and management through MPI's biosecurity system. The ERS focusses on plant and animal hazards and other invasive species in the terrestrial and aquatic environments. The current priorities of the ERS are newly described species of pest or pathogen, newly reported host or commodity associations and significant changes in the distribution of species of potential biosecurity concern to New Zealand. Alerts are progressed into the ERS for assessment if they contain new information about such biosecurity risks. Outcomes of these assessments include sharing information for increased vigilance, changes to import health standards or border operational procedures.



Biosecurity Emerging Risks System Overview



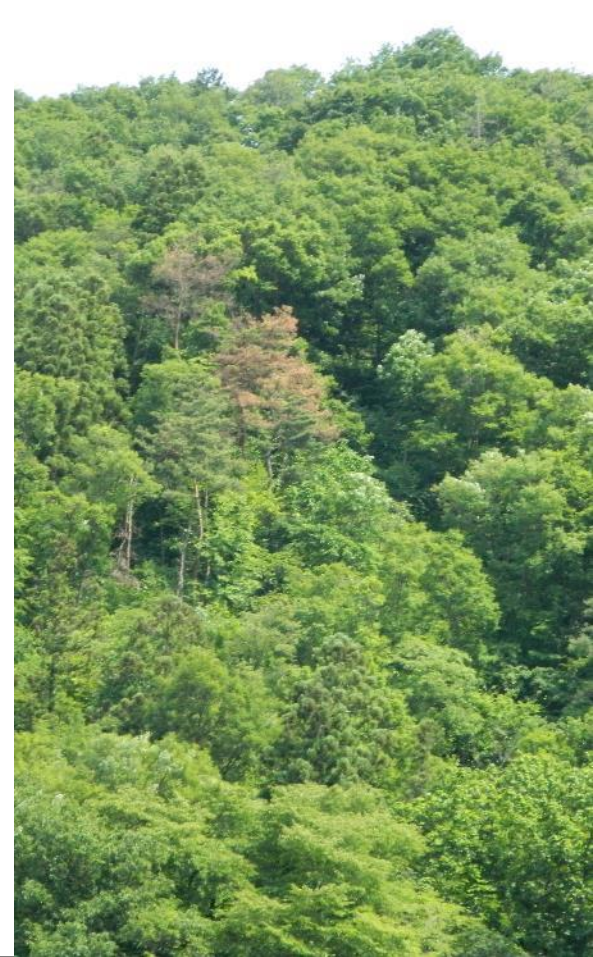
Biosecurity Emerging Risks System Overview

Since the inception of the ERS on 31st August 2012, the system has received a total of:

16,565 alerts, of which;

2,083 required risk assessing (~13%) and;

212 did or will result in changes to import health standards (~1.3%).



Emerging Risks 2018-20: Pathogens on *Pinus* spp.

Phacidium lacerum - newly reported fungal pathogen in USA

Lecanosticta acicola (brown needle spot) –
Review for pathway risk

Dothistroma pini (Dothistroma needle blight) -
First report in Germany, Georgia and the Ukraine.



Lecanosticta acicola (SCI RAC) - <https://dgd.epo.it>



Emerging Risks 2018-20: Arthropods on *Pinus* spp.

Dendroctonus valens (red turpentine beetle) -
added to EPPO alert list

Toumeyella parvicornis (pine tortoise scale) -
Newly invasive in Europe (Southern Italy)

Cyrtogenius luteus - First report of the bark
beetle in Brazil



Emerging Risks 2018-20: Pathogens on Eucalyptus

Celoporthe cerciana - newly reported fungal pathogen in China

Apharknessia eucalyptorum - First report of fungal pathogen in Brazil

Lasiodiplodia brasiliensis - First report of fungal pathogen in China and Malaysia

Teratosphaeria gauchensis & *T. zuluensis* –
Pathogen profile on Eucalyptus



Emerging Risks 2018-20: Pathogens on Eucalyptus cont.

Neopestalotiopsis protearum - First report of fungal pathogen causing dieback, leaf and stem lesions on *Eucalyptus* sp. seedlings from Brazil

Calonectria metrosideri - First report of fungal pathogen causing leaf blight and crown defoliation on *Eucalyptus* sp. in Brazil

Myrtoporthe bodenii - New fungus species described from Malaysia

Xanthomonas perforans - First report of bacteria causing leaf blight on *Eucalyptus* in Indonesia



Emerging Risks 2018-20: Arthropods on Cypress or Douglas fir

Cyphostethus tristriatus (juniper shield bug) -
First report in Canada (on many species).



Biosecurity Emerging Risks

EmergingRisks@mpi.govt.nz



Organism Ranking System

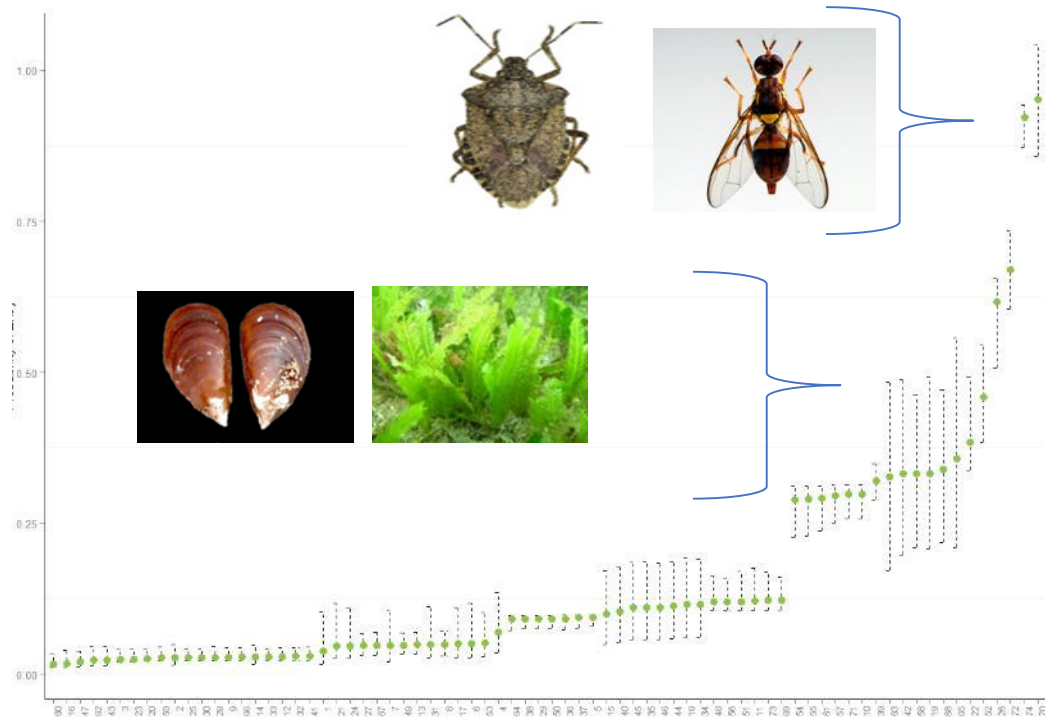


Biosecurity New Zealand's:

1. Lists of priority exotic pests and diseases of highest biosecurity threat in New Zealand to:
 - plant health;
 - aquatic health
2. An initial set of risk management actions for Biosecurity New Zealand

Organism Ranking System

Using a systematic, evidence based approach to comparing the **relative likelihood** of pests and diseases to enter and cause significant impact to New Zealand.

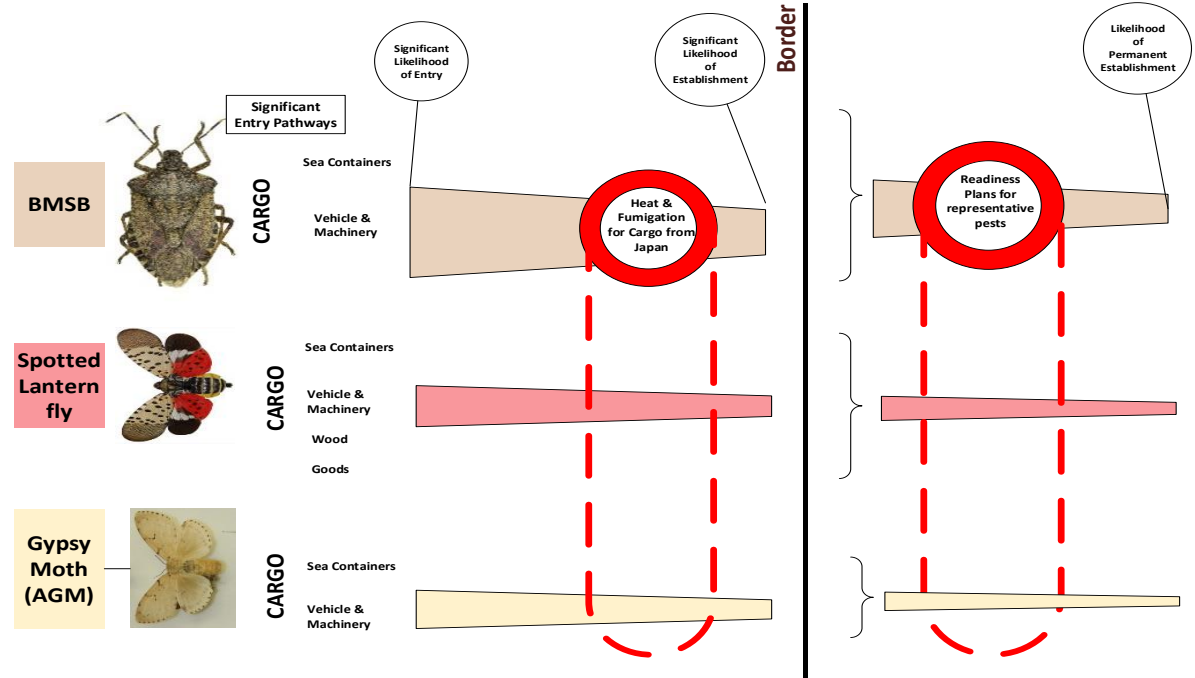


Organism Ranking System

Risk Return Analysis Approach:

- Maximising risk reduction across pathways, pests, sectors
- Developing generic capability

Risk Management Interventions – Example Brown Marmorated Stink Bug (BMSB)
Also enhance the management of other pests eg Spotted lanternfly and Asian Gypsy Moth, AGM



Organism Ranking System

<https://www.biosecurity.govt.nz/protection-and-response/finding-and-reporting-pests-and-diseases/priority-pests-plant-aquatic/tree-forestry-pests/>

The screenshot shows the Biosecurity New Zealand website. The header includes the logo, navigation links (MPI Home, Login, Contact), and a search bar. The main content area features a banner for 'Protection & response' with a background image of a forklift in a warehouse. Below the banner is a breadcrumb trail: Home / Protection & response / Finding & reporting pests & diseases / Priority pests and diseases of biosecurity concern to plant and aquatic health / Tree pests and diseases. The page title is 'Tree pests and diseases'. The main text describes the priority pests and diseases that threaten New Zealand's trees. A list of pests and diseases is provided, including Asian longhorn beetle, Gypsy moth, Pine processionary moth, Ceratocystis wilt, Mountain pine bark beetle, Pine shoot beetle, Daño foliar del pino, Nun moth, Pinewood nematode carried by the sawyer beetle, Dothistroma needle blight, Painted apple moth, Sudden oak death, European pine shoot moth, Pine pitch canker, and Western gall rust.

Biosecurity New Zealand
Tiakitanga Pūtaiao Aotearoa

MPI Home Login Contact Keyword search

Protection & response

Home / Protection & response / Finding & reporting pests & diseases / Priority pests and diseases of biosecurity concern to plant and aquatic health / Tree pests and diseases

Tree pests and diseases

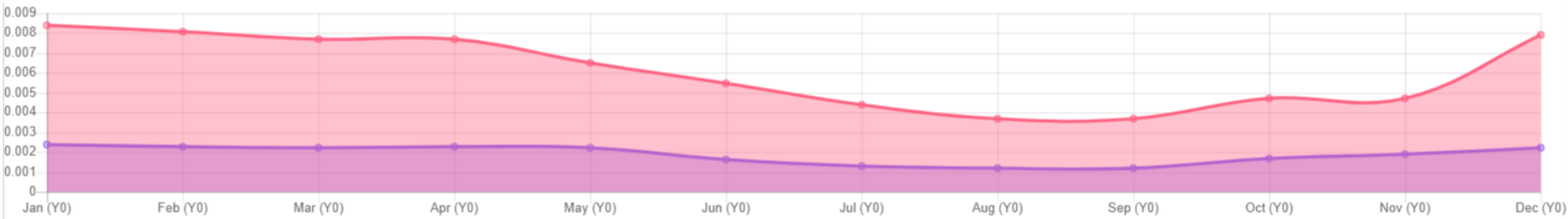
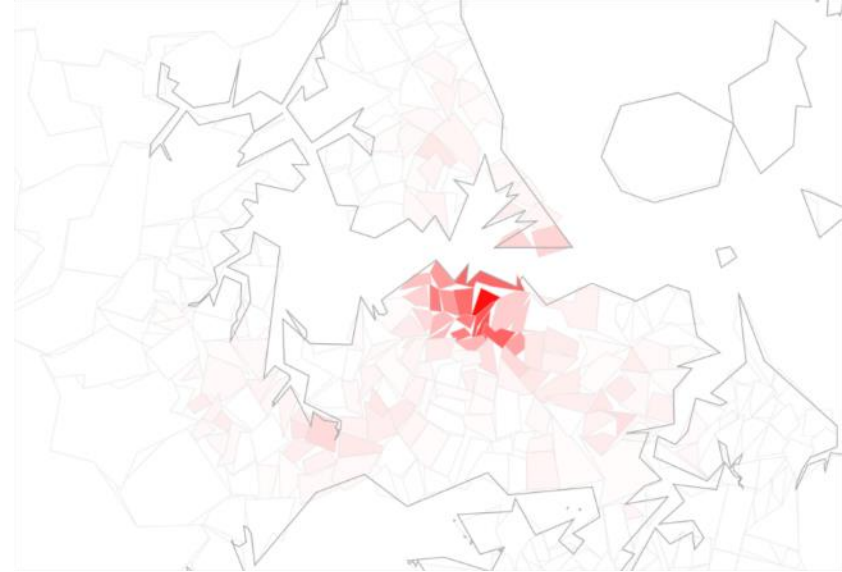
Find out about some of the pests and diseases that threaten our trees – native, urban, and forest. These pests and diseases are a priority for Biosecurity New Zealand. They're not in New Zealand and we want to keep it that way.

- Asian longhorn beetle
- Ceratocystis wilt
- Daño foliar del pino
- Dothistroma needle blight
- European pine shoot moth
- Gypsy moth
- Mountain pine bark beetle
- Nun moth
- Painted apple moth
- Pine pitch canker
- Pine processionary moth
- Pine shoot beetle
- Pinewood nematode carried by the sawyer beetle
- Sudden oak death
- Western gall rust



Research Projects: Pest risk model - AGM

IBRAM: A quantitative risk assessment and risk mapping system to identify risk pathways, periods and areas for pests of concern to New Zealand.



Biosecurity New Zealand

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Ministry for Primary Industries
Manatū Ahu Matua



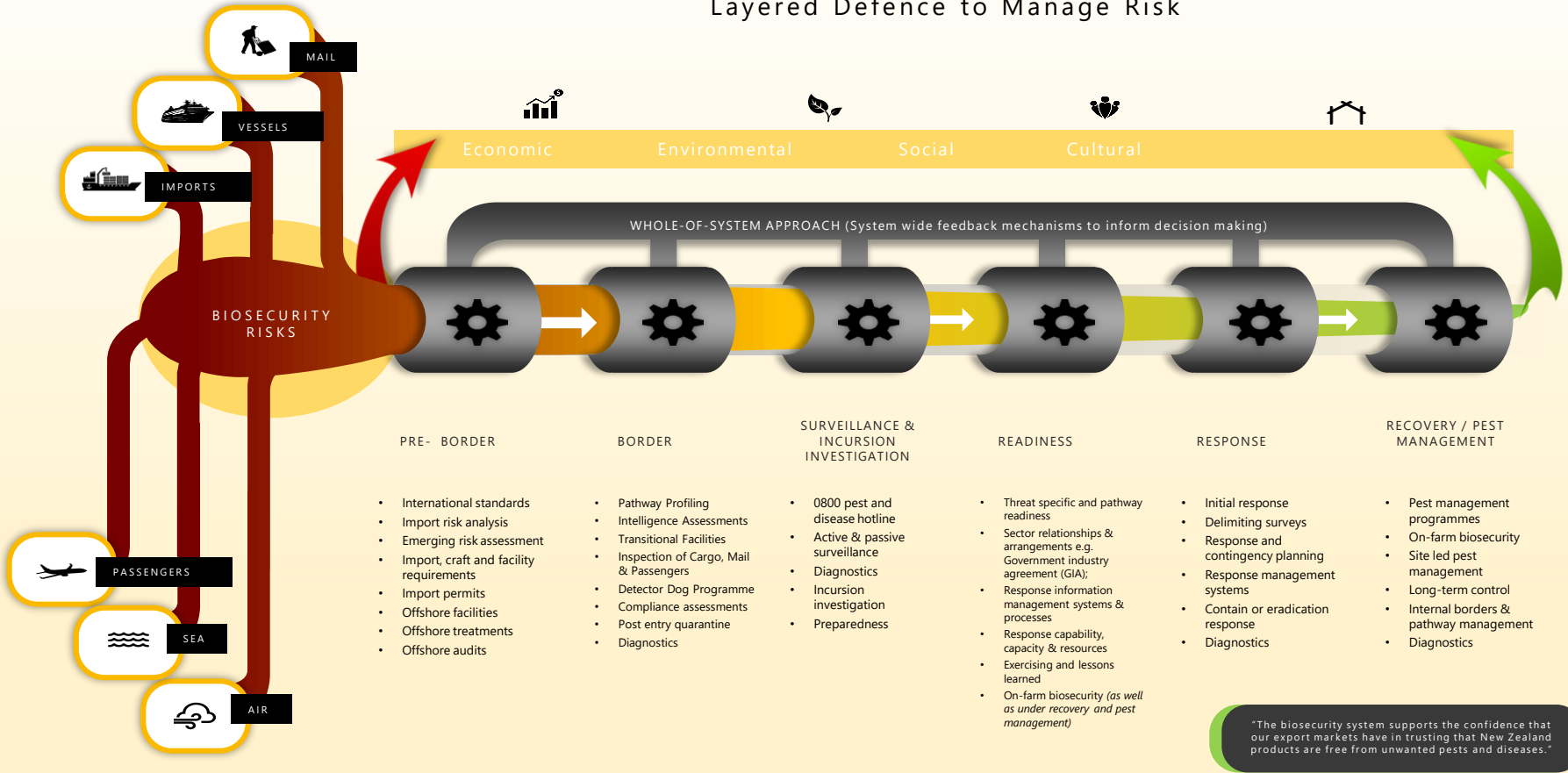
The Biosecurity Response System

Priscila Freitas & John Brightwell
Team Response Manager



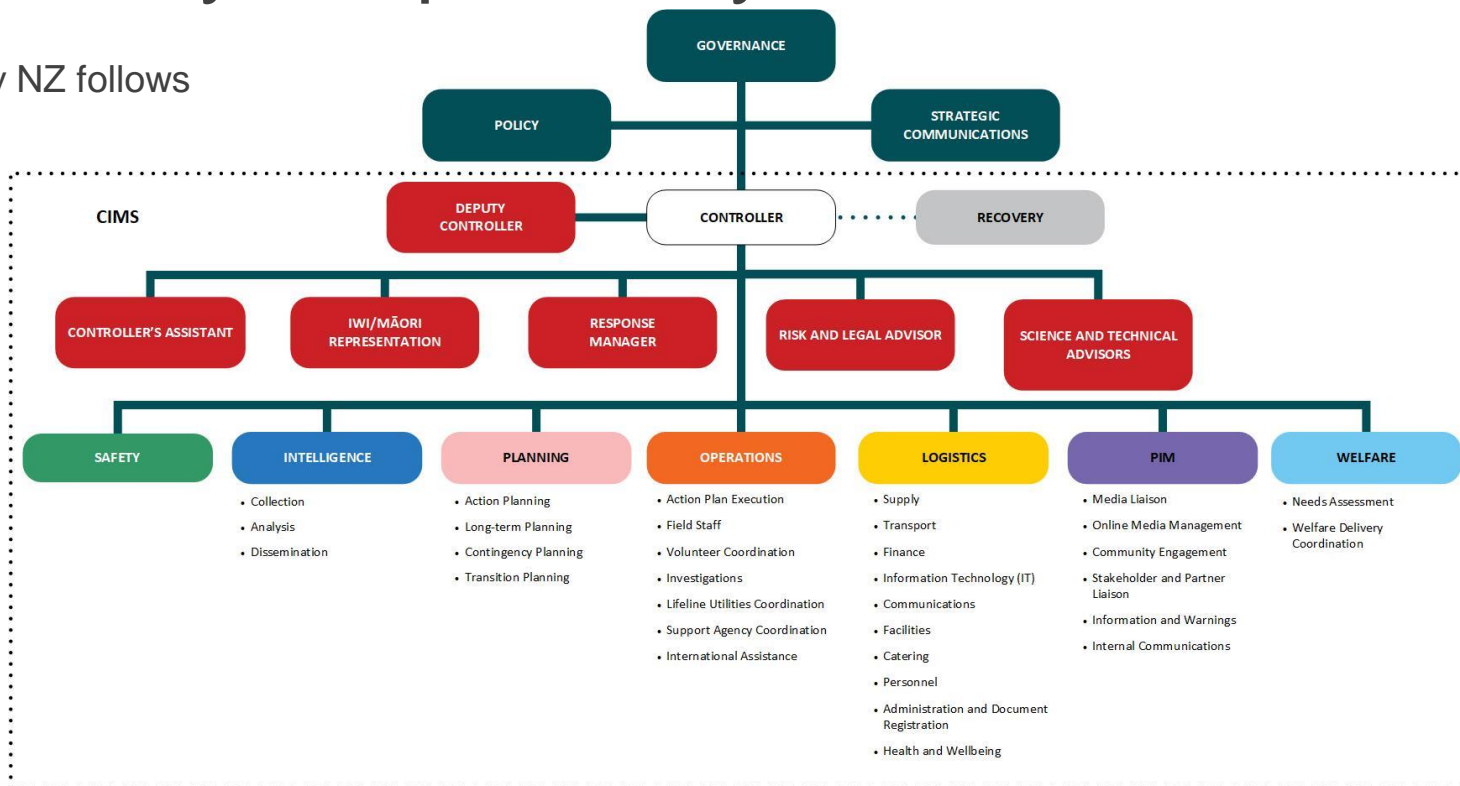
The Biosecurity System

Layered Defence to Manage Risk

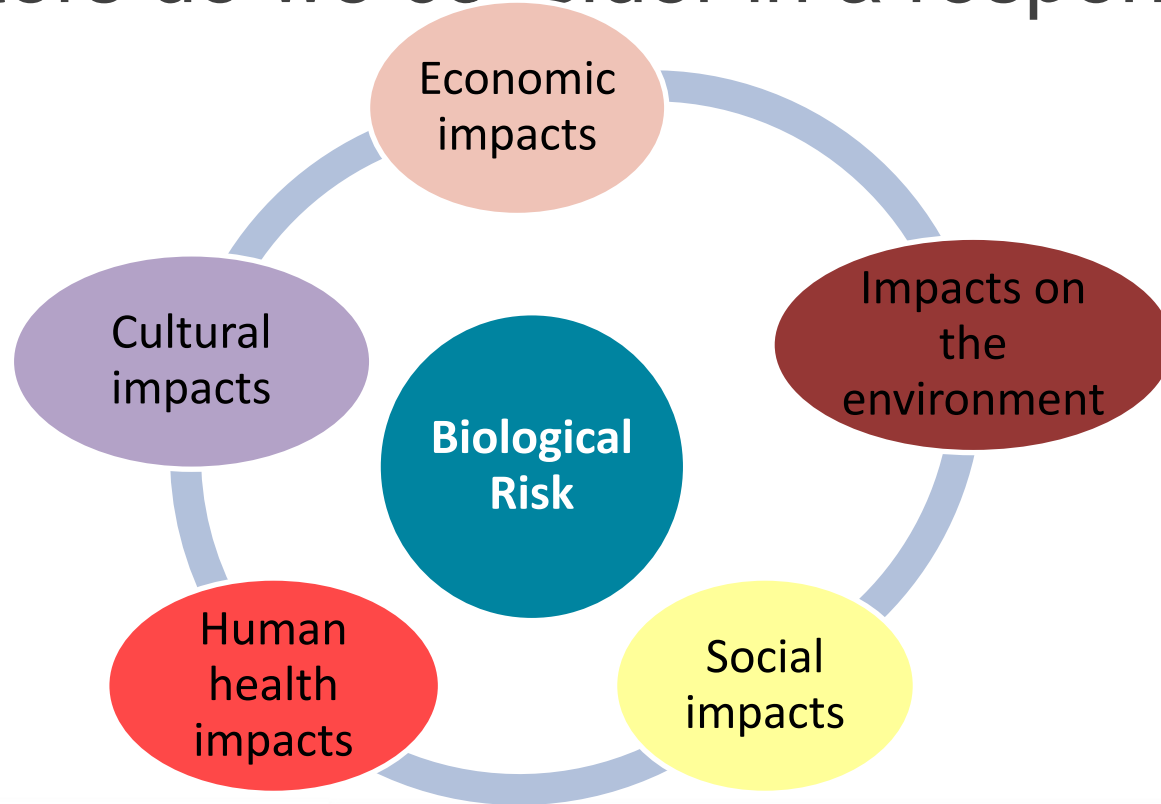


Biosecurity Response System

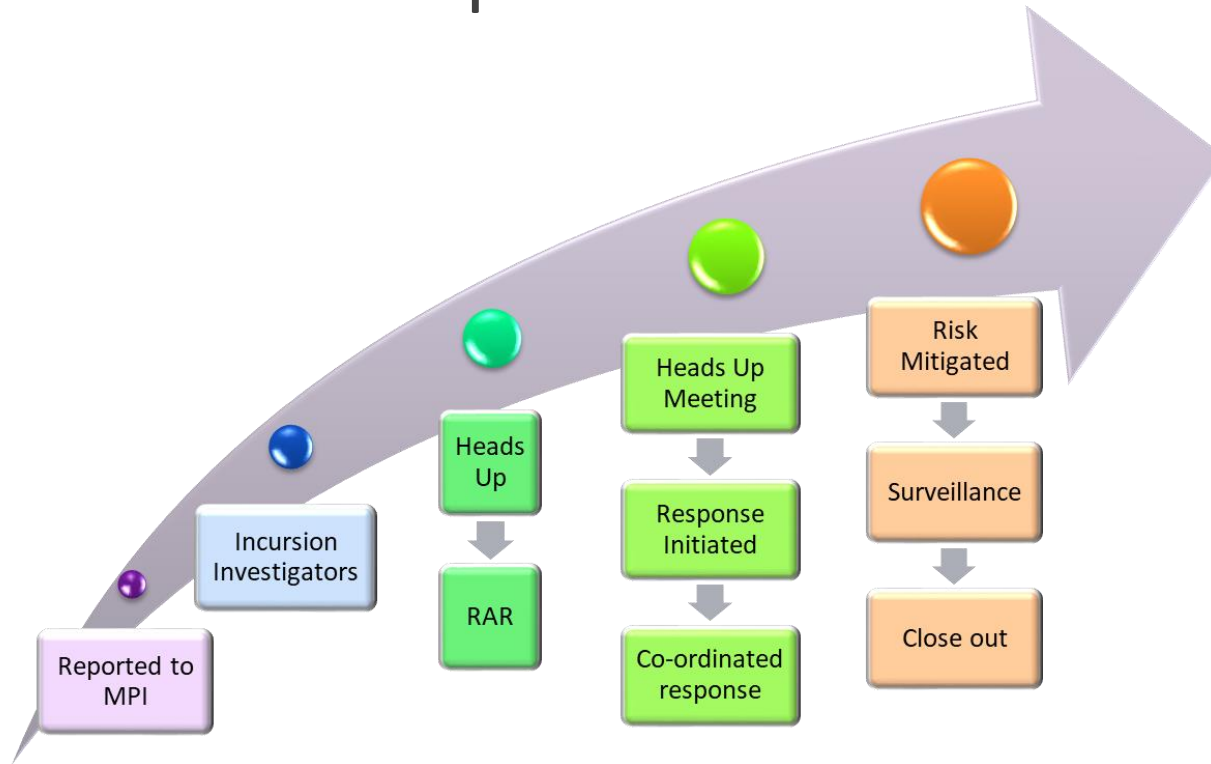
Biosecurity NZ follows
CIMS 3



What factors do we consider in a response



Basic process of a response



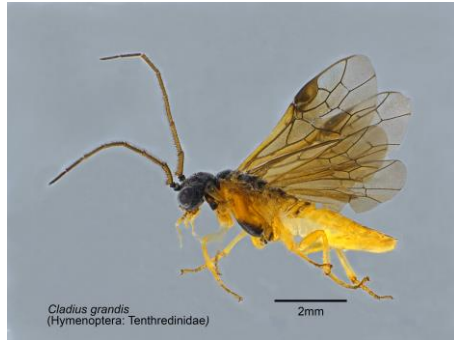
Role of Response Governance

- maintain a strategic overview of the response
- ensure risks are identified and mitigated through operational planning
- **delegate authority and operational control to the Controller** and give the Controller ongoing high level support, advice and direction
- Sets response objectives and is ultimately responsible for the outcome of the response
- ensure response has access to resources needed



Responses of note 2019/20 and achievements

- Nothing has significantly touched the Forestry Industry



Poplar sawfly 2019



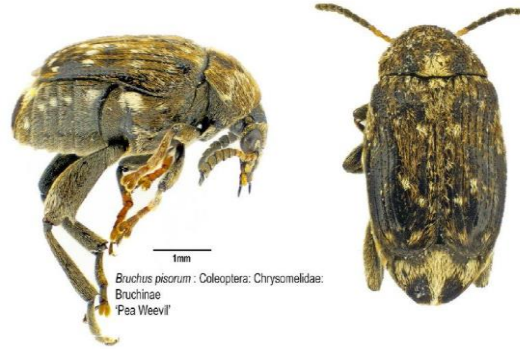
Granulated Ambrosia Beetle 2019

Photo credits: MPI PHL

Response achievements



Queensland Fruit Fly 2019



Pea Weevil Wairarapa

- Nelson Fires
- COVID-19 and Drought transitioning to BAU

Photo credits: MPI PHL

Biosecurity New Zealand

Tiakitanga Pūtaiao Aotearoa

Ministry for Primary Industries
Manatū Ahu Matua



NEW ZEALAND WINE
PURE DISCOVERY