New Zealand Biosecurity Institute

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Protect

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inside

New Zealand Biosecurity Institute

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

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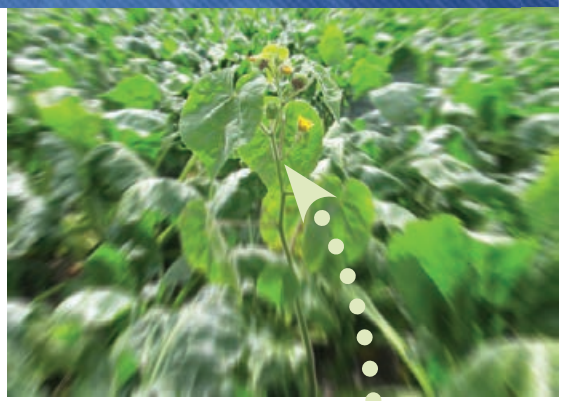


Two fine people remembered

Editor's Note

It has been a sad start to the year with the passing of two valued current members of the Institute and the wider biosecurity family. Dave Galloway and Pedro Jensen were both still working full-time at their biosecurity endeavours. Dave with his considerable career-long wisdom gave wise advice to the Executive and younger practitioners, and Pedro with his youthful funky approach brought fresh perspectives to younger members and generated enthusiasm for biosecurity among young Kiwis generally. Both carried-out valuable leadership roles within the Institute. Tributes to these two respected colleagues appear in this issue.

Members' endeavours at this moment have a high public profile with the discovery in New Zealand of the plant pest velvetleaf. This pest appears to have arrived in a batch of fodder beet seed which again highlights the importance of members' work at the border and in the field. A significant amount of resources in terms of time and finance have already been expended on assessing the extent of its spread. Some members were "borrowed" from their home ranges to assist in other areas. This is a major disappointment because it shows just how easily unwanted organisms are able to enter then spread in New Zealand. "Protect" continues to celebrate the many "saves" at the border, however this significant one-that-got-away is one too many. I would hope that serious checks are made on the processes followed by the importer and that appropriate action is taken as a result.

Over the summer holiday period the Institute mounted its annual appeal through the media for people to take care of their pets, and to pay careful attention to their gardening practices. At Easter the Institute mounted its tongue-in-cheek, yet deadly serious message about the Easter Bunny not being so funny. The upshot was a fine job by President Rebecca Kemp of raising the Institute's profile in an interview on National Radio.

Thank you all for your support of Protect Magazine and please keep your contributions rolling in.

Chris Macann,
Editor

From the NZBI Executive

It has been a sad start to the year with the passing of two valued and respected Institute colleagues, Pedro Jensen and Dave Galloway.

At our first meeting of the year on March 15 in Wellington we acknowledged their significant contributions to the Institute and the Executive over many years. Their passing is particularly sad because both were still involved with the Institute and still actively working on their biosecurity endeavours. The Executive discussed suitable ways of permanently acknowledging their work.

Registrations for NETS2016 are open now. NETS2016 "Emerging Threats in Diverging Communities" will be held at the Rendezvous Hotel, Auckland 27th to the 29th of July. Once again this year we have a great line up of speakers and field trips.

There has been a good response to the call for papers and the programme is full. On the second day of conference several workshops will be held and these workshops will lead into field trips. The programme is now available on the NZBI website.

July is Biosecurity Month and will relate to the NETS2016 theme of "Emerging Threats in Diverging Communities" This theme can be viewed from a broad range of angles but highlights that in New Zealand we are constantly challenged by new and emerging threats in diverging communities. This year we would like to showcase positive behaviours in regards to biosecurity and we want to hear from members about these stories.

We hope to see you all in Auckland at the end of July.

The NZBI Executive Committee

A passionate advocate for biosecurity and its history: Remembering Dave Galloway

It was with great sadness that the NZBI Executive announced the passing of Dave Galloway on January 9, 2016.

Dave had many roles with the NZBI over the years, including seven years service as secretary. He was awarded a life membership in 2014.

His involvement with the Institute began in 1995 when he became secretary for the Auckland/Northland Branch of the then Institute of Noxious Plants Officers and became National Secretary of that body in 1997, a role held through until 2004 reporting to three different Presidents.

During his time the Institute changed its name to the New Zealand Biosecurity Institute. Dave has been involved in the NZBI Archive Project from its inception and has provided useful insight to the history of the Institute from its humble beginnings 64 years ago.

Dave Galloway receives his Life Membership from Paul Champion and President Rebecca Kemp at NETS2014 in New Plymouth

As a result of this project a large amount of material has now been integrated into the formal history of NZ as a permanent archive in the National Library of New Zealand. This work is ongoing and Dave's advice and contribution has been a major factor in its success.

He has also been on the organising committee of the last three NETS in the Auckland/ Northland area—Auckland 2000, Paihia 2006 and Takapuna 2011.

NETS2014 in New Plymouth was Dave's 20th consecutive NETS.

Institute President Rebecca Kemp said Dave continued to hold a valuable ex-officio role with the Institute.

Agriculture had always been somewhere in Dave's life.

Born in Dunedin and raised on a farm in Matakanui, Central Otago. His mother died on his seventh birthday and he was whisked off to an Aunt and Uncle at their Mt Hutt farm.

On returning to Dunedin, Dave went to Mornington Primary School and Kaikorai Valley High.

Dave has been involved in the NZBI Archive Project from its inception and has provided useful insight to the history of the Institute from its humble beginnings 64 years ago.

Dreams of working on farms and of ultimate ownership disappeared and upon leaving school he went to work at Dalgety NZ in Dunedin in late 1969, first as a fertiliser clerk in the Merchandise Department, then upon transferring to Gisborne, as a grain and seed

continued ▶▶

clerk. After a short but enjoyable stint on the East Coast he transferred back to his beloved mainland as an Agresearch technician specialising in pea, wheat and maize breeding. This saw him travelling the high country carrying out trials and multiplying-up various s species for overseas producers. A ten month stint at the then Lincoln College saw him graduate with a Diploma in Field Technology.

Dave was a very well respected member of the Auckland Council Biosecurity Team and the wider Biosecurity network of New Zealand, his loss will be felt in many ways.

Shortly afterwards Dave started work for the Port Agriculture Service in Auckland which began 17 years as a Quarantine Officer. His time was spent equally between port and airport and he became a quasi-specialist in law, teaching staff the vagaries of the Plant and Animal Acts and, from 1993 the Biosecurity Act.

Agriculture had always been somewhere in Dave's life.

He rose through the ranks to become a Senior Officer and finally to become the manager of the Treatment Technology Centre at Auckland Airport, at that time the best, most modern and safest fumigation station in Australasia.

During his time he also spent two-and-a-half years carrying out an overseas aid project for the Ministry of Foreign Affairs in Papua New Guinea where his job was to write a Biosecurity Act for PNG which was needed to split its public health sector away from the plant and animal sector in its existing Quarantine Act.

Upon leaving MAF he took-up a quality control position within the timber industry but his background got the better of him and he successfully applied for a job as a noxious plants officer with Waitakere City working on contract for the Auckland Regional Council, which three years later was absorbed into the new Biosecurity Unit of the Auckland Regional Council. He quickly rose to the position of team leader North/West and after 20 years with local government is now, having survived constant restructuring, Biosecurity Team Manager North/West overseeing six staff and managing Auckland's possum population to low levels and the Low Incidence (Total Control) Pest Plants Programme. Until 2004 he was actively involved in the Auckland Tb programme which was declared as a vector free area that year and has been downgraded to reactive work if an infected animal is found during herd testing.

His latest area of expertise was the monitoring of toxin distribution and breakdown during and after five aerial bait drops in the Auckland Region and also giving advice on this process to managers doing aerial bait drops at Lake Ritokare (Taranaki), Quail Island (Banks Peninsula) and Macquarie Island (Southern Ocean).

He said he was not too old to learn and not too long ago attended training as a restricted Place Manager with the National Response Team for the National Biosecurity Capability Network.

Dave was a very well respected member of the Auckland Council Biosecurity Team and the wider Biosecurity network of New Zealand, his loss will be felt in many ways.

"Kua hinga te totara I te wao nui a Tane" - a totara has fallen in the forest of Tane

"Doing what I love and loving what I do"

Remembering Pedro Jensen

It was with deep sadness that The NZBI Executive announced the passing of Immediate Past President Pedro Jensen on March 1, 2016.

Pedro at NETS2010

Pedro was a very important member of the NZBI as well as the greater biosecurity community and had worked with many in his career. His enthusiasm and passion for the environment were outstanding. Pedro was the NZBI member who spearheaded the Biosecurity Month initiative and an increase in the Institute's profile in the media.

Pedro was President of The New Zealand Biosecurity Institute from 2011-2012 having served as Vice-president since 2009.

A notable point in his presidency was his signing of the Memorandum of Understanding with the National Pest Control Agencies in August 2011, following the desire of the NZBI and the NPCA to align the networking and training events of both organisations.

Knowing that he had made a positive contribution to New Zealand's natural heritage was his motivation.

As President, Pedro welcomed delegates to the first combined conference the following year at NETS2012 in Wairakei.

One of Pedro's major contributions to NZBI life was the Biosecurity Month initiative begun in 2010 that aimed to coordinate biosecurity media from across the country during NETS month.

This initiative was very successful in generating a buzz through television, radio and print.

Pedro also presided when the NZBI Executive voted to create and fund the formal role of Archives Co-ordinator, a major step in preserving the history of The NZBI and its predecessor organisations.

Growing up across the road and running around Otari Native Plant Museum in Wellington instilled in Pedro an early appreciation for the beauty of New Zealand's native forests. Biology was his favourite subject at college which led him to study ecology at Victoria University. Upon completing his BSc in Ecology he volunteered at Zealandia, the Karori Wildlife Sanctuary, to gain work experience. In 2003, after completing two fixed-term contracts and a summer internship with Greater Wellington Regional Council's Pest Plant team, Pedro joined full-time where he remained until 2012.

Colleagues report that with his corn braids and baggy trousers Pedro didn't fit the traditional mould of a Biosecurity Officer, however the interview panel had seen the keenness, brightness and fun in him that those that knew him well came to enjoy and admire.

"I have been doing what I love and loving what I do ever since" Pedro said of his work.

Pedro said what he most liked was the people he met and the places he got to go. He said coming home at the end of the working day knowing that

Pedro in his element

he had made a positive contribution to New Zealand's natural heritage was his motivation.

Pedro was most recently the Contract Manager for the Wellington branch of the ecological, restoration and biosecurity organisation Kaitiaki o Ngahere.

It was as a Weedbusters co-ordinator that he was really in his element. He was brilliant with children and they seemed to hang off him and feed off his enthusiasm. He was known by many as "The Rapping Weedbuster". He gained respect for his work with community groups and for his championing of elegant solutions to bio-data systems while working on a joint Greater Wellington-Environment Bay of Plenty project.

His colleagues report that he was definitely his own person. "No one else wore the hair and baggies". He showed that biosecurity is full spectrum and it takes all sorts to deliver a message. Pedro was genuine and once he committed he didn't deviate.

Colleagues say that Pedro was a conservationist who believed in the intrinsic value of the natural world and in the value of its preservation for this generation and those that follow. His enthusiasm for the lower North Island's natural areas came from a lifetime of local knowledge and his passion for restoration has been of great benefit to those areas.

Light but deadly serious: There's nothing funny about Easter Bunny

THIS ARTICLE WAS RELEASED BY THE NZ BIOSECURITY INSTITUTE FOR EASTER 2016

It's part of Easter every year but it's not cute or cuddly nor is it a friend of farmers. The NZ Biosecurity Institute says it's a costly example of the effects of introduced plants and pests and it's high time the Easter Bunny was replaced.

Institute President, Rebecca Kemp said her members think it would be appropriate to find a heroic icon for Easter rather than the rabbit with its villainous history in New Zealand.

The NZ Biosecurity Institute is the professional training and networking organisation for people involved in biosecurity. Its 450 members work for research organisations, educational institutions, regional councils and government departments.

All are involved in protecting New Zealand from invasive species.

Ms Kemp reckons it's high time the kiwi flew at Easter.

"The symbols around Easter have come from many historic and cultural origins, so why not put our own slant on Easter?" she said.

"The obvious choice would be the kiwi. It lays one of the largest eggs of any animal in the world, which is entirely appropriate for Easter".

Ms Kemp said equally significant is that it is endangered because of the effects of introduced predators.

"We're not trying to replace the Easter Bunny with an Easter Kiwi, but to give the commercial side of Easter a more New Zealand emphasis, and in so doing, help raise awareness of all pests, both plant and animal."

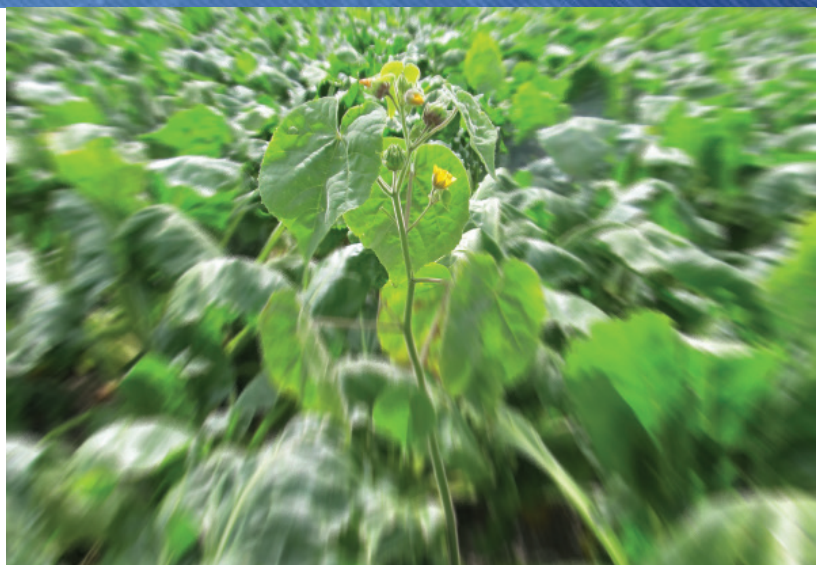
Every year the Biosecurity Institute's members spend hundreds of hours controlling or managing the risks to the economy and the environment of the effects of introduced pests.

"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," she said.

"It is very hard to get the message across that although "bunnies" look like cute cuddly creatures they are not welcome here".

Ms Kemp said an animal or plant is a pest because of where it is, not what it is.

Velvetleaf: ongoing response



As part of its ongoing response to the incursion of velvetleaf, the Ministry for Primary Industries (MPI) has detected velvetleaf contamination in a further fodder beet seed line.

Response Incident Controller, David Yard says the seed testing laboratory has found a low level of velvetleaf seed contamination in the Feldherr 16UB131 fodder beet seed line. This seed line was also imported by the company that imported the three other contaminated lines –Kyros 128, Bangor 126 and Bangor 079. As with the other three lines, it is fodder beet seed sourced from Italy and certified by Danish authorities and imported and planted last year. We are testing other seed lines to get a better picture of where contaminated seed has been planted and to enable farmers to have good information about the safety of seed to plant this coming season, Mr Yard said.

To date velvetleaf has been found in 11 regions on 250 properties.

The Ministry is in the process of issuing a legal direction to seed merchants directing them to contact all companies and farmers that they sold the contaminated Feldherr line to, requesting they return any seed they still hold. Along with our earlier messaging that farmers inspect all fodder beet crops for velvetleaf, as a precautionary measure Mr Yard urges farmers who sowed Feldherr 131 to check their crops for velvetleaf, even though some of the properties may have already been inspected during the search and destroy activities. MPI intends to contact farmers who have received contaminated seed to provide velvetleaf management information. Seed lines Kyros 16UB128, Bangor 16UB126, Bangor 15UB079 and Feldherr 16UB131 that have tested positive for an unwanted organism will not be cleared for entry into New Zealand. Any that arrive here will either be re-shipped or destroyed. Testing of other fodder beet seed lines is continuing and MPI will share information with farmers as it becomes available, Mr Yard said. To date velvetleaf has been found in 11 regions on 250 properties. MPI is leading a nationally-co-ordinated approach with the aim of reducing geographical spread over time. This may include velvetleaf elimination from some regions. It emphasises the message that it is vital landowners continue to inspect their properties for late-emerging velvetleaf. Farmers should ensure their on-farm biosecurity practices are strong and this includes following guidelines in the MPI farm management plan on machinery hygiene, feed management and stock movement. Details of the farm management plan can be found on MPIs website and in a ute guide for farmers to be distributed in the near future.

Velvetleaf: What others say

Dave Hodges, Project Manager, Biosecurity Plants and Pests at DairyNZ told Protect Magazine the biosecurity system and processes that New Zealands agricultural economy relies upon obviously did not work in this case.

"DairyNZ is very interested in understanding how this happened and how MPI plan to close the door and make sure the door remains closed to this type of incursion.

"Fortunately Velvetleaf can be managed in a pastoral setting, although Im not underestimating that challenge of doing so. But, its another pest issue and another cost that makes farming tougher during what is already a very tough time for dairy farmers.

"The pest plant is here now and spread across 11 regions of NZ. We are really disappointed about what has happened but are focusing on working with central and local govt and other stakeholders to help find solutions to manage the problem," Mr Hodges said.

Beef and Lamb New Zealand welcomed the announcement by MPI that they will review import requirements in the wake of the outbreak. B+LNZ's General Manager Market Access, Ben OBrien, said tightening of the biosecurity standards is a welcome step forward.

"New Zealand producers need to meet very high biosecurity standards and we have the right to expect that other countries exporting to New Zealand do the same," Mr OBrien said.

Desperately seeking: Velvetleaf response in Southland

Environment Southland biosecuriy officer Alfredo Paz presents this local perspective on the nationwide search and destroy mission for an undesirable alien hiding in a fodder beet crop.

Emus on velvet leaf duty

In early March this year, MPI announced that a small number of velvetleaf plants had been found in North Canterbury and other regions were alerted they may have fodder beet crops contaminated with velvetleaf. In Southland, we were supplied with lists of customers who had purchased the potentially contaminated lines of fodder beet seed, namely the Kyros and Bangor cultivars.

Environment Southland was tasked to search and destroy this invasive weed during the short window of opportunity before velvetleaf seeds were produced. Our biosecurity team joined forces with Emergency Management Southland and Asure Quality (contracted by MPI as part of the National Biosecurity Capability Network) and developed a plan to inspect the region's fodder beet crops. Following MPI protocols, large teams of people were seconded to Invercargill including staff from other regional councils and contract staff like meat inspectors, tanker drivers and fruit pickers.

Velvetleaf (*Abutilon theophrasti)* is native to Southern Asia, where its leaves and seeds are used in local cuisine. This annual broad-leaf herb is one of the world's worst cropping weeds, out-competing other crops for space, nutrients and water. It grows up to 2.5m tall, amongst arable crops, with a soft to the touch heart shaped leaf. It has buttery-yellow flowers that bloom from spring through autumn. Its distinctive seedpods turn black as they mature.

Between the 8th of March and the 29th of April, 287 properties were inspected, covering a total of 4,442 hectares. A total of 199 plants were found throughout the region, with the majority only at the flowering stage. A few plants found had produced mature seeds and the teams made a concerted effort to search the ground around these plants to help prevent velvetleaf establishing in the region. Contrary to other regions, velvetleaf plants in Southland weren't found growing to great heights, with some plants only 50 cm tall and only a handful reached 170 cm tall. This made searching paddocks difficult for the teams on the ground as some plants only grew to the height of the fodder beet crop. Difficult terrain and trying weather conditions made this a challenging job for the teams, who worked relentlessly for a total of 1874 person days.

On behalf of Environment Southland, a big thank you to those who came to help control the spread of velvetleaf in Southland.

Cavalry leads conifer charge

Riding home

Horse-soldiery is how the Oxford Dictionary describes "cavalry". According to this article contributed by the QEII National Trust and Weedbusters NZ, horse soldiery is very much alive in New Zealand and may be on the rise. It's still soldiery in every sense of the word but time its weeds - very big ones - which are the enemy.

While many New Zealanders spent Easter hunting Easter eggs, a crew of keen volunteers on horseback were out in their big back yard searching for wilding conifers.

These large weeds affect around 1.7 million hectares, almost 6% of New Zealand.

Wilding conifer seedlings in hard to access areas are expensive to control using contractors and helicopter access. The approach using a 'conifer cavalry' of volunteers on horseback was the brainchild of Jesse Bythell, a QEII National Trust regional representative. Her novel idea combined her love of horse riding and her passion for protecting the environment.

Ten volunteers set up camp in a paddock on Easter Friday afternoon and spent all of Saturday and Sunday in and out of the saddle searching for and destroying wilding conifers. The weekend weedmuster was carried out on Coronet Peak Station on the Crown Range between Queenstown and Wanaka. The station is part of the Mahu Whenua covenants, the largest area in New Zealand ever to be protected with QEII National Trust covenants.

The Conifer Cavalry is one of several models that are being supported by the QEII National Trust Weedbusting Project for community involvement in controlling wilding conifers at low densities where the costs of contractors would be prohibitive.

An important element of the Easter weekend event was to put together a 'how to' guide for people who are interested in the idea for other parts of New Zealand, including health and safety plans, mapping of the work done, and logistics of feeding and watering both two and four legged participants in remote areas.

Alex Brown Hunt

When planning the work Jesse looked for an outlying area of wilding conifer saplings at a low enough density for the riders to control.

Volunteer Eva

Jesse said she saw it as a great way of engaging a different part of the community, raising awareness about weed issues and skilling riders up to control wilding conifers. It is a useful approach in areas where trekking in on foot would be tedious and time consuming for volunteers.

'If I had to walk up that hill to kill pines I wouldn't have been at all keen, but riding made it fun and special,' said volunteer Gilly Darby, who brought her young mare Fi along for the weekend of recreation with an environmental angle. The owner of the property has an extensive wilding conifer control programme in place, and further supported this pilot project by supplying food for volunteers and the horses. The neighbouring property also helped by donating the use of their land, woolshed, and shearers quarters for the group to camp and to paddock the horses.

'It's a win for everyone,' said QEII Community Weedbusting Project advisor Anne Brow who helped organise the weekend.

'The land manager gets help with weed issues, spread of wildings from scattered seedlings is reduced, and recreational riders get to enjoy high country areas that they usually wouldn't be able to access.'

Volunteers Sanjay Thakur and Sam Lewis have certainly had their awareness raised about the huge environmental issue wilding conifers pose.

'Doing this work has opened my eyes to weeds; now I am seeing them everywhere,' Sam said.

The QEII National Trust Weedbusting Project is a partnership between the QEII National Trust and Weedbusters NZ. The work is funded through the DOC Community Fund, and supports the Minister of Conservation's War on Weeds campaign.

1080 rule change: mixed reactions

Environment Minister Nick Smith announced in April that central government would now be responsible for 1080 poison and pest control methods to make pest management consistent and save money.

The proposals would mean the use of 1080, brodifacoum and rotenone would be covered by standard controls set by the Environmental Protection Authority, rather than having each regional council set their own pest control rules.

Environment Minister Nick Smith said on Radio New Zealand that "stupid bureaucratic rules" around 1080 were not serving any good environmental cause.

Waikato regional councillor Clyde Graf told Radio New Zealand that the change withdrew the ability of the community to engage at the consent process, and stopped local government from being able to manage their own pest control.

The only people who would be notified of 1080 drops were those on the drop-site boundaries, he said.

> "The impact would be a streamlined and efficient process, taking significant costs out of the programme."
> ~Stephen Woodhead

"Beyond that, notification is generally within a three month window, and there's very little opportunity for the public or the communities to actually know what is really going on," Mr Graf said.

Across the nation however, local government representatives are not all in agreement. Otago Regional Council chair Stephen Woodhead said the idea was sensible and would not shut locals out of the decision to use 1080 in an area.

"The impact would be a streamlined and efficient process, taking significant costs out of the programme.

The decision would make it easier to use 1080 poison, Mr Woodhead said.

> "Stupid bureaucratic rules" around 1080 were not serving any good environmental cause.
> ~ Nick Smith

"A possum is a pest whether it's in Northland or Bluff," Mr Woodhead said.

Parliamentary Commissioner for the Environment Jan Wright called for the move in a major report five years ago, and said the current rules were labyrinthine and costly.

She said Dr Smith's changes sounded good and that the plan would worry some people but the public's view of 1080 was much more positive than it used to be.

Local Government New Zealand said regional councils were pleased, because the duplication was unnecessary and the national safeguards were ample.

Comments taken from Radio New Zealand

We must use 1080: largest ever pest operation launched

Biodegradable 1080 remains the safest, most efficient and effective method of pest control in New Zealand's rugged backcountry according to Conservation Minister Maggie Barry. She said we must use it if we are to protect our precious native creatures.

"We simply can't allow ill-informed, unscientific campaigns to cause us to back away from what we need to do to save our taonga species," Ms Barry said.

The Minister made the comments when she announced the launch of what her Department describes as the largest ever pest control operation in New Zealand's history.

Ms Barry said the pest operation known as Battle for our Birds will be launched this winter in response to a pest plague which threatens vulnerable native wildlife.

Battle for our Birds 2016 will receive $20.7 million in new operating funding for 2015/16 from this May's Budget, helping to fight back against an expected pest population boom caused by a heavy forest seeding, or mast.

"DOC scientists have confirmed the seed fall predicted last year has eventuated," Ms Barry said. "We must respond if we're to protect our native birds and animals from the threat – and the funding will enable DOC to achieve this."

This autumn around a million tonnes of beech seed will drop to the forest floor, providing a bonanza of food for rats and causing their population to boom.

"As rats increase due to the readily-available food source, so will the number of stoats which feed on rats," Ms Barry said. "Once the seeds germinate and the food source disappears in early spring, the plague of millions of starving rats and tens of thousands of hungry stoats will turn on native wildlife, bringing disaster if we do nothing."

"All the indications are that this mast is on a similar scale to the previous event in 2014, which saw the launch of Battle for our Birds, though with a slightly different distribution as more seedfall is predicted in the southern South Island."

Battle for our Birds 2016 will see DOC ramp up pest control by 500,000 hectares, to cover more than 800,000 hectares of land. Aerial 1080 operations will be backed by on-going trapping and ground control programmes.

Pilot projects will also be run to test the effectiveness of using self-resetting traps to keep pests permanently out of an area following a 1080 operation.

"DOC will monitor the pest situation to determine where best to deploy aerial 1080 – priorities will be Fiordland, Otago, South Westland, North Canterbury, Kahurangi, the lower North Island, Taranaki and Tongariro."

Research from DOC's 2014 Battle for our Birds programme showed breeding success rates in areas treated with 1080 were far greater than in areas with no control.

Ladybird ladybird flyaway home: we just wish you would

Ladybirds are often very welcome in horticulture and gardens but not this one. The search is on for naughty harlequin ladybirds (*Harmonia axyridis*) which have been detected in Auckland.

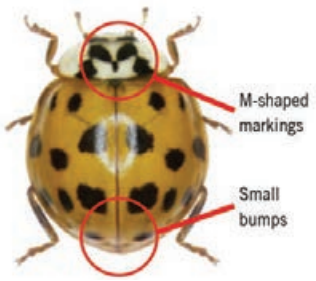
The many forms of Harlequin ladybird Harmonia axyridis

Approximately eight sites have been identified around the Auckland Region. Due to the extent of the spread it is likely that eradication cannot be achieved. The move from MPI is to request sightings in order to determine the spread.

MPI and industry want to know if they are present in other parts of New Zealand.

The harlequin ladybird is considered an invasive species in many countries. It feeds on aphids, usually from willow, oak, maple and poplar trees. This has made it useful as a biological control of pests in some countries. Unfortunately, its huge appetite allows it to out-compete native ladybirds. It will also eat other ladybirds and beneficial insects if it runs out of aphids. It may also feed on pip fruit, causing blemishes on the fruit.It has been known to cluster within bunches of grapes before harvest, resulting in the tainting of the juice and any wine made from the juice.Ladybirds also aggregate during the winter in dark, concealed spaces creating a nuisance for home owners.

Its huge appetite allows it to out-compete native ladybirds. It will also eat other ladybirds.



The species spreads very quickly, making it difficult to manage. It is native to Asia, but has spread through Europe,the Americas, the United Kingdom, and parts of Africa, and Russia.

The harlequin is large by ladybird standards – 5–8 mm long and 4–6.5 mm wide.

It is well known for its very variable colouration and patterning which makes it difficult to distinguish from other ladybird species. It looks similar to the common spotted ladybird (*Harmonia conformis*). The harlequin usually has M-shaped markings on the area known as the pronotum, between the head and abdomen, although this pattern is not present with darker specimens. In contrast, the pronotum of the common spotted ladybird features a W-shaped black mark or two separate U-shaped patches. The harlequin also has small bumps on the rear of its back. Harlequin larvae and pupae have a spikier skin than the common spotted ladybird.

Kauri killer concerns Kiwis

That upper North Islanders care about kauri dieback should come as no surprise, but not all understand the disease or the tree according to a recent survey.

In April MPI announced a survey has found an overwhelming proportion of people living in Auckland, Waikato, Northland and the Bay of Plenty consider that preventing the spread of kauri dieback is of high importance.

Almost 90% of all those surveyed by Colmar Brunton agreed that it is "important" or "very important" to manage kauri dieback, even given the other threats to kauri forests.

The survey also found that 43% of forest users are committed enough to stop kauri dieback to have asked others to take action to prevent its spread.

Sixty-seven percent of residents were found to be aware of kauri dieback, as opposed to just 31% in 2011.

However, 10% of those who said they had not been near kauri in the previous year proved to have been mistaken.

Engagement and Communications lead for the Kauri Dieback Programme, Jay Harkness said it was a concern that 19% of the forest users surveyed thought that dieback is spread on the wind.

Meanwhile, the fungus-like pathogen that causes kauri dieback has been renamed.

It is now officially known as *Phytophthora agathidicida*. The pathogen used to be known as *Phytophthora* taxon Agathis, or PTA, a taxonomic name that was temporarily assigned to the pathogen when it was first identified in 2008.

KEEP KAURI STANDING

STOP KAURI DIEBACK DISEASE SPREADING WWW.KAURIDIEBACK.CO.NZ

19% of the forest users surveyed thought that (Kauri) dieback is spread on the wind.

Dead branches and a thinning canopy resulting in stag-heads

NPPBA like NPPA but for pets

Just as there is an accord in place for the nursery industry, so too is there an accord for the pet industry. The National Pest Plant Accord, better known to biosecurity workers as NPPA, now has a twin—The National Pest Pet Biosecurity Accord (NPPBA).

The Ministry for Primary Industries (MPI) announced in February that it is working with pet industry stakeholders and biosecurity agencies to improve the management of the domestic trade in pets that have the potential to become pests.

Examples of pet species that have already established in parts of New Zealand include the eastern rosella parakeet, rainbow lorikeet and koi carp.

"Species like these could be included in the accord because they pose problems for our native ecosystems and can also have economic impacts," said Erik Van Eyndhoven, MPI's Principal Adviser Conservation.

> "Cats, dogs, domestic livestock and a range of other species are explicitly out of scope."

The eastern rosella and rainbow lorikeet are known to attack crops and can compete with native birds for resources. They can also spread bird diseases. Koi carp churn up the beds of waterbodies when feeding, leading to reduced water quality and lower habitat quality for native species.

MPI has established the National Pest Pet Biosecurity Accord to reduce the risks of the domestic trade in pets leading to new pests. Members of the NPPBA will include the Pet Industry Association, the New Zealand Companion Animal Council, Department of Conservation, regional councils and unitary authorities. The Accord is mirrored on the National Pest Plant Accord, which has been successful in removing high-risk plant species from the nursery trade.

Currently, there are about 1,800 pet species legally able to be kept in New Zealand and approximately 95% of these are considered to pose low biosecurity risks.

"Consequently, the vast majority of pet species currently able to be traded domestically won't be affected," says Mr Van Eyndhoven.

"The Accord will focus on species that are kept primarily as pets which are not widely established in the wild and don't currently have a regulatory framework for their management. This means that cats, dogs, domestic livestock and a range of other species are explicitly out of scope."

The NPPBA will only affect breeding, distribution and sale of pet species. Its focus is on managing risks associated with the trade in pets and encouraging good pet ownership practices.

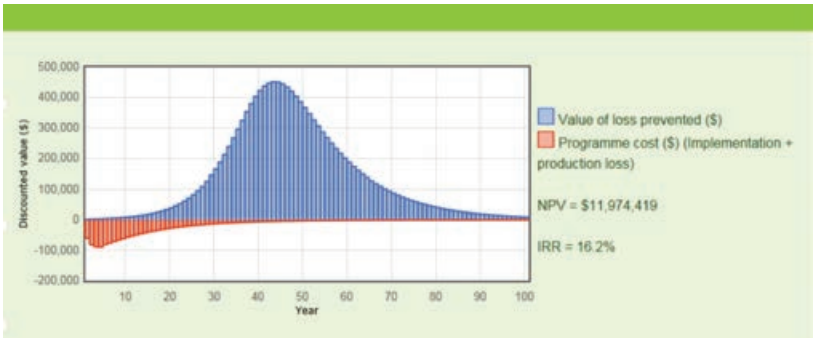
"The NPPBA will develop what is expected to be a short list of pet species that will be regulated and this will be available on MPI's website following a risk assessment and decision-making process."

"Some species may be banned from breeding, distribution and sale and we're working with the pet industry and other affected parties to come up with a practical solution."

Briefs

Web app for weed management analyses

The web app. "Cost Benefit Analysis for Regional Weed Management" is now available on the AgPest website, http://agpest.co.nz/ under "Useful Links". The app was developed as part of the Beating Weeds II project funded by the Ministry for Business Innovation and Enterprise. It is designed to meet the requirements of the Biosecurity Act and the National Policy Direction for Pest Management 2015 regarding cost benefit analysis of proposed regional weed management programmes. For more: Graeme Bourdôt, AgResearch, Lincoln, graeme.bourdot@agresearch.co.nz



Gorse and broom on Banks Peninsula

Environment Canterbury reminded land occupiers in May of their responsibility to prevent gorse and broom spreading to infest productive land on Banks Peninsula. ECan Biosecurity officers inspected properties during May to make sure land occupiers met their obligations under the Canterbury Regional Pest Management Plan. For more: www.ecan.govt.nz "Gorse and broom".

White edged nightshade on Banks Peninsula

Environment Canterbury Biosecurity staff are asking for sightings of the pest plant white edged nightshade (*Solanum marginatum*). The ECan biosecurity team want to eradicate the pest from the region. The prickly plant can form dense thickets and displace pasture and native species as well as threaten marginal coastal areas. It is known to be found in a few coastal areas on Banks Peninsula. ECan will control the plant at no cost to the landholder because it is an eradication pest of limited presence and distribution. For more: www.ecan.govt.nz and search "White edged nightshade".

ON THE BORDER

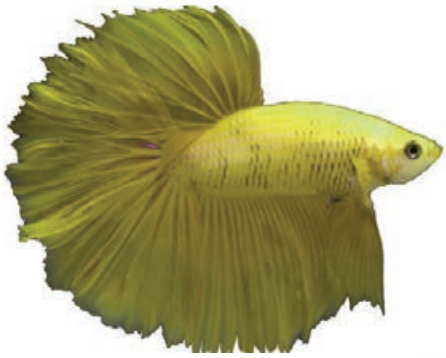
I declare this cow pat

A traveller arriving from Malaysia declared a commercially packaged dry cow pat in February at Auckland Airport.

It had been brought into New Zealand for burning at a Hindu temple.

Dave Sims, MPI Auckland Airport Manager said cow pats are made by mixing fresh cow faeces with hay and have been used for centuries to light fires in India. He said it was rare to intercept cow pats, but they may become more common in the future.

"Cow pats are now a commercial product. There's even a website selling them and some customers want gift wrapping," he said.



"Wet" fish declared

An air passenger who arrived in New Zealand with live Siamese fighting fish wasn't joking when he declared "wet fish" to biosecurity staff.

Arriving at Auckland Airport from Vietnam in May, the passenger was carrying five fish in plastic bags.

MPI seized the freshwater fish, which were humanely euthanised.

MPI reports that the interception is very unusual, although it's not the first. In 2013, MPI prosecuted an air passenger after he was caught smuggling live tropical fish in his trouser pockets.

Lemon smuggler sent home

Auckland border officials refused entry to a woman who deliberately smuggled six lemons in her trousers in March following a flight from Hong Kong. The woman concealed the lemons at the top of her pants.

Loose pipe actually a snake

A loose pipe under a shipping container in Lower Hutt turned out to have teeth, scales and the potential for a venomous bite.

A biosecurity worker at a quarantine facility at Gracefield in February realised what he had thought was a pipe was actually a dead snake jammed half way under a pallet.

"In this case, the accredited person did the right thing by segregating and checking the product that was already unloaded, and then ringing MPI," reported MPI.

Pushed by Research: Biosecurity Bonanza 2016

More than a hundred practitioners, policy makers and researchers attended Landcare Research's annual Biosecurity Bonanza in Christchurch on May 17th.

Dr Andrea Byrom, researcher at Landcare Research as well as director of New Zealand's Biological Heritage National Science Challenge set the flavour for the day explaining the Science Challenge and the collaborations necessary for successful targeted research with an emphasis on biosecurity.

A panel representing the biosecurity spectrum ended the day by discussing what the various sectors would like to get from biosecurity research.

From MPI, Graham Burnip mentioned new technologies in affordable early border detection and noted the attention needed on inanimate pathways (machinery for example).

Rebecca Kemp from Auckland Council commented that it's no longer just mammals which are a biosecurity problem. Birds too, like Indian ringnecks and sulphur crested cockatoos are increasing, as well as reptiles like skinks and red slider turtles. Also micro-organisms such as Kauri dieback among many others are a concern as well as pest fish, aquatic plants, and invertebrates like the guava moth.

Take a "what's stopping us approach" was suggested by Susan Timmins from DOC. She reiterated the importance of collaboration, particularly working together at the beginning of issues not part way through.

Landcare Research's Bruce Warburton, wearing his OSPRI secondment hat, commented on the huge success of TB Free NZ due to good research. He said we need research into how to cost effectively prove Tb free over such big areas through surveillance. He emphasised a need for research to be integrated into operations. He mentioned it was a challenge to get

continued ▶

National SCIENCE Challenges

NEW ZEALAND'S BIOLOGICAL HERITAGE

Ngā Koiora Tuku Iho

▶▶ *continued*

operational staff to value the science and structure control programmes accordingly. "We also need a very effective Kea repellent," he said.

Tactical solutions work if they are pushed by research and pulled by the market said Bill Simmons from Animal Control Products. He gave an example of one successful commercial animal control product but cautioned that most fail. "We need to build on the success we've had so far." He said good products only come about when people sit down and look at the big picture.

Environment Canterbury's Steve Palmer, using Banks Peninsula's community initiated possum control programme as an example, said it would be good to have evidence to back-up biodiversity gains of control programmes.

Other thoughts were the need for research into spatial identification of wilding conifers, more information on marine pests on the Chatham Islands for which ECan has responsibility, and the continuing need for research into biological control of legacy pests such as gorse and broom.

> "We also need a very effective kea repellent,"
> ~ Bruce Warburton

The panel noted that chemicals are now an order of magnitude safer in an era where people's safety expectations are also an order of magnitude higher.

Sandwiched between were presentations on a wide range of biosecurity research. Among them, presentations on biological control, pest spread prediction, animal and plant DNA diagnostics, biodiversity outcomes, and effective control methods. Perhaps less conventional topics were Landcare Research's Murray Dawson's suggestion of the possibility of developing eco-friendly agapanthus and Steve Palmer's recounting of the effectiveness of helicopter-dropped biological control agents for broom.

Listening with mother

Recently Landcare's Lynley Hayes was interviewed on Radio New Zealand about biological control of weeds. When her husband, Protect Editor Chris Macann, arrived in their living room to listen on Freeview he was surprised to see that their dogs—Patch and Poppy, had pulled their dog bean bags a sizeable distance from the corner of the room to in front of the television, and were listening intently to their Mum.

Lynley reports that they have never moved their bean bags unassisted before.

New Zealand Biosecurity Institute