

Spring – 2008

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Protect



New Zealand
Biosecurity Institute

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

NZBI thanks Horizons Regional Council for printing and posting the hard copy of *Protect*.



Protect

Spring 2008

Magazine of the New Zealand Biosecurity Institute Contents

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Editor's Note

Greetings NZBI folk. I hope you are enjoying the longer days and improving weather. It seems that spring has sprung keyboards into action and super-sized this issue of *Protect* – thanks to all contributors. We received so much material, that some articles will appear in the next issue.

In accordance with tradition, and for those who were unable to attend, much of this issue is dedicated to NETS2008. One of the highlights for many of those who attended the conference was Kingsley Field's closing address. Because of this, we have included excerpts for all to read.

Following on, Keith Briden, with two of his many hats, presents actions we can take now to manage some of the impending effects of climate change, as well as an explanation of the new Deer Farming Notice.

Ben Paris and Greg Hoskins then highlight the importance of understanding the habits of our native

birds when designing pest-control programmes, as well as harnessing local people's enthusiasm.

Our MAF Biosecurity New Zealand column updates their news including opportunities to get support for summer didymo campaigns, and changes in the funding of the Dutch elm disease programme.

In one of the coming issues we will introduce your new *Protect* editor. I have really enjoyed the last couple of years editing the magazine, particularly the conversations I have had with biosecurity folk around the country about what they do and why. Thanks to everyone who has contributed material, offered up leads for articles and supported my role. I look forward to reading and contributing to future issues.

Take care.

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News from the Executive

Kia ora and hello from the Executive!

NETS2008

Wow! What a great event NETS2008 was. The Central North Island branch organising committee did a great job in pulling together a very successful seminar. The broad range of speakers was very interesting as were the mix of field trips and workshops.

As usual the opportunity to mix and mingle with old and new friends was a highlight and many went away having made important links within the industry. Our social event on the Thursday night went off, with 100-odd people still enjoying the band at midnight.

The theme of “touch, pause, engage” left itself open to rather a lot of interpretations but for me the take-home message of the seminar was, engage. By pooling resources, tapping folk on the shoulder to ask their perspective or to sell a vision, we can achieve tasks unattainable on our own.

Delegates saw the manifestation of what “engaging” could achieve in local Dave Wallace’s vision creating the 3400ha Maungatautari Ecological Island. (Go to www.maungatrutrust.org/home/index.asp).

The closing speech from journalist Kingsley Field was a highlight for many. Kingsley delivered a fitting endorsement of the worth of what we as biosecurity folk do, mixed with a challenge to take what we do back to our communities, and to our barbecues. Not to proselytise but to listen, to seek out others who engage with nature, and to speak in a language that is understood by those people. Read his address in this issue – stirring stuff indeed.

AGM business

Election of Officers

There are a couple of new faces on the Executive this year – Neil Gallagher was elected to the vacant Vice-President position and Lindsay Vaughan has replaced Mike Taylor as the branch representative for the Top of the South branch.

Seconded members who continue on in their roles are John Gardner (Ministry of Health), Andrew Harrison (MAF Biosecurity New Zealand) and Alistair Fairweather (DOC, representing vertebrate pest interests).

Branch health

What a difference a year makes! Last year the general theme coming from the branch reports was of poor health. This year’s reports showed a number

of branches had met together either frequently or had quality meetings that were valuable to members and wider participants. Branch activities provide another opportunity to forge relationships and find out what is happening in the world of biosecurity at a local level.

Financial Report

Our treasurer, Helen Braithwaite, gave the yearly financial report at the AGM. The financial forecast for the remainder of 2008 is looking very positive (~\$40,000) even with the payments to the Protect editor and the website expenditure to be made. The recommendation was made to keep honoraria and subscriptions at the same amount even with the Institute becoming GST registered.

Website

Our website continues to be managed by David Brittain from Kiwicare Corporation Ltd. As one of the more important avenues for information exchange, the website is about to undergo a major upgrade.

A team from the Executive is refining the requirements as passed on by members. They will then engage the services of a development company to make a website that will better serve the membership, you, and possibly as a tool to make ourselves better available to new members.

Our goal is to have the new website live in early November. So visit www.biosecurity.org.nz, the members login is ‘nzbiosec’ and the password is ‘didymo’.

NETS2009

Queenstown has been chosen as the venue for 2009. The timing is different than recent NETS and is going to be held 14-16 October to miss freezing temperatures, allow for field trips, and hopefully avoid the busy season. Queenstown last had NETS 30 years ago and 2009 will be the Institute’s 60th anniversary, so mark those calendars now.

Next Executive meeting

The Executive is meeting on November 3 so if there is any business or matters that you would like raised please contact the secretary, Louise Cook (louise.cook@tbfree.org.nz). Please also note that a copy of both the letter the Executive sent last year to MAFBNZ regarding didymo, as well as its response, is in the Appendix of this issue.

Craig Davey
President

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New Zealand Biosecurity Institute AGM

President's Report

This last year, my first as President, seems to have flown by. Personally it's been a year that's had challenges and it's also been a steep learning curve. As I look back at the year a number of highlights spring to mind.

Protect has gone from strength to strength. After a survey at NETS2007, *Protect* now provides members with shorter articles from across the biosecurity spectrum and continues to profile people working to protect New Zealand from the adverse impacts of invasive organisms.

We have added a regular news column from MAFBNZ keeping us up to date with their higher-profile work and where possible we have included professional development events, short research updates and acknowledged those biosecurity folk who have had exceptional results and/or awards in their respective fields.

We continue to depend on members' input to the magazine and thank all those involved again this year. Sadly our editor will not be renewing her contract with us after the Spring issue – if anyone is interested in taking on this role please contact me or the Editor.

One highlight came a few weeks after NETS2007 when I represented the Institute alongside ERMA and Federated Farmers on Chris Laidlaw's Sunday morning Radio New Zealand National show. The panel discussed the importance of the biosecurity effort to New Zealand, and some of the implications that pests and biosecurity have had on industry and the environment. I found this an interesting forum and a great opportunity for biosecurity issues to be heard on the airwaves.

Another highlight as far as managing the Institute's business is concerned, has been the GST project.

As NETS has become larger, more costly and with a bigger turnover we have reached a point where becoming GST registered is a requirement as well as a beneficial move for the Institute.



Lastly I'd like to commend to you the Executive, and thank them for their contributions to the Biosecurity Institute. I know that many of the Executive members volunteer considerable time to the business of the Institute and as such I'd like to give special mention to Helen Braithwaite.

Helen's effort and leadership with the finances and recently with the membership responsibility, has been much appreciated. I'd like to thank Melissa Hutchinson for her time spent in the membership officer role, one that takes a sizeable chunk of time. I'd also like to thank departing Executive representative for the Top of the South branch, Mike Taylor, for his contributions, and to welcome Lindsay Vaughan as his replacement.

Looking to the future I have every confidence that the NZBI will continue to be a facilitator of biosecurity knowledge in New Zealand. Our membership remains stable and our finances are very healthy.

I look forward to the proposed website upgrades which will give easier access and better service to the members, and display an up-to-date image of the Institute to visitors. And I hope the funding of professional development opportunities, through study and travel, and also the funding of branch activities is well used.

Craig Davey
President

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A journal of biosecurity for NZ?

Mel Galbraith and Dan Blanchon undertook a scoping report to investigate whether a peer-reviewed biosecurity journal would be beneficial for the NZBI. They concluded:

- Both the Biosecurity Strategy for New Zealand and the science strategy adopted by Biosecurity New Zealand have inherent expectations of improved dissemination of knowledge to maintain effective biosecurity management in New Zealand.
- A refereed journal dedicated to biosecurity in New Zealand (or South Pacific region) would provide a mechanism to disseminate multidisciplinary information pertinent to New Zealand managers and practitioners.

- A refereed journal offers a mechanism to ensure that the biosecurity information is evaluated for technical and scientific quality and correctness.
- The New Zealand Biosecurity Institute is in an excellent position to publish and/or host the publication of quality-assured biosecurity knowledge.
- An electronic format of publication may be cost-effective, and facilitate rapid dissemination of information (e.g. see: www.aquaticinvasions.ru)

What do you think?

Send your feedback to Louise Cook
louise.cook@tbfree.org.nz

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New Zealand Biosecurity Institute AGM

News from the branches

Auckland/Northland

Over the last year, the branch has been relatively quiet with just the one meeting which was informative and educational. Branch membership has remained steady with members totalling about 100.

Our most recent meeting was at the Wellsford Fire Brigade House on June 18 and started with morning tea followed by our AGM and general business. After the formalities we had two talks; one on red-eared slider turtles and the other on Manchurian wild rice control. This was followed by a hearty barbecue lunch which was enjoyed by the 30 or so members who

turned up for the meeting.

The branch AGM elected a new chairman, Don McKenzie from Northland Regional Council; a new secretary, Holly Cox from Auckland Regional Council; and Executive Member Greg Hoskins, from Auckland Regional Council, was re-elected.

Greg Hoskins

Executive Member
Northland-Auckland Branch
Vice President NZBI
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Central North Island

Two full meetings were held during the year. The first was in November at Pukeatua. Here a large turnout learnt of the subtleties of insectivorous plants being planted by misguided enthusiasts in reserves.

The field trip took us on a fascinating walk through some of the forest on Maungatautari, now protected by a 42km predator fence. The results of the passion, dedication, hard work and perseverance of mostly local folk were quite inspiring and evident in the volume of the birdsong.

The second was held in Whakatane where members were treated to a photo display of tricky weeds from around the Bay of Plenty, including horsenettle and alligator weed. There was also a talk on the Whakatane kiwi project where the population of birds on the very

edge of town has been increased from a handful to 80 birds and where townsfolk can easily hear kiwi calling. A field trip followed to look at the work of a care group protecting the wading birds of a large saltmarsh in the Ohiwa harbour.

A brief AGM was held in Hamilton in June at which all the office holders were re-elected – Chair, Willie Shaw; Secretary/treasurer, Heidi Pene. The branch finances are healthy with a closing balance of \$250.

The dedicated bunch of members who regularly turn up for our events would be delighted to see more folks participate in these educative and sociable events.

Tim Senior

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Lower North Island

The Lower North Island Branch held its AGM and associated activities on April 17 and 18, hosted by Greater Wellington Regional Council, led by branch President Pedro Jensen.

The aim of the event was to offer attendees a “mini-NETS” experience with guest speakers and field trips showcasing what is happening in biosecurity in the greater Wellington region.

Traditionally, branch get-togethers have focused on pest plants. The 2008 programme was developed for plant and animal pest officers as well as anybody else within the wider discipline of biosecurity.

The first day was held at Tauherenikau racecourse in southern Wairarapa. An AGM in the morning was followed by five speakers in the afternoon from DOC, Biosecurity New Zealand and Victoria University. The day concluded with a tour guided by Mike Urlich of native

forest surrounding the racecourse. On the second day, numbers doubled to more than 50, and we set out to Clive Paton’s property south of Martinborough. Clive spoke on the history of his block, the regenerating bush, his dreams and the opportunities he had taken to realise them. From here the group was split into two separate specialised field trips.

The event was heralded as a huge success. There was something for everyone and there was plenty of time to catch up with fellow biosecurity officers.

The next AGM and associated activities will be hosted by Hawke’s Bay Regional Council, for which preparations have begun already. All lower North Island Branch members can look forward to another successful event in 2009.

Neil Gallagher

Branch Secretary

News from the Branches Continued

Top of the South

Tasman District Council organised a meeting on February 20 for members in Nelson that covered ants and marine biosecurity.

As part of it I described the spread of invasive ants in Nelson city and Tasman district and outlined the strategies used to encourage public baiting. The group debated the challenge of assessing the effectiveness of having landowners undertake baiting. Alice McNatty escorted the group to the Wood area of Nelson city to demonstrate different surveillance methods and show how these were used to determine boundaries of infested sites and to assess the rate of spread.

Graham Strickett outlined the work being done with marine biosecurity advocacy and Tim Dodgshun described a number of emerging issues that were being assessed by Cawthron Institute. The group moved to

Port Nelson in the afternoon and Graham Strickett outlined some of the marine biosecurity challenges in controlling the arrival and spread of marine pests at the port. Bruce Lines, of Nelson Diving Services, demonstrated the equipment that is used when wrapping structures in plastic film with the discussion focusing on the costs and effectiveness.

At the AGM on June 23, 2008, I was elected to the chair after Mike Taylor stepped down and Ben Minehan was elected Secretary. Ben provided a presentation on the search for an effective herbicide for Chilean needle grass and Lindsay provided a presentation on the ocean patriot, brown mussels and incursion management.

Lindsay Vaughan

Branch Chair

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Canterbury Branch Report

Since last year's AGM, the Canterbury Branch has got together for two key fun events. The first being in November 2007 for an early Christmas bash, touring North Canterbury wineries, followed by a lovely social meal at the Brew Moon – but it wasn't all about the fine-tasting wine.

Miles Giller, from QEII National Trust, took us to a QEII-covenanted area near Waipara where control of boxthorn and sycamore, and the site's potential as a Canterbury branch project, were discussed.

Jean-Luc Dufour, the vineyard manager at The Mud House, spoke to us about the winery's interest in the "Greening Waipara" project and showed us their planting and use of the native clematis within the vineyard. Issues of pest and disease control were also discussed, with Jean-Luc mentioning they were considering the use of falcons for predator control.

Earlier this year, a small group of branch members walked around Godley Head and Nicholson Park to see Keith Briden's work controlling boneseed. It was decided that we would take on Nicholson Park as a branch project.

At this get-together members saw Keith's invention

of a sprayer on a fishing line and how it had the ability to spray target plants on steep inaccessible cliffs. We were so impressed with Keith's work that the branch nominated him for the 2008 Weedbusters awards. Keith was awarded the Canterbury 2008 individual "Unsung Hero" award for this dedication and kiwi ingenuity. Congratulations Keith – we are very proud of your achievements and dedication, and encouraged by what can be achieved when you put your mind to it. The branch will, in conjunction with Weedbusters, hold an award celebration for Keith and the other Canterbury Weedbuster winners and nominees on September 21 at Nicholson Park.

A small dedicated team of members had two Weedbusting mornings in August, the first at Nicholson Park clearing boneseed, and the second clearing a paddock of broom which Keith has been working on for some years. The team of seven managed to cut out 90% of the broom in just two hours of sunshine, fabulous views and pleasant conversation.

Gemma Bradfield

Executive Member Canterbury Branch

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Otago/Southland

Not too much to report from Otago/Southland. Being a small, tight branch, we catch up with each other regarding weed issues, and do not have a specific need to meet under the auspices of the NZBI. We had our AGM with Pete Raal and I carrying on in our roles as secretary and chair. We have not had any branch trips. It's working ok, but we are always looking to increase the number of branch members and

provide opportunities to get together.

This year we had two branch members leave. We wish to thank Frank Rosie and Doug Gordon for their involvement with the branch over the years, and wish them all the best for the future.

Randall Milne

Chair & Executive Member Otago/Southland

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NETS2008

Overview from the Chair

Well, another NETS has been and gone and “touch, pause, engage” seemed to stimulate the majority of you who provided feedback, both via evaluation forms and messages to members of the organising committee.

During NETS we were “touched” by progress in the areas of weed and vertebrate pest control by our keynote speakers, we “paused” to consider the great steps towards restoration of degraded ecosystems around the Waikato, and finally we “engaged” in the discussion groups looking at technology in the field, pests or resources and aquatic surveillance. At least that was the plan, and I’m sure other interpretations of the theme were made!

On behalf of the committee, I’d like to sincerely thank all the keynote speakers, the other presenters and chairs of each session, workshop and field trip organisers and helpers, and for everyone who came along and made the event such a big success.

We were overwhelmed by the generosity of our sponsors and special thanks go to the major sponsors: Environment Waikato, University of Waikato Centre for Biodiversity and Ecology Research, Landcare

Research, MAF Biosecurity New Zealand, and AgChallenge.

My personal highlights were Kay Gregory’s welcome to Hamilton; Ben Minehan’s excellent presentation on battles with Chilean needle grass (worthy recipient of the Stook); Lynley and Carolyn’s joint presentation of the Peter Ingram Memorial Award; the band (especially when it was raining men!!); and Kingsley Field’s masterful closing address.

Our committee worked together very well, with plenty of humour and everyone made major contributions to the planning, preparation and running the seminar.

Many thanks go to Sara Brill, Jeanie Byers, Kevin Christie, Kirsten Crawford, Chris Hale, Trevor James, Andy Laurenson, Wendy Mead and Heidi Pene. Carolyn Lewis was our conference organiser, and did she organise!! Thanks Carolyn, we couldn’t have done it without you.

So, on to Queenstown for NETS2009. Hope to see you all there.

Cheers

Paul Champion

Chair of NETS2008 Organising Committee

And let’s not forget the all-important networking and relaxing...



NETS2008

A view from the sidelines – excerpts from Kingsley Field's closing address

Biota... biodiversity... biosecurity – the sorts of things you've been talking about: words that to us of the great uninitiated are perhaps still a little foreign, and which most of us are probably still grappling to get a proper handle on.

One of the great things journalism has afforded me, is that because I have always had an interest in wildlife and the outdoors and conservation, I have taken the opportunity to learn something of all these topics over the years. And I have been extraordinarily fortunate in being able to work alongside and write about the work of some wonderfully dedicated and very interesting people who are acknowledged experts in their chosen fields of biodiversity and biosecurity.

Let me use three of them as examples:

Don Merton, of international acclaim for his work with black robins, with whom I spent a week deep in Fiordland about 20 years ago, following up on information that kakapo droppings, chewings and a feather had been found there.

Those of you who have been to Fiordland will know how dense and rugged and impossibly impenetrable the bush and the country is, and we spent that week floundering through some of it in the cold and the pouring rain such as only Fiordland can offer.

As an aside, may I implore any and all of you who have any say over what happens in Fiordland, leave it as it is – the world needs such places, desperately.

Anyway, we found not the slightest trace of kakapo – mind you, an entire first XV of them could have been performing a spirited haka two metres off our line of struggle, and we wouldn't have heard or seen them – the bush was incredibly thick, the rain lashed down, we were endlessly climbing over ancient and overgrown rock landslides, and there were sandflies at the rate of 748 million to the cubic metre... and there are a lot of cubic metres in Fiordland.

But lying up in a tiny, sodden tent for 10 hours each day with a man of Don's knowledge and experience and years of accumulated wisdom and dedication was a great way to learn something of how and why he has spent a lifetime working on biosecurity. And, of course, about some of the many successes he has had.

And there is Dr John McLennan, with whom I spent a number of black nights in the thick, mysterious bush of the Urewera, out behind Lake Waikaremoana, waiting in endless hope for the call of a kiwi, or trying to locate

one of his precious kiwi chicks by radio tracking.

And I have seen that same man, who is normally full of fun and laughter and bush lore and knowledge, sitting on the leaf-litter in that same dank bush and weeping in rage and frustrated anguish as he picked through the pathetic remains of a beak and feet and a bundle of kiwi-chick feathers that were all that remained after "another bloody stoat" – to use his words – had lunched comfortably.

And there is Dr Avi Holzapfel, about whom I wrote on a number of occasions as he worked with patience and dedication in the bush at Pureora and elsewhere, unraveling the secrets of *Dactylanthus*, making new discoveries about the plant and its lifecycle, and sometimes lying flat on his stomach on the forest floor, carefully scraping away the detritus so he could more clearly see the plant and its root system, and sometimes even using a powerful magnifying glass to make new discoveries right there among the dirt in the bush.

And then coming back the next day and finding his rare and precious plant had been devoured by a possum, which had left nothing but a small pile of possum droppings. I'm still not sure whether his explosive comment of "Shit!" was an outburst of extreme anger, or an astute observation of possum ablutions.

And there have been many other people working in the field of biosecurity, here and elsewhere in the world, who I have had the real pleasure and absolute privilege to talk to and watch and learn from and write about... and including you now among them, I never cease to admire what you do, the astounding dedication you put into it, the frustrations you have to cope with and battle through, the utter crap of bureaucracy and red tape you have to put up with, the lack of finance and resources and minimalist backing and the feeble support you get from politicians and constipated administrations who know little or nothing of the work you do and its associated difficulties... and how you still turn up for work, day after week after month, and just get on with it... because you really believe in what you do, and its real and absolute value for this special little country of ours.

So, I'm not going to exhort you to save black robins, or more areas of wetlands, or the Mahoenui giant weta, or the pupurangi snail, or Whirinaki or Lake Tekapo, or the beautiful braided rivers of the South Island, or wipe out more weeds or stoats. You already do that... in many

NETS2008: A view from the sidelines

cases with singular success in spite of the odds being greatly stacked against you. Collectively, you do a huge amount to ensure the biosecurity of our nation, and I for one, am hugely grateful that you do. It would be churlish of me to think I could tell you what you should be doing.

Instead, I'd like to share just a couple of observations made over the past 40 years of being alongside scores of people who have worked in roles such as yours, doing what you do, for the much same reasons as you do. As well, I'm going to be obnoxious enough to make several suggestions that may perhaps be naïve, but which I firmly believe will benefit the long-term biosecurity of New Zealand.

First, an observation:

I worry that many of you work in isolation; that there are too few gatherings such as this, where you can exchange ideas, congratulate each other on successes, have bitch sessions, have workshops on things that really matter, suggest new ideas for attacking old problems... set up those networks that allow you to pick up the phone – email is, in my firm opinion, a wonderful tool for those who have nothing better to do than polish their skills on working with wonderful tools – set up networks which allow you to pick up the phone and call friends and contacts in your broad-based industry... just for a chat.

So can I suggest you try to organise more of them. They don't have to be a national gathering such as this; they don't even have to be regional. In your own towns and cities there is sure to be a number of people working towards the same biosecurity objectives as you. There may well be minor jealousies about whose work is more important, who gets the most money to do things, and some of the others may well be turkeys or dismally inadequate. But you are all professionals, and the objective of the job – yours and theirs – is to provide biosecurity, in all its forms, to the best of your collective ability. You can see beyond the small stuff.

Organising regular informal gathering of like-minds in your home towns to discuss upcoming projects, problems, how to cope with real sod members of the public, using friends in the right places to circumvent problem legislation, can result in a sudden and substantial reduction in duplication of roles, the reducing of the "them and us" battlefield mentality that some of us can get trapped into – and a coalescing of ideas can only do great good in the community. It may involve 50, but it will certainly also involve a growing camaraderie and a feeling of purpose and specific, achievable goals.

Those are the times when the real nitty-gritty, the guts of the problems and the really good ideas get traded,

along with mobile phone numbers and invitations to drop into the office next week and "we'll check it out". Such gatherings are worth their weight in gold, for the new contacts that flourish there, and that really great feeling of whanau – these people are my people, because I've just found out they think and feel and operate just like me. And when that form of whanau gets going in the community, it's a force to be reckoned with.

And then there's "the others"... the general public, the people who create the real problems and make life simply hell because they are so blarrrrdy stupid!!

How do you cope with that heterogeneous collection of no-hopers?

Yeah, it's a hard one. But like it or not, we all know we gotta do it. And we all know that in fact, among them are some very good, very smart, very dedicated people whose knowledge and understanding of biosecurity is nearly as good as our own. Some of them may even be smarter.

And if we're being serious about the fundamentals of biosecurity – as distinct from the fundamentals of biosecurity legislation/regulation and bureaucracy – some of these smart members of the public are worth tapping into quietly, because they're not too concerned about having to stick rigidly to the letter of the regulatory law. They simply get on and do it, whatever it is, in the interests of biosecurity.

These members of the public, who are often quiet but highly effective local leaders, need all the encouragement and unofficial backing they can get. In return, once they know you're for real, they'll deluge you with support.

And I would urge you to become seriously involved with them and with your local communities, if you're not already in there boots and all. They can help immeasurably, because they know the neighbourhood, and they elect the local council, and they often have resources to hand. And suddenly you're not slogging it out on your own. You've got people to talk to and work with and advise – and maybe even get advice from.

That's when there's this sense of buy-in on their part, especially if some of their ideas are not just listened to but acted on as well. Perhaps seek the help from one of the leaders who you know has mana when you want to organise a specific project, and you may well find they will be willing to help you organise the whole thing and spread the word. If you begin to get a community behind you, you have a tremendously powerful force to pressure local legislators and leaders into taking action, supplying resources and giving support where it's really needed.

Make a special effort to become friends with your local newspaper or radio station... Yes, I know, it may mean

NETS2008: A view from the sidelines

approaching and even speaking to a journalist, so best you have medical checks before and after – but if you can get them to accept even a slight tinge of biosecurity from time to time, you're way ahead.

Biosecurity is, of course, the new, improved 21st century word for "conservation", and it is perhaps as well for us to remember that many people still prefer that earlier, softer and perhaps more umbrella-style expression. Lots of people still do not really understand what it means, which is why there is still some confusion,

maybe even hostility to it all.

So, you have a sometimes difficult task ahead of you getting buy-in, but I believe you can and will do it – because of your real dedication.

May I leave you with this thought: that conservation – or biosecurity – is not the prerogative of professionals – it is the responsibility of all of us.

But because you are the professionals I would urge you all to give the rest of us the lead that we need.

Thank you.

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NETS2008: Field trip report

Maungatautari Ecological Island Trust

The Maungatautari Ecological Island Trust (MEIT) aims to eradicate mammalian pests and predators from Maungatautari and restore the natural biodiversity of the area by fencing the area to exclude pests and intensively control/monitor existing pests and predators.

This field trip was well attended with about 50 members taking part. The group was bussed to the Southern Enclosure site where Pim De Monchy gave an overview of the project.

Members then gathered at the edge of the reserve where Roger MacGibbon (Xcluder Pest Proof Fencing) spoke on the technical aspects of the fence that surrounds the enclosures and entire mountain reserve.

This impressive 47km fence surrounds 3400ha of bush at a cost of about \$200/m.

A metal track has been laid around the entire perimeter so that the fence can be accessed at every point and checked regularly for damage. The fence has a solar-powered surveillance system that notifies the call-out staff by text if the fence has been compromised by a falling tree/branch. The call-out staff/volunteers have no more than 90 minutes to avoid the risk of potential breach by pests.

The large group on the field trip split into smaller parties of eight or nine with MEIT volunteer guides taking members around the reserve, explaining the details of the project and looking at some of the features/achievements to date.

The features include a viewing tower accessed by a spiral staircase that represents a giant rata vine. The platform at the top holds up to 20 people at a time, nestled among 40m high rata trees.

An aviary has been constructed to house native birds that will be released into the reserve. Members were able to get a close up look at several kaka that presently reside in the aviary while they were being fed.

The Tautari Wetland was constructed adjacent



Roger MacGibbon, of Xcluder Pest Proof Fencing, speaking to NETS2008 attendees about the predator-proof fence used at Maungatautari.



Stairway to heaven: the spiral-shaped access to the 40m high viewing platform in the reserve.

NETS2008: Field trip report

the reserve to house a pair of takahe which have produced several eggs which unfortunately so far have been infertile. The pair is continuing to breed and our fingers are crossed for them. Kiwi have successfully established and are breeding on the mountain. A university masters student who is studying the kiwi had just returned from locating them in the enclosure using radio transmitting devices and reported that they were doing well.

Other achievements include the construction of an education building, "Matapihi" and 5km of walking tracks as well as intensive poisoning and monitoring of pests. It appears MEIT has achieved zero density of pests in the Southern Enclosure.

On behalf of the New Zealand Biosecurity Institute I would like to thank the staff and volunteers of MEIT for their time and efforts in presenting and guiding us on this wonderful look at one of the Waikato region's most



Institute members look over the Maungatautari aviary which is home to a number of kaka.

treasured taonga. We wish them all the best with the future success of the project and look forward to the day kakapo are booming from the mountain.

Heidi Pene

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NETS2008: Field trip report

Tales of the (Waikato) Riverbank

Hosted by NIWA.

Hidden behind the Novotel and the Victoria Street hustle and bustle is one of Hamilton's gems, the mighty Waikato River, even mightier than normal due to recent rains.

Fortunately we had a beautiful clear winter's day so typical of our region. We got on the "walking bus" and headed downriver to see the "Hanging Gardens of Hamilton" with a mass assemblage of weeds originating from garden refuse, growing in profusion over the steep ignimbrite cliffs through which the river flows.

A host of NPPA plants including monkey apple (*Acmena smithii*), giant reed (*Arundo donax*), cathedral bells (*Cobaea scandens*), yellow and Kahili ginger (*Hedychium* spp.), blue morning glory (*Ipomoea indica*) and Japanese honeysuckle (*Lonicera japonica*) were spied along with some newer naturalisations including Cretan brake fern

and Chinese windmill palm (*Trachycarpus fortunei*).

We then walked back to the Grantham Street boat ramp and touched, paused and engaged a range of submerged weeds like hornwort (*Ceratophyllum demersum*) and egeria (*Egeria densa*) which grow in the river with comments on their identification and impacts from Mary de Winton and Rohan Wells of NIWA.

The Waikato University's state-of-the-art electro-fishing vessel, Hiko Hi Ika, was then put to work under the guidance of Brendan Hicks and Dudley Bell along with volunteer for the day Mick Clout, now more used to furry rather than scaly vertebrate pests. Native smelt and stunned mullet were the most abundant catch, but one rather nice brown trout also made an appearance.

Paul Champion

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NETS2008: Field trip report

Urban biodiversity – Hamilton gullies

Hosted by Gerard Kelly, of Hamilton City Council, Darion Embling and Ben Paris of Environment Waikato

Many visitors and some Hamilton residents may not be aware of the extensive gully systems that exist within the city. These gullies add another dimension to the cityscape, providing green space for recreation, visual relief from the urban environment, habitats for a wide range of wildlife, and a corridor to connect the wildlife with other habitats outside the city. They are also a vital part of the city's walkway and drainage systems.

Over the years as the built environment expanded, the gullies' natural features have become degraded, many are weed infested and a large proportion of their native flora and fauna has been lost.

Hamilton City Council promotes gully restoration through its gully restoration programme which aims to get rid of the weeds, revegetate with native plants and promote a habitat to support native fauna. Environment Waikato promotes the removal of pest plants by funding schemes to subsidise work done by gully owners, and through its "Halo project" aims to encourage the return of native birds, particularly tui, to the city.

The urban biodiversity field trip began with a look at the Mangaiti gully in a relatively new part of Hamilton. A well-built boardwalk passes through the city-owned portion of the gully from where walkers can see the nearby adjacent landowners' gully sections. The area highlights some of the problems facing gully restoration and the differing values of gully landowners.

We were shown willow-infested areas which are the sites for dumping lawn clippings and garden rubbish, unmaintained areas where weeds were winning, and two very different concepts of gully "gardening" – a well-tended section with exotic plants, many potentially weedy, and a section fully planted in native plants.

From Mangaiti we travelled to the western edge of the city and stopped briefly to view Waiwhakareke

Natural Heritage Park. This wetland area has been subject to a large-scale reconstruction and restoration project involving removal of willows, large-scale planting and importation of peat. Threats in the future



Part of the boardwalk built through Hamilton City's gully network.

include "garden escapes" establishing in the reserve from nearby private properties.

Tills Lookout was the next stop. From here we could look out across the city and surrounding farmland. Gerard pointed out old stands of native trees in the city including remnant stands of totara and kahikatea, as well as the gully systems winding through the city. Ben talked about the pest control carried out for the Halo project and pointed out those areas which provide a vital connection to the city's biodiversity – Mt Pirionga, Mt Kakepuku, Maungatautari, Old Mountain Road Reserve – all seen from the lookout.

Last stop was Hammond Bush, a key ecological site, and one of the few remnants of native bush left in Hamilton. Hammond Bush has a variety of soil types and has an unusually high diversity of native plants. It has a small population of swamp maire, is a habitat of native bat, and has a historic pa site. This area is under threat from adjacent private land, as well as pest plants such as woolly nightshade across the river.

Darion talked about efforts to encourage neighbours to control pest plants and weedy plant species by

NETS2008: Field trip report

subsidising control work on private land.

Throughout the trip Gerard gave a running commentary of issues facing the city with regards to protecting and restoring native biodiversity. He pointed out numerous small but significant remnants of a past vegetation as they came into view and talked about their history and efforts made today to protect them.

Gerard's passion and knowledge of the city and its native flora was well received and much appreciated by all those on the gully field trip.

Wendy Mead



Gerard Kelly, of Hamilton City Council, explaining the ins and outs of the gully restoration work in Hamilton city.

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NETS2008: Field trip report

Zoo and wetland

Stop 1 – The Hamilton Zoo

**Hosted by Stephen Standley,
Director, Hamilton Zoo, and Mike
Gould, Zoo Veterinarian**

Delegates were shuttled through the metropolis of Hamilton via some of the V8 tracks to their first stop at the Hamilton Zoo. From its early days as a farm park raising game for the Acclimatisation Society, to its current species breeding and research programmes, the Hamilton Zoo has constantly changed and updated its practices and facilities to meet the times.

We were fortunate to have Zoo Director Stephen Standley and Zoo Veterinarian Mike Gould as our tour guides who gave us a real insight to the biosecurity and business of running a zoo.

The zoo has a number of aims, one of which is to provide captive breeding programmes for either internationally or nationally vulnerable species. An important aspect of zoo management is to continually introduce new blood lines for its existing animals. One of the difficulties they have is the lack of existing Importation Health Standards for some zoo species and the length of time and cost involved in it takes to get them. This means that the zoo is unable to import mates for species they already have. This explains why zoo animals are often moved around New Zealand and why some species are not replaced as they die out.

Stephen talked about running the zoo as a containment centre and what this meant in practice. One of the requirements of the HSNO Act is the recently upgraded high-voltage fenceline, which is as much to keep the zoo animals in, as to keep domestic animals out.

We also met with Mike Gould the Zoo Veterinarian. As with many vets, Mike is a “jack of all trades” when it comes



Zoo Director Stephen Standley details the high-voltage fenceline which is one for the requirements of the HSNO Act.

to animals. He deals with all of the animals and is in regular contact with vets overseas about treating the exotic species. He showed us the vet facilities (which include a full sterile operating theatre) and took us on a tour of the zoo speaking about issues from ticks to Tb. The animals have regular full health and dental checks and must be clear of a range of diseases to be in the zoo or moved around the country (including Tb). When they are moved abroad and within New Zealand their records go with them and they are kept in quarantine for specific periods depending on the animal. Mike noted that this could be very difficult for social or pack animals that do not like being on their own and its one of the considerations when moving animals around.

Off to see the chimpanzees. We left the chimps outside and climbed down to their night-time enclosure with their keeper. It was all going smoothly until one of the big guys decided to let us know we were in his space – quiet monkey chatter turned into a blood-curdling scream as he hurled himself at



The chimpanzee was so calm – until we walked into his space!

NETS2008: Field trip report

the window of the enclosure – I swear the whole building shook, mind you that might have been because all of us (except the keeper) jumped through the roof!

We had a quick look at the NZ native species aviary and talked about how they are continually improving this space for the birds. It was great to have Stephen and Mike's expert knowledge throughout the afternoon and the opportunity to delve into another side of biosecurity.

Stop 2 – Kauamatua wetland restoration project

Hosted by Keith Smith

How do you restore the most degraded peat lake of Waipa district? A small group of dedicated Fish and Game members, led by Keith Smith and Murray Davies, have done exactly that at Lake Koromatua DoC Reserve. Ten years ago this shallow lake (0.8 m deep) was primarily surrounded by weeds; blackberry, honeysuckle and privet with a grey willow canopy that was fast reducing the open water area. Water quality was severely degraded through contamination from nearby oxidation ponds and dairy-shed effluent.

Discussions around renewal of the Temple View Sewerage Consent kick started the project. To help improve water quality, lake levels were raised 50cm through the diversion of farm drains and construction of an outlet weir and overflow. More than 4500 volunteer hours, a chainsaw, some herbicide and a small amount of funding has transformed this reserve. Most of the effort has gone into weed control but other activities have been fencing, a car park area, tracks, pest control and planting trees from seed collected



Keith Smith, local land owner, programme co-ordinator and extremely motivated chap!

on-site. The dedicated group has had fun and learnt a few lessons along the way: loosely stake trees so movement builds trunk strength; a path through blackberry is quickly created using a pallet, a machete and 160 keen youth.

Before and after photos clearly illustrate what can be achieved by a small, enthusiastic, well-planned team. Thanks to Keith Smith and nursery man John Finnerty, we were treated to a fantastic tour of Koromatua Reserve. Keith's extensive knowledge and involvement in the project, punctuated with quick wit and sparking enthusiasm, brought the place alive for us all.

Kerry Bodmin and Kirsten Crawford

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NETS2008: Field trip report

Clay bird shoot

Hosted by the Te Kuiti Gun Club

Given the extremely bad weather in the days leading up to NETS2008, there was some trepidation about how the clay bird shoot would pan out. All that worry was unnecessary, with the Thursday dawning fine and clear.

With packed lunches in hand, 22 souls with a penchant for shooting inanimate flying objects, boarded the bus for the Te Kuiti Gun Club on Lee's Block Road, just north of Te Kuiti. This is a small country club set in rural New Zealand, surrounded by typical iconic Waikato lowland remnant kahikatea stands. Because of the deluge in the previous few days, a four to five hectare lake had appeared with the water lapping up to the edge of the gun club.

Our two hosts for the day were the club president Neil Pratt, a national claybird shooting representative and vice president Jim Tarrant. After a quick break for lunch – with everyone agreeing that the Novotel made one of the best packed lunches you would ever see with prawn salads, sticky cakes and fruit – shooting got under way.

We were broken into squads of five depending on our ability. The object of the day was to be scored

over a total of 25 birds that came from a number of different stations so it could be determined who would be awarded the 25-year-old shooting trophy.

There was a mix of skills with a number of shooters having shot at clubs previously, to some participants who had never handled a shotgun before.

The course was set out so that each shooter shot at clay birds coming from the left, from the right, straight away and finally overhead from behind, also known as a high pheasant. That was the easy stuff, because then Jim and Neil started to mix it up, with a number of different combinations. For example on one combination, a second clay bird would come out from another station on the report of a gun from shooting the first clay bird. You had to have your wits about you.

Everyone had a great afternoon and by the end of the day most participants were hitting targets (and some novices were shooting quite well).

The winner for the day was Ewan Kelsall from Greater Wellington Regional Council who shot the highest score. There were a number of shooters not very far from Ewan's score, and quite a few mid-fielders.

Kevin Christie

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NETS2008

Workshop summaries

The workshops at NETS were a chance to “engage” with, not only the other participants, but in three very topical discussions. The themes and outcomes from the workshops are presented below, however the question remains: what do we do with these outcomes? Do we set up some type of NZBI working groups to look at furthering and acting on the ideas or do we leave them as interesting conversation and take what we learned back to our own areas? It is up to us as an Institute.

Workshop: Aquatic Surveillance

Workshop question:

Freshwater and marine pests present their own unique challenges for surveillance and control. How can this be managed at local, regional and national levels?

Workshop process:

A generic approach to surveillance was outlined by Paul Champion (NIWA), summarised in the points below.

Resource status: What are you managing? What is the current state of play?

1. Rank and prioritise water bodies e.g., indigenous biota, endangered species, invasive pest status, threats and values.
2. Risk assessment of pests, activities and vectors.
3. Surveillance programme: where to target, methods and frequency of surveillance.
4. Contingency plan for incursion response, e.g., delimitation, containment, eradication.
5. Freshwater versus marine, similarities in approach and points of difference.

An informal discussion followed with observations and experiences from workshop participants focused mainly on the key points of risk assessment and vectors (2) and targeting surveillance programmes (3). These are summarised below.

Discussion Summary

Awareness is a major factor, both public awareness for passive surveillance and raising awareness of all pest species generally has significant implications for ad-hoc surveillance or rather surveillance aimed at distinct group of organisms.

Examples: *C. demersum* found in Lake Ototoa (ARC); *C. demersum* detected in Motueka during a DOC pest fish survey.

Public awareness has an important role particularly in containing pest species: e.g., Barge operators in the Bay of Plenty are hungry for information.

The need for active surveillance to provide for timely response when eradication is the aim: e.g., EBOP finding and eradicating *Ceratophyllum demersum* in Lake Okataina; DOC with the detection and now eradication of *Lagarosiphon major* in Lake Waikaremoana.

Education and awareness is a real gap and needs highlighting, especially on marine organisms. Graeme Inglis (NIWA) has shown that many new organisms have been found during port surveys. There is a real need to understand the current biota and the functioning of the system.

There is a real need to get information out and in the appropriate language to convey the message.

There is a real need to enable the next generation, through schools and education, to have a new attitude to pest species.

Approach of Matt Bloxham (with a feature on the Rotorua lakes soon to be available) is great. Areas with un-impacted lakes are important for targeted protection – tools available include risk assessment, and climate and habitat data matching for pest species, while also addressing vectors and transfer of organisms.

More co-ordination is required.

Message of what's under the water – take home message (Champion, NIWA).

Recommendations from the workshop

The workshop recommended that NZBI approach MAFBNZ to resurrect the National Aquatic Pest Awareness Group (NAPAG) as a forum to discuss progress in all aspects of aquatic pest management among researchers, regional and national agencies, interest groups and resource users (e.g. NZ Federation of Aquarium Societies, eel fishermen).

Workshop Summary by
D Hofstra (NIWA)

NETS2008: Workshop summary

Workshop: Technology in the field

Workshop questions:

- What do we have?
- What are we using?
- What do we want?

Discussion Outcomes:

What is out there?

- Global Positioning Satellite (GPS)
- Google Earth
- Advanced animal management (Scentinel)
- Geographical Information System (GIS)

Applications of GIS:

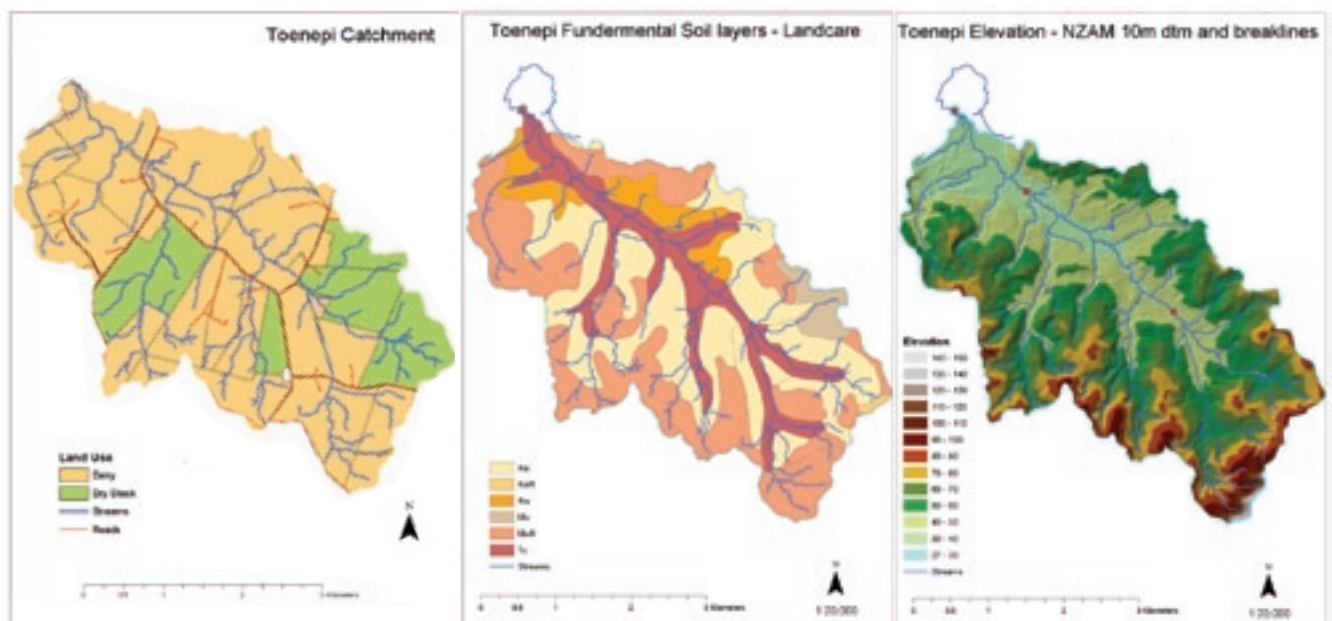
e.g. weed infestations and GIS: Using Remote Sensing for mapping weed infestations, identify herbicide application times and treatment areas

e.g. distribution of nematodes and GIS: enables us to overlay maps of soil types, rainfall, ground temperature, land use and nematode distribution data. To develop understanding/predictive power about where to find them

e.g. Other GIS applications: Investigate spatial and temporal population dynamics of weeds and pests; map overlays of pest and weed distribution for developing local management strategies; consequences of land use changes on pest and weed distribution as well as environmental fate of pesticides; identifying key locations for environmental monitoring of such changes – developing thresholds and indicators of resilience through field trials, mapping, monitoring, modelling and simulations



Technology at work: The use of GPS to locate trial plots.



NETS2008: Workshop summary

- Remote sensing
- Modelling (distribution, limits)
- Pesticide formulations

What are the current difficulties?

- Lack of interchange-ability for GIS data packages
- Inability to interface some PDA's, GIS etc applications
- Limited battery life of PDAs and other recording devices
- Difficulty of contractor training re PDAs etc (new technology)
- Lack of detailed data sets for modelling
- Data sets in wrong format

Due to these difficulties most people still use waterproof paper and pencils to record field data!

What do we want?

- NZ-wide data on all invasive species
- Collaboration modelling tool (i.e. how to get people to collaborate)
- Pooling of data
- One stop shop for new technology/tools
- Something that kills stoats
- Biocontrol for everything
- Species specific toxins

NETS2008: Workshop summary

Workshop: Pest or Resource?

Workshop questions:

What ways do we currently try to resolve pest/resource conflicts?

What works and what does not work, and why?

What alternative methods could or should we use?

Could science be used to help resolve some conflicts?

Could policy be used to help resolve conflicts?

Workshop process:

Small groups brainstormed ideas and worked through questions. At the end of the workshop the whole group came together and discussed main ideas.

Workshop outcomes:

- We know what we should do but do not do it.
- Trying to be efficient with resources not effective with people.
- Need bottom-up not top-down approaches; community-driven; community-champions; empowerment.

- Often aiming for compromise, rather than outcomes, where we can all win.
- Need to move away from consultation to dialogue approaches.
- Science needs to provide new tools, address basic knowledge gaps etc. But needs to be clearer and more relevant and accessible to communities. Problems with funding and timeframes.
- Importance of social science and interaction with other disciplines to get smarter about how to work with, influence and motivate people.
- Relationship building, trust.
- Clear targeted communication – science and policy.
- Next generation, work on kids.
- Raise awareness, power of images, better use of media.

This is a brief review of the workshop, and an in-depth article will appear in the next issue of *Protect*.

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NETS2008

Awards presented at NETS2008

The following NZBI awards were presented at the NETS2008 Conference Dinner.

Peter Ingram Book of Knowledge Award

Awarded annually for members who further their personal pest plant education in a significant way, and/or enable others to do so. Jointly awarded to Lynley Hayes & Carolyn Lewis.

Joint recipient: Lynley Hayes, Programme Leader, Biocontrol of Weeds,
Landcare Research, Lincoln

Lynley began working as a biocontrol technical assistant at DSIR Entomology Division in 1990. She soon rose to become the driver and leader of a commercially funded weeds research programme.

When Landcare Research was formed in 1992, Lynley was developing a significant role as the main liaison between Landcare Research and end users such as regional councils. Never one to stop at just this role, Lynley aspired to become a very competent and prominent facilitator and public speaker.

During the 1990s, Lynley advanced into the ranks of the New Zealand Biosecurity Institute and in 2000 was nominated for the role of president. She won the position and soon things began to change!

Over the five years of Lynley's reign as president, the Institute became more professional, gained a much higher public profile and the NETS format we have today was developed. NETS became a forum for scientific, technical and practical information sharing and gathering for all Institute members and NETS participants.

The Institute has never been the same since Lynley



When asked to outline her main motivation to keep working in biosecurity, Lynley responded: "In biocontrol of weeds you have to be in it for the long haul, as quick results are the exception rather than the norm. I have been working in this area for nearly 20 years and I know it may be another 20 years before we reap the rewards of some of our work, and I want to be there to enjoy it when it happens! It also helps to work with great people, who are equally dedicated to the cause, and in many cases have been at it for longer than me. I am lucky that, through my job, I have been able to make new friends all over New Zealand and in many other countries, and be able to make a difference."

took over the helm. Lynley's influence on the Institute was significant and still remains today. She is a wise and informed voice on almost all Institute matters.

Lynley continues to lead the commercial weeds programme at Landcare Research. She still has a high public profile and is the mainstay of the co-operative programme between regional councils and the Landcare Research team.

Presented by Hugh Gourlay, Landcare Research

Joint recipient: Carolyn Lewis, National Co-ordinator for Weedbusters,
Co-ordinator Te Kauri Trust
Private contractor

Carolyn has been involved in the weed industry for more than 15 years and has been actively involved in NZBI for much of that time. She was president of her local Central North Island Branch, spent two years as the NZBI President, several years editing *Protect* magazine, and was the Chair of the Rotorua NETS Committee. She was also the event co-ordinator for NETS2008 – a highly successful event.

Carolyn was a Plant Pest Control Officer for Hamilton city for many years and during that time actively promoted weed awareness, talked to hundreds of gardening and community groups and organised endless public-awareness events.

Carolyn has always been passionate about weed awareness and education. She was a passionate supporter of the Weedbusters programme when it

NETS2008: NZBI award presentations

first started in Waikato and then took over the National Co-ordinator's role two years ago.

In this role, Carolyn has taken WB to new heights. She initiated new ideas and carried them through such as writing and producing the WB children's story, *When the Jones Kids Come to Town*.

She has built teams of regional co-ordinators, put together tool kits and organised regional awards. She developed the "dirty weekend" weeds clean-up promotion, produced several resources (including calendars, flyers, regional *Plant Me Instead* booklets and regular newsletters), presented at conferences including the NZ Gardening Industry Association and initiated a survey of public perception/knowledge on weed issues.



Carolyn Lewis (the one with the purple hair) when asked, what had been her main motivation to keep working in biosecurity, responded: "A chance to make a real difference for New Zealand's environment, coupled with a really amazing network of people working in the biosecurity field who are so happy to share their expertise and support."

Among all of this, and while wearing several other hats, Carolyn managed to complete a Postgraduate Diploma in Public Relations from Waikato University with flying colours.

Presented by Wendy Mead, Environment Waikato

Peter Nelson Memorial Trophy

Awarded annually for outstanding achievement in the field of vertebrate pest management.

Awarded to Bruce Warburton, Research Leader
Pest Control Technologies Team
Landcare Research, Lincoln

For more than 30 years, Bruce has made significant contributions to research on vertebrate pest management.

He has combined a strong scientific understanding of the biology of pest animal species with a practical approach to their control, through both improvements to the control tools themselves and the optimal strategies for their use (e.g. appropriate trap spacing, buffer widths, etc.).

This combination of biological understanding and strategic thinking has been applied to possums (with a chapter in the *Brushtail Possum* book, published in 2000, on the management of possums), wallabies (six chapters on wallaby biology and management in the *Handbook of New Zealand Mammals*, updated in 2006), and stoats (with a recent paper in the journal *Animal Welfare*).



Bruce Warburton, recipient of the Peter Nelson Memorial Trophy. When asked what his motivation for working in biosecurity, replied: "Having the privileged opportunity to work in the New Zealand outdoors with many great colleagues, and contribute to making vertebrate pest management more effective and world leading."

NETS2008: NZBI award presentations

Bruce's recent research has focused on two key areas. Firstly, the management and control of multiple pest species in natural ecosystems: applying his knowledge of the biology of single species to understanding the dynamics and management of a range of interacting predators and prey. Secondly, identifying and developing new technologies for the management of a range of multiple pest species in New Zealand – including the use of genetic technologies, fertility control and non-toxic substances for control and management of vertebrate pests.

Bruce has also made significant and long-standing national and international contributions to the development of scientifically defensible and acceptable

welfare standards for animal traps and trapping.

Much of Bruce's research has been conducted for and in collaboration with end-users, particularly regional councils, Department of Conservation and Animal Health Board (more than 100 contract reports). One example has been Bruce's work with the Possum Products Marketing Council to assist with the commercial marketing of possum-based products, while at the same time researching how the contribution of harvesting to achieving Tb and biodiversity goals can be maximised. This has resulted in recent interest from regional councils in the potential for incorporating harvesting within local and regional possum control programmes on private land.

Stook Award

Awarded to the NZBI member who makes the best presentation at NETS.

Awarded to Ben Minehan,

Senior Biosecurity Officer (Plants)
Marlborough District Council

Ben is responsible for the administration and implementation of the Regional Pest Management Strategy for Marlborough District Council.

His roles include: surveillance and control work for total control pest plants; surveillance; compliance and enforcement inspection work for containment control pest plants; management of contractors and casual staff; harvest and release of biological control agents; and special projects such as NZ registration of Flupropanate.

Key points of Ben's NETS2008 presentation "The Quest to Control Chilean Needlegrass – The Flupropanate Story":

- Progress has been achieved by pulling New Zealand expertise together and finding a way around the problems encountered through the process;
- Current funding resources have been utilised to help progress the project;
- Funding has been sourced from across the country

Ben Minehan:
"I am motivated by making a real difference on the land. Working with those in the farming community who have a genuine interest in the land and looking after it to ensure it is sustainable for future generations."



and from a range of organisations;

- A large number of people have worked on this project and email has proved to be an invaluable tool.

Study Award

The purpose of the Study Award is to provide funds to assist with an individual's research to improve knowledge in the field of biosecurity.

This year's Study Award was given to Danielle Middleton from Massey University who is studying for her MSc in Zoology. Danielle is researching salmonella prevalence in New Zealand native lizards and how this

would effect translocation projects that are set up to try and conserve native lizards.

Danielle has promised an article on her research findings in a future issue of *Protect*.

NETS2008: NZBI award presentations

Travel Award

The Travel Award is set up to provide an NZBI member with funds to assist with travel expenses to further his or her knowledge in the field of biosecurity.

This year's Travel Award was presented to Dave Galloway from the Auckland Regional Council (ARC).

Dave attended the 14th Australasian Vertebrate Pest Conference, hosted by the Invasive Animals Cooperative Research Centre, and held in Darwin. His trip was jointly funded by NZBI and ARC.

The conference is held every three years with the last being in Wellington in May 2005.

The conference covered every animal pest issue from deer to fish, and for Dave, the carry-home message was watch for feral cats, pigs, birds and pest fish. He is compiling a report on the conference for NZBI which

will either be printed in *Protect* or presented at NETS 2009.

Dave is the ARC Biosecurity Team Leader (North) and his main areas of responsibility are managing a team of five Biosecurity Officers, habitat information for biosecurity and biodiversity, low incidence pest plant control and regional possum control.

His current projects cover a wide range of issues from *Rhamnus* control on the mainland, to assisting with the aerial poison drop on Motu Kaikoura Island in the Hauraki Gulf, and providing advice to other mainland island eradications within New Zealand.

Clay Bird Trophy

This year's Clay Bird Trophy, awarded to the winner of clay bird shoot field trip, went to Ewan Kelsall from

Greater Wellington Regional Council.

Queenstown NETS2009

Got anything 'remarkably pesty' from 30 years ago?

The theme for NETS2009 theme is 'Remarkable Changes' – loosely based around what the state of pest management was about 30 years ago, and what the future of biosecurity might hold in 30 years time.

We need you to trawl through dusty archives and hazy memories to hunt out treasures or snippets of pest management circa 1979.

Photos, files, anecdotes – we'll take them all. Already, Ian Popay has dug up a Noxious Weeds Inspector's folder from 1979 when their conference was last held in Queenstown, and Paul Champion has managed to extract himself, a whole pile of dust, and some pest-related artefacts from NIWA's archives.



So, if you're holding any historic pest booty circa 1979, drop me a line.

Contact: Randall Milne
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New Zealand Plant Protection Society

Arthur Healy awarded society medal

Botanical legend Arthur Healy was recently honoured by the New Zealand Plant Protection Society, which awarded Arthur its Plant Protection Medal at the society's recent conference.

The medal is awarded to individuals who have given outstanding service in the protection of New Zealand's crop plants and native vegetation from the ravages of weeds, pests and diseases.

Arthur was Assistant Director of the old Botany Division of the DSIR, then this country's premier research organisation, for 25 of the 33 years he spent with them. He was an ardent collector, not only of plants, but also of insects and fungal diseases. That resulted in species of insects being named after him, and he is mentioned as a collector in many publications on these organisms.

He also meticulously recorded details of where and when he found specimens, and recorded the details of



Arthur Healy – botanical legend



Arthur's grandson, Cameron Healy, with the medal he accepted on his grandfather's behalf.

his plant finds in a series of publications. He authored *Flora of New Zealand Volume 3*, and a series of papers that helped field workers identify the weeds that they needed to recognise in order to control them safely.

Dr Ian Popay, a specialist in invasive weeds with the Department of Conservation, and a dedicated NZBI member, said: "Arthur was always one of my botanical heroes. He did more for botany, and protection of New Zealand's agriculture than most of us. In fact, for years he was a one-man biosecurity operation – a job now done by dozens!"

Arthur, now 91, lives in Christchurch. When asked to attend the society's conference in Paihia in the Bay of Islands, he said he didn't think he'd survive the journey. So the society asked Arthur's grandson, Cameron Healy, to accept the medal on his behalf.



New Zealand Plant Protection Society (Inc)

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Future trends

How climate change may affect your work

Keith Briden

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Climate change is now accepted by scientists, governments and increasingly by the general community. Recognition of the impacts of invasive species and how they may be managed in the future is going to need more attention and awareness.

We are currently faced with an increasing number of invasive weeds and animals, and insufficient budgets to tackle existing impacts. Climate change will place our ecosystems under even more stress. We can expect increased droughts and fires, floods and storm events, higher temperatures and new peak summer temperatures, and so on. Stressed ecosystems will be open to an increasing number of invasive species at a faster rate.

Climate change policies create new weeds?

The New Zealand Government is bound by the Kyoto Protocol to reduce green house emissions to pre-1990 levels. Unfortunately, New Zealand is currently emitting 26% more greenhouse gas than at 1990 levels. Because of this, the government is increasingly looking at options to:

- reduce emissions,
- sequester carbon, and
- introduce an emissions trading scheme.

Politicians, Treasury, the community, and entrepreneurs are keen to find ways to balance New Zealand's carbon emissions. Potential actions and policies may result in new weed problems, and negative impacts on native biodiversity and ecosystem services.

Biofuels

Our government is currently passing legislation that will require a small percent of biofuel be added to petrol. Biofuel crops are being referred to as "environmentally responsible alternatives to fossil fuels". There are an increasing number of proposals to plant biofuel crops and import new biofuel species. However, many



Dedicated to the core: Keith with another victim of a six-year Weedbuster boneseed event! Keith has worked for the Department of Conservation since 1991 and has wide experience in biodiversity protection including animal pest and weed control. He is the department's technical advisor for environmental weeds management.

species proposed as biofuel crops worldwide have weedy characteristics:

- Fast growing
- Easy to propagate
- Drought tolerant
- Large numbers of seeds
- "Vigorous varieties"
- Weedy history in another country
- Spread via flood events and sprout from fragments
- Expensive and difficult to control
- Toxic to stock
- Few natural enemies
- Grow on wasteland

The one factor that has consistently high correlation with invasiveness in New Zealand is whether or not the species is invasive elsewhere. Promoters of new biofuel crop species promote the expression "just because its weedy in another country doesn't mean it will be weedy here". Some biofuel species being promoted that we should be concerned about are:

- *Spartina* spp.
- Giant reed (*Arundo donax*)
- Reed canary grass (*Phalaris arundinacea*)
- Willow and poplar species
- *Jatropha* (*Jatropha curcas*)
- *Miscanthus* spp.

Recently, ERMA approved the importation of sterile *Miscanthus giganteus* for use as a biofuel plant in New Zealand, without controls. The process was non-notified and did not involve public consultation.

Future trends: How climate change may affect your work

“Don’t let invasive biofuel crops attack your country” — IUCN

Drought-resistant plants.

There is an increasing realisation that climate change means more droughts. This is creating considerable interest in drought-resistant plants including:

- Human food crops
- Stock food
- Turfs and grasses
- Garden plants
- Genetically engineered varieties of the above

A Google search on “drought resistant crops” will give you around 200,000 hits, many from the Monsanto website. We can expect an increasing demand to import and release new drought-resistant plants. Those people protecting dry-land ecosystems should be particularly concerned.

Planting trees to sequester carbon

Two promising ways New Zealand could improve carbon sequestration are to plant new forests, and to encourage successional change towards forests. New forests could involve planting native species or exotic species, but new plantings need to be well thought through.

Native species are difficult and expensive to establish. A recent review in the *NZ Journal of Ecology* suggested the cost of establishing native shrubs at 2500 stems per hectare could be \$15,000-\$20,000 per ha, with additional follow-up weed and pest control costs of \$2000 to \$3000 for two to five years. Although there is considerable potential to increase carbon stocks, most gains may be 100-400 years out. Government and Treasury are mostly focused on the first two Kyoto commitment periods 2008 to 2012, and 2013 to 2020.

Exotic species are much easier and cheaper to establish. Carbon sequestration gains can be made much more quickly compared to native species. We can expect an increasing demand to plant exotic species on both private lands and lower value conservation lands.

Planting exotic species in the high country was carried out in the 1970s by catchment boards and the New Zealand Forest Service. It can be as easy as spreading seed from a helicopter. Trees being considered for carbon sequestration plantings include douglas fir, redwoods, and ponderosa pine. As well, some individuals in our community are promoting the spread of existing wilding conifer infestations.

There are a number of downsides to wide-scale exotic tree planting. Plantings may impact on ecosystem

services and biodiversity.

Water from the 22,000ha tall tussock ecosystem in Otago’s Te Papanui Conservation Park is used for irrigation, domestic drinking water, and hydro power generation. The net present value of this water is estimated at \$136 million. A study in a similar catchment that was converted to forest showed a 41% reduction in water yield after 22 years. Water can be obtained in perpetuity but forests cannot make further carbon gains after they mature.

Douglas fir is a species that spreads onto conservation lands. Recently it has been invading riparian ecosystems in Marlborough’s Branch River. It is also shade tolerant and may invade native forest especially if climate events cause canopy gaps.



Douglas fir invading riparian systems in the Branch River, Marlborough, 2007.

Photo: John Gilchrist

An individual who has planted exotic trees may be claiming carbon credits. In time, neighbouring property owners could find themselves burning fuel and dollars as they clear wildings that have spread to their land.

Planting new forests may be part of the solution, but they need to be well thought through.

Some things we can do to help

Government policies along with community and industry proposals to mitigate climate change may have negative or unintentional consequences for biodiversity. There are things we can do that will make a difference:

- Become aware, and make others aware.
- Promote proposals that benefit both biodiversity and carbon.
- Discourage proposals that are good for carbon but bad for biodiversity.
- Help community restoration initiatives. Many community restoration projects fail because they did not anticipate the level of weed control required nor how to effectively kill weeds. We can provide

Future trends: How climate change may affect your work

leadership to the community through initiatives such as Weedbusters and good information on killing weeds effectively via the Weedbusters website. In this year's budget, communities have been given \$4 million over two years for public land restoration projects.

- Controlling weeds that prevent forest regeneration or kill canopy trees may be cost effective ways of maintaining carbon.



Weed control to protect existing forest sinks may be cost effective ways of maintaining carbon.

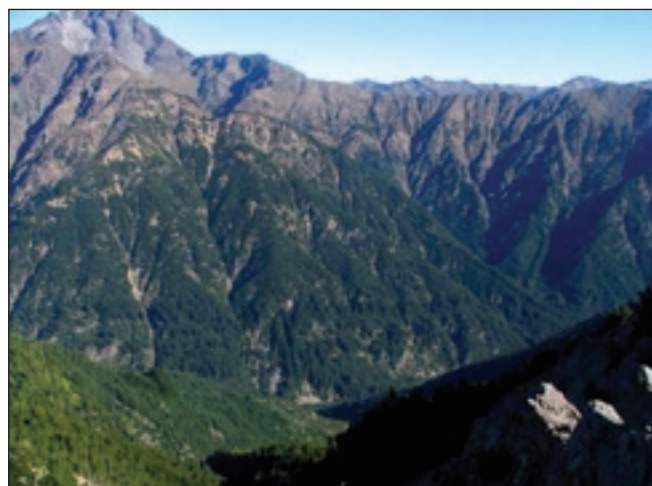
Above left: Old man's beard kills canopy trees.

Photo: DOC Image Library

Above right: Tradescantia, prevents forest regeneration.

Photo: John Barkla

- Surveillance to prevent new weeds from arriving, or, catch new weeds early enough to eradicate or contain them is important work that needs supporting.
- Control weeds early. The cost of controlling wilding confers can be as low as \$2/ha. Left to spread the cost can escalate to \$1500/ha – 750 times the cost and a lot more carbon used.



Pinus contorta establishment on steep bare land in the Branch River, Marlborough, in 1987 (top) and 2007 (bottom).

Photo: Nick Ledgard

Summary

- Climate change equals new weed invasions
- Climate change policies equal even more weed invasions
- But there are things we can do!

For further information:

See www.invasives.org.au/downloads/isc_weedybiofuels_summary2_oct07.pdf for the summary of this paper. For the full text (updated in March 2008) follow links from: www.invasives.org.au/issues/biofuels.html

Climate Change and Invasive Species, November 2006. This is a workshop report to the Australian government-run by the Biological Diversity Advisory Committee.

Invasive Alien species – are we up to the challenge? H.A. Mooney et al. Proceedings of the 15th Australian Weeds Conference

NIWA and MFE websites



Local projects

Hamilton Halo – bringing back the birds

Ben Paris

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Hamilton city has very few iconic native species such as tui, bellbird and kereru. These species are important pollinators and seed dispersers for native plants and they are highly valued by city residents.

The Hamilton Halo project was initiated by the Environment Waikato Biosecurity-Heritage Group to help bring more native birds back into urban areas. The project was designed to assist habitat restoration and biodiversity, with a focus on tui as a key iconic species of the Waikato.

Tui have a summer feeding range of about 20km. Studies by Landcare Research have shown that, unlike other wildlife, tui do not need corridors. They commute daily into the city to feed on the abundant exotic plants. Small numbers of tui have been tracked returning from Hamilton, back to rural summer nesting forest areas outside the city. Five-minute bird counts, carried out by Landcare Research, showed that tui visit Hamilton between May and August, with more seen in



Tui (Prosthemadera novaeseelandiae) feeding on kowhai (Sophora sp.) Studies by Landcare Research have shown that, unlike other wildlife, tui do not need corridors. Tui commute daily into the city to feed.

Photo: W Gatland

the western suburbs. However, no tui were recorded in Hamilton during the breeding season, except in Taitua Arboretum where tui have recently fledged.

To increase the number of tui visiting the city, breeding success must increase within identified breeding areas in the 20km feeding range around Hamilton.

Recent studies have shown that tui nesting success is only 27%, mostly due to high populations of ship rats in the Waikato. To improve nesting success, annual rat control is undertaken by Environment Waikato at selected sites within the Halo area.



The "Halo" represents the 20km feeding range around Hamilton City.

Image: Environment Waikato

2007 Operation

Environment Waikato and its contractors have been involved in possum control for many years. However, ship-rat control creates a whole new dimension to pest control. Ship rats have relatively small home ranges – about 100m – so pest control needs to be very intense. The Halo working group (including staff from the Department of Conservation and Landcare Research) decided the optimum bait station grid spacing should be 75m.

The first Halo Project site in 2007 was at Old Mountain Road, 15km from Hamilton, near Whatawhata. The site had two discrete blocks of bush (approx 180ha each) which presented an opportunity to do some "research by management". The eastern block was chosen to have ground bait stations at 75m spacing using two pulses of brodifacoum. The western block was aerially treated, firstly with one round of pre-feed, and then with 1080 pellets.

The project is specifically aimed at increasing nesting

Local projects: Hamilton Halo project

success, therefore the operation was aimed at suppressing the rat populations before the key bird breeding season. Pre-operation monitoring showed rat tracking rates at 60%. Operations started in September, aiming to achieve rat tracking rates at below 5% (a described "bird safe" level) by November.

Post-operation monitoring results in late November showed 0% tracking in both the ground and aerial control blocks. This was an outstanding achievement considering it was the first year of the operation. A subsequent tunnel survey in February showed an average of 2% tracking, which indicates that the pest population was sufficiently suppressed during the bird breeding season.

2008 Operation

Environment Waikato wanted to expand on the success of the 2007 pest control operation and plans to continue site control for three years out of five to boost tui populations. Pest control is contracted out and paid for by EW and in each area, key community members and other organisations are involved.

Old Mountain Road will be treated again under the same control regime. This will allow EW to monitor the success of consecutive years of control. Landcare Research will monitor nest predation within the block, as well as bird counts within Hamilton to pick up any increases in adult tui adults visiting the city.

Breeding areas on the eastern side of the Hamilton Halo were identified to expand the pest control programme. Te Miro Scenic Reserve is a 400ha Department of Conservation area with a close community living around the reserve. A steering group of key members of the community are part of the operational discussions and keep the rest of their community up to date.



Ben Paris checking one of the tracking tunnels used to monitor rats in the Halo project bush blocks.

Ben is a Biodiversity Officer at Environment Waikato. His work mainly involves co-ordinating the Hamilton Halo project and talking to community groups about rat control. "My motivation is my strong passion and interest in the native birds of NZ, and how we protect them from the introduced nasties. As a Hamiltonian I hope that this work will make a difference so that one day tui in Hamilton city may be a common sight and sound."

Photo: R. Knopp

Nearby, community group Friends of Sanatorium Hill have taken ownership of the longer-term pest control on the 80ha Maungakawa Scenic Reserve (or Sanatorium Hill). The group has accessed funding (external to Environment Waikato) to assist with the project. They also aim to expand the cultural and historical interpretation of the site for the public.

Halo Project pest control for 2008 will kick off again this spring at all three sites.

Local projects

Protecting Bethells Beach NZ dotterels

Greg Hoskins

Biosecurity Officer
Auckland Regional Council
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New Zealand dotterels have been seen at Bethells-Te Henga beach for the fourth successive year. At least two pairs have nested each year with one of two chicks fledged a year since 2005. It is believed the NZ dotterels are returning to Bethells Beach due to pest animal control in the dunes and successful breeding programmes in other areas such as Whatipu, resulting in a spillover of birds to nearby suitable areas. This last season a pair of variable oystercatchers also nested in the dunes for the first time but no chicks fledged.

The birds are tame and approachable. They are about 25cm long and 160g – a squat bird with large head and robust bill. Breeding adults have brown upperparts with an orange-brown breast, which is darker red in males. Non-breeding birds have grey-brown upperparts with white underparts.

Volunteer efforts

The Bethells Beach Care Group, assisted by the ARC have carried out rabbit baiting, and mustelid trapping to protect the NZ dotterels nesting in the dunes. To



The NZ dotterel (Charadrius obscurus) or tuturiwhatu pukunui is a protected threatened endemic bird with a population of about 1400. Confined entirely to NZ, they nest on sand and shingle beaches from the Bay of Plenty and Kawhia northwards.

Photos: Greg Hoskins

date, 17 weasels, 11 stoats and numerous rats and hedgehogs have been caught. With intensive rabbit baiting starting in 2002 in the dunes and mustelid trapping commencing in 2005, the habitat for wildlife has improved dramatically.

Raising public awareness

Dotterel nests are usually just a scrape in the sand with little or no lining, often near a piece of driftwood, seaweed or dune vegetation. They lay two to three pale olive to buff-brown eggs, heavily marked with dark brown or black blotches. As the nests and eggs are hard to see in the dunes people can easily walk on, and crush them. A number of dotterel breeding signs have been put up around Bethells Beach by the ARC, WCC and Bethells Beach Care group, to alert the public that dotterels are breeding in the dunes.

Dogs are also a major threat because they can crush eggs, chase birds from nests or worse, catch them. Bethells Beach is a popular spot for dog owners and we encourage them to keep their dogs on a leash during the breeding season from September to March, and out of the dunes area.

Pest control programme

Rabbits will destroy dotterel habitat if not controlled or kept out of the dunes. At Bethells, the rabbit control



Greg Hoskins has been with the ARC for 10 years as the Biosecurity Officer for South West Rodney, based at the ARC Biosecurity Westgate Depot. Prior to working for ARC he was a horticultural consultant with MAF, based at Kumeu. Greg works mainly with pest plants but also assists beach care and landcare groups with pest animal and pest plant control. Other areas of work include biocontrol of weeds and writing regular biosecurity articles for the Nor-west News.

Local projects: Protecting Bethells Beach NZ dotterels

programme consists of 20 Greengard or multi-feeder rabbit bait stations plus six mini Philproof bait stations scattered throughout the dunes. These are filled every six to eight weeks with Pindone rabbit pellets when the majority of the bait stations are empty.

Twenty stoat traps comprising of ten DoC200 traps, and 10 double set Fenn6 traps are set throughout the dunes to control stoats, weasels, hedgehogs and rats. The traps are baited with a hen egg which is replaced about every three weeks. Controlling these pest animal species will improve dotterel breeding success and may lead to their expansion of range.



The NZ dotterel signs have raised public awareness about the birds so people will give them space.

Monitoring

Each year, the Bethells Beach Care Group and ARC record the number and type of pests caught in the dunes, as well as the number of dotterels present.

Left: Weasel caught in DoC200 trap at Bethells Beach.

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Animal regulations

Deer Farming Notice No 5, 2008, now effective

Keith Briden

Department of Conservation
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New Zealand has about 3800 deer farms holding 1.7 million deer. Each year approximately 700,000 deer are processed, mainly for export. The deer industry is worth in the order of \$300 million to the economy.

Some aspects of deer farming in New Zealand are controlled by DOC under the Wild Animal Control Act 1977. This manifests into a thing called The Deer Farming Notice (DFN). The previous DFN was gazetted in 1986 and has become outdated. Following an extensive consultation process in 2005 an updated deer farm notice has been developed.

The DFN specifies where deer farming is prohibited, where deer can be farmed generally, or where a particular species of deer can be farmed. In some situations deer farming, or a deer species, is "regulated". Regulated means a deer farmer or safari park operator must have a permit. Permit conditions will include e.g. meeting a boundary fence standard and reporting escaped deer. Under the previous deer farming notice all deer farming in New Zealand was regulated. In the new notice deer farming is only regulated by DOC where it is justified.

Prohibited deer farming areas

The direction of the DFN 2008 is to prohibit deer farming where it is justified.

- The existing prohibited areas in Northland, around Egmont National Park, and offshore islands have all been retained.
- The existing prohibited areas in the Waitakere Ranges, Hunua Ranges have been extended slightly to make better boundaries.
- The Coromandel Peninsula had a small prohibited area at the northern end and this has been extended to cover the whole peninsula. The existing 10 or so deer farms affected by the boundary change can remain.
- There are two new prohibited areas; Kaikoura Island



Map showing areas where deer farming is prohibited.

and Stewart Island, where there are no current deer farms or safari parks operating.

- Ninety-nine percent of deer farming involves three deer species: red deer, wapiti and fallow deer. The area that remains a regulated deer farm area is the top third of the North Island which is predominantly free of wild deer. The bottom two thirds of the North Island and the whole SI are now unregulated deer farm areas for the main species, red wapiti and fallow deer. A permit from DOC to farm deer will not be required, and deer farmers will not be required to meet the DOC perimeter fence standards.

For a DoC factsheet on the Deer Farm Notice, 2008 go to www.doc.govt.nz/upload/documents/getting-involved/consultations/consultations-results/deer-farming-notice-5-2008.pdf



New plants added to National Pest Plants Accord

Seven new plants have been added to the National Pest Plant Accord (NPPA) effective from September 1, 2008. The new plants are: *Bomarea caldasii*; *Bomarea multiflora*; *Clematis flammula*; *Cotyledon orbiculata*; *Cyathea cooperii*; *Prunus serotina*; and *Rhododendron ponticum* (note: cross-breeders will be able to apply for permission to use this species for cross-breeding purposes).

The updated National Pest Plant Accord (NPPA) booklet will be sent to partners and will also be available on the MAF Biosecurity New Zealand website www.biosecurity.govt.nz/nppa

The NPPA is a co-operative agreement between the Nursery and Garden Industry Association, regional councils and government departments with biosecurity responsibilities (primarily MAFBNZ and

the Department of Conservation).

All pest plants listed under the accord have been declared unwanted organisms under the Biosecurity Act 1993. This prevents their sale, propagation or distribution across the country.

Regional councils undertake surveillance to prevent the commercial sale and/or distribution of these plants and the NPPA booklet will further assist with the identification of unwanted plants.

MAFBNZ holds regular workshops for staff involved with NPPA work. This year's training workshops have just been completed, with two one-day workshops, one in Hamilton and one in Christchurch.

The workshops covered identification of a range of NPPA plants and similar species, as well as Biosecurity Act training.

Planning for didymo summer campaign under way

Planning for this summer's didymo social marketing campaign is under way. While social marketing is ongoing throughout the year, greatest emphasis is placed on the busy summer period.

MAFBNZ funding will be available again for regional council summer programmes. Application packs were sent to regional councils in late August.

To get partners more involved with the "Check, Clean,

Dry" social-marketing programme a Check, Clean, Dry Advisory Group (CCDAG) is being established.

Nominations are currently sought from partner organisations (DOC, Fish and Game, regional councils, iwi, industry). CCDAG will provide advice/feedback on the campaign.

It is envisaged that greater emphasis will be placed on other aquatic pests, while keeping up with the didymo messaging.



Lesley Wilson
Didymo LTM Coordinator
Didymo LTM Steering Group
MAF Biosecurity New Zealand
PO Box 2526
Wellington

Didymo and felt soled waders

Dear Lesley,

The Executive of the New Zealand Biosecurity Institute (NZBI) are writing to emphasize the concerns of many of our members, many who are directly involved with LTM groups or other regional initiatives, of the potential spread of *Didymosphenia germinata* (didymo) via felt soled waders.

As you are aware, the unwanted freshwater alga didymo is widely distributed in the northern hemisphere but in the southern hemisphere is known only from New Zealand's South Island. In recently published information on your website, MAF Biosecurity New Zealand have emphasised that research by NIWA shows the risk of spreading didymo on felt-soled waders is extremely high, especially when compared to the risk associated with the use of rubber-soled waders (Biosecurity New Zealand Didymo Stakeholder Updates - December 2006; March 2007). This publicity is a positive step in preventing transfer of didymo, as is the presence of information at the embarkation points of the inter-island ferries. The NZBI also commend MAF Biosecurity New Zealand for the new description of services to be carried out at the Picton ferry terminals. The ability to handle non-compliance matters, and to immediately report such matters to the MAF BNZ Compliance and Enforcement Group if necessary, is a positive step to help prevent the spread of didymo into the North Island.

However, given that the North Island is currently free of didymo, and one of the objectives of the long term management plan is to maintain this didymo-free state, it makes sense to specifically target one of the main vectors. The NZBI would like to suggest that complimentary to the existing publicity campaign, a more direct, active effort should be initiated to further reduce the likelihood of didymo reaching the North Island.

The NZBI believes this effort should include the following actions:

1) MAF Biosecurity New Zealand should do all it can to advance increased vigilance on the part of inspection staff at international entry points, particularly airports. Our concern escalated about this matter when we were made aware

aware of a recent instance of damp felt-soled waders carried on an international flight being passed through inspection with no treatment, although inspection staff were informed they had recently been used in potentially contaminated waters in the United States.

2) The NZBI would like the transfer of felt soled waders from the South Island to the North Island prohibited, and the banning of their importation to New Zealand as part of incoming anglers' equipment. We understand this action will be difficult to implement though we have heard that an import health standard for didymo is being prepared for release in October, which may go some way to assisting staff at international entry points.

The Executive will be pleased to provide further information and advice to assist you in considering the above recommendations. We are also happy to act as a conduit for information dissemination via our website and quarterly magazine, Protect. We look forward to your response to our suggestions and other information on these issues as it comes to hand.

Yours faithfully



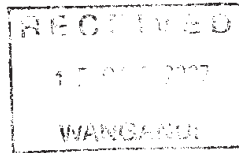
Craig Davey

President
New Zealand Biosecurity Institute,
on behalf of the Executive of the NZBI

C/o Horizons Regional Council
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Wanganui

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12 October 2007



Craig Davey
President
New Zealand Biosecurity Institute
C/o Horizons Regional Council
PO Box 515
WANGANUI

Dear Craig

Didymo and felt-soled waders

Thank you for your letter of 10 September to Lesley Wilson, Didymo Long-Term Management Coordinator, expressing the concerns of the New Zealand Biosecurity Institute (NZBI) about the risk of spreading didymo on felt-soled waders.

Border control between South and North Islands is an area that MAF Biosecurity New Zealand (MAFBNZ) considers very important to prevent the spread of didymo. As you note in your letter MAFBNZ has personnel at the ferry terminals to promote the Check, Clean, Dry message. There is also signage in place at all South Island airports with flights to the North Island. In addition, a 3 x 6 m sign is in place at the entrance to the Picton ferry terminal.

The NZBI has suggested that the transfer of felt-soled waders from the South Island to the North Island should be prohibited. We are currently looking into how best to manage the risk of felt-soled waders in New Zealand, including the possibility of imposing conditions on their use. It is important, however, to ensure that the costs of imposing measures are not greater than the benefits gained.

Based on findings of research into the survivability of didymo in felt-soled waders, from mid-October 2007 MAFBNZ's Import Health Standard for Equipment associated with Animals or Water will be updated to require that all freshwater fishing equipment that is not completely dry (inside and out) must be treated, regardless of whether it has been cleaned before coming to New Zealand. More information will be available on the MAF Biosecurity New Zealand website shortly and we are working with the tourism industry and fishing groups/operators to ensure anglers coming to New Zealand are aware of the updated standard and the reasons for it.

One of the specific objectives of the long-term management programme for didymo is to 'maintain the North Island free of didymo for as long as possible'. In a situation such as we have with didymo, where enforcing a wide area of freshwater systems is difficult, encouraging a voluntary behaviour change through a social marketing campaign is more desirable than attempting to regulate people's behaviour. MAFBNZ's partners in the didymo long-term management programme - Department of Conservation, Fish and Game, regional councils, affected industry and specific Maori entities - are also working hard to ensure



BIOSECURITY NEW ZEALAND

Ministry of Agriculture and Forestry
Te Manatū Ahuwhenua, Ngāherehere

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members of the public are aware of their responsibilities. As you mention, many of your members are directly involved in regional initiatives via the didymo long-term management programme regional groups.

MAFBNZ will be happy to discuss the contents of this letter if NZBI members have further concerns: please address these to Lesley Wilson in the first instance. Thank you for raising the concerns of the NZBI and for your offer to act as a conduit for information dissemination via your website and quarterly magazine *Protect*. I have passed that offer on to the MAF Communications Group.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Peter Thomson', followed by a long horizontal line.

Peter Thomson
Director Post Border
Ministry of Agriculture and Forestry