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Protect

New Zealand **Biosecurity** Institute

Our mission: "To preserve and protect New Zealand's natural resources from the adverse impacts of invasive pests."

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Protect

Spring 2005

Magazine of the New Zealand Biosecurity Institute

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Editor's Note

It's hard to believe that NETS2005 is now behind us and Christmas is looming. For many of us, spring is the start of the busy season when we have a bit of a revamp of the way we do things — a sort of professional spring cleaning. For this editor, this is certainly the case.

This is also the last issue of *Protect* that I will be able to put together. I have enjoyed the role of co-ordinator and then editor of *Protect* over the last two years, and believe that I have learned a lot about biosecurity in areas other than that in which I work.

But all things come to an end, and it is time for someone else to pick up the reins on this one. Whoever takes over *Protect* will be handed a publication that has developed a strong reputation in the field of biosecurity. *Protect* will be an increasingly important communication channel for NZBI members as the profile of the Institute and its involvement in wider issues of biosecurity policy increases.

I'd like to say a big "thank you" to those who have contributed columns, reviews, updates and profiles over the last two years, and urge every member to consider how they can contribute to *Protect* in the future.

Protect is your magazine — help make it the best that it can be.

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New Zealand Biosecurity Institute

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

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News from the Executive & AGM

NETS2005

NETS2005 was a great success, and credit and thanks go to the organising team, the sponsors, the speakers and all others who took part in getting this event off the ground. Much of this issue of *Protect* is about NETS2005 and the outcomes of the workshops held.

Awards, serious and otherwise

Robb McGuinness Stook

The Robb McGuinness Stook for the NZBI member who gave the best paper was awarded to Mike Urlich of Greater Wellington Regional Council, pictured right with the stook, for his talk "Seek, Find and Destroy" on eradicating weeds in the Wellington region. Well done, Mike!

Peter Ingram Memorial Award

The Peter Ingram Memorial Award for the NZBI member who undertakes further study in the field of pest plants or helps others to learn more, was awarded to Wendy Mead, Biosecurity Officer with Environment Waikato, pictured left, holding the award. Wendy completed her BSc part-time extramurally through Massey while raising a family and helping to run the family farm. We also hear that she maintained some very high marks throughout — congratulations, Wendy!

Heroes and Zeroes Awards

Unfortunately the hotel's public address system for the conference dinner let us down, but John Gardner soldiered on to present the following awards:

Heroes

- **Kleenex Award (Not to Be Sneezed at):** To Environment Southland, for moving quickly to stem the flow of rock snot (*Didymosphenium*).
- **Fush and Chups Award:** To DOC's Anne Brow for not making a meal out of getting multiple agencies to work together on aquatic pest issues.
- **Weta Workshop Award:** To Chris Winks of Landcare Research for saving the Mercury Island tusked weta from the brink of extinction.
- **Journey of a Thousand Miles Award:** To Sidney Suma of the Land Resource Division of the Secretariat of the Pacific Community, Suva, Fiji, for walking three hours to school from his village in Papua New Guinea and three hours back in order to get the education to make the Pacific a better place.
- **One Out of the Box Award:** To Jack Craw, for being upstanding, outstanding and occasionally grandstanding in the fight against pest plants. Good on ya, Jack!
- **On Giant's Shoulders Award:** To Ian Popay, for giving a leg up, a helping hand, and occasionally a shoulder to cry on for many in the weeds' world.
- **Feargal Sharkey 'A Good Heart is Hard to Find' Award:** To Paul Champion for services to aquatic weeds, plant identification, generally being a good guy, and entertaining us all at NETS for many years.

Zeroes:

- **Black Sheep Award:** To Rydges Hotel, Christchurch, for failing to finish their new "baaaar" in time for NETS2005.
- **Two Hundred Dollar Baby Award:** To Hilary Swank for thinking we would let her off her fine at the border for bringing in fruit, just because she is a famous Hollywood actress.
- **Don't Fence Me In Award:** To the Landcare Research-supervised student who made a great job of fencing off some research plots and then realised their car was on the inside.
- **Coarse Language Award:** To the 90-year-old Pom who has been spreading fish in the Auckland region since 1964, beginning with goldfish, then introducing rudd, orfe, koi and gudgeon, and spreading perch and tench. When questioned as to why, he said "because there are no New Zealand native fish"!
- **Wild Goose Chase Award:** To the Foundation for Research, Science and Technology (FRST) for coming up with a funding system that prevents many scientists from doing any proper work on pests for months and months and then gives them less than they require to come up with the answers we so desperately need.

Travel and Study Awards

The NZBI Travel and Study Awards are again open for applications and details are on the website at www.biosecurity.org.nz . Tim Senior is the co-ordinator for this, so please contact him on TimS@envbop.govt.nz with any questions or for more information.

News from the Executive & AGM Continued

New and not-so-new faces in the hot seats

Following branch and national AGMs, the following people have now been elected, seconded or appointed:

National Executive

Carolyn Lewis	President
Greg Hoskings, Andrew Wilke	Vice-Presidents
Helen Braithwaite	Treasurer
Gail Cole	Secretary
Lynley Hayes	Immediate Past President

Members seconded onto the National Executive

John Gardner	Ministry of Health
Alistair Fairweather	for Vertebrate Pests
Andrew Harrison	Biosecurity New Zealand

Other officers

Jane Barton	Membership Officer July-December
Melissa Hutchinson	Membership Officer January-June
Tim Senior	Travel and Study Awards Coordinator
Carolyn Lewis	interim *Protect* Editor — replacement being sought

Branch	Chair	Secretary	Executive Member
Northland/Auckland	Rebecca Kemp	Tony McCluggage	Greg Hoskins.
Central North Island	Chris Hale	Esther Van Den Bosch	Tim Senior
Lower North Island	Mike Urlich	Ruth Fleeson	Mike Urlich
Top of the South	Chair, Secretary & Exec Member: Mike Taylor		Media: Ben Minehan
Canterbury	Hugh Gourlay	Jan Crooks	vacant
Southland	Randall Milne	Pete Raal	Randall Milne

NETS2006

Planning for NETS2006 in the Bay of Islands is well under way, with a venue secured and a conference organiser being chosen to help the organising committee with their arrangements. Start making plans to attend – it will be in July, and we will all be counting on a break from the season's chills for a few days in the winterless north!

Subscriptions

At the AGM, a motion to raise the annual subs from $30 to $40 was defeated. At that time, members indicated their willingness to volunteer for NZBI duties rather than paying someone to help with administration and other activities such as the formulation of submissions and position papers.

With this in mind, calls will regularly be going out this year to members for help in these areas, and volunteers are expected to come forward with a minimum of arm-twisting. Failing this, some of the NZBI reserves may well be used to provide the assistance needed to meet the Annual Plan objectives. If this does happen, the issue of subscription levels will need to be addressed again at the AGM at NETS2006.

Membership Officers

Jane Barton and Melissa Hutchinson have kindly put their hands up to each do 6-month stints as membership officers. With our membership edging past the 400 mark, their offer is much appreciated, and Jane is busy as we speak loading data onto a shiny new Access database programme that will allow easier handling of the information we now have.

Merger with VPMINZ

The merger of the NZBI with the VPMINZ is now completed, and Alistair Fairweather of DOC has been seconded onto the NZBI executive to make sure that vertebrate pest issues and pest officers are well represented. Alistair has also undertaken to source vertebrate pest articles for *Protect*, so if he shoulder taps you, please oblige.

News from the Executive & AGM Continued

GM Policy and other position statements

The 16 points of our new GM policy statement were passed in record time and with minimum fuss at the AGM, and this policy is now on the website for all to see.

A big pat on the back goes out to Peter Russell of Wellington for putting the discussion document and this policy statement together. The process of developing this policy statement has been documented and will provide the NZBI with a model to follow in putting together more of these in the future.

Protect

Items are always needed for Protect, so if you have any ideas, profiles, reviews, reports or articles to submit, please email me on cl.sb@xtra.co.nz until such time as a new editor is found.

Again, if you are approached to do an item for Protect, please oblige; it's only through members' efforts that we can provide a high-quality publication four times a year.

Trial Membership

The following people have been offered free trial memberships as a result of NETS2005:

D.W Alkes	Horizons Regional Council
John Andrew	DOC
Kezia Barker	University College London
Mark Beardsley	DOC
Angela Bell	MAF Biosecurity New Zealand
Peter Blaxter	DOC
Neil Bolton	DOC
Mike Bowie	Lincoln University
Ecki Brockerhoff	Ensis
Anne Brow	DOC
Barbara Brown	DOC
Phil Brown	DOC
Stephen Brown	Environment Canterbury
Kerry Brown	DOC
Michael Browne	Invasive Species Specialist Group – IUCN
Scott Butcher	Christchurch City Council
Andrea Byrom	Landcare Research
Colin Carter	Animal Control Products Ltd
Rodney Chambers	Christchurch City Council
Sjaan Charteris	Canterbury Conservancy
Abnesh Chetty	Auckland Regional Public Health Service
Murry Clark	Greater Wellington Regional Council
Jerry Cooper	Landcare Research
Adrian Couchman	West Coast Regional Council
Steve Crarer	SMS New Zealand Biosecure
Andrew Crossland	Christchurch City Council
Noel Crump	Environment Canterbury
Phil Crutchley	Christchurch City Council
Tim Day	Xcluder Pest Proof Fencing Ltd
Jodie Denton	Kaikora District Council
Paul Devlin	Christchurch City Council
Janine Duckworth	Landcare Research
Grant Edwards	Lincoln University
Ivan Fishburne	West Coast Regional Council
Kyoko Fukuda	University of Canterbury
Hazel Gatehouse	Lincoln University
Brent Glentworth	Environment Canterbury
Simon Gooding	Target Pest Enterprises Ltd
Ronny Groenteman	University of Canterbury
Sylvain Guichard	Ensis
Melinda Habgood	Te Ngahere
Martyn Hall	Hawkes Bay Regional Council
Brent Hazeldine	Target Pest Enterprises Ltd
Kay Holder	Christchurch City Council
Leigh Honnor	DOC, Northland
Chrys Horn	Landcare Research
Warren Hughes	ACVMG Group
David Hunter	Target Pest Enterprises
Melissa Hutchinson	University of Canterbury
Peter Johnson	Landcare Research
Bridget Keenan	Environment Canterbury
Jaap Knegtmans	Greater Wellington Regional Council
Rochelle Knox	SMS New Zealand Biosecure
Bruce Kyle	DOC
Shona Lamoureaux	AgResearch
Warren Lee	West Coast Regional Council
Anna Mackintosh	DOC
Fleur Maseyk	Horizons Regional Council
Baxter Massey	Landcare Research
Paul McDonald	Whangarei District Council
Don McLean	DOC
Mark McNeil	AgResearch
Rick Menzies	Banks Peninsula Conservation Trust
Nikola Merrilees	MAF Quarentine Services
Emma Monk	MAF Biosecurity New Zealand
David Moverley	Te Ngahere
Sara Moylan	Greater Wellington Regional Council
Brendan Murphy	MAF Biosecurity New Zealand
Bradley Myer	Te Ngahere
Bruce Nalder	NZFSA
Linda Newstrom	Landcare Research
David Newton	Nelmac
Heather North	Landcare Research
Barry O'Neil	Biosecurity New Zealand

News from the Executive & AGM Continued

Glenice Paine	ERMA New Zealand
Frank Pavitt	Auckland Regional Council
Lora Peacock	Lincoln University
Steve Playle	Greater Wellington Regional Council
Art Polkanov	DOC
Jo Ritchie	Natural Logic Environmental Management
Jason Roberts	Christchurch City Council
Brian Ronke	Hawkes Bay Regional Council
Frances Schmechel	NZ Landcare Trust
Gary Scott	DOC
Justine Shelley	MAF Biosecurity New Zealand
John Skilton	Christchurch City Council
Sam Staley	NZ Army
Kevin Stevens	Greater Wellington Regional Council
Paul Stocks	MAF Biosecurity Strategic Unit
Dean Stronge	DOC
Graham Sullivan	Environment Canterbury
Sidney Suma	Secretariat of the Pacific Community (SPC)
Graeme Swanson	Christ's College
Sally Tripp	Governors Bay Landcare Group
Frances Velvin	Biosecurity New Zealand
Sally Vidler	CRC For Australian Weed Management
James Wakeford	SMS New Zealand Biosecure
Bruce Warburton	Landcare Research
Rohan Wells	NIWA
Dale Williams	DOC
Geoff Woodhouse	DOC
Claire Woolridgeway	Lincoln University

NEW EDITOR NEEDED

This is an awesome opportunity to get some experience that will be interesting, satisfying, and look great on your CV!

You will need to be:

- A networker who can find out what is going on
- A good reader who enjoys words
- A persuader who can convince others to contribute

If you are interested in the role of Editor of Protect, or being involved as part of an editorial team, contact Carolyn Lewis on cl.sb@xtra.co.nz by November 15, 2005.

Member Profile: Rebecca Kemp

I have worked with the ARC for the past seven years, starting as a postgraduate with the ARC's rural team dealing with the implementation of the Regional Dairy Plan. I worked in the rural water quality sector until May 2004 when I moved to the Biosecurity Team.

My position gets me involved with many projects, from general pest and animal plant work, landcare and community support programmes and pest exclusion programmes such as Tawharanui Regional Park.

On the personal side of things, we live on the Hibiscus Coast looking out to Kawau Island and beyond. We spend much of our time on the water fishing, and in summer we venture further north to target the big ones. I am on several committees — for rugby and touch rugby, and dog training.

Rebecca Kemp
Biosecurity Officer,
Auckland Regional Council,
Central Rodney Area

Member Profile: Andrew Wilke

Mainland born and bred (Murchison), Andrew started working life as a planner for Montgomery Watson before moving to Hamilton and Environment Waikato.

With the advent of the Biosecurity Act in 1993, he became a "biosecurity policy analyst" and participated in the first Biosecurity Generic Guidelines Group (BGGs) helping to develop the first Regional Pest Management Strategy for Environment Waikato.

After a stint on OE No 1, Andrew worked at Auckland Regional Council (ARC) where he carried out contract management of possum control, participated in biological control applications to ERMA and wrote policy.

He then took OE No 2 and returned to ARC where he carried on where he left off, before moving to Hawke's Bay to manage the biosecurity section at the Hawke's Bay Regional Council.

Andrew is one of the two new vice-presidents of the Institute.

President's Report July 2005

This is my last ever President's report, but I step down secure in the knowledge that our Institute is in good heart. I will run through how well we achieved our annual plans for 2004 and also let you know how we are doing with our plans for 2005 so far.

2004 Annual Plans

1. **Seek to increase our membership by signing up at least 20 new members, especially from groups that are poorly represented at present (e.g. MAF, health, people involved with vertebrate and invertebrate pests, industry representatives etc).**
   We will encourage all branches to invite prospective members to attend branch activities and NETS (non-members attending NETS will pay a higher registration fee that will automatically sign them up for the following 18 months). We intend to attract more members by raising our profile (see 2, 3 & 7 below). We intend to continue to grow and diversify in subsequent years in a sustainable way.

We gained 22 new members in 2004 and 60 trial members from NETS2004. About 40 trial members arising from NETS2003 have become full members, so the trial member initiative is proving valuable. We are slowly gaining new members from our target groups, but we still need to make a concerted effort to attract some of these people.

2. **Seek to raise awareness of the NZBI and biosecurity issues.**
   Promotional posters will be sent to branches for distribution among members. We will produce at least two press releases. We will investigate ways of enhancing media coverage of NETS. We will continue to support Weedbusters in any way we can.

The posters were distributed and several press releases went out about NETS. A lot of effort went in to ensuring that the media knew about NETS and it was a highlight to have one of our speakers, Mark Lonsdale, interviewed on breakfast television. Carolyn Lewis represented the NZBI at Weedbusters meetings and we have had regular stories about Weedbusters in Protect.

3. **Seek to ensure that the NZBI becomes more involved in matters of policy, strategy and advocacy.**
   We will comment on any matters or documents where it is appropriate for us to do so.

We contributed to the LTGO's revision of the National Certificate in Pest Plants — Jan Crooks was our representative at this forum. We prepared a submission for MAF on strategic issues for pest management. We sent a letter to the Listener *about agapanthus, in response to an opinion piece, but it was not published.*

4. **Seek to make it easier for our members to access the knowledge and information they require to do their jobs effectively.**
   We will seek to get a skills register up and running on our website. We will endeavour to more effectively interact and network with other like-minded organisations both here and overseas.

We have continued to struggle to get our skills register up and running. We have not yet managed to get the information we need out of all our members. Jenny Williams kindly entered all the information we had received into an Excel spreadsheet. This information has not yet been made available on the web because it was decided that it should be included as part of a new Access membership database which will be developed shortly.

We continued to have dialogue with the VPIMNZ about amalgamation which has now come to fruition, and we have developed better linkages with the New Zealand Plant Protection Society. A workshop on strengthening linkages was also held at NETS2004 and a number of actions taken as a result of that.

5. **Seek to improve biosecurity in New Zealand by offering a scholarship to allow one member to travel to learn new skills and another scholarship to assist a student to undertake some relevant research.**

No applications were received for the Travel Award. Five applications were received for the Study Award so the money was allocated to three of these people: Olivia Johnston (effects of the exotic bivalve, Theora lubrica*), Melissa Hutchison (effects of fragmentation and landscape structure on weed invasions) and Liza Koshy (developing a methodology for assessing the effects of climate change and landuse change on weeds).*

6. **Seek to improve biosecurity in New Zealand by holding a National Education and Training**

President's Report Continued

Seminar (NETS) in July.
The organising committee and executive will consult widely about the topics and activities to be covered at NETS and prepare a questionnaire that will go in the registration packs to allow participants to provide feedback about NETS and any other matters relating to the NZBI. We will use this feedback to help us to continue run at least one highly successful NETS per year. We will explore the possibility of running joint conferences with other like-minded organisations.

NETS2004 was certainly our biggest and arguably our best conference ever. It was really great to have the Vertebrate Pest Management Institute of New Zealand (VPIMNZ) on board again and the continued support of the Department of Conservation and Biosecurity Managers Group. The questionnaire provided useful feedback for the NETS2005 organising committee.

7. **Seek to improve biosecurity in New Zealand by producing quarterly issues of *Protect*.**
We will make every effort to cover a broad spectrum of topics, as well as information about members, branch and nationwide activities. We will assess member satisfaction with the size, style and frequency of *Protect*.

Under the guidance of Carolyn Lewis, Protect *has gone from strength to strength and is an incredibly useful communication vehicle and source of information. Thanks also to Col Pearson for continuing to help us to get issues out quarterly, and Dow Agrosciences for their assistance with the production of hard copies.*

7. **Seek to improve biosecurity in New Zealand by developing and maintaining a website.**
We will continue to maintain and improve our website. We will discuss our website at NETS. We will seek to be included as a hot link on other relevant websites.

Last year, the Cawthron Institute kindly gave us our domain name and we are very grateful for such generous support. Mike Harré has continued to keep our website up and running and to load new documents for us.

8. **Seek to ensure that the NZBI continues to be an active organisation that gets things done and makes a difference.**
The executive will meet on at least a quarterly basis and annual and strategic planning will be undertaken every year. Reports on progress and achievement will be provided in *Protect* and at the AGM.

The executive managed NZBI business in a competent manner and our finances are in a healthy state. I would like to thank all the people who served on the executive in 2004. The NZBI is extremely fortunate to have so many capable people who are prepared to contribute their time, skills and knowledge to our organisation. I'd also like to thank all the organisations which have generously let their staff use work time and resources on NZBI matters.

Annual Plans 2005

1. **Seek to increase our membership by signing up at least 20 new members, especially from groups that are poorly represented at present (e.g. MAF, health, people involved with vertebrate and invertebrate pests, industry representatives etc).**
We intend to continue to grow and diversify in a sustainable way. We will work towards amalgamation with the Vertebrate Pest Management Institute of New Zealand if it is appropriate to do so. We will encourage all branches to invite prospective members to attend branch activities and NETS. We intend to attract more members by raising our profile (see 2, 3 & 7 below).

We have so far this year attracted 18 new members. We have also accepted 60 new VPIMNZ members (12 were already NZBI members). Our membership is at an all time high, with about 400 members. We will have approximately another 60 trial members to welcome as a result of this conference. Because of this growth it has been necessary to create a new Membership Officer role. Jane Barton and Melissa Hutchison have agreed to share this job and Jane will take her turn first, beginning soon after NETS. We are processing new members much more quickly by approving them via email rather than waiting until quarterly executive meetings. We are exploring the possibility of making it possible for new members to join online.

2. **Seek to raise awareness of the NZBI and biosecurity issues.**
Develop a communications plan and allocate specific responsibilities for communication to executive members. Continue to support

President's Report Continued

Weedbusters in any way we can. Meet with senior managers at Biosecurity New Zealand to discuss ways the two organisations could support each other. Support the development and implementation of a national Biosecurity Awareness Framework and the ongoing work of the Aquatic Pest Awareness Group.

A communications plan has been drafted. A MOU between the NZBI and Biosecurity New Zealand is currently being negotiated. We continue to send representatives where possible to all relevant meetings including those listed above.

3. **Seek to ensure that the NZBI becomes more involved in matters of policy, strategy and advocacy.**
   We will comment on any matters or documents where it is appropriate for us to do so. We will send NZBI representatives to any relevant meetings. We will take the first steps to developing position statements on a variety of relevant issues.

We wrote a letter to the NZ Herald *in reponse to an opinion piece suggesting rules regarding new plant imports should be relaxed, but it was not printed. We also contributed to an opinion piece which was printed. We also wrote to MAF and the government about our disapproval regarding the continued exportation of known pests to other countries. Please continue to bring to our attention any matters that we should be commenting on. We are holding a workshop at this conference to talk about developing position statements so that we can respond more easily when issues arise.*

4. **Seek to make it easier for our members to access the knowledge and information they require to do their jobs effectively.**
   We will get a skills register up and running on our website. We will endeavour to more effectively interact and network with other like-minded organisations both here and overseas.

We will get this skills register up and running eventually, even if it kills us! Resistance is futile.

5. **Seek to improve biosecurity in New Zealand by offering a scholarship to allow one member to travel to learn new skills and another scholarship to assist a student to undertake some relevant research.**
   We will offer these awards again in 2005.

We reopened the Travel Award again earlier this year and awarded one to Ben Minehan so he could visit Australia to learn about advances in Chilean needle grass control. Another call for Travel and Study awards will be made later this year.

8. **Seek to improve biosecurity in New Zealand by holding a National Education and Training Seminar (NETS) in July.**
   The organising committee and executive will consult widely about the topics and activities to be covered at NETS and prepare a questionnaire that will go in the registration packs to allow participants to provide feedback about NETS and any other matters relating to the NZBI. We will use this feedback to help us continue to run at least one highly successful NETS per year. We will continue to explore the possibility of running joint conferences/activities with other like-minded organisations.

It has been really pleasing to see the increase in the number of people coming forward and offering to give papers this time! NETS2005 looks set to be another great conference. The organising committee had great depth being made of representatives from eight different organisations. The support we are continuing to receive through sponsorship for our conferences is making a huge difference to quality of these events.

7. **Seek to improve biosecurity in New Zealand by producing quarterly issues of *Protect*.**
   We will make every effort to cover a broad spectrum of topics, as well as information about members, branch and nationwide activities.

Two excellent issues of Protect *have already been produced this year. Carolyn is seeking some assistance with writing and chasing up articles. Please do offer to help.*

9. **Seek to improve biosecurity in New Zealand by developing and maintaining a website.**
   We will continue to maintain and improve our website. We will seek to be included as a hot link on other relevant websites.

Suggestions for any further improvements/alternations are welcomed. It is continuing to be difficult to get items for the "What's On" section.

10. **Seek to ensure that the NZBI continues to be an active organisation that gets things done**

President's Report Continued

and makes a difference.

The executive will meet on at least a quarterly basis and annual planning will be undertaken every year. Reports on progress and achievement will be provided in *Protect* and at the AGM. The executive will encourage branches to hold regular meetings and activities and to extend invitations to participate beyond just the members of that branch.

The executive is contining to manage NZBI business in a competent manner. There will be several changes to the executive this year. After five years in the job I am stepping down as President. Alison Gianotti is not able to continue as Secretary and I'm grateful to Jenny Williams for caretaking this role in recent months. After numerous years on the executive, Paul Champion has stepped down and Tim Senior is now the representative for the Central North Island Branch. Andrew Harrison has also taken over from Christine Reed as our seconded MAF representative. Depending on the outcome of the election of officers at this AGM, the executive is likely to be seconding at least one additional person to represent the interests of former VPIMNZ members. Jane Barton and Melissa Hutchison will be taking on the new role of Membership Officer. We have prepared job descriptions for all the key roles so people know what is expected of them.

I have every confidence that my successor will enable the NZBI to grow and develop in new ways. The advantage of us now being a much larger organisation is that we have more income, diversity, credibility, and pairs of hands. But on the other hand we are a more complex and cumbersome organisation and have higher expectations to manage. If we are to realise our dream of having a stronger role in advocacy then we need to put in place some better systems for things such as developing position statements, and preparing submissions and media releases. We are also either going to need a whole lot more members to step up to the plate and offer a little of their time and expertise or we are going to need to pay more people to do work for us (with a corresponding rise in subs).

I would really like to thank everyone who has supported me during my time in the hot seat and had faith in me, especially at the start when there was a lot of disappointment and frustration to be overcome and a lot of changes to be made. I'd also like to thank all those people who put up their hand whenever a volunteer was needed, because without you we couldn't have developed the NZBI to the strong and vibrant organisation it is today. I'd also like to thank my employer, Landcare Research, which has generously allowed me to the time and resources to tackle the job properly. Looking back some of the highlights for me have been:

- *Developing our logo and mission statement*
- *Getting our website up and running*
- *Putting out 20 issues of* Protect*, which has just got better and better*
- *Running five awesome conferences*
- *Instituting a number of awards*
- *Largely achieving our aim of moving away from just pest plants to the covering the whole gamut of biosecurity, including our merger with the VPIMNZ*
- *And all while maintaining a healthy set of accounts*

Thanks everyone for a challenging but rewarding five years!

Lynley Hayes ☺

NETS2005 Synopsis

By John Hellstrom
Biosecurity Limited

I would like to congratulate the Biosecurity Institute on the breadth and quality of the presentations we saw over the three days of NETS2005. Of course none of us could get to all the sessions but those I attended were generally well presented, informative and interesting. From my straw polling, that seemed to be consistent with the majority view.

I was particularly impressed by the growth and diversity within the Institute as reflected by the range of topics at the seminar. A strength of the Institute is its wide practical background and this came through in the approach taken to the theme for this programme, "In Your Neighbourhood", for which Lynley set out very clear objectives in her opening remarks:

• To allow us to explore the roles we each can take, and;

• To take personal responsibility from our own backyard to our local region, to the country and the whole world.

This concept of contributing to better global biosecurity by focusing on what we do locally is consistent with the approach of that great Canadian advocate for environmental sustainability, David Suzuki, who promotes the concept that we must "Act locally to influence globally".

The neighbourhood theme was well covered by the range of material we saw on how to involve and motivate the community for the support that is so critical to achieving good biosecurity outcomes. Many speakers came back to this point from many different angles including the warning that volunteer exhaustion was also an important issue to manage. Bob Parker colourfully reminded us of this in his tale of the Akaroa recluse Shagger Waghorn, who said to the Red Cross aid workers coming to rescue him after a blizzard, "Bugger off, I gave last year".

Jack Craw's positive approach to what has been achieved after 10 years of pest management under the Biosecurity Act 1993 was a very well presented and relevant seminar opener. It was refreshing to hear for a change of positive achievements rather than the problems with the Act. Jack's short but pointed list of shortcomings that need to be addressed should provide useful input for Biosecurity New Zealand as it comes to grip with its new pest management role. I also strongly agree with Jack's major concern about our national failure to come to grips with New Zealand's hunting culture; this is going to be a major issue over the next few decades.

Barry O'Neil's self-assessment of Biosecurity New Zealand's first year of implementing the strategy seemed realistic and balanced to me: Two ticks out of three for getting ownership, culture shift and infrastructure in place; one tick for getting the new programmes up and running; and one tick for getting everyone to work together.

Rick Menzies provided the first of many examples during the seminar that emphasised the key role of community support to the achievement of good biosecurity outcomes and it was encouraging to hear a variety of approaches to gaining this support from many speakers.

Of considerable concern was the number of papers, led by Jon Sullivan's, that showed the extent of the pest management challenges we jointly face and, in particular, the role of people as pest spreaders. There was a good range of papers illustrating these points, with examples as diverse as wilding pines in Canterbury, Onehunga weed at a Martin's Bay airstrip, exotic frogs on the Chathams and ants in Timaru pot plants.

The scale of the problem and the paucity of tools to deal with it is a sober message and I couldn't help but agree with Ecki Brocerhoff's summation of our success in avoiding major invertebrate forest pests as "Good luck so far".

Then there were a number of helpful insights into the processes for community involvement. These included:

• Anne Brow's paper on the national aquatic awareness programme, which has built on a number of diverse and unco-ordinated regional programmes to develop a range of simple but consistent messages and approaches and includes a lot of involvement with schools;

• Sally Vidler's entertaining description of approaches to weed surveillance in Australia based on community involvement;

• Mike Harré's review of the characteristics of successful community partnerships, which focused on the need to understand motivation and the value of

NETS2005 synopsis Continued

celebrating success. I now understand the importance of a "good barbecue"; and

• Richard Goldsborough's ideas on how to develop future generations of kaitiaki.

However, the most thought-provoking comments for me came from the cultural geographer, Kezia Barker. Kezia, in asking for some help in her London-based research into New Zealand gardeners' behaviours and attitudes to invasive plant species raised a critically important issue. By questioning our "aggressive approach to protecting New Zealand's single historic nature" I believe she touched an unspoken flaw in our thinking about biosecurity into the future. Susan Timmins expressed this beautifully when summing up the international session. "Kezia," she said, "held up a mirror for us to look in and think about what we are really hoping to achieve for New Zealand's nature."

As always happens at a seminar like this there was much to learn, both from the formal and informal contacts, and I personally learnt a great deal.

Some of it is of great concern, but underlying that concern was the delight at the knowledge of the growth in numbers of those of us dedicated to improving New Zealand's biosecurity. Many more citizens now want to help to protect those natural values in our neighbourhoods that we enjoy and our souls depend upon. This very appropriately brings me to closing with Mike Harré's quote from anthropologist Margaret Mead:

"Never doubt that a small group of commited citizens can change the world; indeed, it's the only thing that ever has."

Biosecurity challenges in the Pacific Islands: What are we doing about them?

Sidney Suma
Co-ordinator:
Biosecurity and Trade Facilitation,
Land Resources Division,
Secretariat of the Pacific Community,
Suva, Fiji Islands.

The Pacific region consists of thousands of small islands scattered over the vast Pacific Ocean. The region extends from the Pitcairn and French Polynesian islands in the east, to Palau and Papua New Guinea in the west; to the south are the metropolitan states of Australia and New Zealand; and to the north our region extends to the American territory of the Commonwealth of Northern Mariana Islands.

These islands consist of pristine and fragile ecosystems and the protection of these environments from the unintentional introduction of exotic pest and diseases, including invasive species, is paramount. We must work together to develop and implement strategies that would prevent new introductions of exotic pests and diseases and manage those pests that are already present in the Pacific Islands Countries and Territories (PICTs). The regional organisations, non government players and partners must liaise closely with national governments to ensure that whatever is planned or implemented is appropriate and beneficial to the local people and environment.

In order to appreciate the biosecurity challenges in the PICTs we need to understand the greater challenges imposed on our region by globalisation.

The Pacific must stay current with the global changes in trade, cargo and passenger facilitation practices. The global environment in agricultural commodity trade and cargo and passenger movement is liberal, quick and more frequent than few years ago. These changes bring new challenges in the way we do things in the Pacific and we need to adopt these changes or find ourselves in difficult situations. We need to facilitate trade and movement of cargo and people through our islands whilst safeguarding plant, animal, human health and well-being, and the environment. In short we need to safeguard our way of life. Furthermore, globalisation introduces another layer of complexity to the resource-constrained and under-equipped biosecurity services in the PICTs and thus raises the trade and tourism facilitation hurdle for the Pacific even higher.

The current global concern about terrorism has also added new dimensions to the myriad of biosecurity concerns faced by the islands.

This article highlights some of the biosecurity challenges faced by the PICTs and what has been done or needs to be done to address these challenges.

Secretariat of the Pacific Community (SPC)

The Pacific Community is made up of 22 PICTs and five metropolitan members and is served by the Secretariat of the Pacific Community, based at Noumea, New Caledonia. The Land Resources Division of the SPC is based in Suva, Fiji Islands, and its main objectives are:

- Improving food security and health by improving the efficiency and sustainability of agriculture production and practices;
- Managing the environment sustainably through the development of a sound framework for policy, legislation and planning, capacity building and promotion of sustainable forestry and agricultural production practices; and
- Providing an efficient and effective biosecurity service to increase trade while protecting our agriculture and fragile environments.

The SPC Land Resources Division assists PICTs in the agriculture and forestry sectors and protects the environment by building appropriate technical, human resource and infrastructure capacity nationally and supplementing existing national systems through a regionally based multi-disciplinary technical team.

Biosecurity (Quarantine) Services in the Pacific Island Countries and Territories

Generally the biosecurity services of the 22 PICTs can be classified into four groups based on their geographical size and socio-political and/or economical status.

Large countries

This group is made up of Melanesian countries: Papua New Guinea, Fiji, Vanuatu and Solomon Islands. On average they have five or more staffed ports of entry located on various islands, and have a separate quarantine service with the Ministry of Agriculture

Biosecurity challenges in the Pacific Islands Continued

(in the case of Papua New Guinea, biosecurity services are provided by an independent statutory body). Generally there are dedicated/specialised quarantine officers to perform quarantine duties. Border operations include sea, air and mail exchange operations. These operations have the technical capacity to conduct import risk analysis and other technical functions. While Fiji has an adequately sized and resourced biosecurity service, the other countries lack resources to provide a biosecurity service that complements their physical size.

The capacity to carry out quarantine surveillance in the Pacific Island countries and territories (PICTs) depends largely on the size of the land mass, the number of entry points and the resources available.

Medium-sized countries

Samoa, Tonga, Cook Islands, Niue, Federated States of Micronesia (FSM), Marshall Islands and Palau would be grouped into this category. The medium-sized countries have lesser ports of entry and are generally more adequately resourced than the bigger countries. The ports of entry have infrastructure and the service size is adequate to cover their jurisdiction. However, given their size they would struggle to cater for future increases in volume of trade and tourism.

Small island/atoll countries

This group includes Kiribati, Nauru, Tokelau and Tuvalu. Apart from Tokelau the small atoll countries are poorly resourced, have basic border infrastructure and inadequately manned frontiers. The biosecurity service is provided by officers who are also responsible for other agriculture and fisheries functions. They generally have little technical capacity. Pitcairn does not have a biosecurity service.

Territories

This group includes all American and French territories. American territories are American Samoa, Commonwealth of the Northern Mariana (CNMI) and Guam, with French Polynesia, New Caledonia and Wallis & Fatuna being French territories. The territories are generally well resourced with good border infrastructure and adequate staff and equipment to provide biosecurity services. The main challenge in the territories is the legal issues associated with implementation of biosecurity services at the international ports of entry. The American territories aligned their biosecurity services, particularly the border operations, with the United States Department of Agricultures Animal and Plant Health Inspection Services (USDA-APHIS), while biosecurity is under territorial jurisdiction in the French territories.

The challenges

The following is not an exhaustive list of challenges facing biosecurity services in the PICTs but simply a list of some of the most common challenges.

Geographical size and isolation

One of the main advantages of the Pacific Islands is their geographical or physical isolation and the smallness of the islands. However this in itself is a challenge, as there are less people living on the islands and hence less people available to carry out the various duties required for a functioning nation. This results in overworked officers, and when there is an absence at the office for one reason or another, there is no-one available to perform the duties. The isolated outer islands and vast coastlines remain unmonitored and in the case of Papua New Guinea, the more than 600km of terrestrial border with Indonesia remains exposed to biosecurity breaches. The islands in the north in close proximity to Asia and French Polynesian islands and Cook Islands are particularly exposed to risks associated with yachts and other ocean-going vessels.

Biosecurity challenges in the Pacific Islands Continued

Culture and Tradition

The issue of culture and tradition is dear to most Pacific Islanders and hence is an important and sensitive challenge for the biosecurity officers. The dilemma of juggling national importance to the country with that of the family/tribe is real in the Pacific. Let us look at a practical example to illustrate this everyday challenge to the biosecurity officers on the border.

Sione's grandmother arrives at Nukuolofa Airport with a bunch of cut-flowers from Auckland. Sione inspects the flowers and finds some leaf spots on the flowers. Does he ask his grandmother to leave the flowers behind for destruction or does he let his grandmother take the flowers with her? The flowers were a parting gift from Sione's aunty in Auckland (grandmother makes it a point to tell Sione this). Letting her take the flowers is a risk Sione is unwilling to take and it would be unprofessional on his part, however he is also cautious of the fact that the family and community will scorn him for disrespectful behaviour and for contravening traditional protocols. This is a challenge faced by biosecurity officers on a daily basis on the border.

Technical capacity

Generally the Pacific Islands lack the technical capacity to be able to provide biosecurity services that are comparable to their metropolitan neighbours. Even the territories with their metropolitan support are unable to maintain adequate technical capacity particularly in technical and specialised fields. The problem is exacerbated by the departure of technically trained Pacific Islanders from their native islands for better conditions in the metropolitan states or elsewhere.

National priority

Biosecurity concerns do not feature highly on the national development agenda of the resource-constrained governments of the Pacific. This does not mean that biosecurity is not important to the island governments, but put against health, education, infrastructure and economic development, it takes it rightful place. Even in PICTs where there have been institutional strengthening projects implemented through bilateral donor funds, the maintenance of the facilities after the exhaustion of the projects has been average.

In the territories there is conflict between federal or metropolitan government priorities and territorial government priorities. In most cases, the metropolitan state priorities on trade and security override territorial concerns for biosecurity.

Resource limitation

The matter of limited resources (equipment, infrastructure, personnel, etc) probably poses the most common and important challenge to biosecurity services in the region. Lack of resources is particularly acute in the small atoll islands and it is these islands that would suffer most from a biosecurity disaster given their fragile environment. In some PICTs adequate resources may be available but are not managed properly. Most mismanagement cases are due to lack of management skills rather than blatant misuse.

Inadequate infrastructure

Generally biosecurity infrastructure is inadequate or non-existent in the PICTs. Essential facilities such as post-entry quarantine facilities, treatment facilities, inspection facilities and garbage disposal units are not available. Furthermore, infrastructure to facilitate export from the Pacific Islands needs to be installed or upgraded.

Archaic biosecurity-related laws and operational/ administrative practices

In most jurisdictions the current biosecurity-related laws are archaic and/or not harmonised with global best practices. There have been administrative changes in some jurisdictions without appropriate changes in the laws or regulations to enable biosecurity operations. In some PICTs there are no operations manuals or duty instructions for biosecurity officers to follow in carrying out their duties.

Changing sources of food imports will put an added burden on PICTs to educate and assess the risks of new trading partners.

Net importers

PICTs are net food importers and this trend is unlikely to change in the future. However, what is likely to change are the sources of imports from the traditional suppliers — Australia, New Zealand, France and the United States — to the cheaper suppliers in South East Asia and China. Facilitating imports from the new trade

Biosecurity challenges in the Pacific Islands Continued

partners will be a whole new ball game, and will include establishing rapport with the officials of the exporting countries, awareness of the pest and disease status of the exporting country, and biosecurity risks associated with imports from the new sources.

SPC also recognises the difficulties in the small PICTs with regard to the importation of basic materials such as soil, gravel and building materials for infrastructure development. These materials, though essential for development of the small resource-constrained islands, also pose a real biosecurity threat to the islands. The sourcing, shipment and handling, and proper use of these materials needs to be done carefully. It is important to ensure that we don't create a bigger problem in the name of development that would end up threatening the livelihood of our people.

Threat of invasive species

Most of our islands consist of pristine and fragile ecosystems. Protecting these environments from unintentional introduction of pests, diseases and exotic invasive species is paramount. SPC, South Pacific Regional Environment Programme (SPREP) and their partners are working together to develop and implement mechanisms that would prevent introductions for invasive species and enable the management of those species that are already present in the PICTs.

In collaboration with SPREP and other partners, SPC looks forward to closer relationships in dealing with the problem of invasive species in the region. The collaborators are keen to implement mechanisms that would slow the spread of invasive species in the region and, where feasible, contain and eradicate current occurrences.

Border security and biosecurity

The current concerns with terrorism have made it essential for border administration agencies to work together. What needs to be looked at carefully in the near future is the way we do things at the border. The PICTs have to move away from the traditional way of going through the motions of doing border management because that is the way they used to do it, to border management that is risk-based.

This is already happening with our partner organisations such as the Oceania Customs Organisation (OCO) and the SPC-based regional maritime programme, and will be discussed later.

What are we doing to address these challenges

The Secretariat of the Pacific Community and its development partners recognise these challenges but are under no illusion that they will be able to alleviate them all. The SPC is mandated by its members to ensure that their needs, and in this case, their biosecurity needs, are addressed to the best of SPC's ability. The following are some of the activities implemented by the SPC with the support of its partners.

Border inspection: Improved infrastructure and equipment at entry points in some PICTs has assisted customs work.

Border management

There has been substantial improvement in biosecurity operations at the border in the recent past. The biosecurity services in the PICTs are working closely with their counterparts in the other agencies to improve the interfaces involving the various border regulatory agencies. Interactions have improved between customs and biosecurity agencies, and customs is more appreciative of the biosecurity risks. Also, the improved infrastructure and new equipment for biosecurity at the ports of entry at some of the PICTs, for example, x-ray machines at the arrival clearance halls at airports, have assisted customs work. The interaction between the regulatory agencies and the private sector (shippers, stevedores, transport companies etc) has also improved and more end-users of biosecurity in the PICTs are appreciative of what the service does. Furthermore, the ports authority and its clients are becoming aware of the importance of biosecurity and are working closer with the biosecurity services.

Regionally we have been working with the Oceania Customs Organisation (OCO) and SPC maritime section to improve the ship/port interface and address the customs/biosecurity issues across national borders. Nationally, the biosecurity services have a cordial working relationship with other border agencies

Biosecurity challenges in the Pacific Islands Continued

in their respective countries, and the co-operation at the regional level is to consolidate the PICT efforts in addressing cross-cutting issues such as transnational crimes, terrorism, drug and money laundering.

Review and harmonisation of biosecurity-related law

SPC has also embarked on a major project to update and harmonise biosecurity legislation in the PICTs. The PICTs would benefit by having a biosecurity law that is compliant with the WTO-SPS agreement and the Convention on Biological Diversity (CBD). In close collaboration with relevant national government agencies and regional partners, SPC intends to assist PICTs to draft a harmonised and pragmatic national regulatory framework that will enable effective trade facilitation while minimising the risk of entry and establishment of exotic pest and diseases.

The aim is to draft a national biosecurity law that is appropriate to the particular PICT and in broader terms this means drafting bills based on the existing laws. The administration and style of the draft biosecurity bills will be aligned with those common in the southern islands, while northern Pacific countries will be aligned with the American systems. The project covers 14 Pacific ACP and excludes the territories.

A complementary exercise associated with the law harmonisation project is the development of a biosecurity information facility that will enhance biosecurity operations at the border and other related biosecurity functions. In essence, the project will involve development of operations manuals and information systems for the biosecurity services. Training of staff and provision of equipment is anticipated to improve enforcement of biosecurity regulations and increase trade facilitation in conjunction with these activities. Collaborators on the biosecurity information facility are SPC, EU, Australia, New Zealand and relevant national government agencies.

Resource supplementation (equipment and infrastructure improvement)

SPC and partners currently provide a substantial amount of biosecurity equipment to supplement biosecurity services in the PICTs. The equipment ranges from incinerators to inspection kits. A few PICTs, such as Samoa and Fiji, have seen major improvements at the ports of entries through bilateral help from Australia and New Zealand. SPC provides a pest diagnostic service for the region, and resource/ textbooks, consumables, and laboratory accessories are provided for research and for basic biosecurity laboratories in the PICTs.

SPC has assisted some of the PICTs to install basic biosecurity infrastructure at their ports of entry. One such achievement has been the construction of basic inspection sheds on the three islands in Tokelau.

Training and advisory support

As one of SPC's main functions is to build technical human resource capacity in the PICTs, it assists PICTs by conducting regular training in various disciplines on request. This training is conducted by SPC technical specialists or hired specialists and includes attachment training, workshops, in-service or refresher training in-country, short-term specialist training in particular disciplines, and assistance for student projects in regional and national tertiary institutions.

SPC continues to provide technical advice on a range of biosecurity issues and most of this is handled through the biosecurity helpdesk mechanism.

Trade facilitation

SPC fully supports the regional trade facilitation initiatives, and together with the Pacific Islands Forum Secretariat and other partners, will work towards co-operation among the island nations. SPC assists PICTs in building technical capacity in biosecurity systems including plant and animal health infrastructure and border controls in PICTs to enable increased trade.

SPC's immediate focus is on training national staff on import risk analysis and the development of market access submissions. It will work together with New Zealand, Australia and the Pacific Island countries in the implementation of the regional trade facilitation programme under the auspices of the Pacific Agreement on Closer Economic Relations (PACER).

This will lead to increased export trade opportunities for PICTs and enable pragmatic and effective facilitation of imports into the PICTs without subjecting PICTs to harmful exotic pests and disease risks. The holistic commodity pathway approach will be considered where deficiencies or gaps in the pathway can be identified and mitigated. Hence increased production, quality and marketability of the commodity would improve PICT's chances to negotiate export market access for their commodities. The improvement in production, quality and availability of tradeable commodities will contribute to improved food security.

SPC has also established the regional centre of Import-Export Biosecurity Technology (IMPEXTEK) which includes units devoted to regional technical advice, training on import risk analysis (IRA) and market access bids, and pre-shipment research and development.

SPC has developed a pest list database and animal health information system to enable PICTs to generate national pest lists that are used in trade negotiations,

Biosecurity challenges in the Pacific Islands Continued

and to provide basic pest and disease surveillance information.

Emergency and incursion response

Increased and continued co-operation between the partners — SPC, SPREP, South Pacific Applied Geoscience Commission — and national governments is essential for effective implementation of the emergency response plan for agricultural pest and disease incursions. The major hindrance associated with implementation of emergency responses is the availability of resources, particularly emergency funds, for immediate incursion response. The partners need better co-ordination and the commitment of stakeholders, including the private sector, in implementing these plans. Benefits to the countries are: a sound emergency response plan, ability to act on detection of pest and disease incursion, increased trade partner confidence in PICT ability to prevent the spread of exotic pest and diseases, improved surveillance network, and skilled manpower to manage incursions.

SPC will work with partners to develop contingency plans for major agriculture and environment pest and disease threats to the region, and develop regulatory frameworks to control the spread of invasive species within the country.

Public Awareness

SPC has a two-pronged approach to public awareness on biosecurity and these are: nationally based awareness and regional awareness. Nationally focused awareness is conducted or assistance given on request of the particular PICT. The awareness campaign can be focused on a specific pest or biosecurity matter, or on general biosecurity awareness such as production of in-flight videos and broadcasts of biosecurity messages over radio.

Regional awareness is generic in nature and usually associated with a major regional event such as the South Pacific Games or the Pacific Festival of Arts. SPC also conducts general biosecurity awareness during peak travelling periods such as Christmas and New Year.

All modes of mass media (print, radio, TV) and distribution of printed material (posters, leaflets, newsletters) are used in the awareness programme circulated to the stakeholders and public at large.

Incineration: The Secratariat of the Pacific Community (SPC) is working with partners to develop contingency plans for major agricultural and environmental pest and disease threats.

Building partnerships

In the Pacific we value our development partners and we will continue to work constructively with them for the betterment of our peoples. SPC has an extensive partnership network with donor agencies, PICTs, foreign governments, international and regional organisations, research and technical institutions, and civil societies from the region and the wider global community. SPC also welcomes new partners as collaborators to deliver its mandate objectives.

Conclusion

The biosecurity challenges to the region are real and pose a threat to the livelihoods in our islands. The respective governments of the PICTs, regional organisations and their partners have done their part in protecting our shores, and the onus is now on us as individual Pacific Islanders to ensure we protect our future.

The challenges discussed above should not been seen as problems but as opportunities to develop new partnerships, and to share our expertise and experience as we work together for the common good.

I wish to acknowledge that substantial progress has been made by the biosecurity services in the region thanks to the assistance received from our friends and most importantly by the individuals involved in the service on the islands.

Alien nature: Environmental cosmopolitanism, or the McDonaldisation of the natural world

By Kezia Barker
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Thank-you all very much for this opportunity to introduce myself and the research I hope to undertake in New Zealand. My name is Kezia Barker, I am a PhD student from University College London, and I am in New Zealand over the next five months to undertake the empirical research for my PhD.

My academic background is in cultural geography, particularly in researching social understandings about the place and value of nature in contemporary life, and the ways in which ideas about native and alien species, are produced, circulate, and are accepted or contested in the public domain.

My research in New Zealand is focused on the intersection between gardening, and plant biosecurity and weed control, and I am particularly interested in the differing value sets which underlie these two environmental practices. It could be suggested that while both are based on the ideal of managing the environment to promote improvements of some kind, biosecurity is about preventing both species movement and species hybridisation, whereas gardening celebrates new hybrids, and combines plants transported from many parts of the world within the space of one garden — newness and difference, next to originality and continuity. Where then, can these two value sets meet, as they must now be required to do so? Just think for a moment about the changing role of gardening over time. The garden has been used to represent religious ideas, to produce medicine, to display the wealth and power of the monarchy and the extent of the empire, to represent current ideas about geography and science, and to stimulate social improvement. What then, can gardening within the context of a regime of biosecurity come to mean? What if the most important moment in gardening history occurred when plants jumped the garden fence?

There are two key parts to this research. Firstly, I hope to find out about the ways in which institutional biosecurity interests and values are communicated to the gardening public, and the ways in which the gardening public are encouraged, through both regulation and through more subtle mechanisms of education and value normalisation, to align themselves with these institutional interests.

In order to access this information I will be interviewing different representatives of the weed and plant biosecurity establishment, I will be following Weedbuster events and undertaking discourse analysis of different public communication literature. For example, the *Plant Me Instead* booklet looks and feels very much like a gardening manual, with the colour photos, plant descriptions, and explanations of planting techniques. This is approaching the gardener within their own worldview, tapping into their preferences and enjoyment, and so a really successful alternative, I would suggest, to the traditional wagging finger of environmental regulation.

Secondly, I am interested in the ways in which the circulation of ideas about weeds is being interpreted by the gardening public. What are gardeners' attitudes towards biosecurity regulation and education? Is it changing the way people think about gardening in New Zealand? Do certain plant categories such as native, alien, exotic, weed or plant nationalities have meaning for the New Zealand gardener, and how do gardeners understand the impact of their own gardening behaviour on the prevalence of weeds? For this I will be undertaking in-depth interviews with gardeners in their own gardens. I hope that by conducting the interview within the home garden I will be able to access a depth of engagement with these issues prompted by the physicality of the garden itself.

A key theme to come out of the discussions at this year's conference was both the presence of the home garden and gardener at the forefront of weed spread, and also the need for public involvement and communication. So, cultural research of this kind, although often seen as the poor relation to scientific research, and even to quantitative social science, can help to enhance our understanding of the meanings behind both behaviour and discourse, which is essential for both successful public engagement, and

Alien nature Continued

for designing well-targeted programmes to influence behavioural changes.

I perhaps need to suggest and explain why a cultural geography PhD student from London might be interested in the circulation of ideas that underlies plant biosecurity and weed control in New Zealand. Cultural geography argues that there is not a single nature, but multiple, overlapping and contesting interpretations that are culturally mediated and historically and geographically specific. Cultural geography is currently concerned with questioning the static space-based compartments of nature, and the boundaries between nature and culture. And so biosecurity, as a state-led attempt to prevent the movement of certain species past national boundaries, as a fixing of a particular type of nature to a specified place, is hot academic territory.

New Zealand is fascinating due to the extent and complexity of the biosecurity regime, and the historical background of a settler society with very different attitudes to native bush and imported species. The New Zealand context is also, I think, ethically challenging in certain ways to these cultural geography theories, which celebrate nature-culture hybridity, what is called the environmental cosmopolitanism of alien nature, and regard native conservation as purifying logic, which fragments living fabrics of association, by dividing and designating the proper places of nature and society. The title I have used highlights two contrasting ways of ethically approaching the question of native and alien species, currently in vogue within cultural geography.

As I have been asked to speak within the International Speakers Session, I feel I should make a few observations about differences in attitudes towards the management of native and alien species I've noticed with the UK situation. Please be aware these are un-researched personal opinions only!

In the UK there is a greater scepticism on the part of the UK public towards measures to control alien species. There have been protests about the removal or control of ruddy ducks, hedgehogs, rhododendrons and grey squirrels over the last few years to name a few. This is a sweeping generalisation, but I think overall in the UK people are more suspicious and ambivalent towards claims that a plant or animal shouldn't be in a place because it isn't "natural". I think this could perhaps be related to the lack of a "pristine" nature as a national landscape. The nature of our iconic national parks is human-made, predominantly farmed, usually degraded, and we love it that way. Also, the length of human history in the UK makes the distinction between native and alien species more difficult to determine, and so arbitrary in the eyes of the public. And so nature is perhaps judged through categories other than "the natural" or "the national", and by perceptions of beauty, hence the enjoyment of rhododendrons flowering in Snowdonia's valleys, and through the experience of personal interaction, hence the persistence of feeding alien ducks and squirrels in UK parks.

Palmers Chapel Street staff member, Olwen Hooper, with a selection of alternative plants recommended in the booklet "Plant me instead"

Here in New Zealand, the clarity of national borders for differentiating between native and alien species, together with the presence of endemic species and preserved areas of iconic native bush, really seems to have positive ramifications for public attitudes towards plant biosecurity measures.

Now, here is my appeal for support. If you are:

- organising an event which targets gardeners in any way, so perhaps a stall at a garden show or garden centre
- interested to chat about the reasons and methods for communicating and encouraging weed prevention, and about the underlying justifications for biosecurity measures
- know an enthusiastic gardener who would enjoy talking about gardening and plant biosecurity

I would really appreciate it if you could contact me at redkayz@yahoo.co.uk

I would like to take this opportunity to thank those people who have already helped and supported me in this research.

NETS2005: Field trip report

A wet day in Christchurch wetlands

What better day to visit wetlands than on the coldest, dampest day of NETS 2005. An initially enthusiastic busload set out into the wider Christchurch city area led by Scott Butcher and Andrew Crossland from Christchurch City Council.

First stop was the Woolston Cut along the Heathcote River. Diverted in 1993, this inter-tidal area was previously infested with spartina, now gone thankfully. The area has improved significantly with sea lavender establishing after removal of the spartina and with riparian planting along the river.

Next stop the Avon Heathcote Estuary. The estuary is significant enough to meet some RAMSAR criteria and its surrounds have benefited from a planting programme during the early 1990s, aptly called the "Great Green Planting Machine". Onto Humphries Drive wetland where Andrew extolled the virtues of wetland birds and their habitat. What was initially an accidental scrape to create a playing field has now developed into fully tidal wetland. Islands were formed to create nesting sites for black-billed gulls, pied stilts and a multitude of other wetland birds (90 species in total). The primary threats to wildlife in this area tend to be disturbance from people and dogs. Proposed dog-free areas will be set up to counter this. The trapping programme around the perimeter has turned up lots of hedgehogs, quite a few rats, but no mustelids. Household moggies and feral cats are kept at bay using water as a barrier. It was great to see a restoration project not being swamped by weeds; the saline habitat limits the number of usual nuisance species that can have impact on such projects.

Pukeko et al: Christchurch's Bexley Wetland, a 12.5ha ecological heritage site protected from future development.

Onward to Bexley Wetland. The area has a multi-faceted history, initially used by Maori as a source of mahinga kai prior to European arrival. During World War II crops were grown to supply the war effort; more recently the area has been grazed by dairy herds, and used as a scrap metal yard. Since 1984 community groups lobbied Christchurch City Council to protect the wetland. In 1992, 12.5ha were designated an Ecological Heritage Site and protected from future development. Given the recent housing development in the area, this protection was very timely. In 1999, the Bexley Wetland Trust formed to help protect and restore the wetland. Along with Christchurch City Council, local residents, schools and other community groups, the goal for Bexley Wetland is to protect existing plant communities and to restore lost or damaged plant communities and wetland bird habitats, while providing public access for recreation and education. Go for it, we say.

Next stop was Travis Wetland Nature Heritage Park. John Skilton (CCC) gave an overview of this significant wetland. Again, an important source of mahinga kai for Maori, the introduction of fire, grazing, more fires, farming, drainage and invasion by weeds has severely impacted on this once biologically diverse area. Subdivision was the last in a long line of threats Travis faced. In 1997 Christchurch City Council purchased the land from developers in conjunction with the Travis Wetland Trust. The primary goal for the wetland is to be a largely indigenous and self-sustaining system representing wetland ecosystems of the Christchurch area from pre-Polynesian times until present.

Colin Meurk (Landcare Research) spoke about the vegetation associated with Travis including one of the last remnant stands of manuka left in Canterbury. Under shelter, we heard from Sjaan Charteris (DoC) about aquatic pest fish and weed species that threaten not only Travis, but other wetlands in Canterbury. Advocacy and awareness were promoted as two mechanisms to counter these threats.

Although it was a bit wet and a bit cold, we were well served by the organizers and speakers for the wetland field trip. A brief round of applause at the end may seem like small reward, but I hope those involved know how appreciative we are of their time and effort.

— Randall Milne

NETS2005: Field trip report

Port Hills and Lyttelton Harbour basin

Our field trip to the Port Hills showed what can be achieved when community groups and local and central government agencies work together towards a common goal. The biodiversity of the hills has been severely degraded over hundreds of years of human occupation but the trend is being slowly but surely reversed.

Leaving the hill suburbs, we drove through Victoria Park at the top of Cashmere Hill. Revegetation has been progressing here for decades but unfortunately early Arbor Day plantings contained a number of undesirable species — cotoneaster, hawthorn, holly, Darwin's barberry and Taiwan cherry — which have now overrun the park and need to be removed. However, these plants are a valuable source of food for birds, so some are being left until suitable native species take their place. Compromise is often important when taking a holistic view of biodiversity. Old man's beard and banana passionfruit are also a big problem. A range of pest animals are being targeted with increasing reliance on poisoning with areas prioritised for wildlife potential. A band of very enthusiastic officers from CCC manage this area with a high level of buy-in and practical assistance from 80 or so community volunteers who are passionate about their patch.

As we dropped down into the Lyttelton Harbour basin we saw evidence of some huge revegetation programmes and gorse and broom removal for habitat connection, silt prevention and forestry replacement. The stopping of grazing is having a positive impact on the health of podocarp forest remnants but comes with the down side of an increase in the fire risk due to rank grass.

At Rapaki, a small settlement on the harbour's edge, our group was welcomed on to Te Wheki marae by the elders of Ngati Wheki who provided us with afternoon tea followed by several fascinating presentations.

Sally Tripp, Governor's Bay Landcare Group, talked inspiringly of some substantial restoration projects at Governor's Bay involving many private blocks and reserves of native bush. This is a huge effort by about 70 locals led, it seems, largely by Sally, involving weed clearance (particularly old man's beard), revegetation and community awareness campaigns. Funding has been sourced from QEII, the Biodiversity Condition Fund, Transpower and World Wildlife Fund, and the projects have been supported by CCC and Landcare. Such is Sally's dedication to the area that she has written a book: *Indigenous Ecosystems of the Lyttleton Harbour Basin*. And check out www.onlinegroups.co.nz/biodiversit/groups/titoki

Yvette Couch-Lewis of Ngati Wheki described the strategic plan for the restoration of reserves, streams and harbour margin. Working on multiple-ownership Maori land requires much consultation. The vision is to see the return of birds to the trees and inanga to the streams for the benefit of generations to come. Tussock is being planted into existing pasture and a weed-infested stream gully has been cleared and planted. Interestingly this is being done without herbicides, and woven cabbage tree mats are being used around seedlings to obviate the need for releasing. Schools and international students have been assisting, and support has been provided by CCC.

Yvette Couch-Lewis presenting Ngati Wheki's environmental plan at Rapaki marae

The restoration of nearby Quail Island is being spearheaded by Mike Bowie from Lincoln University. Fifty-nine hedgehogs and 18 weasels have been trapped and the island is now rat free, though mice have proved to be a problem. Owing to the island's proximity to the mainland, constant vigilance is required to prevent reinvasion and trapping is also carried out on the adjacent mainland. Wildlife is being monitored; big increases have been noted in small bird and invertebrate populations, and the little blue penguin population has trebled. Some invertebrates have been re-introduced, including the Akaroa tree weta, with weta motels and log sections being used to provide habitat. There are now plans to reintroduce other fauna including lizards and to re-vegetate one third (30ha) of the island.

A big thank-you to Christchurch City Council staff who led this inspiring trip, to all those who put on fascinating presentations, and to Ngati Wheki who made us so welcome on their marae. The future of the Port Hills is evidently in good hands!

— Tim Senior

NETS2005: Field trip report

Wilding pines at Craigieburn

The trip to Craigieburn had an international flavour to it with Sidney Suma and Kezia Barker joining a select few to see and hear about wilding trees from Nick Ledgard (ENSIS/Scion).

A spectacular day to head into the hills, our first stop was at a layby above the Rakaia River to demonstrate to the overseas guests just how magnificent braided river systems are. Then into the hills towards Lake Coleridge where Nick and Gordon Baker have a 50-year agreement with the University of Canterbury to manage a stand of predominately Corsican pine.

Wilding Corsican pines originated from a shelterbelt planted in 1910 with major spread occurring from the 1960s onwards. Wilding pines around the boundary have now been removed to leave a core stand of trees. The opportunity for further spread is reduced by the improved grazing land that now surrounds this area.

NETS attendees near the site of what was, prior to the mid 1980s, a very intensely researched experimental station at Craigieburn where many species, including many introduced varieties were trialled for catchment protection.

Then to Craigieburn itself. Originally set up as a forest and range experimental station, Craigieburn had 100 people in four sections carrying out research in its heyday. Nick's involvement was investigating species to counter erosion in the high country.

Over 30 years, 300 introduced and native species were sown and grown for this purpose. The feeling of the day was that catchments were falling apart and revegetation was necessary to alleviate this. Ironically, the research indicated that erosion was very much a natural process and that loss of land from riparian areas was more important than the moving scree slopes at the head of catchments.

In a further twist of fate, some of the species trialed for revegetation turned out to be the problematic wildings of today (e.g. *Pinus contorta*, *P. mugo*). These species have proven too successful, demonstrating the capacity to change the landscape and characteristic of high country in New Zealand.

Changing political times during the 1980s saw the separation of production and conservation and this affected Craigieburn as well. Management of the area went from Forest Service to Landcare Research and now to DOC. The intensive research carried out at Craigieburn has ended and Nick's involvement there is as a distant observer. However, Craigieburn still holds a special place in his heart — it was there for all to see as he spoke eloquently about his 30 years of involvement there.

— Randall Milne

NETS2005: Field trip report

Riccarton Bush/Christchurch airport

Riccarton Bush is a 7.8ha remnant of kahikatea floodplain forest that has been protected (to some extent) since the early 1800s.

According to a flier prepared by Brian Molloy, it was gifted to the people of Canterbury by the Deans' family in 1914. The Deans were a canny bunch, and there were strings attached to the "gift" that ensured to bush would be preserved, and its up-keep paid for by the Government, in perpetuity.

City-based predator exclusion zone: Ranger John Moore talks to NETS delegates before entering Riccarton Bush, a kahikatea forest remnant a few kilometres from the centre of Christchurch.

A predator-proof fence was recently erected there (completed Feb. 2005), and NETS delegates were led to the centre of this by ranger John Moore. At last census there were 478 adult kahikatea trees in the reserve, with some estimated to be 550 years old. The enclosure is rich in plant and insect life and is the "type" locality for many native species. Now that predators have been poisoned and excluded (with the exception of a few pesky mice, whose days are numbered) native birds are returning to the area. Interestingly, their greatest weed problem was caused by North Island lacebark (*Hoheria sexstylosa*), which is native to New Zealand, but not to the Riccarton Bush area.

Then we were off to Christchurch airport where Stella the Beagle impressed us with her food-finding-prowess. She quickly sniffed out small parcels of contraband that had been planted previously on amused delegates by her handler, Chris. She even found things in people's socks, where one might have thought other odours would predominate! Our tour guide, Rob Mulholland, then showed us the airport x-rays and how different substances appear in different colours on the attached computer screens. Even with the colour-coding, considerable skill and experience was needed to tell the innocuous from the potentially disastrous. It was frightening to be told that last year, 773,000 international passengers had passed through that airport, an increase of over 30% on the year before. Just as well quarantine staff at Christchurch airport seem to take their biosecurity responsibilities very seriously.

— Jane Barton

Border protection: Stella the Beagle managed to sniff out pre-placed parcels of contraband in all manner of places for handler Chris.

NETS2005: Field trip report

Lincoln biosecurity facilities

A happy bunch of 14 people went on the field trip to Lincoln. On arrival the group was divided into two, with one heading down to an animal facility and the other to the herbarium.

The animal facility, a combined venture between Landcare Research and Lincoln University, is probably the largest of its kind in the southern hemisphere. Possum control research is Landcare Research's main focus. Feral animals are used for this research, as animals raised domestically may have a wider tolerance to different bait types and eat ones that would be rejected in the field. A lot of work is put into different bait combinations, to the extent that baits can be made site-specific. Testing is not stopped once the baits have proved successful; eels are also kept on site as they are a good bioindicator for water contamination.

After looking through the main building, the group moved out to look at the outdoor facilities where more possums, ferrets and stoats are kept. Then it was back onto the bus to return to the main site to meet the others and where afternoon tea waited.

Stuart Larsen gave the whole group a talk on the Biotron, Lincoln University's new facility for conducting research. It is a secure facility built to minimise any contamination. It gives total climatic control of the growing area and can separate soil climate from atmosphere climate. The Biotron is so new that no research has been initiated yet.

Around the corner was Landcare Research's Allan Herbarium, named after first official government botanist, where Peter Heenan gave an interesting talk on the facility and the work that goes on within. Plant specimens stored go back the originals that were collected on the voyage that Cook made to New Zealand. The collections in the herbarium include native plants, naturalised plants, garden plants, plants of the Pacific, mosses, liverworts and lichens. Activities that herbarium staff undertake includes taxonomic work, molecular work for population studies and updating the New Zealand's flora. The flora information can now be found on the web at www.nzflora.landcareresearch.co.nz

— Tony McCluggage

NETS2005: Workshop report

Internal borders

On Wednesday afternoon, Peter Johnson facilitated a workshop on Internal Borders which raised the question, "Is a regional border feasible and how to create one?"

Peter pointed out that borders can be applied at many spatial scales, and presented examples from three different scales. Firstly, islands, with an emphasis on Chatham Islands biosecurity; (2) the Otago region and its newly arriving weeds; and (3) fine-scale management of a home garden in Dunedin.

He described some lessons learnt from his experience:

- the need for vigilance and monitoring
- the need for good observers with the ability to recognise new invaders
- the need for ecological knowledge of pests
- objective criteria should be used to decide on pest status
- there is usually little reaction from managers to "whistle-blowing"
- suspect invaders should be "arrested" straight away (before they have a chance to spread further)

Participants at the workshop revealed that even people working in biosecurity ("the experts") inadvertently spread pests around, for example, taking a pot plant with weeds across Cook Strait! Participants agreed that we cannot solve the problem by law enforcement and prosecution alone; we also need to raise public awareness and encourage voluntary action.

The workshop raised some important points about managing the spread of exotic species already established in New Zealand, although time ran out before we were able to reach any definite conclusions. More discussion is definitely needed on this subject.

— Melissa Hutchison,
Lincoln University

NETS2005: Workshop report

Hazardous substances legislation

This workshop was led by Dr Peter Dawson, a principal scientist with ERMA New Zealand. It was thought that the workshop would provide an opportunity for participants to quiz ERMA about how regulatory processes might affect the use of weed and pest management tools in New Zealand. Relevant questions might have been:

What are the barriers to registration of new and safer pesticides?

What new materials are in the pipeline?

How are the reassessments of 1080 and 2,4-D progressing? And so on.

In the event, Dr Dawson provided a long account of how ERMA operates and what it has been doing in the past five years. He described the reassessment process, which is a legal mechanism for reconsidering risks, cost and benefits of substances, usually where such a consideration has not occurred in the past. Reassessment may lead the authority to change conditions of use, including the possible withdrawal from use. The reassessment of 1080 was to be notified for public submission in late August, and there is expected to be a high level of interest from many sectors.

Dr Dawson also described the processes for licensing pesticide approved handlers.

He described the process by which new materials are assessed, and noted that ERMA operated a risk-reduction strategy, giving a better ride to applications where new products reduce the overall environmental risk in New Zealand. He also pointed out that ERMA was able to rely heavily on information provided from other jurisdictions (for example the US Environmental Protection Agency) and this should limit the cost and difficulty of registering new pesticides in New Zealand. There was little opportunity to question Dr Dawson further on this or other potential issues.

Rohan Wells presented a paper during this workshop because it described the registration of Aquathol, a new tool for aquatic weed control. This is the first registration of a new weed control product under the processes described by Dr Dawson. Approval has been given by ERMA, but with strict conditions of use. The discussion highlighted that although registration of new materials is possible, translating the conditions of the approval onto the label as practical instructions for use remains a challenge.

— Richard Hill,
Richard Hill & Associates

NETS2005: Workshop report

Vertebrate pest exclusion

Vertebrate pest exclusion has become an increasingly effective pest management option with the recent development of "excluder" fences, and an increasing number of successful eradications. The size of areas from which pest species have been excluded, and the number of species continues to increase. These successes continue to provide supporting evidence for such an approach to pest management. A workshop was held on pest exclusion to provide an opportunity for participants to hear about successes and failures, and to identify problems, knowledge gaps, and possible solutions.

Successes

National level

Exclusion of large animals or "mega-fauna" and snakes at New Zealand's national border

Regional level

Thar — exclusion zones north and south of the feral range
Exclusion of mustelids from Stewart Island
The Taranaki deer programme
Exclusion of sika deer from the South Island
Exclusion of many pests from the Chatham Islands

Local level

Examples of successful eradication of vertebrate pests at a local level include:
A growing number of offshore islands
Karori Wildlife Sanctuary
Maungatautari Ecological Island
Bream Head
Tawharanui Regional Park
Christchurch wetland areas

Local exclusion options

1. **Offshore islands** (e.g. Kapiti Island)

Easily defined geographic boundaries
Eradication of pests reasonably feasible
Reinvasion by pests moderately likely
Intensive monitoring of boundaries required (e.g. bait stations and tracker tunnels)
Habitat not always suitable for species that need protecting (e.g. blue duck)

2. **Exclusion fence** (e.g. Karori Wildlife Sanctuary)

High capital cost
Eradication of pests reasonably feasible
Reinvasion by pests unlikely
Water courses and falling trees a constant threat
Monitoring required for fence breaches
Need pest control on the outside — a buffer zone
Tend to be small areas

3. **Mainland islands**

Permeable boundaries
Eradication of pests hard to achieve
Reinvasion likely
Need pest control on the outside - a buffer zone
Illegal releases a problem

Failures

Historical introductions at the national level
Pigs — continued release of pigs by hunters
Birds — neglected with regard to pest status
Fish — containment zones around Auckland and Waikato failed so far — koi and gambusia continue to spread (assisted to a large extent by people)
Rabbits on the mainland — rabbit fence didn't work

Problems

Cost
Illegal releases (eco-terrorism)
Public attitudes — resource or pest (e.g. deer, pigs), pet or pest (e.g. turtles, amphibians)
Sustained use of toxins
Getting acceptance that action is required sooner rather than later
Long-term commitment is needed and is yet to be tested
Public access (e.g. Tawharanui 150,000 people per annum)
Removal of one pest species could lead to an increase in another (e.g. removal of cats could lead to more rodents)
Hard to undertake operations because of bureaucracy (e.g. paperwork and consultation)
Public attitudes to poisons
The smaller the animal the harder to eradicate e.g. mice
National border control — we can't check everything

Knowledge gaps

Most appropriate method of excluding pests
Most appropriate method of eradicating pests (e.g. toxins, guns, traps, dogs)
Most appropriate method of monitoring for reinvasion of pests
Reinvasion potential — which pests are most likely to reinvade
Knowledge of the ecology of the areas in question
Understanding of food webs and flow-on effects
Reproductive rates of pest species
Prioritising what to focus on when dealing with multiple target pests
Monitoring of pests at low levels
Effects of removing some pests but leaving others.

— Chris Winks
Landcare Research

NETS2005: Workshop report

NZBI position-statement generation

The NZBI is keen to have a voice. This is spelt out in two of the ways that we intend to achieve our mission statement for example by:

• Working to raise public awareness of the NZBI and biosecurity issues.

• Providing advice to policy makers and legislators.

In order to be a useful player, and not go shooting its mouth off ill-advisedly, the NZBI needs to be clear about where it stands on various issues. Given the number and diversity of our members there may need to be considerable dialogue before general agreement about where the Institute stands on various issues can be achieved.

A workshop was held at NETS2005 to examine the one position statement that has been prepared so far — on genetic modification — before it went to the AGM to be ratified later that afternoon, and to think about what other topics the NZBI should be preparing position statements on, and how we might go about developing them.

A brainstorming session yielded the follow possible topics:

- Research funding (especially given concern about recent funding decisions made by the Foundation for Science, Research and Technology).
- Biosecurity Strategy implementation priorities (the top seven priorities for pest management have just been agreed — do we agree with these?).
- Biosecurity communications (e.g. collaboration to ensure strong consistent messages, best use of resources, and no reinventing of wheels).
- Best practice pest control and decision-making around that (rather than developing statements about any particular pest control activity).
- Government budget priorities (to ensure pest control management agencies have sufficient resources).
- Legislation (e.g. the Biosecurity Act and any areas in it requiring review etc).
- System performance (the NZBI could have a useful role in commenting on how well biosecurity is performing and if anything is falling through the cracks or needing improvement).

It was agreed that the process for developing the Genetic Modification Position Statement was a useful model to follow with some minor changes. It was also suggested that the vice-president(s) could be responsible for driving/overseeing the process. The process would follow these steps:

- Find/hire a champion/driver.
- Form a subcommittee and also identify interested members who want to be kept informed.
- The subcommittee holds a workshop to generate ideas.
- A discussion document is drafted.
- The subcommittee discusses and refines the document.
- The discussion document is put on the website for all members to comment.
- The document is refined after taking members' comments into consideration.
- The document goes to the Executive for quality control.
- The draft position statement is taken to the next AGM for ratification (75% of members who vote must agree for it to be passed). However, the Executive may use email or postal voting if the AGM timing is not appropriate, in which case voting criteria will be the same.
- The final version of the position statement is posted on the website.

Note: That position statements should preferably be only about one page long and they can be reviewed at anytime.

— Lynley Hayes
Landcare Research

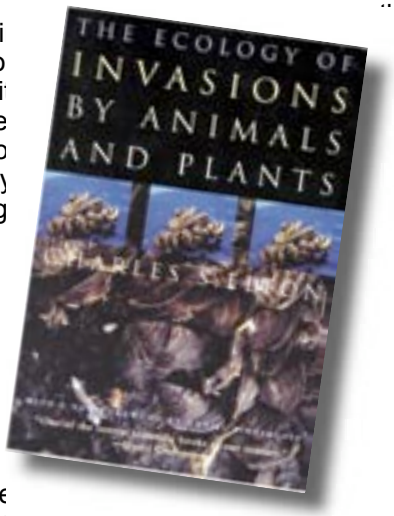
Help required developing position statements

Wanted: Members who are interested in taking part in the process of developing NZBI position statements on the issues raised in this report.
These position statements would be developed in time to be presented to the AGM at NETS2006.
If you would like to take part in this, please email Carolyn at cl.sb@xtra.co.nz

Book review

Original work on invasive species reissued

The Ecology of Invasions by Animals and Plants, by Charles S. Elton (University of Chicago Press, 2000. NZ$37.95)



This is not a new book. It was fi published in 1958 and this mo recent edition is dated 2000, wi a foreword by invasion specie specialist Daniel Simberloff, Professor o Environmental Studies at the University of Tennessee. It's still well worth reading though.

This was probably the first book to warn us of what invasive alien species were doing to the world. Since the original was written, the pace of invasion has quickened and news of new invasions appears regularly in the papers. But Elton explained, clearly, concisely and with good humour, why the diversity of wildlife, of genetic material, is so important to mankind and the world, what invasive species can do, and why conservation of plants, animals and environments is vital.

The author asks three "questions" concerned with conservation, then adds a fourth, and I have a fifth.

- All life has the right to exist: "The astonishing diversity of life on the globe was not evolved just to be used or abused".
- All organisms are interesting, and usually exciting and beautiful as well: "Should be preserved for posterity to enjoy".
- Humanity must survive.

Elton's conjectured fourth:

- Divergent attitudes can be harmonized: "Coexistence of man and nature".

And my extra one, in light of the genetic revolution:

- The unique genetic combinations in each organism may one day be useful, even if we don't yet know how.

New Zealand merits frequent mention in the book:

"No place in the world has received for such a long time such a steady stream of aggressive invaders, especially among the mammals — successful in the short run, though often affecting the future of their own habitats in a decisive manner."

The author furnishes his account with examples of successful and failed invasions big and small, and eradication attempts and successes (foot and mouth in the USA — and now in Britain, and Colorado beetle and muskrats in the UK). He mentions invasions that have "have helped to alter the course of world history," such as bubonic plague, influenza, the blight that wiped out Irish potato crops. He includes attempts at biological control (he didn't use the term, calling them "counterpests") with brilliantly successful conclusions, others where results were disastrous, and ose where successful introductions didn't achieve their aims.

He makes the point that many nvasions are repulsed and some nvasive species may cause damage nd then, for reasons unknown, diminish importance. A good example is *Elodea nadensis* which, in Britain, became a jor polluter of waterways in the 1860s, ore declining to become a universally sent but relatively innocuous problem.

relevance to New Zealand is his cription of the spread of Argentine ants, n reached the USA in 1891 and Australia 39-1941. Only in 1990 did they arrive in and, and already are too numerous and too widespread to be stopped. DOC is left with the task of keeping them out of island nature sanctuaries. Dutch elm disease, another example quoted by Elton, killed elms in Britain from 1927 onwards, reaching the USA in 1930. Here it infected Auckland trees in 1989: earlier this year Biosecurity NZ decided that eradication wasn't possible, and handed its "management" over to the regional councils.

Many invasive plagues are the result of accidental introductions, of stowaways on ships, planes or containers. Many too have been deliberate. Cane toads to Australia, rabbits and possums to NZ, trout, salmon and oysters all over the place, New Zealand flax on Tristan da Cunha. The intentions were good, the results bad for other species and sometimes for human endeavours. Will we ever learn?

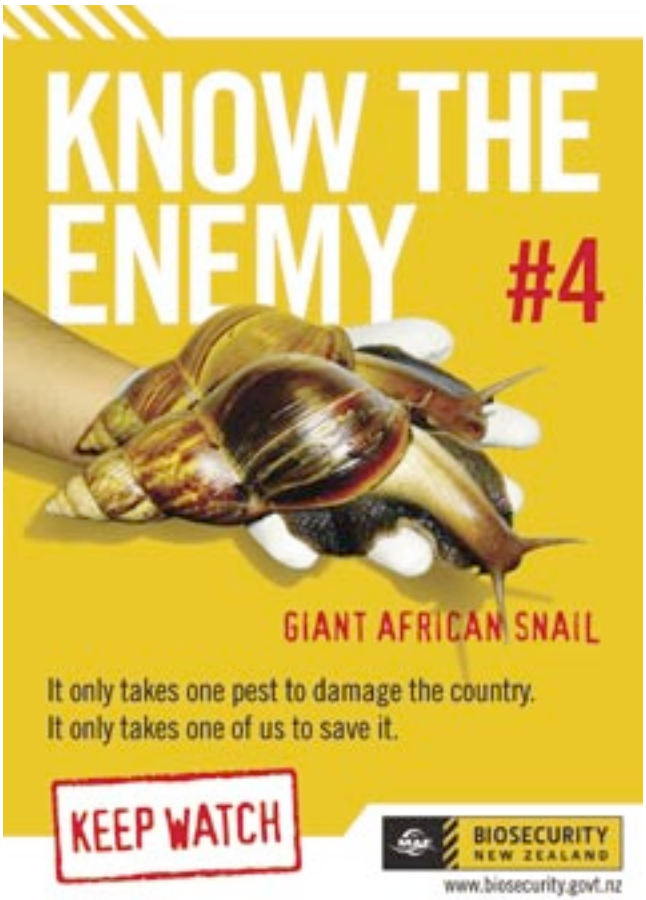
The world has changed since Elton wrote this book. Jet planes capable of carrying more than 300 people have proliferated and still grow in size and number. We all travel, in increasing numbers, to far-flung and hitherto inaccessible corners of the world. We bring back mementoes of our travels, straw hats or pretty seed necklaces, and animal claws or skins. People migrate and, as our forebears did, want to take with them their favourite garden or medicinal plants, or the children's pets. Traders in dangerously endangered species flourish and some risk hefty fines to smuggle valuable birds, lizards, plants or fish. Biosecurity is starting to bite but so far, it's too little, too late and in too few countries. Invasions continue!

Reviewed by Ian Popay, DOC

Biosecurity New Zealand launches advertising campaign

Biosecurity New Zealand is launching new advertising in its Know the Enemy campaign in this month.

The eye-catching advertisements will encourage consumers to participate in protecting our biosecurity.
The campaign will feature in newspaper, radio, internet, and outdoor media.



Widening the brief from the first wave's focus on post-border detection, the new campaign is intended to increase awareness of simple 'prevention' activities such as declaring items on arrival into New Zealand as well as profiling some of the potential biosecurity risks that could establish in New Zealand.

The goal of the campaign is to get New Zealanders actively involved in biosecurity — by reducing the risk of unwanted pests and diseases hitchhiking with unsuspecting travellers, or reporting suspected biosecurity incursions post-border. The **Know the Enemy** campaign provides a platform for targeted campaigns on other topics such as pest management.

For further information on Biosecurity New Zealand's Know the Enemy campaign, call Carolyn Kildare, Biosecurity New Zealand, on 04 470 2760.