Protect



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

Protect

Autumn 2002

Magazine of the New Zealand Biosecurity Institute

Contents

Editor's Note	3
News from the Executive	4
Stop press: Reply from DOC regarding its possible	
role in a 'Weedbusters' Week	6
News from the Branches:	7
Longstanding member retires	9
Life Member Profile: Neville Daniel	10
Member Profile: Ken Massey	11
Overview of Biosecurity and DOC	
lan Popay	12
Practical Control Tips: Moth plant in the Waitakeres	
Chris McKain	15
Water hyacinth — a world-wide weed	
Carolyn Lewis	18
'Alternatives' booklet under going revision	
Mike White	21
Appendix:	
Life Membership Guidlines	i
Letter to ERMA	ii
And reply	İV

Editor's Note

As stories and pictures come in for each *Protect* of biosecurity officers out in the field dealing with some unwelcome plant species that has found its way into the country often through short-sightedness on someone's part, I am struck by the huge weight of knowledge, expertise and dedication in the biosecurity community. Those monitoring, advising on, and controlling weeds are carrying out a largely thankless task often misunderstood by New Zealand's increasingly urban population. From where I sit seeing the material cross my desk, I am glad there are so many committed individuals involved. I'd like to pass on my gratitude to all of you working in your own spheres doing such valuable work — keep up the good work.

This issue

This issue is predominantly made up of Institute business and articles from, or concerning, members.

News from the Executive is followed by a last-minute arrival of a letter from the Department of Conservation concerning the holding of a Weedbusters Week. News from the Branches includes details of a successful meeting held by the Central North Island Branch, together with reports from other branches.

In news of members, Allan English is farewelled after nearly three decades battling weeds in the lower North Island, while Institute Life Member Neville Daniel and the scrounge of Northland nassella tussock, Ken Massey, are both profiled.

The Department of Conservation's orientation to biosecurity is outlined in an article by Ian Popay.

This issue's Practical Control Tips is written by ARC Biosecurity Officer Chris McKain detailing work he has done on moth plant in the Waitakere Ranges.

Carolyn Lewis has taken a global view of water hyacinth after reading a suggestion in a gardening magazine that the plant be grown in New Zealand for the manufacture of fashion furniture.

And lastly, the *Friendly Alternatives* booklet published by the Auckland Regional Council is in the process of being revised and expanded. Mike White outlines where that project is up to and what is planned.

There is an appendix to this issue containing the Institute's Life Membership Guidelines and a letter from the Executive to ERMA and the reply.

Pictures

If sending pictures electronically for *Protect:* It is difficult to say how big to make pictures, but as a rough rule, postcard size — 10x15cm — is usually good. If they are scanned to 200-300dpi and sent as a 'jpg' file they can be altered to suit end use in most situations. Other formats can make for enormous file sizes without improving the quality.

Col Pearson Editor

Phone: 021 189 23 97

Email: col.pearson@caverock.net.nz

News from the Executive

Website

By the time you read this issue of *Protect*, we should have the "Members Only" section of the website up and running. Indeed you are hopefully reading this issue of *Protect* after downloading it! Thanks to Mike Harré for making this possible. Don't forget that we are having a forum at NETS2002 to discuss how well the website is working, along with possible improvements and new developments. If you have any queries or feedback

in the interim please contact myself hayesl@landcareresearch.co.nz or reddwarf@ww.co.nz Please remember

to send information through to Mike to include in the "What's On?" section — we want lots of advance warning about any branch activities etc.

NETS2002

The countdown to "Southern Exposure – The Roaring 40s" is now on in earnest. We have an excellent line up of speakers and activities planned so if you haven't already registered — get your forms away without delay.

The trip to Stewart Island will also be a highlight and an interesting place to spend election night! This year we have decided that any non-members attending NETS will have to pay a slightly higher registration fee (unless they are presenting) but this will also entitle them to become members for a trial period. Any presenters who are not members will also be invited to take up this offer. Hopefully they will all like being a part of the NZBI so much that they will want to stay on as members in future!

Be sure to pack your polar fleeces but also don't forget to bring something to wear to the beach party/BBQ which is being held in the indoor heated pool, spa, and sauna complex on the second night. I hope to see as many of you as possible in Invercargill!

Life Membership Criteria

The executive has recently agreed to some criteria for awarding life membership (see Appendix) as the wording in our constitution Is not particularly helpful when making such important decisions. Please read through these guidelines carefully if you are considering nominating anyone for this honour. Please also note that we can now award "Fellowships" to recognise long-term endeavour or career excellence, and that recipients of these do not need to be members.

Travel and Study Awards

Details about these awards are now on our website. Applications for the first round close on June 30, 2002 and the outcome will be announced at our AGM. If we do not have any suitable candidates applying by this date then the deadline may be



extended.

If you haven't paid your sub for the last two years before NETS2002 then this may be the last time you hear from us! Please also note that if you are not financial you cannot vote at the AGM. When members join part way through a year their sub covers them until the end of the following financial year.

Skills Register

If you haven't sent in the short questionnaire that we sent out with the spring issue of *Protect* please do so as soon as possible so we can get our skills register up on our website. If you need another copy of the questionnaire, please email Dave Galloway dave.gallo way@arc.govt.nz Please send any completed ones to Dave too.

New Members

We would like to extend a warm welcome to the following new members:

Peter Raal — DOC, Dunedin

Verity Forbes, Susan Timmins — DOC, Head Office Steven Christensen, Kevin Christie, Nigel Hayman,

Craig Knapp — ECOFX

Rob Phillips — Environment Canterbury

Nick Ledgard — Forest Research, Christchurch

Toni Withers — Forest Research, Rotorua

Don Clark — horizons.mw

Ester van den Bosch — Hortresearch, Hamilton Margaret Stanley — Landcare Research, Auckland Peter Heenan — Landcare Research, Lincoln Phil Cowan — Landcare Research, Palmerston North

Policy Matters

The NZBI has recently written to ERMA and received a response back about streamlining processes for importing plants and well known biological control agents to reduce the risk of illegal activities. Both letters are included in the Appendix. Note that there will be a chance to quiz Bas Walker further at NETS.

Some of our members have expressed concerns

News from the Executive Continued

about the operation of the National Plant Pest Accord (NPPA). However, things do appear to be coming together at last. Steve Hix has advised us that there will only be two people warranted in any one regional council area to remove NPPA plants. This is apparently a risk management action to limit liability for MAF (i.e. they don't want every officer running around removing NPPA plants when there could be compensation issues). Every officer can still inspect nurseries etc. Steve is getting together a group to write some protocols for regional councils to use. Compiling the NPPA identification booklet has been a huge task but it is now almost done. Regional councils will distribute the NPPA booklet and the Biosecurity Managers Group has been asked to advise about the quantity each council needs. The NPPA booklet will be expensive to produce so there seems to be some merit in resurrecting the old grey booklet which could be handed out more widely. Our executive strongly supports this idea. The Auckland Regional Council is also thinking about commissioning some posters. A training package is currently being worked on and will be shared with others once it is in place.

As you all know the Government has undertaken to develop a biosecurity strategy for New Zealand (see www.biostrategy.govt.nz) A draft strategy was due out on May 31 but the latest news is that it is not now expected out until October. Apparently the early election will delay the processes needed before the draft strategy can be released for public consultation. Submissions on the 'Issues Paper': A Summary Report is available on www.biostrategy.govt.nz

Biosecurity Symposium

The New Zealand Plant Protection Society (NZPPS) is holding a one-day Biosecurity Symposium on August 12, 2002 just before their annual conference in Rotorua. The main emphasis is on scientific research and associated capabilities, and various policy matters. We are hoping to get a chance to explain where the NZBI fits into the scheme of things and we have been invited to take part in a panel discussion at the end. For more information about this day contact Lois McKay lois.mckay@agresearch.co.nz or visit the NZPPS website (www.hortnet.co.nz/publications/nzpps/index.htm).

Volunteers to Help With Protect

Thanks to lan Popay for offering to help source stories for this magazine. We could still use a couple of other helpers! The job is not onerous, as our editor can write the stories once pointed in the right direction. Any assistance would be appreciated (even one article a year). Please help us to produce the best possible magazine for our members.

Stop press

The letter on the following page from DOC arrived as *Protect* was getting ready for distribution and has been included for its relevance to NETS 2002 in Invercargill at the end of the month.



26 June 2002

New Zealand Biosecurity Institute C/- Dave Galloway P.O. Box 138 WELLSFORD

Dear Lynley Hayes,

Thank you for your letter of 14 December regarding the idea of holding a "Weedbuster" week in New Zealand.

My apologies for not replying sooner, we have been planning to do some national level weeds public awareness and now that this year's budget has been released I can supply you with some details.

The idea for a "Weedbuster" week was raised at an earlier NZ Biosecurity Institute conference held at Wellington in 1998 following a presentation given by Kate Blood. At that time there was support from Regional Councils to fund a similar initiative. It was noted by Regional Councils that they did not have a national structure to plan and carry out a national event and it was suggested that DOC could provide national co-ordination with support from Regional Councils and other groups.

In 2001/02 DOC weeds staff put together a steering group to look at the importance of national level weeds public awareness and the possibility of running a national weeds campaign. The group recommended that a person be employed for a two year period. In year 2002/03 the person would be employed to carry out some internal DOC tasks and investigate a national level weeds awareness campaign to be held the following year. A funding proposal for this work was prepared and has now been approved.

The Department of Conservation is prepared to act as a catalyst for an initial campaign and will seek to involve Regional Councils and other groups such as the NZ Biosecurity Institute. The campaign will be "as big as the support we get". After the initial campaign has been run we will review its success and may decide to run further campaigns.

Once we recruit a person to begin this work we can start looking at details and whether "Weedbuster" or another type of campaign will be proposed.

If there is an opportunity at the NZ Biosecurity Institute Conference in July, either myself or Susan Timmins would like to talk for 5-10 minutes about this initiative. Main Conference or AGM would be fine.

Thank you for your letter of support and offers of assistance. DOC staff look forward to working with your group and the challenge of doing a national weeds campaign.

Yours Sincerely

Keith Briden For John Cumberpatch Regional General Manager (Southern)

News from the Branches

Central North Island Branch

A well attended meeting was held in April in the NIWA boardroom in Hamilton. The branch has been going from strength to strength and to have 20 people from so many different agencies attend was a real treat.

Thanks to the Taranaki Regional Council people who made the long drive up. When you get people from as far away as Opotiki and Stratford wanting to attend the same branch meeting it is a real vote of confidence in what the Institute is doing and in the way the branch is being run.

There were two excellent presentations to the meeting and a vigorous discussion on the implementation of the Plant Pest Accord.

Pip Gerard, an entomologist at AgResearch presented information on the biology and spread of the clover root weevil (*Sitona lepidus*). The weevil is proving to be a major pest of upper North Island pastures, with no sign that it's spread has slowed down yet. It favours white clover, with obvious dire implications for nitrogen inputs into our number-one crop — good pasture. Nitrogen inputs alone are estimated to be worth \$1.5b annually, about half of the total worth of white clover to the New Zealand economy. See http://ceresfarm.co.nz/clover.htm

The agricultural community is taking the threat from the pest very seriously. In the short-term, management practices that curtail the weevil are being investigated. The longer term hope is in biological control. AgResearch have distinguished themselves with the successful biocontrol programme of another pasture pest, Argentine stem weevil (now the lesser of two weevils). Let's hope that the expertise developed over the last decade can be successfully transferred to this new beastie.

Australian community initiatives

Wendy Baker gave an illustrated presentation of her recent trip to Australia, studying the way the Ockers implement community initiatives for weed control. Wendy was the recipient of the inaugural Travel Award for this trip. They seem to be a bit further down the road than we are in recognising the major role community groups can have in combating invasive plants. For more on the subject, make sure you go to NETS in Invercargill, where Wendy will be speaking. Apparently she also fitted in some time for the odd bronzed Aussie, and readers familiar with the famous Pete and Dud sketch

What to look for: The crescent-shaped feeding damage of clover root weevil.



on similar matters will know that any reports on such goings on always end in three dots ...

National Plant Pest Accord

Carolyn Lewis lead a discussion on the implementation of the National Plant Pest Accord. There was some consternation that MAF had been slow to show the lead in this matter. Many nurseries were poorly informed and MAF's idea of public consultation fell short of being thorough. There was also the issue of authorising people to inspect and to seize. All of these issues were put forward to the National Executive for action.

Problem plants

Walter Stahel brought a sample of Kudzu vine along to the meeting. The interest was such that a field day to one of the infestation sites near Katikati was arranged for later in the month. This was well attended by people from Waikato, Taupo, the Coromandel and the Bay of Plenty. Control work is proceeding on the three sites in the Bay of Plenty.

After the meeting a field trip to Taupiri was held to look at Asiatic knotweed (Reynoutria japonica). It is



Asiatic knotweed smothering a paddock in Taupiri.

News from the Branches

Central North Island continued

spreading in a gully leading down to the Waikato River. It has the potential to be a serious weed of riparian and waste areas, and has realised this potential in Europe.

for their organisation of this event.

Pete McLaren Branch Chairperson

Social matters too

On social matters, it was reported that a very successful dinner was held as a reunion of former Noxious Plants Officers from the old South Auckland region. There are plans for another, and existing Plant Pest staff are encouraged to come along and meet their predecessors. Thanks go to Jeff and Colleen Jefferey

Stop press

The CNI branch had its AGM on June 28. Wendy Baker and Peter McLaren continue as branch secretary and chairperson respectively. Carolyn Lewis is the branch's new executive member.



Secretary Jan Crooks, above, took the orders as well as the minutes when the Canterbury Branch mixed business with pleasure by holding their AGM at a local restaurant, right.

Canterbury

The Canterbury Branch held its AGM on of June 7. Laurence Smith, Jan Crooks, and Helen Bratihwaite all



agreed to continue in their present positions for another year (chairman, secretary, executive member).

After the highly sucessful METS last October, the Canterbury branch is keen to organise activities again

this year. A day featuring aquatic issues is planned for October.

We also hope to piggyback on the International Plant Pathology Conference being held in Christchurch next February and organise an activity involving some of the overseas guests.

Auckland/Northland

The Auckland/Northland Branch held its AGM on the June 5. Brett Miller has now taken over as chairman of the branch. Alison Gianotti and Greg Hoskins have stayed on

as secretary and executive member respectively.

The branch plans to organise a training day in Whangarei in October, more details on this later.

Otago/Southland

After a considerable period of inactivity, the Branch is pretty much back in full swing which is just as well considering we are hosting NETS 2002 at the end of the month.

Recent new members joining the Institute are Peter Raal of DoC, Dunedin; Lynne Sheldon-Sayer of DoC, Invercargill and Bala Tikkisetty of Environment Southland.

At our recent Branch AGM in Invercargill, Keith Crothers was elected as Chairman/National Executive Member and Randall Milne was elected as Branch Secretary. Keith has indicated that this will be his last

term (he has said that several times before) in the positions, and the "new blood" coming through will have to take a turn.

Once NETS is over, the Branch has planned at least two get-togethers over the next year. One will be a wilding trees field day in February 2003 and the other an aquatic weed seminar in association with NIWA. Other opportunities will be considered as they arise.

The Branch is looking forward to hosting NETS and for those lucky enough to travel south, we hope you enjoy some good Southland hospitality.

Longstanding member retires

Allan English retired in June after nearly three decades of battling weeds. Allan was born in Gisborne — there is some confusion over his actual birthdate, and Allan believes that he ended up with his cousin's birth certificate by mistake.

After 17 years sharemilking near Otaki, he decided that he wanted more job security. Allan and his first wife, Monica, had six children (two boys and four girls) by then to support. "There was no TV in those days!," he quipped. He applied for and got a job with the Wellington Regional Noxious Plant Authority in 1976 a position he held until 1984 when he moved further north to work for the Wanganui District Noxious Plants Authority.

After Monica sadly passed away, Allan moved further north again to work for the Patea District Noxious Plants Authority. When regional councils were formed in 1989, Allan was seconded to the Taranaki Regional Council and moved to Stratford. He met and married his second wife, Rita there in 1995.

Allan joined the Institute of Noxious Plants Officers in 1976 and was on the executive for two years in the early 1980s. He survived triple bypass and replacement heart valve surgery in 1979.

"It hasn't slowed me down much. One of the highlights of my life was waking up after being out cold for two days after the operation. At that stage it was hard to tell where my face started and the pillow stopped," he remembers.

He said that another highlight had been the successful biological control of ragwort and nodding thistle. "It was great to release the insects, see them disperse and become common, and then eventually take these



weeds out."

Some of Allan's passions include horses, dogs and bowls. He still rides and owns a chestnut with white spots Appaloosa called "Speck". He has been president of both the Central Taranaki Indoor Bowling Association and the Stratford Lawn Bowls Club. He also used to coach hockey for the under 18 Wanganui and Taranaki ladies, as well as various secondary school teams. He has also enjoyed his involvement with Lions and served a term as president of the Stratford Lions. With more spare time on his hands Allan hopes to play lots more bowls and get out fishing more, to visit his family in Australia regularly, and maybe get a little bit involved in farming and horse racing.

Allan concludes by saying: "I consider myself lucky that I got to do all the things that I wanted and that things all fell into place".

We hope this continues to happen for him in the future!

Life Member Profile: Neville Daniel

Neville has a farming background and comes from a large family. After attending Waitaki Boys High School, he worked as a musterer, a farm manager and then as a farmer. In 1968, he joined the Waitaki County Council as a noxious weeds inspector, then as a noxious plants officer, particularly working on nassella tussock. He continued to work with noxious plants until he retired in 1991.

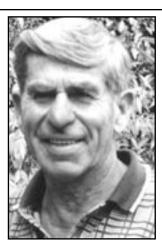
Neville was an active member of the Institute of Noxious Plants Officers, and helped the Institute to have input to the drafting of the Noxious Plant Act. He served a three-year term and a two-year term as president, as well as representing the Institute on the Vocational Training Council, Local Authority Training Board and the Noxious Plants Council.

During his time with the Institute, Neville was one of the driving forces behind the provision of in-service training, consisting of both correspondence courses and practical training. This was one of the first training schemes for local government employees, and other groups used the ideas to develop their own training. Without the Institute's leadership it would have taken the local authorities much longer to organise a national training scheme.

Another important movement Neville was a part of, was the move to an advisory role — informing landowners and helping them to plan their weed control - rather than just carrying out an inspection. sees the Institute as having played an important part, providing leadership and encouraging this move. He is concerned to see that recent changes in the way local government operates, and a reduction in numbers of people "on the ground" have reduced this advisory role in some regional councils.

Neville has an interest in the progress of bio-control, which he saw develop from the early stages. was impressed with the enthusiasm and dedication of people like Tom Jessep and Judy Grindell in the pioneering work on bio-control. He also remembers Arthur Healey of DSIR Plant Identification as a valuable contact outside local authorities.

One of Neville's memorable field experiences was when he was blown over the top of a steep gorge by a heavy gust of wind. He managed to stay at the top. His motorbike, however, went to the bottom of the 30m drop, and was not worth picking up.



Life member Neville Daniel

Neville has always

enjoyed being outdoors and is keen on hunting, fishing and a wide variety of sports. After he retired he was greenkeeper at the Lower Waitaki Golf Club for five years (lowest handicap 7). His hobbies now include fishing, involvement with a four-wheel-drive club and woodturning. Neville and his wife, Catherine, have two children .

Many of the issues Neville was concerned about are still very real to NZBI members today —

- the need for good quality training,
- the balance between enforcement and an advisory approach
- the balance between chemical control and other methods
- the need for the Institute to provide a national oversight
- the need to help advance the cause of the members as professionals.

It is good to be reminded of the contribution the Institute and its members have made in the past, and to work to continue the progress.

Member Profile: Ken Massey

Born at Paparoa, September 11, 1942, and grew up in Waipu and educated at Waipu primary and secondary school.

Lived on family farm until age 16 then moved into a contract shearing gang as a shearer after getting itchy feet at age of 15 and shearing on weekends and after school.

Stayed in the shearing industry as contractor for 15 years fulltime, then managed farms and part-time shearing for another 10 years, until finally purchasing own small farm of 120 acres in 1984, at Parua Bay, Whangarei Heads.

In May 1984 I was employed by the Whangarei County Council as a nassella tussock ranger, under the direction of the Inter-Departmental Nassella Tussock Committee, and subsidised 75 percent by MAF.

These duties included inspecting all nassella infestations in the North Island and reporting to the MAF committee.

After about eight years of nearly sole nassella ranging, and being satisfied that no other Nassella sites occurred 2km from the then known

Ken Massey with examples of nassella tussock, the plant he is working to eradicate from Northland

infestations, I took on extra duties of weeds for the new Northland Regional Council, and completed a Certificate of Proficiency.

The change over to the biosecurity structure around 1990 involved more changes, and interesting training in

biocontrol, plant detection of a wider range of plants and then, computers!!!!!!!

Office moving occurred regularly at this time, and finally settled down after about a year of upheaval.

I am continuing to use my knowledge and determination in an effort to eradicate nassella tussock from Northland and have reduced the seven areas of infestation, covering 600ha, from many thousands of plants in 1984 to 130 in 2001.

Of the 29 properties ranged, about 13 have had no plants present for three years, and hopefully these are on the eradicated list.

Have been a member of the New Zealand Biosecurity Institute for 17 years, was secretary for for the Northland/Auckland branch for two years, and branch executive for three years.

Am now nearing the end of the second year as National Treasurer, and am willing to carry on for a bit longer!!!!!

Interests are show shearing, pig hunting, rodeo, fishing, and most sports of which I currently play squash and golf.

> Ken Massey Biosecurity Officer.

Overview of biosecurity and the Department of Conservation

By Ian Popay

Department of Conservation

As you well know, biosecurity is about managing risks posed by exotic organisms that threaten to breach, or have breached New Zealand's border and may be detrimental to the economy, human health, and/or the environment. The term 'biosecurity' includes both external threats (from species that are not currently in New Zealand) and internal threats (from invasive species already here).

Habitat loss is regarded as the largest threat to the survival of New Zealand's threatened native species and ecosystems, with introduced invasive species coming a close second. DOC is one of four key agencies involved in managing New Zealand biosecurity. The others are the Ministries of Agriculture and Forestry (MAF), Health and Fisheries (MFish). All these organisations' operational biosecurity functions come together under the Minister for Biosecurity.

The total land area managed by DOC is 7.8 million ha — 30% of New Zealand's total land area. DOC also manages almost 7% of the territorial sea as marine reserves, marine mammal sanctuaries, marine parks or specially protected areas. DOC's mission is to conserve New Zealand's natural and historic heritage for all to enjoy now and in the future. Its biosecurity priorities are

- prevent the entry of new species, pathogens or genetic stock which pose a significant risk to indigenous flora or fauna,
- eradicate or contain newly naturalised weeds or animal pests, and
- 3. limit the spread of those already established but not yet widespread.

External threats — border biosecurity

MAF is the lead agency responsible for preventing the unintentional introduction of organisms into New Zealand's terrestrial and freshwater ecosystems. It is also responsible for developing standards for importers to ensure risks posed by importing goods into the country are minimised. MAF administers the Unwanted Organisms Register (http://www.maf.govt.nz/biosecurity/pests-diseases/registers-lists/unwanted-organisms/index.htm), a list of all species that have been determined to be 'Unwanted Organisms' by all

biosecurity agencies. Unwanted Organisms are defined under Section 1 of the Biosecurity Act as "any organism that a chief technical officer believes is capable or potentially capable of causing unwanted harm to any natural and physical resource or human health". This status has effect nation-wide and may be invoked for the purposes of eradication, containment or management.

The Ministry of Fisheries (MFish) is the lead agency for marine biosecurity issues and is responsible for responding to new organism incursions into the marine environment. The ministry also develops and implements policy relating to marine biosecurity, and standards similar to those developed by MAF.

DOC advises these agencies of organisms that would damage conservation values if they were allowed into the country. To do so, the department developed a weed risk-assessment framework for determining their potential damage if such organisms arrived in this country. The department is currently working with MAF to develop a risk assessment framework for evaluating risks posed to the environment by exotic invertebrate and animal pest species.

Before importing a new organism to New Zealand, the importer must apply for approval to the Environmental Risk Management Authority (ERMA). Such applications must outline the potential for the new organism to degrade New Zealand's native ecosystems, establish an undesirable self-sustaining population, and the ease with which the organism may be eradicated.

Despite all these safeguards, new organisms continue to arrive in New Zealand, either brought in accidentally on high-risk goods such as used cars, used tyres, containers or people, or are deliberately brought in by enthusiasts, or smugglers.

Internal threats – biosecurity within the country 1. Catching them early

Once a new organism has breached border security rapid action is needed if the pest is to be eradicated before it can establish, or spread too far. A recent and hopefully successful example was the discovery and elimination of a red imported fire ant nest found at Auckland airport in February 2001. Other examples that illustrate the importance of catching new incursions

Overview of Biosecurity and DOC

continued

early are the guava moth — which has now spread throughout much of Northland, the painted apple moth for which an intensive eradication programme is still under way in Auckland, and varroa mite for which a national control programme is now in place.

While MAF is responsible for responding to new incursions, they may also choose to lead management or eradication programmes for pests or weeds that are established in New Zealand, but for which eradication or control may still be possible (varroa, water hyacinth and salvinia are good examples).

Currently MAF and MFish undertake the bulk of surveillance activity that aims to detect new organisms. There is no nationally co-ordinated surveillance activity undertaken with the specific aim of identifying new organisms that may pose risks to the environment. DOC contracts Forest Research to survey around 68 campsites throughout New Zealand for the early detection of new introduced organisms. The sites are considered to be likely first night camping spots where international visitors initially use camping equipment (tents, tramping boots) that may harbour new organisms. A national review of biosecurity surveillance now under way will feed into the National Biosecurity Strategy and hopefully provide recommendations for an integrated, comprehensive surveillance system to capture the needs of all agencies (including local government) and target both new organisms and existing pests and weeds.

2. Stopping them spreading

If a new organism is identified too late to ensure eradication, MAF may decide further action is not cost effective. In such a case MAF consults with the agency most likely to be affected by the organism. This agency may then choose to undertake control if the perceived risks are significant enough. DOC has established a procedure to help decide whether an organism warrants further action, and whether that action should be taken under the Biosecurity Act or other legislation. Recent examples of this approach by the department are the hornwort response in Nelson/Marlborough, the koi carp/gambusia response in Nelson/Marlborough, and the blue tongue skink response in Palmerston North.

Besides the danger of organisms arriving in New Zealand and becoming problems for conservation, some of the 20,000 to 25,000 plants that are grown in cultivation (as crops or in gardens) have the potential to become naturalised and spread, in some cases becoming weeds. To counter this threat, DOC has helped develop the National Pest Plant Accord. The accord was a joint MAF, regional council, MFish and Ministry of Health initiative. It provides a list of

plants, regarded as unwanted organisms under the Biosecurity Act, that cannot be legally sold, propagated or distributed within New Zealand. These species could become serious problems if they became established in conservation areas.

DOC also carries out surveillance, actively searching for outbreaks of newly naturalised plant species, of plant species new to an area, or of plant or animal species that seem to be posing an increasing threat. This surveillance is carried out on conservation land and may be extended to waste places and roadsides near settlements — places where weeds are likely to first establish. DOC is currently assessing the national distribution of pest fishes like koi carp and gambusia (mosquito fish).

3. Local biosecurity

DOC actively manages more than 240 invasive weeds following an over all strategic plan which distinguishes between weed control to protect high value places (siteled weed control) and weed control to reduce future risks from weeds (weed-led control). Weeds have invaded nearly all types of indigenous plant communities, and now dominate in many lowland forests, coastal habitats, wetlands, shrublands and tussock grasslands, and most lakes and lowland rivers. Weeds would degrade at least 575,000ha within 10–15 years if no control were done and also pose a direct threat to a third of all New Zealand nationally threatened plant species.

Weed-led control programmes are aimed at eradicating or containing outbreaks of weed species new to the country or new to a particular natural area. The object is to act before the weed becomes a serious nuisance. DOC has developed a simple decision-making system to help local staff decide whether or not a weed qualifies for a weed-led programme. Copies of a poster describing this system are available on request from irc@doc.govt.nz

Who's responsible for biosecurity in DOC?

Five staff work directly on biosecurity for DOC, in addition to the department's many pest control and technical support staff. The person accountable for all biosecurity activity is Geoff Hicks, Chief Technical Officer (CTO) for Conservation, a position which has direct access to the Director-General on matters of biosecurity. The Biosecurity Technical Officer, National Advisor, is Rachel Garthwaite. Rachel co-ordinates and gives advice to the biosecurity agency leading an incursion response and to the relevant minister. The New Organisms Officer is Verity Forbes. Verity co-ordinates the department's input into applications seeking to deliberately introduce new organisms and provides input into MAF's border processes. The Response

Overview of Biosecurity and DOC

continued

Biosecurity Technical Officer is Andrew Harrison who advises and supports 'nominated Lead Conservancies' and regional general managers when they are appointed as CTO-Responses in the event of a DOC-led response. The Senior Policy Analyst, Sean Goddard, develops strategic policy for biosecurity issues.

Acknowledgments

Most of the information I have used here came from Verity Forbes' two articles in the *Conservation Science Newsletter* (see below) and from the reports mentioned below. Special thanks are due to Rachel Garthwaite for supplying useful information.

Sources of information

Buddenhagen, C., Timmins, S.M., Owen S.J., Champion, P., Nelson, W., Reid V.A. 1998: An overview of weed impacts and trends. Chapter 3, In, Owen, S.J. *Department of Conservation strategic plan for managing invasive weeds*, Department of Conservation, Wellington.

Department of Conservation 2001–2004 Statement of Intent

Department of Conservation Annual Report for the year ended 30 June 2001.

Forbes, V. 2001. Protecting New Zealand: Biosecurity in DOC. *Conservation Science Newsletter* No. 42, 21 November 2001. Forbes, V. 2002. Biosecurity Update 2. *Conservation Science Newsletter* No. 43, 28 February 2002. 4

Timmins, S.M.; Owen, S.J. 1999: Eradicate this weed or not: Decision-making for weed-led control programmes. DOC Science Poster No. 21.

Methods for controlling Moth Plant in Waitakeres

By Chris McKain

Biosecurity Officer Auckland Regional Council

Background

Moth plant is considered by many to be the number one environmental weed in New Zealand, mainly due to its vigorous growth and wind dispersed seed system. It is these properties and the low number of known sites, that has made it a Total Control Plant Pest in the Waitakere Ranges as part of the Auckland Regional Pest Management Strategy. The risk to the Waitakere Centennial Park is too high to let this weed spread from the urban part of the city.

In 1997, only a few sites were known within this new control area. Since then a surprising number of properties and sites have been found. The increase from two sites, to 157 in four years, would indicate the level of infestation was grossly underestimated. Fortunately many of the sites occur across boundaries and most are on small 1200m² properties or on roadside reserves, so the overall area of the infestation is still quite low.

Surveillance of these sites has been a learning experience due to the large number of property occupiers to be contacted, many of whom are at work during the day, the organisation of work to be done and followed up, all of which has slowed control.

Initially, I sent letters, and notices where appropriate, to each occupier. However, it soon become obvious that most people had no idea what the plant was or any notion of how to control it. The re-inspections were drawing on resources I needed elsewhere, so I changed tack two years ago and now I contact and do the control at the same time. This has two advantages: firstly, only one visit is required in most cases, and secondly, I know correct control has taken place.

Although another five sites have been found this season, the number now under surveillance is increasing, to about 20%. The number of fruiting vines has been reduced to less than 5% as well, which basically translates into good results.

Distribution

The initial sites were all found by 'drive by' during the December to February flowering period. Some of the Titirangi road systems had more sites than others. A foot search of the entire street found many of the infested properties and residents reported others. The inspections found most of the infestations occurred close to the roadway.

Another disturbing pattern emerged when the ARC Parks staff reported moth plant on the West Coast beaches. A search of the beaches was carried out with nearly all having some level of infestation.

How did this weed get to where it is?

1. While working on the Titirangi infestation, the Waitakere City roadside flail mower contractor was also working. Mature fruit pods were over-hanging the vegetation to be trimmed back and these seeds could be easily transported in the rotary blades. I suspected a vine had become established and fruited near the road and with its fruit being transported throughout the area by the mower. This has never been proved, however there is now an understanding that the mowing cease between November and May each year, and if vegetation clearance is required for vehicle safety, I am notified first.

I suspect contaminated soil or mulch lead to the initial source.

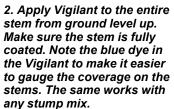
2. The presence on remote beaches was a puzzle until I found a semi-mature pod floating in the surf at Anawhata, one of the earlier sites on Parkland beaches. It appears moth plant pods can travel some distance in the sea and beach themselves. These pods can then ripen in the sun, spilt open to release the seeds to be carried into the dunes, where all the beach infestations have so far been found.

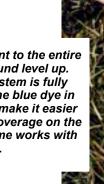
Since large numbers of moth plants are found in Onehunga, it is likely that pods from there swept out of the Manukau Harbour and northward on the currents.

Practical Control Tips: Moth plant continued

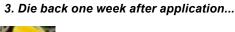
Stem treatment method

1. Find where the stem meets the ground and clear around it so you can see up to at least 300mm of the vine. It is important to treat the vine from where it comes out of the ground.











4. And after one month.

Practical Control Tips: Moth plant continued

I also suspect the prevailing south-westerly wind to aid dispersal. While there is a link to some sites, other infestations seem to be random. However, one observation is that while seed is capable of being transported some distance by wind, it seems to fall only a few metres from the parent vine in practice. Some of the sites in Titirangi would be much farther off the road if the seed had been transported by the breeze, especially where there was a slope down wind.

Control

I started using Grazon mainly due to the presence of other weeds such as wandering Jew and woolly nightshade. I changed to Escort when mignonette vine, another Total Control Plant Pest in Waitakere, was also present. The latter proved to be more effective. I also hand pulled many vines, but insuring the entire 'fat' taproot was removed was difficult and some re growth occurred. Tests on pods from vines sprayed with Escort showed no seed germinated when compared to the control pods. Escort then become the preferred chemical. I also found spraying or coating the stems with Tordon Brush Killer had little effect.

Some new sites had a single established vine climbing up and over desirable plants. Mixing and applying chemical for these was not appropriate so Vigilant was trialed. Despite anticipated difficulty with this method due to the 'latex'-type sap that supposedly prohibits absorption of the herbicide into the plant

vascular system, I just coated the lower part of the vine in a similar way I treat woolly nightshade. Results were impressive with vines wilting within a week and dying off in a month.

The method I have adopted is:

- **1.** Find where the vine meets the ground and clear around it so you can see at least 300mm of the vine. It is important to treat the vine from where it comes out of the ground. (photo 1)
- **2.** Apply Vigilant to the entire stem from ground level up, making sure the stem is fully coated. Note that I put blue marker dye into my Vigilant to make it easier to gauge the coverage on the stems. I do the same with any stump mix. (photo 2)
 - 3. Leave to die.

Note: I doubt the picloram in Vigilant would have seed-damaging effects like Escort. From the photos you see it is easily applied. However it is not always the best method, expressly when the ripe pods are out of reach. In this case I would recommend Escort to kill any maturing seeds.

Also some feel that foliar treatment of Escort is too damaging to the non-target plant the vine is on. If this is so, I would like to suggest you change to an adjustable nozzle so you can change to pattern to suit each application.

Water hyacinth — a world-wide weed

By Carolyn Lewis

Plant Pest Advisory Services, Contractors to Environment Waikato

In our little corner of the world, dealing with plant pest problems on a day-to-day basis, it is easy to feel very isolated in what we do. Sometimes it is important to take a step back and remember that other countries are often dealing with the same invasive plants in far more difficult circumstances, and that, globally, we are an important part of a large body of individuals and agencies working to tackle this issue. Water hyacinth (*Eic-chornia crassipes*) is a good example of this.

In South America, its country of origin, water hyacinth (*Eicchornia crassipes*) is a well-behaved aquatic plant that forms part of that country's fantastic flora. Its glossy thick leaves and showy violet-blue flowers put on a fantastic display along the edges of rivers and in ponds.

Water hyacinth is completely free floating, and this flotation is aided by a bulbous piece at the base of the plant that is filled with a spongy, aerated tissue called aerenchyma — it looks a little like polystyrene when broken open. The roots dangle into the water and take out the nutrients the plant needs. New plants form from runners sent out from the parent plant, and then these break off to form new plants. Water hyacinth also produces a large amount of long-lived seed.

In its country of origin, water hyacinth is host to a number of naturally occurring diseases and insects. These limit its ability to become invasive, and so it is maintained in balance with the environment around it

Out of South America, however, water hyacinth is not so well behaved. This plant is known as the world's fastest growing water-borne weed, with the ability to double its biomass in less than two weeks. To give you an idea of what this means in the real world, it has been estimated that in just under eight months in the

right conditions, 10 water hyacinth plants can multiply to 600,000 plants and take over 4000m² of water.

As if that isn't bad enough, water hyacinth plants can mesh together to form thick floating mats that make travel along infested rivers difficult, and fishing and irrigation nigh impossible. These mats block dams, destroy habitats for birds and fish, and harbour disease-bearing creatures such as certain sorts of snails. Overall, water hyacinth is a potential disaster environmentally, socially and economically for many countries.



Water hyacinth: attractive plant, will travel.

Because of its beautiful blooms and foliage, water hyacinth has been carried by tourists, plant collectors and botanists to over 80 countries around the world in the last 100 years. It can now be found in North America, throughout many Asian countries, in parts of the African continent, Australia,

the Pacific Islands and the Indian Ocean islands, and of course. New Zealand.

The problems faced by Thailand because of water hyacinth provide an interesting case study of the serious impacts of this plant, and how lateral thinking is needed to combat plant pests when resources are limited. The story goes that water hyacinth was brought into what was then Siam by a royal consort who fell in love with the hyacinth flower. The plant grew so rapidly that she was able to give pieces to all those she favoured, presumably as a sign of royal patronage. So the plant was spread around the country, multiplying furiously wherever it went.

At that time, Krung Thep (what is now known as Bangkok) was known as the Venice of the East because of its extensive klongs, or canals. One can only assume that someone so royally blessed with the water hyacinth got frustrated at the havoc it then wreaked on their ornamental gardens, and tipped excess pieces of plants into a klong, from where it rapidly spread throughout the city and then the rest of the country.

Now, Thailand is a country with an economy that relies heavily on water transport, fishing, and the irrigation of fields by way of networks of waterways. The emergence of an aggressive weed such as water hyacinth was a disaster for that country. Thailand is also not a wealthy country, and the option of herbicide application to control water hyacinth is not a long-term option, in economic or practical terms, so other solutions had to be considered. The army and navy were called in to help with clearing the besieged canals,

and a Water Hyacinth Act prohibiting the intentional spread of this weed was put in place, but to no avail — the problem was just getting out of control.

Innovation

As they say, necessity is the mother of invention, and someone certainly started thinking outside the square when it came to Thailand's water hyacinth problem. It was found that when it is taken out of water, the plant rots down within 15 days, producing a mulch that is ideal as a low cost organic fertiliser, or for mushroom propagation. Some bright spark also discovered that this water hyacinth mulch can be used as the base of

a fibre-board for construction. But the most unlikely product to come from water hyacinth control must be wickerwork for furniture that is now sold around the world in the most fashionable of outlets.

I first became aware of this a couple of years ago when a letter to the *New Zealand House and Garden* magazine suggested that since water hyacinth made such lovely furniture, maybe we should look at growing the plant in New Zealand so that our own craftspeople could have a crack at this lucrative market! I pricked up my ears, and started to do some research.

In 1999, a UK company called Hyacinth Design started to specialise in the distribution of water hyacinth

furniture from a Thai company called Yothaka International. According to the website, the furniture is handmade over a period of up to five days, and the resulting products, a sort of upmarket wickerwork look in sofas, chairs and dining suites, is very popular in the western world.

The first factory started with five workers, and now has expanded to over 80 workers. There are even claims that a shortage of water hyacinth has resulted in the plant having to be imported into Thailand to keep this industry going, although that is not a comment I have seen verified anywhere other than on the manufacturers website.

The use of water hyacinth in this way was made possible by funding from the Japanese government, which was supporting environmental enhancement projects in parts of Asia. To aid in collection of the plant material, the Agrotechnology Department of the Thailand Institute of Scientific and Technological

Research, funded by the Pollution Control Department, developed a "complete cycle operating machine for water hyacinth" — in other words, a mechanical harvester, the first of its kind in the world for this sort of work.

There has also been a spin off benefit for local Thai farmers — the supplementary collection and sale of water hyacinth to the manufacturers has meant that they have an extra income during their cropping off-season.

Other uses for water hyacinth, such as the production of butane gas and as a 'green fuel' for cooking are also been explored.



Chairs with wickerwork made of water hyacinth: one way of creating worth out of a weed.

Water hyacinth

continued

It is a fascinating story. It would be nice to think that this sort of non-chemical control would be sufficient to ensure that the threat of water hyacinth is minimised in Thailand, but the reality is that it is dependent on many factors, not the least being the fickleness of the international fashion market for furniture.

To ensure that there are backstops, biocontrol agents have also been released in Thailand for the control of water hyacinth — the water hyacinth moth (Sameodes albiguttalis), the mottled water hyacinth weevil (Neochetina eichhorniae) and the chevroned water hyacinth weevil (Neochitina bruchi). These three agents have been successful in slowing down the spread of this plant pest, but again, are only one tool in the fight against water hyacinth.

Global problem

Meanwhile, back in the rest of the world the picture is no prettier.

Water hyacinth started moving across Africa in the 1890s, again as a result of importation for ornamental purposes. From the Nile in Egypt, it spread through the continent, colonising almost every river and most freshwater lakes that it encountered. Up until the 1970s it was still being displayed as a desirable ornamental plant.

Although the negative impacts associated with water hyacinth have been well known around the world for a long time, water hyacinth has continued to spread throughout Africa, aided by politics and division. The problem of water hyacinth in Lake Victoria is a good example.

Lake Victoria is bordered by three countries — Uganda, Kenya and Tanzania. Tributaries also flow into the lake from Malawi and Rwanda. Water hyacinth in these countries was blocking dams, preventing fishing, slowing water flows and limiting movement of boats from place to place. The co-operation of all five countries was needed if the water hyacinth controls were to be successful, and the major stumbling block was politics.

Control of water hyacinth using chemical, manual and mechanical methods was attempted in the 1950s, but efforts were piecemeal and unable to tackle the problem as a whole. Biological control agents were first released in Africa in the Sudan in the 1970s and 1980s but civil war meant that no evaluation of the programme was possible. When agents were suggested for use in the Lake Victoria situation, agreement had to be reached between all five countries to allow effective releases to be made throughout the area. The political process took until 1997 to achieve, and undoubtably the war in Rwanda has meant that evaluation of this programme has also been problematic. Those working

with biological control in New Zealand should be grateful that they aren't facing such challenges here!

In a less war-torn part of the world, water hyacinth blocks nearly a million hectares of lakes and rivers in the United States. In the most heavily infested states of Florida, Louisiana and Texas, over \$10US million per year is spent trying to control the spread of the aquatic invader. The biological control agents for water hyacinth have also been released in the United States, with mixed results.

Anti-pollution application

In desperation, scientists there have hit upon a use for water hyacinth that exploits its ability to absorb almost any pollutant that can dissolve in water — it is particularly good at removing nitrates, phosphates and potassium, all common water pollutants. This led scientists to consider the possibility that water hyacinth could be used to treat wastewater, and the initial studies were put in place in Mississippi, run by NASA.

The resulting technology has led several small communities in the USA to use water hyacinth purification technologies instead of more costly conventional systems. One community in Florida has a half million litre a day pilot plant that has been operating since 1978. The biggest planned so far is a 3.8 million litre a day pilot plant in San Diego, dealing with sewage from two million local residents.

Closer to home, Australia also struggles with outbreaks of water hyacinth, though not on the scale of the other countries mentioned. Which leads us back to little old New Zealand — and by now you should be feeling a whole lot better about the occasional small finds of water hyacinth in garden ponds in this country.

Although it was introduced into New Zealand in 1914 as an aquarium plant, and had spread to a number of sites by the 1950s, our climate here is not as friendly to water hyacinth as it is in some places overseas. Declared a Class A noxious plant in New Zealand back in 1950, the plant has been all but eradicated in New Zealand, although historical sites remain under surveillance as the seed life is still under scrutiny.

But that does not mean we can be complacent. No doubt, the violet-blue flowers of this attractive water weed continue to work their magic on some dedicated gardeners who still allow this plant to lurk in their ornamental ponds, just waiting for the chance at freedom. Who knows where, who knows how, who knows when — but when it does happen, it will be up to us to find the water hyacinth and destroy it before it establishes. And situations like that, in a nutshell, are what makes our jobs so important.

'Alternatives' booklet under going revision

With invaluable help from Kathryn Whaley, I am producing a revised and expanded edition of the popular *Friendly Alternatives* booklet which Lance Vervoort put together back in 1997.

A total of 15,000 copies were printed and the booklet is currently out of stock. Changes from the National Surveillence Lists to the National Pest Plants Accord (NPPA) lists has meant that a revision is timely. All the previous listings have been retained and some 10 extra pest plants from the superceding NPPA have been added, along with an aquatics section.

The booklet is not the total list of any regional strategy or the NPPA but rather is those pest plants which might be considered, in innocence, to be useful or attractive in a garden and which will hopefully be replaced when garden owners find out what they are. The alternatives are the best 'look-alike' suggestions from the grass roots of the growing industry.

Whereas the earlier edition was an Auckland Regional Council production, this time the support and involvement of the Northland Regional Council, Environment Waikato, Environment BOP, Protect NZ (MAF Biosecurity), NGIA and LIANZ (the body of professional landscapers).

The terrific response and support has shown the need to work "across the lines" more often on projects such as this.

The new edition now covers the 'northern climate zone' — Northland, Auckland and coastal Waikato and Bay of Plenty.

Several meetings and mailouts about the suggested alternatives have been made to the plant-growing industry in an effort to minimise criticisms in line with the old maxim, "if they complain, put them on the committee!

Because of the industry 'buy-in' we expect much better support and promotion of the booklet by the garden centres. It is also anticipated that the cooperation from the nursery sector will help to ensure that the alternatives are not only good matches bur are also commercially available.

The new edition, which may be published under a slightly different name, is due to be launched at the Ellerslie Flower Show in November.

The object is to see this booklet available on the counter of all retail plant shops and garden centres in the zone.

Environment Waikato are already planning a variant to suit the inland areas of their region.

NGIA is keen to see other regional councils co-operate to produce a southern North Island version and then a 'Mainland' edition.

Mike White Auckland Regional Council

Appendix

Life Membership Guidlines

- Life Membership is to recognise long and exceptional service to the NZBI. It is not to reward outstanding
 endeavour in the applicant's career, field of employment or personal interests. These guidelines are to assist
 with decision-making only, and occasionally people may still qualify for life membership even if they don't meet
 all these criteria.
- As a general rule an applicant for Life Membership shall have been a paid up member for at least 15 years.
 This may be reduced by up to 2 years if the applicant has been, for at least that same period, an effective and
 active branch executive member, National Treasurer, National Vice President, Branch Chairman, or Branch
 Secretary. This may be reduced again by up to a further 2 years if the applicant has been National President
 or National Secretary, for at least that same period.
- As well as having had a significant length of service (as outlined above) a successful applicant will be expected
 to have made a substantial contribution in at least several of the following areas:
 - a. organising NETS or branch activities
 - b. making presentations at NETS or branch activities
 - c. assisting with Protect
 - d. assisting with major training projects
 - e. assisting with the NZBI's advocacy, publicity, or other objectives

N.B. Any involvement where the applicant has been financially rewarded either by the NZBI, or some other organisation, will not count.

- Application for Life Membership shall be made through a branch at a branch meeting. If a simply majority
 of that meeting votes in favour then a copy of the minutes of that meeting, together with the supporting
 testimonials, must be forwarded to the National Secretary this must be done in sufficient time for the
 Executive to consider the nomination prior to last National Executive meeting before the AGM.
- If the Executive supports the nomination it will put it to the AGM for a final vote. If the Executive declines to put a nomination forward then it will explain to the nominating branch the reasons why in writing.
- Branches can also put forward the names of people (members or non members) that they consider should be made a "Fellow of the NZBI". This recognises long-term endeavour or career excellence in fields that are endorsed by the NZBI. If the Executive is in agreement with this nomination then the "Fellow" will be issued with a special certificate.

May 2002				



19 March 2002

Bas Walker Chief Executive ERMA PO Box 131 Wellington

Dear Bas

We appreciated you taking the time to come and speak to us at the New Zealand Biosecurity Institute's National Education and Training Seminar at Napier last July. We were interested to hear about possible improvements that you are considering to streamline various processes, and we have decided to write to you to let you know that we are in support of some changes being made.

The NZBI is concerned that since ERMA came into being it appears that most people are no longer applying through the correct channels to import plant (and probably animal material). The small number of plants screened by ERMA is in contrast to the hundreds of applications received under the previous system. We believe that the cost has probably driven most of this activity underground, particularly since it is still relatively easy to bring seed undetected in to New Zealand, despite real improvements in border control. Also there is often no significant commercial gain for the importer (once the plant is here usually anyone can propagate and sell it). If material enters New Zealand illegally then it circumvents any screening procedure for pest potential. We believe that effective screening of plant material should be considered a public good activity and funded accordingly.

Likewise the NZBI sees the importation of biological control agents as a public good activity and believe it also should be funded accordingly, as everyone ultimately benefits from them. At present the process and cost of applying for permission to release biological control agents is daunting for applicants. We are anxious to avoid a situation where groups might feel that it is easier to import biological control agents illegally. Perhaps at the very least a fast track process should be made available for biological control agents that are well known and have a good track record in other countries? We believe that it is probably still worth putting less well studied biological control agents through a rigorous process, but that the current system is not warranted for all species.

A similar case arises where pesticides that are not registered in New Zealand are needed to enable rapid control of a new invasive pest. For example, in the past "new" herbicides (which have often been used for many years in the USA or Europe) could be trialed by research organisations under an Experimental Use Permit (ELTP). Apparently there is no mechanism for a similar permit under the Hazardous Substances and New Organisms Act. We believe that pesticides used extensively overseas that have reliable environmental

data should be allowed limited access here in order to deal with new incursions that are not controllable with chemicals or other techniques currently available here. Time delays spent working through the ERMA process and persuading pesticide producers that a viable market for their product exists in New Zealand, can result in the further spread of a pest to a level where eradication becomes more difficult if not impossible.

Please let us know if the NZBI can be of any assistance to your organisation. We have a wealth of experience and expertise amongst our members and we are keen to become more active in matters of advocacy. We also hope to see you again at our National Education and Training Seminar later this year where we could discuss some of these issues more fully.

Kindest regards

Lynley Hayes President

ENVIRONMENTAL RISK MANAGEMENT AUTHORITY NGĀ KAIWHAKATŪPATO WHAKARARU TAIAO



3 April 2002

Lynley Hayes President NZ Biosecurity Institute C/- Dave Galloway PO Box 138 WELLSFORD

Dear Lynley

Thank you for your letter dated 19 March 2002. I enjoyed the opportunity to speak at your Napier conference. I am very happy to commit now to providing ERMA New Zealand participation in your National Seminar later this year.

We all agree that the virtual disappearance of applications to import new plant material since HSNO started, is a bad sign. There is good reason to think that legitimate importers are being deterred, and others are simply going underground. Doing something about it is another thing, but we are actively exploring all possibilities.

As you know from my address last year, part of our work programme for this year is the development of a risk model to enable plant import propositions to be dealt with more quickly and cheaply. The work is still in progress so it is too soon to draw firm conclusions. However, the emerging implication is that risk modelling will help but not enough!

If other measures have to be looked at then two come to mind.

The first [as you suggest] is to zero-price plant import applications. However, this would require a change in Government policy [at present we are being pushed in the opposite direction, i.e. to full cost-recovery], and we would have to be careful about the funding implications. And I am not sure that this alone is the solution anyway, because there is a considerable hidden cost in putting an application together.

The second solution, and perhaps the ultimate fallback, is to change the HSNO Act so that straight forward cases can be dealt with as they arise, i.e. at the border and without excessive cost or bureaucracy. However, Parliament would have to be persuaded that this was justifiable.

I can only agree with what you say on biocontrols. A proposal for recognising the public good element in such introductions was put to the Government in December 2000 but did not find favour.

I take a somewhat different view to your comments on pesticides. There is some bad misinformation about on this subject. The first point is that laboratory based research and development is exempt from the HSNO Act, so there are no costs there. For field tests the equivalent of a EUP under HSNO is a containment approval. These are relatively simple [look only at containment] and do not have to be publicly notified. Good applications can be pushed through in a few days. The very first application put through was relatively costly [\$5,000], but I expect that to come down rapidly now that we have a precedent. And similar responses can be made to other aspects of dealing with pesticide applications.

In this area [approving new pesticides] I would be glad if you could refer complainants to us, so we can reassure on misleading points and look at corrective action on others.

Bas Walker

Chief Executive

Regards