

New Zealand Plant Protection Society (Inc.)

# Newsletter

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MAY 2005

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## From the President

It's election year, and we live in hope that more money will be made available for research in the pre-election budget. This country's research spending is miserly compared with most other countries. (Statistics NZ quotes 2002 government-funded research at 0.54% of GDP, OECD averages 0.67% and Australia's is 0.71%). Don't count on any increase, though, because research doesn't bring many votes by comparison with roads, hospitals, warships and schools. Remember that sustainability for a politician is only 3 years,



Agriculture, horticulture and forestry have pulled us through bad times and continued to perform brilliantly in the good, despite our high dollar. Don't forget conservation either – it's one of the draw-cards for the burgeoning tourist industry. Starving research is silly. It's not long ago that agriculture was being written off as a sunset industry. Now we hear repeatedly how important it is, and how its productivity has grown over the last 50 years. Past and present growth, based largely on research, has meant greater production from less land and fewer resources. Unless research is maintained at satisfactory levels, future growth looks much less sure.

An even bigger problem than research funding is the money wasted in its allocation. In theory we're run by MORST which sets policy, and FRST which dishes out the lolly. It seems to me that FRST is setting its own rules, and those rules change frequently, and often without warning. Furthermore, a huge amount of paperwork is needed before funds are released. Most CRI scientists complain bitterly about the time they waste filling in forms, often with no returns in the lottery of funding. The recent round of OBIs is a good example.

Related to these worries is the number of scientists seeking solace offshore. What else do you do if you didn't score funding last time and have little chance of finding more for years? Just becoming a scientist takes a lot of commitment; the financial rewards aren't all that flash, who need even more hassle?

We deserve a better system. Even the old direct funding of DSIR and MAF, flawed as it was, was surely better, and less wasteful of human resources, than this? Bringing MORST and FRST together would be a start, and let's have a consistent, long-term strategy for research funding in this country. If we continue as we are, we're going to be in big trouble in the future.

**Please** try not to organise your various business and other meetings during conference sessions. One of the advantages of our conference is the opportunity to understand research progress in fields other than your own. A full audience also helps encourage less experienced speakers. So please, if you must have those other meetings, try and hold them at other times. You never know, the germ of an idea might rise from hearing somebody else's way of doing things.

**Ian Popay**

## **From the Editor – May 2005**

I'm guessing that there will be about 60 papers presented at the Wellington conference this year, which is about average for the last 10 years. There are a number of papers with the "Biosecurity" theme that will tie in with the workshop being held on the Monday. Thank you to those authors who have got their papers in early – some of these have already been refereed so that helps me to get things started.

You will notice a few changes in the journal this year. As the corresponding authors for this year know, I have made a late adjustment to the formats for the reference list. Several years ago, I decided to align the formats with the New Zealand Royal Society journals to try and simplify things. We had already planned to complete this adjustment to include the use of **full journal titles** in the reference list, when I was alerted to a change in New Zealand Royal Society journals reference formats, effective from 2005. I thought it was best to keep aligned to these journals and so decided to make the changes effective immediately for us.



The new formats are much simpler ... no italics and very little punctuation. For example:

Seefeldt SS, Peters E, Armstrong ML, Rahman A 2001. Cross-resistance in chlorsulfuron-resistant chickweed (*Stellaria media*). New Zealand Plant Protection 54: 157-161.

Harrington KC 1996. Strategies for managing herbicide resistance. In: Bourdôt GW, Suckling DM ed. Pesticide resistance: prevention and management. New Zealand Plant Protection Society, Rotorua, New Zealand. Pp. 91-98.

The in text citations haven't changed as these already used minimal punctuation. Other changes to the journal will include a rearranged front page with an updated disclaimer and the dropping of the chemical names lists at the front.

Could I please give a little grammar lesson? One mistake many people make is putting an apostrophe in front of "s" when the "s" is plural rather than possessive. The most common ways this mistake is made are for years (in general, use 1970s not 1970's) and abbreviations (DMIs not DMI's). I know that there are exceptions and in some cases there will be an apostrophe before the "s". However, like the punctuation in the new reference formats think of the phrase "IF IN DOUBT LEAVE IT OUT"!

Every year, I have a few people concerned that I haven't acknowledged receipt of their abstract. Please remember that I do not acknowledge receipt of abstracts. My time is better spent in sorting the numerous abstracts that have arrived, developing a draft programme and assigning referees. The abstracts are discussed briefly at the Executive Committee meeting that is held in the first week of March and I plan to notify everyone of their paper number, referee and submission date by the end of that week or the following week. In the meantime please begin to prepare your paper – generally abstracts are only rejected if their content is outside the scope of our journal (and this doesn't happen very much). The only time to panic is if you haven't heard from me by 15 March. If there is a genuine mistake (and these do happen) so that I haven't received your abstract then I will still accept it.

Could everyone please remember that the timeframe for return of your refereed/edited paper is five days. For those people with the 15 May deadline, you may even have to do this faster. I need to have all papers with the printer by 31 May to allow time for formatting, final proofing and preparation of the supplementary pages. Once I have all the papers in, I can then develop the programme for discussion at the Executive Committee meeting on 7 June. This allows the programme for the conference to be posted on the website about 15 June.

Please check your final version very carefully before you send it to me. Changes on the proofs that were not in the final version of your manuscript are a direct cost to the Society and will only be made if the mistake has a major effect on the interpretation of the paper. When you are sent the .pdf file of your formatted paper the main things to check are Greek letters and other non-keyboard characters, as well as Tables and Figures. The costs of formatting changes due to a mistake during layout are borne by the printer.

When preparing your talk for the conference, please read the instructions for presenters on the website. Trevor James is the co-ordinator for presentations so don't send anything to me. Remember that overheads and slides are not supported any longer – the only option for presenters is PowerPoint. I hope to attend the conference this year, and look forward to meeting new people as well as catching up with everyone else. Please come up and introduce yourself if we haven't met before.

If you have any questions the easiest way to contact me is by email. I check emails every evening so you will get a reply the following morning.

## CLL Writers' Awards

New Zealand writers of non-fiction books are invited to apply for two grants worth \$35,000 each in this year's Copyright Licensing Ltd (CLL) Writers' Awards.



The CLL Writers' Awards were established in 2002 and are financed from copyright licensing revenue collected by CLL on behalf of authors and publishers. This is the second time that two awards of \$35,000 each have been provided.

Last year the awards were presented to two Dunedin-based writers to enable them to devote time to a specific non-fiction writing project and to provide reasonable research expenses for their projects. Poet and critic, David Eggleton and writer and academic, Lloyd Spencer Davis were each awarded with \$35,000. Eggleton is using his award to work on a contemporary guide to New Zealand cultural history. Spencer Davis describes his work-in-progress as a science book - the unravelling of Darwin and Darwinism - but also part travelogue, part personal memoir. He said that the award "offers the prospect of the one commodity a writer really needs - a period of uninterrupted time."

The Board of Copyright Licensing Ltd (made up of authors and publishers) encourages all established writers of non-fiction to consider applying for one of the two awards on offer this year. It is hoping to encourage applications from writers with interests in the sciences, business, Maori and Pacific studies, the arts and beyond. Applicants must be New Zealand citizens or permanent residents and writers of proven merit.

Applicants must submit details of a project planned or under way to a selection committee set up by CLL. Applications close at 5pm on Friday 15 July 2005. The two winners of this year's awards will be announced at a special ceremony to be held on Tuesday 20 September 2005. Full application details for the CLL Writers' Awards are available on the website [www.copyright.co.nz](http://www.copyright.co.nz) or by telephoning 09 480 2711.

# The Friends of the Wellington Botanic Garden

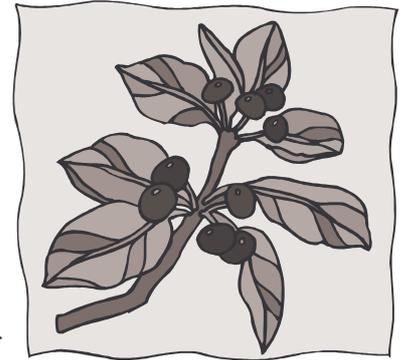
## Winter Seminar Series

### The Treehouse, Wellington Botanic Garden

Marking the Registration of the Wellington Botanic Garden by the New Zealand Historic Places Trust

Seminar One 12 June 2005 9.30am - 4.30pm

Wellington's Native Bush: 'Forward from the Brink'. Illustrated Talks from Settlement to Today'.



### Speakers:

Marian Minson (Alexander Turnbull Library), 'The Pictorial Record of Wellington's Bush at the Time of Settlement'.

Walter Cook (Alexander Turnbull Library) and Winsome Shepherd, 'The Historical Photographic and Written Record'.

Dr. Maggy Wassilieff, 'Studies of the Wellington Town Belt'.

Dr. Geoff Park, 'Wellington's Bush Remnants Today'.

Barbara Mitcalfe and Chris Horne, 'John Buchanan's Paper of 1875 and the 2003 Survey of the Wellington Botanic Garden Bush Remnants'.

Mike Oates (Manager, Wellington City Council Open Spaces) and David Sole (Manager, Wellington Botanic Garden and Otari/Wilton Bush), 'Managing the Wellington Botanic Garden Bush Remnant Today'.

Panel discussion and questions from the floor with Dr. Maggy Wassilieff (Chair), Dr. Geoff Park, David Sole, Dr. John Dawson, Mike Oates, Barbara Mitcalf, Chris Horne and Walter Cook'.

### Seminar Two 10 July 2005 9.30am - 4.30pm

#### 'Your House - Our Trees': the Importance of the Exotic Conifers in the Wellington Botanic Garden'.

Winsome Shepherd and Walter Cook (Alexander Turnbull Library), 'Conifer Introductions to New Zealand in the 19th Century, and the Role Played by Wellington Botanic Garden and Early Scientific Institutions'.

Kerryn Pollock, 'The Wellington Botanic Garden and the Creation of Environmental Change in Colonial New Zealand: the Conifers'.

**Keynote Speaker** Dr. Jenny Aitkin (Forest Research Institute, Rotorua), 'Genetic Studies in Conifers and the Importance of the Wellington Botanic Garden: DNA Analysis and its Implications'.

David Sole (Manager, Wellington Botanic Garden and Otari/Wilton Bush), 'Where to From Here? Managing the Conifers at the Wellington Botanic Garden'.

Panel discussion and questions from the floor with Mike Oates (Chair), Dr. Jenny Aitkin, David Sole, Winsome Shepherd, Kerryn Pollock and Walter Cook.

Cost for each seminar: \$28 per person. \$20 for students. Includes refreshments and lunch.

Registration for each of these seminars is essential. The last day to register for seminar one is 27 May 2005. The last day to register for seminar two is 30 May 2005.

To register and/or for further information please telephone the Treehouse on 499 1400 or email [treehouse@wcc.govt.nz](mailto:treehouse@wcc.govt.nz).

## Suggested corrections to information in the 2<sup>nd</sup> edition of *An Illustrated Guide to Common weeds of New Zealand*, by Roy, Popay, Champion, James and Rahman

Some of you will be familiar with this book, and several people have already suggested changes. We are investigating the production of a LucidKey CD based on the book. This will include a computer key to the species listed in the book, a key that can be accessed on any feature. So that this CD can be as accurate as possible, we would be grateful if you would let us know of any more errors you have spotted in the book.

Weeds are constantly expanding their ranges, so we would appreciate any information you have on the distribution of the species listed so that, again, the CD can be made as up-to-date as possible. We have listed below some of the changes we and others have observed.

New weeds are constantly appearing, and we would be interested in your views of new weeds to include in the book. Note that the book (and the CD) refers to common weeds. We deliberately haven't included the very rare, like water hyacinth, salvinia and Johnson grass.

A further point is that the authors don't make anything from the sales of this book. Any profits go to the New Zealand Plant Protection Society for the benefit of plant protection in this country.

### Corrections

- p 5 *Carex longebrachiata*, photo needs rotating through 90° - the fruiting heads hang in filiform peduncles.
- p 28 Note that the scape of *Nothoscordum* is terete (circular in cross-section) as opposed to the triangular one of *Allium triquetrum*.
- p 37 Photo of *Hydrocotyle moschata* is probably *H. microphylla*.
- p 42 Top picture is probably *Colocasia esculenta* and not *Alocasia brisbanensis*.
- p 59 Top two pictures are of *Carduus acanthoides* and not *C. tenuiflorus*.
- p 67 *Conyza bilbaoana* not spelt correctly.
- p 79 **Related species** *Lactuca serriola* leaves tend to be held on their sides.
- p 81 top picture is *Hypochoeris radicata*.
- p 83 *Matricaria discoidea* (not dioscoidea as in Flora NZ Vol. IV).
- p 87 *Pseudognaphalium luteoalbum* is an aggregate species, of which some entities (unnamed as yet) are indigenous or even endemic to NZ. Therefore should mention it as a species complex.
- p 94 The pictured fruits of *Soliva* are only part of the range of forms, see Flora NZ vol. IV p. 174.
- p 105 Picture at top right is *Myosotis discolor*.
- p 159 Picture on bottom left is also of *Teline monspessulana*.
- p 169 *Racosperma*. this was the genus in Flora NZ Vol. IV, but the belief of many Australian taxonomists is that NZ 'jumped the gun' in using this genus *over Acacia*. Heenan et al. (1999) [NZJBot 37:632] discuss this, and revert to using *Acacia*, as they did also in Heenan et al. (2002) NZJBot 40:162.
- p 169 *R. dealbata* should be *R. dealbatum* and *R. longifolia* should be *R. longifolium*.
- p 207 Both photos are *M. neglecta*.
- p 227 picture is of *Passiflora tarminiana*.
- p 233 The new botanical name for sheep's sorrel is *Acetosella vulgaris*.
- p 238 Related species: pale willow weed, not pale willow herb.
- p 251 Native *Clematis* spp. do not only have trifoliate leaves. When it's young, *C. foetida* has 9-foliate leaves (i.e. each primary leaflet is divided into 3 again). *C. australis* (even if you include it in *C. forsteri*) has pinnate to pinnatifid leaves.
- p 260 *Acaena novae-zelandiae*: some believe that this sp. (contrary to its name!) is not native to NZ - i.e. that it was an early import from Australia and actually named after it arrived in NZ.
- p 262 *C. pannosus* is not one of "the main weedy species" in NZ: *C. microphyllus* and *C. lactens* are.
- p 279 picture at bottom right is *Verbascum creticum*.

### Changes to Distribution notes (unless otherwise noted)

- p 29 *Alternanthera philoxeroides*: alter to .....one or two sites in Waikato, Bay of Plenty and Volcanic Plateau.

- p 40 *Sison amomum*: alter to .....Ashhurst in Manawatu and Wanganui.
- p 43 *Alocasia brisbanensis*: alter to .....Bay of Plenty, Manawatu and Nelson City.
- p 46 *Tetrapanax papyriferus*: alter to .....New Plymouth, Wanganui and Hutt Valley in NI.
- p 47 *Araujia sericifera*: alter to .....of Northern NI and Wanganui.
- p 55 *Artemisia verlotiorum*: alter to ... Bay of Plenty and Wanganui northwards.
- p 91 *Senecio skirrhodon*: alter to ...Palmerston North, Wanganui and....
- p 100 *Berberis darwinii*: alter (in related species) .....Wellington, Wairarapa and Manawatu in NI.....
- p 111 *Cardamine hirsute*: delete ....., except Taranaki,...
- p 132 *Euonymus europaeus*: alter to ...Palmerston North, Levin, Wanganui and Taihape.
- p 133 *Ceratophyllum demersum*: alter to ...Hawkes Bay, Manawatu and Wellington in NI.
- p 149 *Dryopteris filix-mas*: alter to .....Gisborne, Wanganui and Wellington.....
- p 152 *Calluna vulgaris*: alter to ...Volcanic Plateau, North Taranaki and
- p 154 *Euphorbia maculate*: alter .....from Bay of Plenty and Waikato to Northland and occasionally in Manawatu. Locally in Nelson and Christchurch.
- p 156 *Ricinus communis*: alter to ... Bay of Plenty northwards, Hawkes Bay and Wanganui.
- p 166 *Ornithopus pinnatus*: alter (in related species) ...northwards and occasionally in Manawatu.
- p 168 *Psoralea pinnata*: alter to ...Coromandel Peninsula, Taranaki and Wanganui.
- p 169 *Racosperma mearnsii*: alter to .... Palmerston North and locally in Manawatu to Taumarunui.
- p 184 *Myriophyllum aquaticum*: delete ....southern Manawatu.....
- p 191 *Romulea rosea*: alter to ....Wairoa, Masterton and Wanganui.
- p 193 *Galeobdolon luteum*: alter to . . . Bay of Plenty, Levin, Wanganui and Taihape,.....
- p 195 *Lamium amplexicaule*: alter to ...in Hawkes Bay and Manawatu,
- p 198 *Origanum vulgare*: replace 1<sup>st</sup> sentence with Occasionally in NI near Hamilton, Katikati and Wanganui and locally common in SI as a road-side weed.
- p 204 *Linum trigynum*: alter to ....Hawkes Bay, Manawatu and Wellington.
- p 206 *Lavatera arborea*: delete (except Taranaki)
- p 214 *Ligustrum lucidum*: alter to ... Auckland, Waikato and coastal Bay of Plenty, occasional in southern NI.
- p 217 *Ludwigia peploides*: alter (in related species) ...Occurs in Auckland, the Waikato north of Hamilton and occasionally in Taranaki.
- p 226 *Papaver rhoeas*: alter to .....Hawkes Bay, Taranaki and Manawatu.
- p 232 *Navaretia squarrosa*: alter to .... Hawkes Bay, Volcanic Plateau and Wairarapa .....
- p 232 *Polygala myrtifolia*: alter to ...New Plymouth, Wanganui and.....
- p 235 *Fallopia convolvulus*: alter to ...Hawkes Bay, Manawatu and Wellington.
- p 247 *Hakea salicifolia*: alter to ....and in Wanganui and Wellington in NI.
- p 251 *Clematis flammula*: alter (in related species) ....in northern NI, Wanganui, Nelson ....
- p 259 *Rhamnus alaternus*: alter to ... Auckland City, Hauraki Gulf islands, Hamilton and Wanganui, occasional in other NI locations.
- p 264 *Fragaria vesca*: alter to...Opotiki, Volcanic Plateau and Wanganui in NI.
- p 265 *Potentilla anglica*: alter (in related species) And Southland, rare in NI.
- p 266 *Rosa rubiginosa*: delete ...in drier east NI.
- p 282 *Ailanthus altissima*: alter to...Masterton, Wanganui, Christchurch.....
- p 284 *Cestrum elegans*: alter (in related species)...Taranaki, Manawatu and northern SI.
- p 288 *Salpichroa origanifolia*: alter to ...Napier, Wanganui, Opunake and Wellington.
- p 299 *Verbena bonariensis*: alter to .....uncommon in the west (except Whanganui and Rangitikei river valleys).....
- p 301 *Viola arvensis*: alter to . . . Bay of Plenty, Waiouru and Wellington districts.

### Future additions?

*Eupatorium cannabinum* (hemp agrimony); *Gunnera tinctoria* (Chilean rhubarb); *Acacia sophorae*.

## Dan Watkins Scholarship in Weed Science

Dan Watkins was one of the founders of the Ivon Watkins Ltd herbicide company based in New Plymouth, which later became Ivon Watkins Dow and is now Dow AgroSciences. He was a leading figure in the early weed science research arena within New Zealand. Dan Watkins was a founder of the New Zealand Weeds Conference, forerunner of the New Zealand Plant Protection Society (NZPPS). He was also a member of the New Zealand National Research Council and was involved with other scientific bodies. This scholarship has been set up and financed by Dr George Mason, one of the founders of Taranaki Nuchem, in memory of Dan Watkins and to recognise his contribution to weed science within New Zealand.

1. The scholarship shall have a value of \$5000 and be available annually.
2. The recipient shall be a postgraduate student at a New Zealand university working on research of relevance to the discipline of weed science.
3. Applications for the scholarship will close each year on 1 October, and should be made on the application form available from the NZPPS web-site. Applications should include details of the research being undertaken and a supporting statement from the supervisor.
4. The selection committee shall comprise of members of the NZPPS, appointed each year by the NZPPS executive committee. The selection committee must seek advice from a weed scientist in making its decision.
5. When selecting the recipient, consideration will be given to the appropriateness and relevance of the proposed research to weed science, academic record of the applicant, and supporting statement of the applicant's supervisor. If no suitable weed science postgraduates apply, then the scholarship may, at the discretion of the Society, be awarded to a student in another plant protection discipline.
6. The tenure of the scholarship will be for one year only.
7. The scholarship will not be awarded in those years when the selection committee considers none of the applicants are suitable.
8. The recipient of the Dan Watkins Scholarship in Weed Science is permitted to hold other scholarships concurrently.
9. The scholarship will be paid in two instalments, in March once enrolment has been confirmed, and in July following a statement from the supervisor that studies are progressing well.

## Controlled Substances Licence for Fumigants

Under the Hazardous Substances and New Organisms (HSNO) Act, anyone who manufactures, sells, uses or stores fumigants will need to obtain a Controlled Substances Licence.

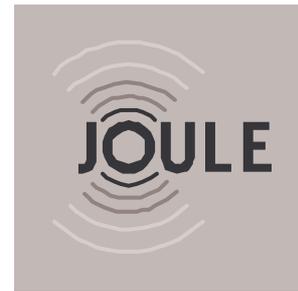
For a list of fumigants requiring a Licence refer to the *Compliance Guide - Fumigators*, available at [www.ermanz.govt.nz/resources/publications/word/ER-CG-17-01.doc](http://www.ermanz.govt.nz/resources/publications/word/ER-CG-17-01.doc) or by calling toll free on 0800 376 234 (Hazardous Substances (HS) Compliance Line) for a copy to be sent to you.

A copy of the notice of transfer can be obtained from the ERMA New Zealand website at <http://www.ermanz.govt.nz/hs/transfer-pest-status.asp> or from Bennett's Government Bookshop. There is also a number of free copies available from ERMA New Zealand, Phone 0800 376 234.



## What is a Joule?

- A unit of work or energy
- The work done by the force of one Newton when its point application moves one meter in the direction of that force
- An organisation formed to promote Science and Technology
- All of the above



of

Joule is a new organisation, dedicated to supporting ideas which promote Science and Technology. As a centralised hub of information, advice, resources and contacts, Joule has everything you need to get your idea, event, activity or promotion buzzing with energy!

Our evolving website offers free advice, forums, contact details for people and venues, event information and a great ideas bank. The resources of Joule also offer advice and support on sponsorship, audience targeting, efficient project delivery and effective marketing.

<http://www.joule.org.nz>

### **HAZARDOUS SUBSTANCES AND NEW ORGANISMS RISK SPECIES (*Microctonus aethiopoidea*) REGULATIONS 2005 COMES INTO EFFECT**

On 17 March 2005 the Hazardous Substances and New Organisms Risk Species (*Microctonus aethiopoidea*) Regulations 2005 came into effect.

The Regulations provide that all strains of the parasitic wasp *Microctonus aethiopoidea*, other than the Moroccan strain are a risk species and are now new organisms for the purposes of the Hazardous Substances and New Organisms Act 1996 (HSNO).

Research may continue on any strains of *Microctonus aethiopoidea* already held in containment within New Zealand, but approval from the Environmental Risk Management Authority (ERMA) is now needed before any strain of the organism other than the Moroccan strain can be imported into New Zealand or released to the environment.

For more information contact the Environmental Risk Management Authority (ERMA), phone (04) 916 2426 or email [info@ermanz.govt.nz](mailto:info@ermanz.govt.nz)

### **CARTAGENA PROTOCOL ON BIOSAFETY - Information for stakeholders on implications of NZ's ratification**

New Zealand has ratified the Cartagena Protocol on Biosafety (the Protocol), an international agreement under the United Nations to regulate international trade of living modified organisms (LMOs). Under the Protocol LMOs includes all genetically modified organisms (GMOs) as defined under the Hazardous

Substances and New Organisms Act 1996 (HSNO), as well as the products of cell fusion beyond the taxonomic family.

The Protocol will enter into force for NZ on 25 May 2005. From that date on there will be new requirements that must be met before any LMOs can be exported.

No change for imports and domestic use

Becoming a Party to the Protocol will not impact on the import or domestic use of LMOs. New Zealand already has rigorous controls in place, under HSNO and the Biosecurity Act 1993, covering the import and domestic use of GMOs. These will not change.

Products of cell fusion are not regulated under HSNO - they are specifically excluded under the Hazardous Substances and New Organisms (Organisms Not Genetically Modified) Regulations 1998. This also will not change.

New requirements for LMO exports from 25 May 2005

However, from 25 May 2005 there will be new obligations for exporters of LMOs, because under the Protocol these must be able to be controlled.

The Imports and Exports (Living Modified Organisms) Prohibition Order 2005 (the Prohibition Order) was passed to enable New Zealand to comply with this obligation.

The Prohibition Order comes into effect from 25 May 2005, and will require the consent of the Minister for the Environment before any LMOs can be exported from New Zealand. Exporters will need to get an authorisation to export - available by contacting either the Environmental Risk Management Authority (ERMA) or the Ministry for the Environment (MfE).

Different requirements will apply depending on the intended use of the exported LMO in the country of import, e.g. whether it is intended for use in containment, to be processed, or for release to the environment. The most stringent requirements will be placed on the exports of LMOs intended for release to the environment in the receiving country.

It is anticipated that additional compliance requirements for existing exporters of LMOs will be minimal as the new requirements will be based on existing export processes (e.g. NZ Customs procedures; adherence to the International Air Transport Association (IATA) Dangerous Goods Regulations), and current export documentation requirements (e.g. Ministry of Agriculture and Forestry Transfer Requests for GMOs in containment, and customer invoices (or equivalent) for the products of cell fusion).

Officials are working to finalise the detail of what will be required of exporters. Notice of the new requirements and process for gaining export approval will be provided on the Ministry for the Environment website ([www.mfe.govt.nz](http://www.mfe.govt.nz)).

Anyone proposing to export any LMO after 25 May 2005 should contact ERMA or MfE promptly to confirm what they need to do to comply with the new rules.

For more information contact

Dr Geoff Ridley, Science Manager New Organisms, the Environmental Risk Management Authority (ERMA), phone (04) 916 2426 or email: [geoff.ridley@ermanz.govt.nz](mailto:geoff.ridley@ermanz.govt.nz),

or

Dr Sarah Adams-Linton, Senior Adviser, Hazardous Substances and New Organisms, Ministry for the Environment, phone (04) 917 7400 or email: [sarah.adams-linton@mfe.govt.nz](mailto:sarah.adams-linton@mfe.govt.nz)

- Further information on the Cartagena Protocol on Biosafety is available on <http://www.biodiv.org/biosafety/>
- The full text of the Prohibition Order can be accessed through the Regulations section of the government legislation website on <http://www.legislation.govt.nz/>

# Shooting trees – a possible new control method

Ian Popay, DOC, Hamilton

Ballistic Delivery Systems Ltd from the Sounds and AV8 Helicopters from Wellington have developed a technique which I think shows considerable promise in our battle against wilding trees. They have patented a method of ‘injecting’ herbicide into trees, using herbicide-filled bullets, fired from the ground or, preferably, from a helicopter.

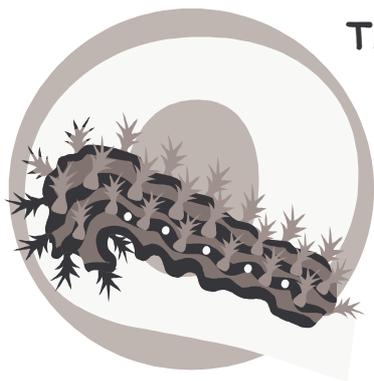


The shot dislodges a chunk of bark, so the shooter can see quite clearly if he’s hit the mark and where the bullet went in (see attached photo). The plastic container of herbicide shatters inside the tree, distributing the herbicide in the outer layers of xylem and probably in the phloem (between wood and bark) as well (see other attached photo).

Ballistic Delivery Systems are looking for funding to continue improvement of the bullet and its herbicide container. Dow Agrochemicals are helping with supply of herbicide, and the consortium will be contacting other herbicide manufacturers as well. DOC personnel from the Sounds Area Office are providing some support.

I have asked the Regional Councils (via Environment Waikato) if they would be interested in contributing to further development, as has been done for registration of herbicides. Response so far is a request for more information.





## The PPS Eradication Technologies Workshop

Ilot Theatre, Wellington Town Hall, Monday 8th August, 9.15am

Convenors: Toni Withers, Ian Popay, Pip Stevens, Ian Harvey

This workshop will bring together scientists involved with the planning and achievement of successful eradications of insects, mammals and plants from mainland New Zealand, or from its off-shore islands. It will involve discussion of how decisions are made on the feasibility of eradications, how we know an organism is new to New Zealand, and how it's all handled overseas.

Taking part will be key players in the eradication industry –Biosecurity NZ, Department of Conservation, CRI's (HortResearch, LandCare, AgResearch, ForestResearch, ESR), ERMA and industry. We shall also hear some Australian perspectives on eradications.

The emphasis of this Workshop will be on the science of eradication *technologies* but will be of interest to all whose concern is with national or localised (island) eradications.

Further details of the Symposium are on the NZPPS website ([www.nzpps.org.nz](http://www.nzpps.org.nz)). The cost of the one day event will include a copy of the proceedings.



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### President

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