Also in this issue

New charges for live animal exports
Red fire ant response stood down
Broiler chicken code of welfare introduced
Animal welfare on Last Samurai set
Plant pest incursion investigation team
Welfare of dogs used in teaching
Standard for wood packaging materials
Next-generation quarantine x-ray technology
Regional strategy for persistent tussock pest

Varroa transitional management programme: p4
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Cover: Maintaining South Island freedom from varroa has been identified as the most appropriate option for a varroa national pest management strategy (feature p4).
ERMA and MAF Biosecurity partnership to strengthen further under new legislation

When is a new organism not an ‘unwanted organism’? The answer lies with the Environmental Risk Management Authority, otherwise known by its acronym “ERMA”, which makes it sound like some distant yet dignified elderly relative. In fact you only have to mention the words ‘genetically modified’ and that ‘distance’ is replaced by screaming headlines - then the relationship to other agencies becomes clearer.

ERMA New Zealand is the regulatory authority for the introduction of new organisms into, and management of hazardous substances in, New Zealand. It operates under the Hazardous Substances and New Organisms (HSNO) Act. The decision-making body of ERMA New Zealand comprises eight members appointed by the Minister for the Environment. These members have wide ranging academic and scientific expertise and experience.

Issues of interest to Maori

ERMA New Zealand is supported by an agency consisting of about 55 staff and led by the Chief Executive, Bas Walker. A Maori advisory committee, Nga Kaihautu Tikanga Taiao, provides independent advice on issues of particular interest or concern for Maori.

For the purposes of this editorial I’ll focus solely on the new organism side of the HSNO Act, and our relationship with MAF and the Biosecurity Act.

Any person wanting to bring a new organism into New Zealand or develop it through genetic modification must first apply to ERMA New Zealand to do so. As our name suggests, making decisions on these applications involves a careful risk management process. The risks associated with any particular application are assessed and weighed up against the benefits in deciding whether or not to approve or decline it. In the case of the release of new organisms it is currently a simple “yes/no” decision because at the present time no controls can be set. However, it is also possible to approve new organisms in containment and in this case the decision making process includes assigning controls or conditions to manage any possible adverse effects.

A new category, one of conditional release, is proposed to be introduced later this year. A simple and often-cited example of conditional release is of the importation of an animal [a camel for instance] to be used for trekking. The conditions or controls on this release could be that only one sex may be brought into the country, thus giving control over reproduction.

The majority of new organism applications decided by ERMA New Zealand involve genetically modified organisms in containment. This means that they involve research which is carried out within a laboratory or similarly contained system, for example a shade house or glass house containing plants. Our controls specify that the containment facility is registered with MAF and are in accordance with the joint MAF Biosecurity Authority/ERMA New Zealand containment standards.

The standards are comprehensive and cover all aspects of containment right down to the mesh size covering air conditioning ducts. MAF verifies that these facilities are in accordance with the joint standards and that any additional conditions of the HSNO approval are complied with.

ERMA makes decisions on applications for new organisms and oversees the enforcement of the HSNO regime, while MAF’s Biosecurity Authority is the agent on the ground that undertakes enforcement duties.

This requires the two agencies to work closely together from decision-making through to project completion. ERMA is committed to further developing and strengthening this partnership in the coming months and years.

Neil Walter, Chairperson
Environmental Risk Management Authority.

The majority of MAF’s new organism enforcement activities are conducted under the auspices of the Biosecurity Act. However, the Government has indicated its intention to include MAF as an enforcement agent under the HSNO Act through its proposed New Organisms and Other Matters Bill. This will act to strengthen the relationship and liaison between the agencies, particularly in scenarios which involve genetically modified organisms and concepts of conditional release and coexistence, i.e. the coexistence of GM and non-GM crops (in order to retain the integrity of non-GM crops).

In short, ERMA and MAF’s Biosecurity Authority work together to protect the environment from the unwanted release of organisms.

ERMA and MAF’s Biosecurity Authority work together to protect the environment from the unwanted release of organisms.

NEIL WALTER.

Biosecurity Issue 45 • 1 August 2003
Varroa programme review reveals opportunities for improvement

The $7.6 million varroa transitional management programme was the first such programme by central government under the Biosecurity Act 1993. It had the objectives of slowing the spread of varroa to the South Island and minimising its impact in infested areas.

Education

A 124-page book Control of Varroa: A Guide for New Zealand Beekeepers was written and sent to all beekeepers in August 2001. Interestingly, there has been significant demand for the book from other countries where varroa is a problem. An instructional video based on the book was completed March 2002.

A nation-wide programme of 56 Living with Varroa workshops for beekeepers concluded in June 2002, and a free-phone number for technical advice was closed at the end of the programme.

Treatments

MAF funded an initial round of treatments for all varroa-infested apiaries in July-August 2000. For the 2000 kiwifruit pollination season, all hives coming from varroa-infested regions, or being placed within certain pollination regions, were eligible to receive free treatment strips. More free strips were made available in Autumn 2001, to beekeepers who could demonstrate that their apiaries were infested. The impact of this government-funded treatment on slowing spread is difficult to quantify.

Two synthetic pyrethroid-based varroa treatment products (Apistan and Bayvarol) were approved for varroa control in 2000.

Two further registration applications for proprietary products are close to approval, which will greatly broaden the range of available treatments. MAF funded applications for the approval of three low-cost generic treatments which are acceptable to organic certification agencies (formic acid/oxalic acid/thymol). The two acids were approved in February 2002, while residue data is still being analysed for the thymol application.

Research

The varroa research budget had the overall objectives of improving understanding of varroa behaviour in the New Zealand environment and beginning the development of an integrated pest management programme for varroa.

The original budget of $500,000 was boosted by a further $589,000 in varroa research funding from Budget 2002.

A wide range of projects have been carried out by HortResearch, with additional work being carried out by Landcare Research New Zealand Limited (Manaaki Whenua) and the New Zealand Institute for Crop & Food Research Ltd.

Movement controls

Movement controls have been in place since varroa was first detected. A
movement control line runs from Taranaki to East Cape and prevents the southward movement of bees and beehives from the upper North Island. This line has been successful in slowing southward spread, as shown by the much lower incidence of varroa in the lower North Island than the upper North Island. However the line has not completely prevented (and was never expected to) the southward spread of varroa. MAF is discussing the implications of recent varroa finds south of the line with the beekeeping industry. It is likely that the line will be either removed completely, or controls will be placed around movements into Hawke’s Bay-Wairarapa.

A complete prohibition on moving bees from any part of the North Island to the South Island remains in force.

South Island surveillance
A surveillance programme based on 20km² grid squares, each of which was classified either high or low risk, was carried out to verify South Island freedom from varroa. MAF tested 1,737 apiaries containing 24,737 hives during South Island surveillance in 2001, with no varroa detected. Refinement of the targeting system the following year provided the same level of assurance of varroa freedom, when only 17,427 hives in 1400 South Island apiaries were tested. Because of funding constraints, surveillance of high-risk grid cells only was carried out in 2003, totalling 7400 hives in 631 apiaries. This limited surveillance programme does not give a high probability of rapid detection, and is inadequate for a long-term surveillance programme where eradication is the desired outcome.

North Island surveillance
MAF has not carried out any surveillance in the upper North Island since 2001, as varroa has been confirmed from all regions. Based on beekeeper reports, it is likely that almost all the apiaries in the upper North Island are infested with varroa.

Four hundred and fifty apiaries were tested in the lower North Island in autumn/winter 2002. A total of 27 varroa-infested apiaries were detected, 18 of which were within 20 km of the movement control line, while another four resulted from spread from an infested log transported to the Wellington region in January 2002. In autumn/winter 2003, 330 apiaries were tested, with varroa being widely detected in Poverty Bay, Taranaki, Wanganui, Manawatu, Horowhenua and Wellington, with low levels of infestation in Hawke’s Bay.

Compensation
Under the Biosecurity Act 1993, compensation is payable for losses caused by the use of statutory powers. It is not payable for losses caused by the actual presence of varroa.

In the case of the varroa response, compensation claims have centred on losses due to movement restrictions. As of June 2003, MAF had received 64 claims from 53 claimants, for a total of $4 million. To date, MAF has paid out or has under offer $1.5 million to 33 claimants. Twenty-one claims (33%) were declined.

This has been one of the first major uses of the compensation provisions of the Biosecurity Act 1993, and it highlighted some shortcomings in the Act, in particular, the lack of a time limit for submission of claims. This affected both the verification of the claims and the logistics of the process.

Long-term management
A varroa planning group (VPG) made up of MAF, local government and stakeholder industries was formed in 2001 to assess the options for a long-term management programme. They concluded that a national pest management strategy (NPM S) with the objective of maintaining South Island freedom from varroa was the most appropriate option.

There was widespread support for the proposed measures during the public

The cost of varroa
Varroa has imposed additional operating costs on all beekeepers in the upper North Island. These costs have been estimated at $20-$50 per hive annually, with a wide variation between beekeepers, depending on management practices. Beekeepers engaging in paid pollination of horticultural crops (notably kiwifruit) have passed these costs on to growers by increasing their pollination charges. There have been no reports of shortfalls in hives available for pollination.

Many beekeepers unable to pass on costs in this manner are reported to be under considerable financial pressure. There are anecdotal reports of large hive losses in the upper North Island (especially the Waikato) this winter, resulting from inadequate varroa control in the autumn.

However, there is a strong demand for hives from beekeepers either replacing dead colonies or expanding their businesses, which demonstrates a degree of confidence in the industry. This is underpinned by high prices received in recent years for manuka honey. A degree of industry consolidation appears to be taking place. Last season recorded the lowest national honey production in three decades. As production in the South Island was equally affected, this is attributed to climatic factors rather than varroa.

There has been a significant decline in the number of hobby beekeepers in the upper North Island, which is at least partly attributable to varroa. Numbers of registered hobby beekeepers are also falling in other regions, but at a lower rate.
Changes to charges for the export of live animals and germplasm

As of 1 July 2003, there is a new fee structure for the costs associated with live animal and germplasm exports.

The charges are documented in the Animal Products (Fees, Charges and Levies) Amendment Regulations 2003. The regulations are part of the Animal Products Act and determine the basis of cost recovery for services provided in the export of live animals and germplasm. A MAF discussion paper regarding cost recovery was distributed for consultation in 2002.

Submissions invited

The paper addressed the issues of who should pay the costs, how the charges should be structured and the proposed charging method for live animal and germplasm export services. Submissions were invited and a summary of those submissions can be found on the MAF website. The regulations are based on the paper and submissions and the agreed charges are detailed in the table opposite.

The charges cover veterinarian hourly rates and associated costs, certification costs and unit fees for specific animals. Certificate and unit fees will be invoiced when official assurances are issued and will be identified separately on the invoice as MAF Biosecurity charges.

The International Animal Trade team is no longer charging for the development of export certificates on a per hour basis.

Guide dogs exempt

Assistance dogs such as guide dogs are exempt from all charges under the Regulations.

Carolyn Hini,
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International Animal Trade,
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fax 04 474 4227,
inic@maf.govt.nz
www.maf.govt.nz/cost-recover-live-animals

Cost structure for export of live animals and germplasm

<table>
<thead>
<tr>
<th>Fee or charge</th>
<th>Fees/charges ($, including GST)</th>
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<tr>
<td>Hourly rate for MAF Accredited Vets (per hour)</td>
<td>96.10</td>
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<tr>
<td>For each 15 min block in final part-hour</td>
<td>24.05</td>
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<tr>
<td>Where MAF employee or officer is required to travel (per km)</td>
<td>0.54</td>
</tr>
<tr>
<td>Issue of an official assurance under section 63 of the Act</td>
<td>25.00</td>
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<tr>
<td>Reissue of an official assurance under section 64(2) of the Act if replacement assurance demanded by importing country (maximum fee)</td>
<td>1,000.00</td>
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<tr>
<td>Hourly rate for equivalence/dispensation work</td>
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<tr>
<td>For each 15 min block in final part-hour</td>
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<tr>
<td>Fixed fee per export certificate</td>
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<td>Unit fee for cats/dogs</td>
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<td>Unit fee for sheep for slaughter</td>
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<td>Unit fee for other livestock and bloodstock</td>
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<tr>
<td>Unit fee for semen (per straw)</td>
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<tr>
<td>Unit fee for embryos (per embryo)</td>
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<tr>
<td>Unit fee for day old chicks (including hatching eggs)</td>
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<tr>
<td>Unit fee for finches</td>
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<tr>
<td>Unit fee for other avairy birds</td>
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</tr>
<tr>
<td>Unit fee for queen bees (per queen bee)</td>
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<td>Bees other than queen bees (per kg)</td>
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<tr>
<td>Large shipment fee for zoo animals (total weight 150 kg or more)</td>
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</tr>
<tr>
<td>Small shipment fee for zoo animals (total weight under 150 kg)</td>
<td>270.00</td>
</tr>
<tr>
<td>Unit fee for other animals (incl. small mammals, ratites and their eggs)</td>
<td>2.80</td>
</tr>
</tbody>
</table>

Varroa: continued from page 5

consultation that was carried out in the South Island and lower North Island in February-March 2003. Despite this support, however, there has been great difficulty in developing a mechanism to fund the proposed programme. The VPG was looking for a method that would minimise the transaction costs of collecting the relatively small amount of funding needed from a large pool of stakeholders. Their preferred option of obtaining voluntary contributions from stakeholder industry groups proved impractical, as some industry organisations do not have the mechanisms to collect the funds needed.

The VPG and regional councils are now discussing the possibility of using council collection mechanisms. The groups representing potential levy payers would be required to publicly support the proposal before councils could approve the collection of funds for a varroa NPM S.

The process of developing a long-term management programme has been much harder than originally expected. With the benefit of hindsight, the project planning should have included clearer timelines, better contingency planning and a firm commitment to make this a priority in the work programmes of all the participants. (In saying this, we acknowledge how big an ask this would be for smaller industry groups.) On a brighter note, professional mediation has been a useful tool to help industry groups to reach consensus on issues where there is significant internal disagreement.

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MAF Biosecurity is officially standing down the red imported fire ant (Solenopsis invicta) response after two years of intensive searching and no further sign of activity.

In March 2001 a mature nest of fire ants was found in a security area of Auckland International Airport. An intensive response programme was initiated, resulting in:

• two years of intensive searching around the incursion site
• a national awareness programme
• a fire ant risk pathway assessment
• establishment of an independent invasive ant technical advisory group (TAG)
• an ongoing national invasive ant surveillance programme; and
• funding for an invasive ant pest risk assessment.

On 27 June 2003 MAF met with the invasive ant TAG to review the results of the various invasive ant programmes currently underway, including the fire ant response. The TAG considered that if further fire ants were established in the area then they would have been detected by MAF’s response programme. Accordingly, they advised MAF that it was appropriate for the response to be stood down.

The stand-down of the fire ant response is cause for celebration. Established populations of fire ants have never been successfully eradicated before, making the New Zealand situation a first.

One of the keys to the success of this response was the New Zealanders’ general biosecurity awareness. A member of the public who was stung by the ants while mowing the lawns in the airport grounds reported the fire ant nest. If the nest had not been reported, it is possible that the ant would have got a much firmer foothold in New Zealand, making eradication a lot more difficult.

In Australia, red imported fire ants went undetected for at least five years, by which time the population had heavily infested tens of thousands of hectares. A five-year eradication programme was initiated and is expected to cost in the order of 140 million Australian dollars.

Although MAF appears to have successfully eradicated the Auckland red imported fire ant incursion, the threat of new incursions remains. Therefore MAF will not be relaxing its vigilance for red imported fire ants, but will continue to search for new incursions of all exotic invasive ants that have a potential to threaten the New Zealand environment.

The invasive ant pest risk assessment, which is due to be completed by June 2004, will enable MAF to identify those species that pose the most significant threat. The national invasive ant surveillance programme will continue to be fine-tuned to ensure opportunities for early detection of new incursions are maximised.

Amelia Pascoe, Programme Coordinator, Exotic Animal Response, phone 04 470 2785, fax 04 474 4133, pascoea@maf.govt.nz

Biosecurity People

Risk Analysis Section, Animal Biosecurity

Katie Owen graduated BVSc from Massey University. After an initial time in mixed practice Katie has been a companion animal practitioner, both in New Zealand and in the UK. In the UK she worked towards her UK Certificate in Small Animal Medicine.

Katie’s interest in epidemiology started when she did practical work in Kenya during her degree. It increased with the emergence of bovine spongiform encephalopathy (BSE), and through being in the UK during the 2001 foot and mouth disease outbreak. This led her to join MAF upon her return to New Zealand. She is currently studying for her MVSc (Epidemiology) at Massey.

Susan Cork graduated BVSc from Massey University in 1986 and has a special interest in wildlife diseases and public health. She was awarded a PhD in 1994 based on a study of the diseases of New Zealand native birds that was developed working with the Department of Conservation. Susan spent 5 years in clinical practice, with a short period managing the SPCA clinic in Fiji, and 6 years teaching animal health and sustainable agriculture to animal science and agriculture students. In 1995 Susan began a very rewarding two-year project running a district veterinary diagnostic laboratory in the Eastern Zones of the Himalayan Kingdom of Bhutan. More recently she completed one year of government service with the Animal Scientific Procedures Inspectorate, which is part of the Community Policy Directorate within the British Home Office.
Biosecurity Issue 45 • 1 August 2003

Injured animals on roads - your obligations

While you are driving down a suburban street, a cat dashes out in front of your car and you are unable to avoid hitting it. Are you legally obliged to stop and check the cat’s injuries?

When the Animal Welfare Act 1999 was being developed, a draft clause was included that would require drivers to stop and determine the nature of an animal’s injuries if they hit it with their vehicle. The driver would then have to either report the accident to an inspector or obtain or render assistance. However, this clause was deleted because it would have been extremely difficult, if not impossible, to enforce.

The definition of ‘animal’ under the Animal Welfare Act is much wider than under the previous Animals Protection Act 1960; it includes all mammals, birds and reptiles. This means that drivers would have also had to stop if they hit pest species such as possums, rats and stoats. Even if the clause had been narrowly defined so it only applied to domestic animals, it would still be very difficult to distinguish between, for instance, a feral and a domestic cat.

Some District Councils have bylaws covering the issue of animals on the road. However, these bylaws primarily relate to public safety – such as removing any material or thing (such as an animal) from the road – rather than to animal welfare.

Under current animal welfare legislation, drivers are not legally obliged to stop and seek treatment for an injured animal they have hit with their vehicle. However, if a driver feels morally obliged to stop and help, they can call their local SPCA branch or take appropriate action to prevent the animal from undue suffering.

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Code of practice for broiler chickens published

The Minister of Agriculture issued the broiler code on 26 June 2003, the first code of welfare to be issued under the Animal Welfare Act 1999. It came into effect on 25 July 2003.

This code has been a long time coming and is the result of a huge amount of work by all concerned. New Zealand has a unique status with regard to broiler health, which is due to a number of factors, such as absence of a number of major poultry diseases, good management and a high level of stockmanship. The broiler code addresses issues such as lighting, feeding, stocking densities and ventilation.

The National Animal Welfare Advisory Committee (NAWAC) received over 1400 postcards and about 160 written submissions, addressing various aspects of broiler health and welfare, during the public consultation period. After careful consideration, NAWAC found that the code takes into account good practice, scientific knowledge and available technology, and the committee advised the Minister that it was satisfied that the proposed standards will ensure that the purposes of the Animal Welfare Act will be met.

NAWAC has also encouraged New Zealand-based research that will be relevant to this code, especially in relation to leg health and stocking density. This research is currently underway.

Based on current information, NAWAC believes that the maximum stocking densities should remain as currently practised and as proposed in the code.

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American Humane says “goodbye, samurai”

The American Humane Film and Television Unit established an office in New Zealand to cover the South Pacific area and train safety representatives (Biosecurity 42:10). Subsequently, two further safety reps have been trained in New Zealand - one more to work here and the other in Queensland, Australia.

After covering productions in Australia last year, The Last Samurai was the first major production American Humane (AH) safety reps have monitored in New Zealand. Warner Brothers chose to film the major battle scenes in Taranaki, and the people of the area opened their hearts to stars, extras, crew - and anyone else attached to the movie - making them very welcome.

AH safety reps covered all the intense battle scenes which were filmed from 3 March until the wrap on 9 May. They were on set from before the horses were saddled in the morning until they were washed down, vet-checked and fed at night.

Peg Loague, International Film Animal Welfare Manager for American Humane, is very happy with the cooperation by production staff and the consideration given to the horses throughout this part of the filming.

“With the emphasis on safety and welfare, everyone from the Horse Master, Peter White from the UK, through the production team to the riders and wranglers worked closely with the AH safety reps,” Peg says.

“Technological and crafting advances in modern film making brought together careful choreography, camera angles and illusion to achieve all that was hoped for without animals being endangered or unduly stressed.

“When released, this film will be a ‘must see’ for New Zealanders, featuring lovely Taranaki scenery, some spectacular riding and amazing special effects. The Last Samurai brings history to life in a way the history books never could,” Peg concludes.

Dr Lindsay Matthews has been awarded a New Zealand Science and Technology Bronze Medal by the Royal Society of New Zealand on behalf of the Government, to recognise and honour exceptional contributions to New Zealand society and culture, and in particular outstanding promotion and advancement of science and technology.

Dr Matthews is Team Leader of AgResearch’s Animal Behaviour and Welfare Group, based at Ruakura in Hamilton.

His award was presented by Agriculture Minister Hon. Jim Sutton at the Pan Commonwealth Veterinary Conference in Wellington on 27 June 2003.

The medals are awarded to people who can serve as role models and demonstrate the importance of science and technology to the community. Significant importance is placed by the Royal Society on informing the lay person to increase public understanding and awareness and appreciation in science and technology, and foster a positive change in attitude.

Dr Matthews has contributed to the science-based industry guidelines and recommendations for many animal-handling procedures, including humane transport of farmed deer, velvet removal in deer, winter stand-off practices for dairy cattle, and tail docking in cows.

Other research includes understanding pest behaviour, including possums, for improved control, and he has contributed to developing a fence to protect native bush from all major mammalian predators. He has been involved in effective welfare educational programmes, and has served on the National Animal Welfare Advisory Committee for six years.

He is presently working on new techniques to understand the behavioural needs of animals, reducing environmental stress in livestock, and genetic markers for easy-handling cattle.

Dr Lindsay Matthews, AgResearch Ruakura, phone 07 838 5569, lindsay.matthews@agresearch.co.nz

AgResearch animal welfare scientist honoured

American Humane says “goodbye, samurai”

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Dr Matthews is Team Leader of AgResearch’s Animal Behaviour and Welfare Group, based at Ruakura in Hamilton.

His award was presented by Agriculture Minister Hon. Jim Sutton at the Pan Commonwealth Veterinary Conference in Wellington on 27 June 2003.

The medals are awarded to people who can serve as role models and demonstrate the importance of science and technology to the community. Significant importance is placed by the Royal Society on informing the lay person to increase public understanding and awareness and appreciation in science and technology, and foster a positive change in attitude.

Dr Matthews has contributed to the science-based industry guidelines and recommendations for many animal-handling procedures, including humane transport of farmed deer, velvet removal in deer, winter stand-off practices for dairy cattle, and tail docking in cows.

Other research includes understanding pest behaviour, including possums, for improved control, and he has contributed to developing a fence to protect native bush from all major mammalian predators. He has been involved in effective welfare educational programmes, and has served on the National Animal Welfare Advisory Committee for six years.

He is presently working on new techniques to understand the behavioural needs of animals, reducing environmental stress in livestock, and genetic markers for easy-handling cattle.

Dr Lindsay Matthews, AgResearch Ruakura, phone 07 838 5569, lindsay.matthews@agresearch.co.nz
Infestations of three different species of invasive ant on the same site within the last six months may or may not be a world record - but either way, they have been keeping Karyn Froud and her new team of Incursion Investigators very busy.

Karyn is the Team Leader for the National Plant Pest Reference Laboratory’s new Incursion Investigation Team. Based at Lynfield in Auckland, the team was set up in January and provides for dedicated investigators to respond to post-border reports of exotic pests. Since then, Karyn and fellow investigators Travis Ashcroft and Mark Bullians have been dealing with detections of tropical fire ants, yellow crazy ant and crazy ants – all within about three metres of each other. The ants have all been found on a bank behind a container yard in the Port of Tauranga.

Karyn says many of the notifications of possible incursions come from members of the public through the 0800 phone number. Calls are screened first by a call centre and then again by rostered NPPRL staff, who determine whether the organism is likely to be an exotic pest. If staff are unsure, they ask for a specimen to be sent or the investigators will go out to the site themselves.

“IF it’s confirmed as an exotic pest we’ll alert MAF Biosecurity, we’ll do a site visit and initial investigation, and we’ll get technical research from NPPRL,” explains Karyn.

Incursions can range from the fairly innocuous - a lone beetle jumping out of a container in a warehouse - to potentially serious pests that could threaten New Zealand’s environment and land-based industries. In cases likely to be one-off incidents, the investigators will arrange for the site to be treated. However, with a high-impact incursion - where an organism is found to be established and breeding, for instance - the team will assemble all the technical information it can and make recommendations to MAF on what response is required.

These recommendations can include delimiting surveys, where the investigators try to determine the extent of the spread. Other recommendations can include distributing fact sheets to the general public, and arranging for movement control, which involves obtaining agreement from those at the affected site not to remove any vegetation from the area for a certain length of time. The team may also recommend tracing, a process which enables them to work out an organism’s likely dispersal route from the site by following its entrance pathway.

In high-impact incursions, the investigators become the incident controllers for the response, including arranging ongoing monitoring of the site. Eradication is officially achieved only after a site has been clear of a pest for two years.

Travis Ashcroft is the Incident Controller for all three ant incursions at the Mt Maunganui site. The Incursion Investigation Team is currently working on a delimiting survey and will soon begin tracing. Karyn says assistance from the public is invaluable. “The general public have been incredibly helpful – we’ve had an extremely good response.”

Karyn Froud, Incursion Investigation Team Leader, Ministry of Agriculture and Forestry, National Plant Pest Reference Laboratory, PO Box 2095, Auckland, phone 09 627 4131, froudk@maf.govt.nz
Biosecurity People

Incursion Investigation Team

Before becoming the first member of the Incursion Investigation Team in January, Travis Ashcroft worked as an entomologist for MAF Operations for three years at the National Plant Pest Reference Laboratory – initially at Lincoln, then later at Lynfield. In addition to his Masters degree in Science majoring in Freshwater Ecology at Waikato University, Travis holds a Postgraduate Diploma in Environmental Management.

Karyn Froud was recently appointed Team Leader, Incursion Investigation after joining MAF Operations in April. Prior to this she worked for nine years as a horticultural entomologist at HortResearch, where she specialised in plant virus vector ecology, pest monitoring systems, and biological control. Karyn completed her Masters degree in Science and Entomology at Auckland University.

Mark Bullians was first employed by MAF in 1997 as a diagnostic entomologist at the Lynfield Plant Protection Centre. He has since worked for Agriquality New Zealand as a diagnostic entomologist, and more recently at Landcare Research, where he catalogued a database for the alcohol beetle collection. He joined the Incursion Investigation Team in February.

MAF Biosecurity Plant Imports Team

Gavin Edwards has recently joined Plants Biosecurity as the National Adviser Fresh Produce in the Plant Imports Team. This role involves developing and implementing import health standards, and technical and operational standards for fresh produce (fruits, vegetables and cut flowers). Gavin has joined MAF from Agriculture, Fisheries and Forestry - Australia, where he worked in a similar capacity in developing and implementing import and export policy for plants and plant products.

Gerard Clover was recently appointed as National Adviser, Nursery Stock in the Plant Imports Team. Gerard started working in the team two years ago and was initially responsible for setting measures to prevent the importation of genetically modified organisms (GMOs); more recently he took over responsibility for seed for sowing. Rob Taylor is now responsible for seed for sowing and the team is currently recruiting for the GMO position. Before joining MAF Biosecurity, Gerard worked as a molecular plant virologist in MAF's National Plant Pest Reference Laboratory and in the UK Department for Environment, Food and Rural Affairs.

Rob Taylor has recently joined Plants Biosecurity as a National Adviser, Seed for Sowing in the Plant Imports Team. Rob comes to MAF from the Horticulture and Food Research Institute of New Zealand Ltd where he worked for 14 years in the research fields of microbiology and plant bacteriology. Recent research focused on the detection, identification and ecology of plant pathogenic bacteria that affect market access and biosecurity of New Zealand horticultural crops.

Specific examples include research on the fire blight pathogen to provide technical information to facilitate market access of apple fruit and the development of molecular methods to detect exotic plant pathogenic bacteria that pose a biosecurity risk to New Zealand.

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Rob Taylor, National Adviser, Seed for Sowing, phone 04 474 4119, fax 04 474 4257, robert.taylor@maf.govt.nz
Meet Rosie, Zak and Jip. They don’t fit the conventional image of animals used in research, testing and teaching, but when the National Animal Ethics Advisory Committee (NAEAC) puts out its statistics on such use every year, the numbers include this particular trio and others like them.

In order to safeguard their welfare, the Animal Welfare Act 1999 requires that any manipulation of animals for the purpose of research, testing or teaching must be approved by an Animal Ethics Committee formed under a Code of Ethical Conduct approved by the MAF Director-General.

Owned by lecturers at UNITEC’s School of Animal Health and Welfare, the three – and others – are used from time to time for demonstration, practice and assessment purposes in procedures ranging from general handling and physical examination, through obedience training to bandaging techniques.

Although such procedures are relatively minor and minimally invasive, they may be repeated on a single animal by more than one student, particularly during assessments. This means they may fall outside what a dog would normally be exposed to, and thus require approval from an Animal Ethics Committee.

The role of the Committee in such circumstances is to ensure that the welfare of the animals has been considered. For instance, they will ensure that there are limits set to the number of times an animal can be used, that qualified personnel are always present and that there are contingency plans in place if any animal should become stressed.

Sara Elliott, lecturer on the Animal Welfare Investigations programme which trains inspectors under the Animal Welfare Act 1999, laughs at the thought of her fox terrier, Rosie, getting stressed by the part she plays in training students. “She sees it all as a bit of a game,” she says. “In fact she thrives on all the attention. She’s a real ‘people’ dog. If she gets bored sitting in my office, she heads straight for the classroom to spend time with the students – she certainly wouldn’t do that unless she enjoyed being with them.”

Sara takes Rosie around the country with her when she has students outside Auckland, and finds having a dog in the classroom a bit of an ice-breaker when meeting new groups of students – it tends to make everyone more relaxed.

Jip and Zak belong to Alan Willox who lectures in training and behaviour modification. His dogs are also used by veterinary nursing students learning handling and examination techniques.

“The dogs we use in this way are all well socialised and used to regular human contact so stress is minimal,” he says.

“We also ensure we have enough dogs so that they can be regularly swapped over, and no one dog is over-used.”

Dr Virginia Williams, 
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Dip Prof Ethics, 
Animal Welfare Coordinator, 
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Standard for wood packaging materials

The International Standard for Phytosanitary Measures (ISPM) publication 15, Guidelines for Regulating Wood Packaging Material in International Trade was adopted at a meeting of the Fourth Interim Commission on Phytosanitary Measures (ICPM) in Rome, 11-15 March 2002 (Biosecurity 36:21).

Implementation of the standard internationally was delayed due to difficulties with registration and copyright of the phytosanitary mark included in the standard, but this issue was resolved at the meeting of the Fifth Interim Commission on Phytosanitary Measures (ICPM) in Rome, 7-11 April 2003.

Importing wood packaging material under ISPM 15

New Zealand’s import health standard for wood packaging material from all countries, issued on 16 April 2003, allows for the import of wood packaging material treated and marked in compliance with ISPM 15.

Export of wood packaging material

Export of wood packaging from New Zealand is not affected by New Zealand legislation. Any phytosanitary assurances required are those of the quarantine authorities of the importing country. The United States, Canada, Mexico and the European Union have all announced their intention to implement this standard from the beginning of January 2004.

Biosecurity People

Forest Biosecurity

Shiroma Sathyapala recently joined Forest Biosecurity as National Adviser, Import Health Standards.

The main emphasis for the Forest Biosecurity group imports team is to work to protect New Zealand from the biosecurity risks associated with the import of forest produce, and to protect New Zealand from unwanted organisms that may impact on New Zealand’s forests.

Shiroma will assist with the development and review of import health standards, system and procedures for the import of forest tree seed for sowing, nursery stock, micro-organisms and forest produce.

She comes to MAF from Carter Holt Harvey Forest Genetics where she led the clonal commercialisation programme. While there, Shiroma managed imports and exports of biological materials, and the quarantine facilities. Prior to this she has worked for the Tea Research Institute of Sri Lanka and the Department of Biology, University of Sri Lanka.

Shiroma holds an MSc in Agronomy from the former USSR, and completed her PhD in Plant Biotechnology at Miyasak University, Japan.

This means that all exporters who ship goods to these countries and who use wooden pallets, boxes, or other wooden packaging, need to ensure that the packaging they use complies with this standard. Compliance with this standard requires that the packaging has been subjected to sterilisation treatment by a MAF-approved or supervised treatment operator, and is indelibly labelled with the registered IPPC mark.

Exporters who wish to ensure that their packaging will comply with the IPPC standard should discuss their requirements with their packaging supplier. AgriQuality New Zealand (Forestry) is currently working with those packaging manufacturers who wish to produce packaging for the EU and North American markets. Manufacturers who are seeking MAF accreditation for production of wood packaging should contact the AgriQuality New Zealand Mount Maunganui office.

The ISPM and a report on the meeting of the fifth ICPM are available at:

www.ippc.int/

New Zealand’s import health standard for wood packaging material is available at:

www.maf.govt.nz/forest-imports

Imports

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MAF Quarantine Service (MAFQS) staff are committed to providing the best possible biosecurity protection for New Zealand, and our quality systems are an integral part of ensuring that this is delivered to the highest standard.

MAFQS has achieved the top international accreditation for organisations conducting inspections (ISO17020), and conforms to the New Zealand Code of Inspection Body Management Practice. We have maintained this accreditation for the last four years.

The objective of the quality management system is to ensure that our quarantine inspection outcomes are underpinned by technical integrity. Our quality systems ensure that that the quarantine inspection information available to our Inspectors is current, understood and applied in a nationally consistent manner. There are four members in the quality management team – the National Quality Manager, Risk Analyst/Audit Coordinator, Procedures Coordinator and Quality Systems Administrator.

All 22 MAF Quarantine sites throughout New Zealand are accredited to the 17020 standard. Inspection information and records at each site are controlled by a local Inspector who has been appointed and trained as the Site Quality Coordinator for that office. MAFQS maintains documented Procedures which describe how the MAF Biosecurity Authority Border Management and Import Health Standards are to be applied on a practical level. As the standards are continuously being amended, these must also be amended accordingly.

Every year, all MAFQS operations are internally audited by the MAFQS quality systems team, and are audited externally by International Accreditation New Zealand. Auditing involves visits to all MAF Quarantine Service sites in New Zealand, and includes observing inspections being conducted on the day of the audit. This might mean observing passengers’ luggage being searched in an international airport arrival hall, meeting overseas aircraft on arrival, visiting foreign vessels when they arrive in New Zealand and checking the meat stores carried on board, observing inspections of fresh produce, or any other of the myriad tasks carried out by MAFQS staff in their day-to-day work. The MAF Compliance Investigation Group and the Border Management Group also audit MAFQS inspections.

Other methods utilised by MAFQS for determining competency of staff include regular peer reviews and written competency reviews to ensure staff remain familiar with inspection requirements. MAFQS has also established a New Zealand Qualifications Authority-based training programme which, when completed by staff, will result in a Certificate in Biosecurity. This includes on-the-job assessment, written and workshop-style training.

Improvements to our application of standards, documented procedures and any other part of the quality systems are encouraged through a Quality Improvement Form system which can be accessed through the staff intranet. All staff are encouraged to use this tool when they identify areas they believe can be improved. Since December 1999, staff have formally registered over 1400 suggestions for improvement. All suggested improvements are acknowledged, and sent to the appropriate person or area within MAFQS or MAF Biosecurity Authority for consideration. This often results in amendments to procedures or standards, and provides enhanced information for staff to ensure appropriate inspection outcomes.

Claudia Slaney, Risk Analyst/Audit Coordinator, MAF Quarantine Service, phone 09 256 6553, fax 09 275 6953, slaneyc@maf.govt.nz

MAF Quarantine Service Risk Analyst/Audit Coordinator

Claudia Slaney was recently appointed Risk analyst/Audit Coordinator for MAFQS. This is a new position, reporting directly to General Manager Fergus Small, and sitting on the MAFQS Senior Management Team. Claudia’s role encompasses two key areas – identifying and analysing operational and business risks, and conducting risk investigations; and coordinating and leading MAFQS internal audits. Claudia joined MAF in 1996 and spent three years as a Quarantine Officer at the International Mail Centre, where she took on the Acting Group Leader role until the MAF/MOF merger. After another 18 months at Auckland International Airport, she gained the Team Leader position, then promptly left on a six-month secondment to become the MAFQS Quality Systems Coordinator.

Six months became three years of managing the address of Quality Improvement Forms (QIFs), making up-to-date information available on the intranet and making sure that staff knew how to access it, and ensuring that all hard copy documents were current. She also took part in internal audits, including checking the quality systems requirements and processes, operations and inspections.

Claudia has worked for MAFQS in Japan three times, each time in a different location. She has a BSc in biological sciences from the University of Auckland.
Next-generation x-ray machine will change luggage screening

Imagine this. You’re a MAF Quarantine Officer, x-ray screening bags at the airport. The biosecurity area is packed with tired passengers who just want to get out into the fresh air. The case on the screen in front of you contains a round organic object that could be a piece of fruit. Then again, it could be soap, candy, or a candle. How can you tell? You have to stop, open the bag, and check it...

Howard Webber, MAF Quarantine Service (MAFQS) Operations Manager for Auckland International Airport, is confident that this scenario will one day be a thing of the past. He recently spent a couple of days visiting x-ray machine manufacturers Rapiscan, in Los Angeles, along with Fergus Small, General Manager of MAFQS and Grant Burney, Assistant Director General (Operations), examining prototypes and discussing plans for next-generation biosecurity x-ray machines.

“Passenger numbers at Auckland airport alone are increasing by around 10 percent per year. We would need a terminal twice the size of the one we have now if we tried to cope by just increasing the numbers of inspectors and x-ray machines and processing passengers the way we do now. We have to work smarter,” Howard says.

The solution - develop an x-ray machine that can take a trolley laden with bags and give a clear, 3-D image of the contents.

“Two years ago we were alone in thinking like this,” says Howard. “But mail centres don't want to unload cages of mail that have already been sorted, so a prototype x-ray machine has been tested in Hong Kong that will screen whole cages of mail. It's a smart machine that detects drugs and explosives - it works well.”

Airport companies are also interested in security screening trolley-loads of bags as passengers enter terminal buildings. “We are no longer alone,” says Howard. While it is relatively easy for the machines to pinpoint the presence of drugs and explosives, the atomic weight spectrum of quarantine risk material is so wide that operators must rely on the image to detect these items.

The MAFQS team presented Rapiscan with a novel idea - rather than programme the machines to recognise quarantine risk items, programme them to pinpoint the top five false positive signatures, such as soap, candles, and chocolate. Thus the x-ray machine would identify the presence of, say, soap in a bag, by enclosing the image in a green circle, and the machine operator would know that it was not biosecurity risk material without having to stop the belt and examine the contents of the bag.

“Rapiscan are confident that they can put this technology together,” says Howard. “They have already designed machines that will pick up a baggage trolley, drag it into the machine and release it at the other end.”

Work is under way here in New Zealand as well. A new x-ray machine with a more powerful generator similar to what is required in the large, whole-trolley machines has been imported and set up near Auckland International Airport. While this unit will be used for screening freight and courier mail, it will also be used to trial x-ray screening of whole trolleys with baggage.

In the assembly area of the Rapiscan Hawthorne plant in Los Angeles are, from left, Ian Simpson (MD of Aviation and Industrial Distributors Ltd, Rapiscan agents in NZ and Australia), Grant Burney, Howard Webber and Brian Kaval (Project Engineer, Rapiscan). Photo by Fergus Small.

A familiar scene to travellers arriving in New Zealand - loading and unloading of luggage at the MAF Quarantine X-ray machines will be unnecessary when the next-generation machines are developed.
A project initiated by the Biosecurity Council is validating a computer-based decision tool to manage biosecurity risks to New Zealand’s native ecosystems.

BIOSECURE was first developed by Landcare Research in 1998 as an adjunct to research on invasive invertebrates in natural ecosystems. It is a computer model that integrates spatial coverage data for key drivers of invasion processes and values at risk, into a spatially-explicit prediction of vulnerability in New Zealand ecosystems.

BIOSECURE is now being tested for its capacity to determine risk profiles for a range of exotic organisms that pose a threat to biodiversity. The Biosecurity Council identified this sort of research to the Foundation for Research, Science and Technology (FoRST) as a funding priority for public good science.

Ten case studies will be used to validate the modelling approach used in BIOSECURE. The studies were selected by Landcare and a technical working group from MAF Biosecurity and the Department of Conservation (DOC).

The evaluation is restricted to an assessment of the biological sensibility (‘fit’ with common biological understanding) and robustness of the model’s predictions, through retrospective case studies. MAF and DOC will fund independent peer reviews of the evaluation methodology and a technical review of the results.

The results that are generated, with supporting quantitative and interpretative summaries, will be assessed by the technical group and the independent reviewers. The findings will be reported to the steering group led by Geoff Hicks, DOC, with members from MAF, the Environment and Health ministries, regional councils and Landcare. The steering group will discuss the results of the evaluations and make recommendations on further development and/or implementation of BIOSECURE.

Christine Reed, Manager Indigenous Fauna and Flora team, Biosecurity Coordination, phone 04 470 2756, fax 04 470 2741, reedc@maf.govt.nz

International standards for plant protection

The fifth session of the Interim Commission on Phytosanitary Measures (ICPM 5) was held in Rome, Italy, April 7-11, 2003.

ICPM 5 adopted two new standards. Guidelines for the use of irradiation as a phytosanitary measure will be useful to New Zealand if and when we permit the import of irradiated products. Guidelines on lists of regulated plants will help New Zealand in discussing market access with trading partners.

Two supplements to current standards were adopted: one to promote a common understanding of the term potential economic importance and the other to clarify the use of risk analysis in relation to environmental concerns arising from quarantine pests. The new supplements will help officials who deal with environmental risk in the context of the Convention on Biological Diversity as well as the International Plant Protection Convention (IPPC).

The IPPC secretariat and the Food and Agricultural Organization legal section updated the ICPM on the development of a new mark associated with the wood packaging standard (See page 13). The mark will soon become available to identify wood packaging that has received an approved treatment.

The ICPM members wish to develop more than 140 standards but the present budget and current procedures limit progress to two a year. ICPM 5 established a focus group to consider criteria and procedures for a “fast track” mechanism for developing new standards. This could include recognising standards from other organisations such as regional plant protection organisations and the International Seed Testing Association. The development of the Phytosanitary Capacity Evaluation, a tool for assessing the phytosanitary needs of developing countries, will continue. Since New Zealand funded the pilot version, this tool has been used in over 30 countries. The ICPM is seeking funding to allow officials from developing countries to discuss draft standards.

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Nassella tussock is an invasive grass from Argentina that has plagued the Hurunui district in North Canterbury for 60 years. The focus of Environment Canterbury’s pest management strategy for nassella is to ensure farmers are removing nassella tussock from their properties by a process of inspections and enforcement as well as education.

Nassella tussock can rapidly dominate grasslands and eventually smother them. It is unpalatable to stock and infests 265,000 hectares in North Canterbury. Some of the 800 affected properties take 500 hours each year to remove more than 20,000 plants. Nassella is also found on a further 200 properties in other parts of Canterbury.

Although present by 1905, it was many years before nassella tussock became a recognised problem. The first inspector was appointed in 1941 and the North Canterbury Nassella Tussock Board was formed in 1946. Responsibility has mostly sat with farmers since then, although the board staff carried out most of the control work and until 1989 this was largely subsidised by the Crown.

When Environment Canterbury (the Canterbury Regional Council) assumed responsibility for pest management it moved away from service delivery and took a regulatory role, requiring landholders to carry out the control work. The Biosecurity Act 1993 required pests such as nassella tussock to be managed within a regional pest management strategy.

The regional pest management strategy approach

Environment Canterbury’s objective for nassella control is to progressively reduce the population of nassella tussock within the Canterbury region.

A strategy rule requires landholders to eradicate their nassella tussock by 31 October each year to prevent it from seeding.

The strategic tools for nassella control are self-compliance, inspection, regulations, service delivery, community liaison and education, research and monitoring.

Self-compliance and inspection

Landholders are encouraged to “self comply” by informing Environment Canterbury at the time when they have finished their control work for the year. This saves ratepayers’ money by making the regional council’s inspection programme, which typically covers 400 - 500 properties annually, more efficient. Where the tussocks have not been removed, an enforcement process begins that can result in contractors doing the work at the landholder’s cost.

The costs of the actual control work fall on each individual landholder. Half the cost of inspection is funded by a targeted rate on rural ratepayers in the affected district and half through the general rate on all Canterbury ratepayers.

Education

Biosecurity officers visit properties on request to identify nassella, advise on a control programme, and explain the landholder’s obligations. Nassella features in displays of plant pests at Agricultural & Pastoral shows throughout North Canterbury.

Research

Environment Canterbury supports an AgResearch programme to increase understanding of nassella tussock and, in particular, its seeding behaviour and the extent and importance of its seed bank. This information will be important in population modelling and determining how the nassella tussock programme should be reviewed in the future. Research by Landcare Research and Australian scientists into biological control agents is also supported.

Monitoring

A key part of the strategy is being able to measure progress towards achieving the objectives of the strategy. In other words, is the strategy doing what we said it would?

AgResearch scientists have conducted a sampling programme to estimate the nassella tussock population in Canterbury for several years. Since 1998, the mean population density in Hurunui has declined from 40 plants per hectare to ten or less.

Community liaison

The Hurunui Nassella Tussock Pest Management Liaison Committee, one of twelve animal and plant pest committees throughout the Canterbury region, involves the community in the nassella tussock strategy. The quarterly committee meetings provide advice and feedback to Environment Canterbury and is a key in farmer ownership of the strategy.

Laurence Smith, Northern Team Leader - Biosecurity, Environment Canterbury, phone 03 365 3828, laurence.smith@ecan.govt.nz
The Biosecurity Council confirmed the final shape and content of New Zealand’s biosecurity strategy and presented it to the Minister for Biosecurity on 26 June.

Apart from some fine tuning and editorial work on style and presentation, the document is now complete. It is scheduled to go to Cabinet for approval in mid August.

A summary of the key cabinet decisions is expected at the same time as the strategy in early August. This will allow the thousands of New Zealanders who contributed to the development of the strategy to have a full picture of both the short-term actions to improve our biosecurity systems now, and the longer-term vision of what biosecurity should be achieving over the next 5-10 years.

Rather than setting down a series of recommendations about how biosecurity should be changed, the strategy provides a series of expectations of what biosecurity should be delivering, both in terms of processes and outcomes. These substantially reflect the inputs from stakeholders. The expectations about processes focus on such issues as participation, transparency and consistency, with a particular emphasis on balanced decision-making and continuous improvement.

The expectations around outcomes are for a significant and ongoing reduction in economic and environmental loss from exotic and established pests and diseases and that New Zealand continues to remain free of exotic species that could harm our health and lifestyles.

Over the past six months, in a parallel process to the completion of the strategy, a group of officials from agencies with an interest in biosecurity have been working on a set of papers for Cabinet (Biosecurity 42:4).

These papers seek decisions on a number of issues raised in the strategy and will become the first stage of implementation.

www.biosecurity.govt.nz

Biosecurity People

Chad Hewitt was recently appointed as the Ministry of Fisheries Chief Technical Officer for Marine Biosecurity. Chad began university study at the University of California at Berkeley, United States, and undertook his PhD at the University of Oregon focusing on the correlates of invasion success in an experimental system. By the time he began post-doctorate study in Knoxville, Tennessee (split between the University of Tennessee and the Oakridge National Laboratory), he was working on modelling the process of biological invasions.

Chad put theory into practice in Australia when, in 1996, he switched hemispheres to work at CRIMP, the Centre for Research onIntroduced Marine Pests, at CSIRO Marine Research in Hobart. His work focused on understanding the invasion process, determining the scope of invasions in Australia, and determining mechanisms for reducing the rate of invasions. Major projects included developing and implementing a port baseline survey protocol, and advancing a biological risk assessment for Australian ballast water management.

One of the challenges Chad sees in his new position is setting up a rapid response system for marine pests, and he plans to review existing capabilities in order to establish the best possible system. Chad will build on previous risk profiling work by the Ministry to help decide what marine pests should be responded to. Specific response procedures can then be documented accordingly. There is also the ongoing need to provide technical advice for managing the risks from ballast water and hull fouling.
Travel agents play a vital role in helping keep New Zealand free from the threat of unwanted pests and diseases. Protect New Zealand will roll out a targeted communications programme to New Zealand agents this month, aimed at encouraging and enabling them to regularly provide biosecurity requirements and information to the New Zealand travelling public.

Adrienne Tollemache, coordinator of the Protect New Zealand programme, says the New Zealand-based travelling public can represent a significant biosecurity risk.

“When returning to New Zealand from overseas, passengers can carry new pests and diseases on them or in their baggage,” she says.

“Carrying dirty sporting equipment or outdoor clothing, and plant and food material are just some of the ways travellers can host unwanted pests and diseases. That’s why the programme seeks the support of travel agents who, via regular daily contact with travellers, can alert and inform them of biosecurity threats and the fines incurred when the rules are broken.”

Travel agents were surveyed in late 2002 to determine their requirements for obtaining and providing better biosecurity information.

“Their feedback and needs have directly shaped this campaign which will be launched in mid-July to coincide with the peak travelling season,” Adrienne says.

As part of the programme, an information pack will go out to all travel agents containing revamped brochures in a number of languages and point of sale materials to help agents promote this important message to their clients. In addition to this, new website content, an email newsletter for agents and electronic versions of important information have been developed.

“These resources will keep agents up-to-date with the latest biosecurity issues relevant to them. We believe this overall approach will add value to the already high level of service travel agents provide.

“After all, travel agents are at the front line of interaction with travellers and are in an ideal position to inform them of the risks New Zealand faces if our biosecurity is compromised.

“Together, Protect New Zealand and travel agents can keep our country’s good reputation for keeping out unwanted pests and diseases,” Adrienne concludes.

Biosecurity Institute seminar

National initiatives and local themes concerning biosecurity were the focus for the 2003 Annual National Education and Training seminar, Biosecurity at the Centre of New Zealand, held in Nelson from 9-11 July.

Hosted by the New Zealand Biosecurity Institute in association with the Vertebrate Pest Management Institute of New Zealand, the seminar also promoted the ideas of ‘selling the message and exploring how to get the best for everyone out of biosecurity’. Industry perspectives from the wine, seafood and shipping sectors were included in the busy three-day programme, which also featured workshops on aquatic weeds and plant pest surveillance.

A field trip for participants took in the Brook sanctuary, urban weeds and Port Nelson. A full report on the seminar will be carried in the 15 September issue of Biosecurity.
**New import health standards**

**Inedible tallow from Canada**

**Shelf-stable petfoods containing bovine ingredients from specified countries**

**Shelf-stable petfoods containing animal products from all countries**

All of these standards have been amended in response to the recent discovery of bovine spongiform encephalopathy (BSE) in Canada. The appropriate changes have been made to ensure bovine products from Canada are no longer imported. These standards are all dated 6 June 2003 and replace those dated 22 May 2001, 13 August 2002 and 12 August 2002 respectively.

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www.maf.govt.nz/animals-imports

**Draft import health standards for consultation**

**Bovine semen and embryos from Australia, Canada and United States**

Comments are invited on the reviewed standards. A number of changes have been made, including the introduction of separate standards for the United States and Canada.

**Surgical catgut from all countries**

Surgical catgut manufactured from bovine tissues from countries affected by bovine spongiform encephalopathy (BSE) is not permitted. These countries are listed under Clause 6.1. Model zoosanitary certification has also been included.

**Animal fibre**

The animal fibre standards have been reviewed and consolidated into three standards for animal fibre from all countries: scoured and uncarded, scoured and carded, and unprocessed. The draft standard are based on the 1998 import risk analysis Unprocessed Fibre of Sheep and Goats. The standards will replace all of the current standards for animal fibre, except for the animal fibre testing standard. The closing date for submissions is Friday 8 August 2003.

Jennifer Brunton,
Technical Adviser, International Animal Trade,
phone 04 474 4116, fax 04 474 4227,
bruntonj@maf.govt.nz

www.maf.govt.nz/biosecurity/consultation.htm

**Import health standards revoked - Plants**

The import health standard for Coffea (coffee) seed from Fiji was revoked on 24 June 2003 because of the presence of the quarantine pest Stephanoderes hampei (coffee berry borer). The borer is a serious pest of coffee and causes losses ranging from 50-100 percent of berries attacked if no control measures are applied. The borer infests the seeds and fruit of coffee and has been transported widely throughout the world in this way. There were no measures in the import health standard to prevent the introduction of the borer and therefore the standard was revoked urgently. MAF has no records of any imports of coffee seed from Fiji since at least 1 January 1997.

Jennie Brunton,
Technical Adviser, International Animal Trade,
phone 04 474 4116, fax 04 474 4227,
bruntonj@maf.govt.nz

www.maf.govt.nz/biosecurity/consultation.htm

**Draft import health standards for consultation - Plants**

MAF Plants Biosecurity has redrafted the measures for Iris yellow spot virus (IYSV) on nursery stock of Allium (onion), Hippeastrum (amaryllis), Iris (iris) and Tulipa (tulip). Although there are general measures in place (e.g. post-entry quarantine or growing season inspection), MAF proposes to amend the import health standards for these four genera to require a specific additional declaration that the virus is not found in the country of origin or that the crop has been specifically inspected for its presence. Simultaneously, MAF proposes to simplify the import health requirements for dormant bulbs by consolidating the currently available options.

It has also been noted that there a number of Liriomyza species which may be associated with Allium nursery stock. Similarly, Tulipa (tulip) is a host of tomato bushy stunt virus. These
species are high impact pests and MAF is proposing specific measures to prevent the introduction of these pests. Submissions on these proposed changes should be sent to the address below by 8 August 2003. Depending on the results of consultation, it is anticipated that the new requirements will be in place by September 2003.

Plant Imports - Consultation on measures for Iris yellow spot virus

[Image -0x-18 to 616x787]

Codes of ethical conduct - approvals, notifications and revocations since the last issue of Biosecurity

All organisations involved in the use of live animals for research, testing or teaching are required to adhere to an approved code of ethical conduct.

**Codes of ethical conduct approved**: Nil

**Transfer of code of ethical conduct approved**

- From Zapadappa Concepts Ltd to Woodland Goats Ltd

**Amendments to codes of ethical conduct approved**

- PharmVet Solutions

**Notifications to MAF of minor amendments to codes of ethical conduct**: Nil

**Notifications to MAF of arrangements to use an existing code of ethical conduct**

- Waikato Science Teachers’ Association Inc (to use the University of Waikato’s code)

**Codes of ethical conduct revoked or expired or arrangements terminated**: Nil

**Approvals by the Director-General of MAF for the use of non-human hominids**: Nil

**Approvals by the Minister of Agriculture of research or testing in the national interest**: Nil

Linda Carson, Senior Policy Adviser, Animal Welfare, phone 04 470 2746, fax 04 498 9888, carsonsl@maf.govt.nz

**NAWAC annual report available**

The 2002 annual report of the National Animal Welfare Advisory Committee (NAWAC) was published recently. If you would like a copy of the report contact:

Pam Edwards, Executive Coordinator Animal Welfare, phone 04 474 4129, fax 04 498 9888, animalwelfare@maf.govt.nz

www.maf.govt.nz/animal-welfare
New organism records: 12/05/03 - 20/06/03

Biosecurity is about managing risks – protecting the New Zealand environment and economy from exotic pests and diseases. MAF Biosecurity Authority devotes much of its time to ensuring that new organism records come to its attention, to follow up as appropriate. The tables below list new organisms that have become established, new hosts for existing pests and extension to distribution for existing pests. The information was collated by MAF Forest Biosecurity and MAF Plants Biosecurity during 12/05/03 - 20/06/03, and held in the Plant Pest Information Network (PPIN) database. Wherever possible, common names have been included.

### New host reports

<table>
<thead>
<tr>
<th>Organism</th>
<th>Host</th>
<th>Location</th>
<th>Submitted by</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dilococaster pemicious (parasitoid)</td>
<td>Hyphantria cunea (Fall Webworm)</td>
<td>Auckland</td>
<td>Forest Research</td>
<td>No other hosts are recorded in PPIN.</td>
</tr>
<tr>
<td>Gibberelia baccata (canker, false coral spot)</td>
<td>Quercus robur (English oak, truffle oak)</td>
<td>Waikato</td>
<td>BioLinc</td>
<td>Anamorph: Fusarium lateritium. This species has a very wide host range and geographic distribution.</td>
</tr>
<tr>
<td>Nambouria xanthops (no common name)</td>
<td>Eucalyptus aggregata (eucalypt)</td>
<td>Auckland</td>
<td>Forest Research</td>
<td>Other PPIN hosts include Tasmanian blue gum, Ribbon gum, Bosisto's box, Camden woollybut and Candle-bark gum.</td>
</tr>
<tr>
<td>Eriococcus coriaceus (gum tree scale)</td>
<td>Eucalyptus pulverulenta (Silver-leaved mountain gum)</td>
<td>Nelson</td>
<td>Forest Research</td>
<td>Other PPIN hosts include Meyer lemon, Black peppermint, Blue gum, Alpine Ash, Shining gum, Narrow-leaved black peppermint gum, Argyle apple, Sugar gum, Sydney blue gum and Yate tree.</td>
</tr>
<tr>
<td>Lindingaspis rossi (circular black scale, Ross's black scale)</td>
<td>Leptospermum laeavigatum (coast tea tree)</td>
<td>Auckland</td>
<td>Forest Research</td>
<td>Other PPIN hosts include lemon, grape, pear, feijoa, orange and New Zealand grapefruit.</td>
</tr>
<tr>
<td>Uraba lugens (gum leaf skeletoniser)</td>
<td>Eucalyptus aggregata (eucalypt)</td>
<td>Auckland</td>
<td>Forest Research</td>
<td>Other PPIN hosts include silver dollar gum, brown barrel, cut tail, narrow-leaved black peppermint, white iron-bark, Southern mahogany, sugar gum, red river gum, candle-bark gum, Bosisto's box and Eucalyptus pauciflora.</td>
</tr>
<tr>
<td>Pseudaulacaspis eugeniae (gum tree scale)</td>
<td>Syncarpia glomulifera (lustre wood, turpentine tree)</td>
<td>Auckland</td>
<td>Forest Research</td>
<td>No other hosts are recorded in PPIN.</td>
</tr>
<tr>
<td>Naupactus leucoloma (white-fringed weevil)</td>
<td>Eucalyptus ovata (eucalyptus)</td>
<td>Nelson</td>
<td>Forest Research</td>
<td>Other PPIN hosts include grape, rockmelon, tomato, carnation, garlic, potato and pumpkin.</td>
</tr>
<tr>
<td>Hemiiberlesia latani (latania scale)</td>
<td>Zelkova serrata (Japanese zelkova)</td>
<td>Auckland</td>
<td>Forest Research</td>
<td>Other PPIN hosts include orange, apple, kiwifruit, grape, rose, Japanese plum and Buxus sp.</td>
</tr>
<tr>
<td>Nipaecoccus aurilianus (golden mealybug)</td>
<td>Agathis robusta (Queensland kauri)</td>
<td>Auckland</td>
<td>Forest Research</td>
<td>Other PPIN hosts include kiwifruit.</td>
</tr>
<tr>
<td>Phleothrips cupressi (Cypress bark beetle)</td>
<td>Juniperus flaccida (Drooping juniper)</td>
<td>Rangitikei</td>
<td>Forest Research</td>
<td>Other PPIN hosts include mock thuja.</td>
</tr>
<tr>
<td>Callicidius scutellaris (no common name)</td>
<td>Eucalyptus viminalis (Manna gum, ribbon gum)</td>
<td>South Canterbury</td>
<td>Forest Research</td>
<td>Other PPIN hosts include shining gum.</td>
</tr>
<tr>
<td>Navomorpha lineata (striped longhorn)</td>
<td>Buddleja davidii (buddleia, butterfly bush, summer lilac)</td>
<td>Taupo</td>
<td>Forest Research</td>
<td>Other PPIN hosts include Caucasian fir and poplar.</td>
</tr>
<tr>
<td>Acrocercops lacinliella (black butt leaf miner)</td>
<td>Eucalyptus regnans (eucalyptus, giant gum, mountain ash, swamp gum)</td>
<td>Wanganui</td>
<td>Forest Research</td>
<td>Other PPIN hosts include Red flowering gum, Shining gum, Red ironbark, Tasmanian blue gum, Brush box, White peppermint, Yellow box, Sydney blue gum, Tallow wood, Blackbutt, Alpine Ash and Eucalyptus dendromorpha.</td>
</tr>
<tr>
<td>Placosteraella baileyi (no common name)</td>
<td>Grevillea lanigera (grevillea)</td>
<td>Hawke's Bay</td>
<td>Forest Research</td>
<td>Other PPIN hosts include Grevillea depauperata.</td>
</tr>
<tr>
<td>Icneya purchasi (cottony cushion scale)</td>
<td>Ulmus crassifolia (Cedar elm)</td>
<td>Auckland</td>
<td>Forest Research</td>
<td>Other PPIN Hosts include pumpkin, orange, lemon, mandarin, tangelo, New Zealand grapefruit, Citrus sp., kiwifruit, Malus sp., rose and tamarillo.</td>
</tr>
</tbody>
</table>

### Extension to distribution reports

<table>
<thead>
<tr>
<th>Organism</th>
<th>Host</th>
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<tbody>
<tr>
<td>Calophya schini (Pepper tree psyllid)</td>
<td>Schinus molle (pepper tree)</td>
<td>Nelson</td>
<td>Landcare Research</td>
<td>No other distributions are recorded in PPIN.</td>
</tr>
<tr>
<td>Acrocercops lacinliella (black butt leaf miner)</td>
<td>Eucalyptus regnans (eucalyptus, giant gum, mountain ash, swamp gum)</td>
<td>Wanganui</td>
<td>Forest Research</td>
<td>Other PPIN distributions include Wanganui, Taupo, Auckland, Northland, Bay of Plenty, Hawke's Bay, Coromandel and Waikato.</td>
</tr>
<tr>
<td>Placosteraella baileyi (no common name)</td>
<td>Grevillea lanigera (grevillea)</td>
<td>Hawke's Bay</td>
<td>Forest Research</td>
<td>Other PPIN distributions include Wellington.</td>
</tr>
</tbody>
</table>

Forest records: Peter Thomson, Director MAF Forest Biosecurity, phone 04 498 9639, fax 04 498 9888, thomsonp@maf.govt.nz
ANIMAL BIOSECURITY RECORDS 12/05/2003 – 20/06/2003

No new to New Zealand records for this period.

PLANTS BIOSECURITY RECORDS 12/05/2003 – 20/06/2003

Validated New to New Zealand reports

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<th>Organism Host</th>
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<th>Comment</th>
</tr>
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<tbody>
<tr>
<td>Alternaria solani-nigr</td>
<td>Solarum nigrum (black nightshade)</td>
<td>Waikato</td>
<td>National Plant Pest Reference Laboratory (NPPRL)</td>
</tr>
<tr>
<td>Alternaria longissima</td>
<td>Cleome hassleriana (spider flower)</td>
<td>Auckland</td>
<td>NPPRL</td>
</tr>
<tr>
<td>Ewingella americana</td>
<td>Agaricus bisporus (mushroom)</td>
<td>Mid Canterbury</td>
<td>NPPRL</td>
</tr>
</tbody>
</table>

New host reports

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<td>Diapothale helianthi</td>
<td>Pyrus pyrifolia (Asian pear, nashi)</td>
<td>Waikato</td>
<td>BioLinc</td>
</tr>
<tr>
<td>Daucus carota (carrot)</td>
<td>Mid Canterbury</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vitis vinifera (grape)</td>
<td>Northland</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phomopsis viticola</td>
<td>Juglans regia (walnut)</td>
<td>Mid Canterbury</td>
<td>BioLinc</td>
</tr>
<tr>
<td>Taxon 1 (phomopsis leaf spot)</td>
<td>Pyrus pyrifolia (Asian pear, nashi)</td>
<td>Nelson</td>
<td></td>
</tr>
<tr>
<td>Colerol senniana</td>
<td>Protea neriifolia cv. Pink Ice (black protea)</td>
<td>Auckland</td>
<td>Forest Research</td>
</tr>
<tr>
<td>Cerolastis sinensis</td>
<td>Crataegus monogyna (hawthorn)</td>
<td>Waikato</td>
<td>Forest Research</td>
</tr>
<tr>
<td>Hemiberlesia lataniae</td>
<td>Citrus reticulata</td>
<td>Northland</td>
<td>NPPRL</td>
</tr>
<tr>
<td>(latania scale)</td>
<td>(mandarin)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Microthyriella hibisci</td>
<td>Hibiscus rosa-sinensis (Chinese hibiscus)</td>
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<td>Northland</td>
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</tr>
<tr>
<td>Phytoliriomyza jacarandae</td>
<td>Jacaranda mimosaefolia (jacaranda)</td>
<td>Nelson</td>
<td>Landcare Research</td>
</tr>
<tr>
<td>(jacaranda leaf miner)</td>
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<td>Microthyriella hibisci</td>
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</table>

CODES OF WELFARE – Animal Welfare Act Update

The table below is a quick guide as to the status of the various codes of welfare as they are developed under the Animal Welfare Act 1999.

<table>
<thead>
<tr>
<th>Code</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Broiler Code</td>
<td>Final Code issued by the Minister of Agriculture on 26 June 2003</td>
</tr>
<tr>
<td>Pig Code</td>
<td>Final Code to be presented to Minister of Agriculture August 2003</td>
</tr>
<tr>
<td>Rodeo Code</td>
<td>Public consultation completed. Final Code to be presented to Minister of Agriculture late August 2003</td>
</tr>
<tr>
<td>Layer Hen Code</td>
<td>Public consultation completed. Final Code to be presented to Minister of Agriculture September 2003</td>
</tr>
<tr>
<td>Zoo Code</td>
<td>Under development. Final Code to be presented to Minister of Agriculture mid November 2003</td>
</tr>
<tr>
<td>Circus Code</td>
<td>Under development. Final Code to be presented to Minister of Agriculture mid November 2003</td>
</tr>
<tr>
<td>Commercial Slaughter Code</td>
<td>Public consultation completed. Final code to be presented to Minister of Agriculture early 2004</td>
</tr>
</tbody>
</table>
Exotic disease and pest emergency hotline: 0800 809 966
Animal welfare complaint hotline: 0800 327 027
www.maf.govt.nz/biosecurity