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Cover: Chris Shepherd from pest eradication company Antians and Flybusters checks for fire ants in Wellington (see page 19 for fire ant response update).
Photo: Andrew Gorrie, The Dominion.

www.maf.govt.nz/biosecurity
Important linkage between ERMA New Zealand and biosecurity

by Bas Walker, Chief Executive, ERMA New Zealand

Not long ago there were major concerns about introducing new organisms such as chinchillas and fresh water crayfish to New Zealand. New organisms like these came under the Animals Act and Plants Act. This earlier legislation was primarily designed to protect New Zealand’s agriculture from diseases. There was no legislation to control the broader effects of these organisms on people and on the environment.

In 1993 the Biosecurity Act was passed to protect New Zealand from the unintended introduction of unwanted organisms into New Zealand.

Just one year later, in 1994, the Hazardous Substances and New Organisms (HSNO) Bill was introduced into parliament – its aim was to protect the environment, and health and safety of people and communities by preventing and managing the adverse effects of hazardous substances and new organisms. The legislation covers both genetically modified (GM) and non-GM organisms.

The Bill was passed in 1996 and ERMA New Zealand was established the following year.

There are two connections between the Biosecurity Act and the HSNO Act.

In one instance, the HSNO Act, implemented through ERMA New Zealand, protects New Zealand’s biosecurity by providing a framework for regulating the introduction or release of new plants and animals. This framework relies on applications to the Authority which then makes decisions by weighing up risks, costs and benefits including risks to people and to the environment.

Quarantine officers to star in Border Patrol TV series

MAF’s public profile – and the key biosecurity role played by MAF Quarantine Service – will get a boost when Border Patrol, a new TV docu-drama, screens in the next few months.

Filming is almost complete on the series, which will feature the day-to-day border protection work done by both quarantine officers and customs officers. Produced by Cream TV, Border Patrol has already logged more than 1300 hours of filming at locations from Whangarei to Invercargill.

Line producer Elizabeth McGougan says the production team have all enjoyed learning about the different roles MAF and Customs perform.

“Absolutely nothing was staged,” says MAF Quarantine Officer Stu Rawnsley of his on-camera experience in the Border Patrol series. Stu has worked with the MQS team at Auckland Wharf since 1995 and was glad to take part in the series “from the point of view that it will improve the public’s understanding of the work we do”. Segments filmed include the biosecurity clearance of a super yacht and the response to interception of a nest of redback spiders aboard a cargo vessel.

“Working with MAF staff has been a real experience – MAF is full of great people who have bent over backwards to help make the series a success,” says Elizabeth. Border Patrol follows the daily work of a wide set of ‘stars’ including quarantine officers at Whangarei (Brian Whimp), Auckland Airport (Brendan Bartlett, Megan Brown and Kerry O’Neil), Auckland Zones (Danielle Hancock), Auckland Wharf (Stuart Rawnsley, pictured) and dog handlers at the Biosecurity Detector Dog Programme (Mark Goodard and Mo Toeke).

The series could run to 10 evenings and is planned to screen on TV One. It is hoped the screening will run up to and coincide with the recently announced dates for Protect New Zealand Week - July 8 to July 14. Watch this space.

www.ermanz.govt.nz
Biosecurity wins favour as a ‘great term’ from leading environmentalist

When Dr David Suzuki, world-renowned environmentalist, visited New Zealand in March we asked him to share some thoughts for Biosecurity readers. Dr Suzuki is a Canadian with close ties to Australia. His latest book is Good News for a Change: Hope for a Troubled Planet.

**Is biosecurity a term you are familiar with?**

I hadn’t really thought about it because it isn’t a term I use or have heard but it is a very interesting conjunction. I would immediately interpret biosecurity as meaning securing biodiversity. If protecting biodiversity is indeed a part of biosecurity, then I think biosecurity is a great term. If biosecurity was only about keeping out exotics I would think that’s too limited. [See box below right]

**How do you use the term biodiversity?**

I certainly don’t use words like biodiversity in my work as a communicator for or with children. I talk about nature. In fact most Canadians tend to think biodiversity is about cultural diversity. In survey after survey, if we ask ‘do you think it’s important to protect nature?’ 97 percent will immediately say yes. Then if you ask ‘is it important to protect old growth forests?’ that number drops. But if you say ‘nature’ people have some kind of visceral response – they know it’s important.

**How serious is the problem of exotic pests and diseases?**

Exotics now have got to be one of the major disrupters of ecosystems all over the planet just as humans make attacks on biodiversity. I find it hard to see how, with the amount of travel and exchange, current border controls can be totally effective. We are depending on a very imperfect system that will always have some holes in it. In terms of pests, nature has no pests. If we, at one extreme, just let nature take its course, there would be a lot of invasion, I imagine. As with existing ‘pests’ you could say they could then be left to equilibrate on their own – but it would be extremely destructive before that happened. I would think that 99 percent of exotics that come in never make it because they don’t belong. But the ones that do make it and find it a good environment are always going to be very, very tough to contain.

**What are your views on eradication of pests?**

Canada has had outbreak after outbreak of different things that are coming in with wood for example, such as the Gypsy Moth. Our response immediately was to investigate and then spray like mad, with huge objections to it. I’ve protested against it myself but yes, it’s a matter of degree – we’ve got to protect biodiversity and if we have a chance of control I’d be willing to tolerate a measure of chemical use but only on the basis it is used very conservatively. I think we ought to learn from the success stories. It’s about very early detection and then taking whatever the heroic measures are.

**So where did the term ‘Biosecurity’ come from?**

Biosecurity Council chair John Hellström can take the credit for ‘coining’ use of the word biosecurity from his days at MAF when a term was being sought for what eventually became the Biosecurity Act 1993.

Originally the idea came from some brainstorming at a conference in the United States concerned with new fields of science. Jim Glosser, then US Chief Veterinary Officer, used the word biosecurity in connection to containment – as distinct from the primary usage here to convey ‘protection by exclusion’.

John recalls: “Later that week I was sitting in a Denver coffee shop reading a DOC backgrounder when I read about concerns in the Nelson conservancy about the ‘security’ of some endangered species in the region. I jotted biosecurity in the margin of my notebook and immediately made a connection to our new legislation. ‘Ironically at that time I had never heard of biodiversity – what might be called its companion term,” he adds. John says that right from the start ‘biosecurity’ had connotations of protecting natural values as well as agriculture and horticulture.

The word proved acceptable to all the interested parties and the rest, as they say, is history. It should be noted, though, that international use of the word biosecurity is still limited. While New Zealand has the Biosecurity Council and Biosecurity Authority, and Australia has Biosecurity Australia, the term hasn’t achieved global currency and has yet to be picked up by mainstream dictionaries.
The timing was ideal for the 2nd National Workshop on Marine Biosecurity, held in Nelson on 20-21 March 2002. Threats from non-indigenous marine species to our marine ecosystems are gaining increasing attention, and two public policy initiatives are underway – the development of a Biosecurity Strategy and an Oceans Policy for New Zealand.

Dr Andrew Cohen, invasion ecologist at the San Francisco Estuary Institute, United States, presented the long history of human-mediated introductions into the San Francisco estuary. In contrast to New Zealand the estuarine flora and fauna in San Francisco is now almost entirely introduced species.

Lynn McIlwain, maritime environmental science consultant of Melbourne, Australia, gave a shipping industry perspective on the practicalities of mid-ocean ballast water exchange. This procedure is currently the only internationally recognised technique to rid ships’ ballast water of unwanted coastal organisms.

Other workshop speakers were from the Ministry of Fisheries, Yachting New Zealand, port companies, regional councils, ocean and coastal law, mussel farmers, commercial divers, and science providers. The participants too were from a mix of industry, policy and science backgrounds.

The presentations were punctuated by discussion on:
- what is at stake in the marine environment
- the international scene
- biosecurity and the shipping industry
- the potential for local vectors to spread non-indigenous marine species
- the importance of pre-border risk management initiatives, research and education.

The diverse perspectives and opinions that emerged will be made available to the team preparing a draft Biosecurity Strategy for New Zealand (next column).

Biosecurity strategy: draft takes shape

The draft Biosecurity Strategy for New Zealand is taking shape. The strategy team aims to deliver the draft strategy to the Biosecurity Council by 30 April.

In March the Biosecurity Council approved the following structure for the draft strategy:

Introduction to: ‘A Biosecurity Strategy for New Zealand’
Coverage: purpose and scope of biosecurity; current biosecurity management; importance of biosecurity; why a strategy is needed; purpose, aims and structure of the strategy.

Biosecurity principles, vision and goals
Coverage: definition of biosecurity; guiding principles; vision statement (desired future for biosecurity); goals (high-level outcomes for biosecurity and its management).

Biosecurity management
Coverage: accountabilities; governance; leadership; stakeholder and Maori participation; coordination; policies; funding; infrastructure; systems and processes; risk management framework; priority setting and decision making; capabilities and resources; information management and communication; science and research.

Biosecurity programmes
Coverage: biosecurity programmes (objectives, targets, actions) to cover all aspects of biosecurity (economy, environment, public health); sectors (e.g. marine environment, agricultural sector); activities (e.g. enforcement, surveillance) and zones of activity (pre-border, border, post-border).

Strategic priorities and strategy implementation
Coverage: priority actions to be undertaken in the short term (three-five years) to enable strategy goals to be achieved in the longer term; requirements for strategy implementation and review.

Consultation on draft strategy
Coverage: strategy consultation process; guide to making a submission.

The draft Biosecurity Strategy will be released for public consultation in June-July 2002 after approval by the Biosecurity Council, the Minister for Biosecurity and Cabinet.

Biosecurity stakeholders and the public have already made significant contributions to strategy development by identifying biosecurity issues, making submissions on the Issues Paper and participating in nationwide workshops and meetings. More recently, four Issues Groups (Biosecurity 33:16) and a Maori Focus Group have helped the team to analyse consultation reports and submissions, and to develop parts of the draft strategy.

Malcolm Crawley, Biosecurity Strategy Development Team, phone 04 460 8710, fax 04 460 8779, bsdteam@biostrategy.govt.nz

www.biostrategy.govt.nz
Hosting the 8th International Workshop of specialists in Veterinary Biosafety in March this year has widened the network of expertise available to New Zealand, says Dr Hugh Davies, Director of MAF’s Animal Health Reference laboratories.

Dr Davies created the opportunity for New Zealand to host the biennial workshop when he attended the last one in 2000 – the first New Zealander to do so.

“A key focus for this biosafety working group is on developing and maintaining the excellence of high level security at biocontainment facilities in our respective countries,” says Dr Davies.

“It was reassuring that the biosafety of our laboratory here at the National Centre for Disease Investigation (NCDI) was seen to be meeting the highest standards by a group of people actively involved in biosafety issues – our peers really. It was noted that we are extremely cost-efficient and our approach to ensuring we have a secure facility is at the advanced end of the scale.”

Scott Rusk, Assistant Director of the National Animal Disease Center in Iowa, USA, says the global pool of experts in the field of biosafety and containment of animal diseases is small.

“Bringing these experts together to discuss operations, standards, concepts and solutions has tremendous impacts and benefits. As a result we can benchmark our knowledge, experience and practice against each other’s approaches and respective issues,” he says.

Workshop members are not all scientists or veterinarians. Laboratory directors, directors of biosafety standards-setting agencies in the veterinary and human fields, hands-on biosafety officers, biocontainment engineers and architects are among those drawn from a variety of agencies – public and private.

This year’s workshop attracted 20 participants from eight countries for an intense three day programme. Topics included:

- updates on best practice developments in each country
- the decontamination of liquid effluent
- policies and procedures for securing high consequence pathogens
- standards for handling TSEs (the ‘family’ of diseases that includes BSE). New Zealand does not allow the importation of TSE infected material for any purpose
- transportation of specimens
- the health and safety issues arising from liquid nitrogen storage in confined spaces
- the use of fully encapsulating (level 4) suits.

The opportunity to affiliate the group with international bodies such as WHO, OIE or ABSA was also discussed.

Dr Davies was joined by NCDI colleagues Ann Gibbons, Ariana Hermara-Wahanui and Reinhold Kittelberger. Grant Burney, Director of MAF Operations, opened the workshop.

The proceedings of the workshop will be issued electronically later in the year and will be added to the International Veterinary Biosafety Working Group website.

Where appropriate, papers will be published in the Journal of Applied Biosafety.
Pasifika Festival 2002. Vibrant. Non-stop noise. Crowded with people from almost every nation in the world – an estimated 100,000 plus. A dynamic showcase for the best of the Pacific. There could not be a better venue for Protect New Zealand to test the waters prior to the launch of our Biosecurity Campaign aimed at Pacific peoples.

Our display had a very Pacific flavour – absolutely essential for reaching our target audience on the day. We called the stand ‘Pasifika Airport’ and concentrated on border biosecurity issues.

The MAF decision (effective April 8, 2002) to ban all cooked breadfruit and all fresh breadfruit that doesn’t have a phytosanitary certificate from entering New Zealand was very timely. The stand echoed with constant wails of, “Oh no – what do you mean no more cooked breadfruit?” “Oh man – I love that stuff – why?” The news spread like wildfire and certainly kept us on our toes for the day.

Our posters highlighting this new law contained close up photos of fruit fly larvae on a breadfruit. The breadfruit had been seized several days earlier from a flight coming in from Apia. The thought of eating the larvae was enough to put anyone off and certainly helped push the message home.

Pati Umaga, our Samoan MC, certainly got the crowd’s attention with his running commentary based on our ‘dump it or declare it’ theme. ‘Declare It’ bingo games, which he ran every hour, were a huge drawcard. The bingo cards had 12 pictures of commonly seized items from Pacific nations. As each item was read out, a short explanation as to why they posed a threat to New Zealand was given. Word soon got out and we were swamped with eager players.

Another popular item was 10,000 lime green and gentian violet sun visors bearing the ‘Declare it’ message. These were snapped up as the Auckland sun beat down on the show.

Pasifika 2002 was a resounding success for starting the process of heightening biosecurity awareness amongst Pacific peoples.

No Breadfruit From 8th April 2002

The image of breadfruit crawling with frasty larvae helped push home the biosecurity message to its Pacific audience.

Llama curio handed over

From our “There’s no accounting for taste” department: MAF Quarantine Officers are hard people to surprise, but none had ever encountered one of these before. Two young English backpackers were happy to declare and hand over this dried llama foetus when they entered New Zealand recently after travelling in South America.

They did the right thing. By declaring the curio on the animal products section of their declaration card they avoided a penalty – and the risk of introducing an unwanted animal disease to New Zealand.

The two young women had apparently been told that the item should be given to friends as a good luck charm. The grotesque and definitely unwelcome souvenir is now safely in MQS custody. It is to be freeze dried and set in a resin block for display purposes – joining the ever-growing collection of weird and wonderful items that travellers just couldn’t leave home without.
Memorandum underscores whole-of-government biosecurity commitment

An updated memorandum of understanding (MOU) was signed by the chief executives of the four central government departments charged with responsibility for biosecurity on 12 March 2002.

In announcing the signing of the MOU, Biosecurity Minister Jim Sutton said it was a positive sign of the commitment to a whole-of-government approach for biosecurity.

“The purpose of the MOU is to ensure that effective biosecurity measures are maintained, to fully utilise the expertise within each department and to continue to build the positive relationship between them to promote and produce optimal results for biosecurity in New Zealand,” he said.

The four signatories were: Murray Sherwin, Director-General of the Ministry of Agriculture and Forestry; Dr Karen Poutasi, Director-General of the Ministry of Health; Warwick Tuck, Chief Executive of the Ministry of Fisheries; and Hugh Logan, Director-General of the Department of Conservation.

Caryll Shailer, Director of the Biosecurity Coordination Group within MAF Biosecurity said the significant expansion of the MOU since the first version was signed in July 2001 was a credit to all involved.

“This new MOU further clarifies the relationship between the biosecurity responsibilities, powers, functions and duties of each department including interaction where more than one department is affected. The MOU clearly defines our respective roles and provides a clear understanding of areas of mutual interest. All of this is designed to ensure duplication of activity and gaps in roles are minimised,” says Caryll.

Scope

The biosecurity processes within the scope of the MOU include:

- policy development
- funding and cost sharing
- communications and information sharing
- strategic and operational planning
- risk analysis, standard setting, diagnostic and border services
- surveillance systems for exotic organisms
- interception, post-border detection, and incursion responses
- compliance and enforcement
- international forums.

Matters relating to management of endemic pests, such as the development of pest management strategies for endemic organisms, fall outside the MOU.

Roles and responsibilities

MAF houses the largest biosecurity capability of the four biosecurity departments. MAF has the lead role in implementing the Biosecurity Act 1993 in the terrestrial and fresh water environments. MAF undertakes risk assessment, standard setting and the initial response to all pests and diseases affecting agriculture, horticulture, forestry and indigenous flora and fauna.

The Ministry of Health’s priority for biosecurity is to protect public health from the adverse effects of exotic organisms. The Ministry has the lead role for surveillance and responses to incursions and interceptions of exotic mosquitoes of public health significance, for example. Health will contribute to the development of risk analyses, import health standards, and border control and containment standards.

The Ministry of Fisheries has the lead role for biosecurity in the marine environment. Fisheries develops policy on border measures and vectors, undertakes marine surveillance, and identifies and contracts appropriate research.

The Department of Conservation provides advice to the Minister for Biosecurity on biosecurity risks to indigenous flora and fauna. Conservation also has an operational role that currently includes responding to the seaweed undaria at Stewart Island, and koi carp and Gambusia in the South Island.

The MOU sets out responsibilities for lead and support roles for departments, and rules for confidentiality, disclosure and disputes. Areas of mutual interest to all four departments are also defined.

Coordination officers

The four contact people listed below are designated in the MOU as coordination officers. Their role is to manage its operation and ensure the spirit and principles of the MOU are being followed.

<table>
<thead>
<tr>
<th>Name</th>
<th>Contact Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caryll Shailer</td>
<td>Director Biosecurity Coordination, phone 04 474 4219, fax 04 496 9888, <a href="mailto:shailerc@maf.govt.nz">shailerc@maf.govt.nz</a></td>
</tr>
<tr>
<td>Sally Gilbert</td>
<td>Deputy Chief Technical Officer (Health), Ministry of Health, phone 04 495 4345, fax 04 495 4401, <a href="mailto:sally.gilbert@moh.govt.nz">sally.gilbert@moh.govt.nz</a></td>
</tr>
<tr>
<td>Sean Goddard</td>
<td>Senior Policy Analyst, Department of Conservation, phone 04 471 3096, fax 04 471 3130, <a href="mailto:sgoddard@doc.govt.nz">sgoddard@doc.govt.nz</a></td>
</tr>
<tr>
<td>Jane Willing</td>
<td>Manager Biosecurity, Ministry of Fisheries, phone 04 470 2651, fax 04 470 2669, <a href="mailto:willing@fish.govt.nz">willing@fish.govt.nz</a></td>
</tr>
</tbody>
</table>

For a background information sheet summarising the key points of the MOU, visit: www.maf.govt.nz/biocouncil (under “policies”) for a copy of the MOU and its component operational agreements.
Developing a Forest Biosecurity import health standard: just what is involved?

Forest Biosecurity outlines the process involved in the development of an import health standard – in this case the standard for Cordyline and Dracaena cut flowers and branches.

On 14 March 2002, the import health standard (IHS) for Cordyline and Dracaena Cut Flowers and Branches was issued. This IHS once again allows cut flowers and/or branches of Cordyline and Dracaena plants to be imported into New Zealand, provided they meet the phytosanitary requirements specified in the standard. Florists import Cordyline and Dracaena foliage into New Zealand for use in floral arrangements.

Why review the standard?

The import health standard for Dracaena foliage was suspended on 22 May 2000 when a consignment of Dracaena foliage was tested and found to be propagatable. Import requirements at that time specified that all such foliage must be devitalised (rendered non-propagatable) prior to being cleared for entry into New Zealand.

During a review of the IHS, a number of potential problems with the standard were identified, the most significant being that:

- there was no evidence that the recommended devitalising treatment was effective on Dracaena foliage; and
- MAF border staff may be unable to distinguish between Dracaena foliage and the prohibited Cordyline foliage.

The process...

An initial assessment of more than 200 organisms on the pest list determined that the impact of these organisms entering or establishing in New Zealand would be either economic or environmental. The environmental impact would be largely restricted to New Zealand’s flora – no health or marine impacts could be envisaged. Representatives from MAF’s Forest Biosecurity and Plants Biosecurity teams, and the Department of Conservation (DoC), were invited to participate on the project team overseeing the analysis.

Led by Dr Mike Ormsby of MAF Forest Biosecurity, the project team met in December 2000 to establish a working group to complete the analysis. The agreed process outline for the project was:

- the working group completes draft import risk analysis
- the draft import risk analysis is peer reviewed by independent experts
- the project team reviews the import risk analysis in light of peer reviewers’ comments
- the import risk analysis and draft IHS are circulated for consultation (domestic and international)
- the project team reviews the import risk analysis and IHS in light of stakeholder submissions
- a project team member with the appropriate delegated authority recommends to the relevant Chief Technical Officer that the import health standard be issued

The Cordyline and Dracaena import health standard is designed to protect native flora such as the New Zealand cabbage tree (Cordyline australis) from imported pests.
Sterile moths released in West Auckland

HortResearch has made several releases of sterile male painted apple moths in Waitakere City in an effort to learn more about the Australian pest.

The research – which may provide critical information about the dispersal of male moths – is part of MAF's comprehensive painted apple moth programme.

In a system similar to the tagging and release method used for fish and birds, the male moths are irradiated to make them sterile before being marked with a fluorescent powder. They are then released and information is gained on their dispersal and flight patterns as marked moths are recaptured in traps around the release site.

Over 400 sterile moths were released in late February at the Waikumete Cemetery and two weeks later almost 100 had been recaptured. Although most of the moths were caught within half a kilometre from the release site, the record-holding moth was recaptured about three kilometres away.

HortResearch has been working for some time on ways to sterilise the moths in a manner which didn’t affect their health or ability to fly. The research focused solely on males, as female painted apple moths are flightless.

The new research backs up one of the most extensive trapping operations conducted for this type of programme. MAF has over 700 traps baited with live female moths being monitored over a wide area surrounding the epicentre of the infestation in West Auckland.

Dr Ruth Frampton, Director Forest Biosecurity, phone 04 498 9639, fax 04 498 9888, framptonr@maf.govt.nz

www.maf.govt.nz/painted-apple-moth

Import risk analysis

Development of the import risk analysis closely followed the requirements of the Biosecurity Authority Policy Statement on Conducting Import Risk Analysis and Applying them in the Development of Import Health Standards (2001). Initially the working group identified 257 organisms that could potentially be carried into New Zealand by Cordyline and Dracaena cut flowers and branches and prepared an import risk analysis on that basis. However, during peer review of the draft import risk analysis, a further 67 candidate organisms were identified, taking the total to 324.

Of the 324 organisms assessed in the final import risk analysis document, 105 were classed as ‘non-regulated’ as they are already established in New Zealand and were not at that time under official control. Of the remaining 219, two were considered sufficiently unlikely to successfully enter and/or establish in New Zealand from cut flowers or branches of Cordyline or Dracaena. These eliminations left 217 organisms requiring some form of treatment to the foliage to ensure the likelihood of them entering and/or establishing in New Zealand was reduced to an acceptable level.

The import risk analysis concluded that a number of treatments (phytosanitary measures) would be required on imported Cordyline and/or Dracaena cut flowers and branches prior to receiving biosecurity clearance into New Zealand. A draft IHS for Cordyline and/or Dracaena cut flowers and branches was prepared based on the findings of the import risk analysis.

After reviewing the submissions from the peer reviewers, the project team agreed that the amended import risk analysis and draft import health standard should proceed to consultation.

Import health standard

In November 2001 the draft IHS and the import risk analysis were circulated to both international and domestic stakeholders for a 60-day consultation period. A number of comments were received during this period and minor changes were made to the import risk analysis. The IHS was submitted to the relevant Chief Technical Officer with a recommendation that it be issued. This occurred on 14 March 2002.

There is more general information on risk analyses and import health standards, and specific information on the Cordyline and Dracaena IHS on the MAF website:

www.maf.govt.nz/biocouncil for Policy Statement on Interdepartmental Consultation on Risk Analyses and Import Health Standards under Section 22 of the Biosecurity Act (1993)


Dr Mike Ormsby, National Adviser Import Health Standards, MAF Forest Biosecurity, phone 04 498 9630, fax 04 470 2741, ormsbym@maf.govt.nz
Spray modelling for biosecurity incursion responses

Aerial spraying for exotic pest incursions was first used in New Zealand during 1996/97 to eradicate the white-spotted tussock moth from Auckland. Since then, continuing research has taken place to maintain up-to-date systems and improve spray accuracy.

A meeting on spray modelling technology and its contribution to biosecurity incursion responses was held in Wellington in March.

Guest speakers included Dr Harold Thistle, a leading international researcher from USDA Forest Service, who presented the latest information on pesticide spray drift modelling and its application to a variety of pest problems. Dr Brian Richardson of Forest Research spoke on New Zealand capabilities and applications of spray drift. An overview of bioincursion scenarios was given by Dr Gordon Hosking, and Dr Jeffery Fowles of Environmental Science and Research spoke on the surveillance and human health effects database, ‘Driftnet’.

New Zealand is currently using helicopter spraying in response to two exotic pest incursions – painted apple moth and the salt marsh mosquito. The spray modelling techniques developed by Dr Brian Richardson have been particularly useful for the aerial spraying of West Auckland in the painted apple moth response.

The ideas generated at the meeting will be used to further develop the precision of New Zealand’s aerial spraying techniques in urban and forest environments.

Spray modelling techniques will help further improve the precision of aerial spraying operations.

Workshop focuses on future of forestry

MAF and the Forest Owners’ Association (FOA) jointly convened a two-day workshop in Rotorua in February. The workshop focused on challenging the status quo in three areas: MAF’s approach to forest biosecurity; industry’s approach to forest health surveillance; and New Zealand’s approach to forest health research.

The workshop also aimed to identify any potential obstacles to the wood industry becoming the country’s primary export earner by 2025. International expert Mike Wingfield, Mondi Professor of Forest Pathology from the University of Pretoria, South Africa, was guest speaker. Professor Wingfield said even the ‘experts’ know relatively little about the potential economic damage that could be caused by the world’s forestry diseases.

The New Zealand forestry industry currently spends more than $1 million a year on forest health surveillance. The surveillance assists in the detection of new pest establishments in plantation forests, and provides a valuable negotiation tool when discussing trade access with other countries. A larger government budget allocation to forest biosecurity was recommended by workshop participants. This argument is strengthened by the fact that New Zealand is currently fighting forestry incursions on four fronts: Dutch elm disease, painted apple moth, Australian subterranean termite and gum leaf skeletoniser.

Another strong recommendation was the need for much greater research collaboration, both internationally and between the many New Zealand research providers.

As a result of the workshop, the establishment of a virtual biosecurity/forest health research programme will be investigated and discussed with research providers, industry and government funding agencies. FOA will follow up on the key issues and action items identified in the workshop.

Spray modelling techniques will help further improve the precision of aerial spraying operations.
The use of navigational technology is gaining momentum and, in response to a gap in the market, Forest Research has developed a training course for forest industry staff. The course provides a guide on the use of navigation software and Global Positioning System (GPS) units.

GPS is a satellite navigation system funded and controlled by the United States Department of Defence. While there are many thousands of civil users of GPS world-wide, the system was designed for, and is operated primarily by, the United States military.

The GPS receiver collects data from satellites and computes its location anywhere in the world. Four satellite signals are needed to compute positions in three dimensions, and the time is offset in the receiver clock.

In New Zealand, MAF’s forest pest surveillance and response programmes frequently use GPS navigation systems to collect geographical coordinates at sites. Examples include the location of pheromone traps for gypsy moth surveillance, mapping sites of potential new pest incursions in forests and the collation of data during risk site surveys.

The collected data on the GPS allows for integration into a Geographic Information System (GIS), which provides valuable mapping information for determining trap locations, planning responses and organising surveys.

The Forest Research course was held in late January and involved classroom and field components, including hands-on GPS use, data collection and software application. Participants attended from the commercial forest industry, Department of Conservation, MAF and the rural fire service.

Mark Ross, National Adviser, Forest Pest Surveillance and Response, MAF Forest Biosecurity, phone 04 498 9611, fax 04 498 9888, rossm@maf.govt.nz

New Zealand forest industry on show

MAF joined the wood chopping, loggers’ sports and numerous other attractions at the Forest Industries 2002 International Exhibition held in Rotorua in March.

The “expo” drew a large contingent of local and overseas participants and coincided with a welcome resurgence in the forestry sector. Some 300 companies were on display at the expo, which provides a once-in-four-years opportunity for the New Zealand forest industries to showcase and demonstrate the best that forestry offers.

A MAF display site was developed to represent the different forestry units within the organisation. Forest Management provided a particularly strong presence, with the East Coast Reforestation Project and Indigenous Forest Management teams also receiving good attention.

From a biosecurity perspective, it was promising to see a large number of industry representatives and the public approaching the Forest Biosecurity team. From a whole plethora of exotic pests and diseases.

MAF’s role in the export of forest products was of much interest to industry. With New Zealand’s goal of creating a $20 billion plantation forest industry by 2025, overseas market access is seen as a high priority.

Forest Biosecurity staff working at the expo found the public’s awareness of biosecurity issues was high, largely due to the promotional activities of the Biosecurity Awareness and Biosecurity Strategy teams. ‘Max the Beagle’ fridge magnets were a particularly popular collection item amongst the younger section of the crowd.

Mark Ross, National Adviser, Forest Pest Surveillance and Response, MAF Forest Biosecurity, phone 04 498 9611, fax 04 498 9888, rossm@maf.govt.nz

Biosecurity People

Market Access – Plant Exports

Bob Macfarlane has been appointed to the Plant Exports Team in the position of Market Access (Asian, Pacific, Europe and Middle East). Bob is a graduate in Applied Entomology from Imperial College, London.

He brings a broad range of experience to the team that will serve him well in his new role. He is responsible for market access projects for Asia, Pacific, Europe and Middle East. He is also responsible for management of special operational programmes to Japan and will be responsible for the implementation of the MAF Plant Export Operations Pest Identifier Requirements Standard (PEO.PIR).
International standards for plant protection

The fourth session of the Interim Commission on Phytosanitary Measures (ICPM 4) was held in Rome, Italy, between 11 and 15 March 2002.

New standards adopted

ICPM 4 adopted four new international phytosanitary standards:

- the use of integrated measures in a systems approach for pest risk management
- regulated non-quarantine pests: concept and application
- pest reporting
- guidelines for regulating wood packaging material in international trade.

Discussions on the standards for pest reporting and regulated non-quarantine pests were reasonably straight-forward. However, discussions on the other two standards were more protracted. Issues with the wood packaging standard focused on the debarking associated with heat treatment and methyl bromide fumigation, and the lack of data on the efficacy of the treatments against pests. This standard was finally adopted on the condition it is reviewed at the next session of the ICPM.

Election of expert members

ICPM also elected the 20 expert members of the Standards Committee and seven members of the Subsidiary Body on Dispute Settlement.

ICPM strategic plan

Amendments to the strategic plan for the ICPM were considered, amended slightly and confirmed. Trust fund proposals prepared by an informal working group at the request of ICPM 3 were rejected by the ICPM. Two trust funds had been proposed to carry over the programme of work until the funds provided by FAO for the work of the ICPM could be increased.

50th anniversary of IPPC

ICPM 4 was held on the 50th anniversary of the coming into force of the International Plant Protection Convention. The Food and Agricultural Organization (FAO) of the United Nations has, since March 1952, been the depository of the Convention.

Changes to plant pest quarantine categories

Plants Biosecurity has modified the quarantine categories for plant pests. These modifications will not result in any change to the requirements for imported plants and plant products.

Within the two groups of regulated and non-regulated pests the following quarantine categories have been used in the past:

**Regulated pests:**
- Quarantine: Risk Group 1 pests
- Quarantine: Risk Group 2 pests
- Quarantine: Risk Group 3 pests
- Regulated non plant pests
- Regulated non-quarantine pests

**Non-regulated pests:**
- Non-regulated non-quarantine pests
- Non-regulated non-plant pests

This system has now been simplified so that there are now two quarantine categories:

1. Regulated pests
2. Non-regulated pests

The definitions are:

**Regulated pests**

A pest of potential economic importance to New Zealand and not yet present there, or present but either not widely distributed and being officially controlled, or a regulated non-quarantine pest, or having the potential to vector another regulated pest into New Zealand.

**Non-regulated pests**

A pest that is present in New Zealand, not officially controlled, not a regulated non-quarantine pest and has no potential to vector another regulated pest into New Zealand.

Where pests associated with plants are not pests of plants, for example insect parasites, the pest name is now tagged with the name of the government department responsible for setting any actions, for example, *Latrodectus mactans* [Ministry of Health] (black widow spider). Pests tagged with the name of a government department may be Regulated or Non-regulated.

A consequence of this change is that the former Registers of Quarantine Risk Group 2 and Quarantine Risk Group 3 pests will no longer be used. Regulated pests will be placed on the Unwanted Organisms Register when they have been declared unwanted. Several thousand pests are already listed on the Unwanted Organisms Register. The register is available on the internet (see below).

1No Regulated non-quarantine pests have been identified by New Zealand to date.

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John Hedley, National Adviser (International Agreements), Biosecurity Coordination, phone 04 474 4170, fax 04 470 2730, hedleyj@maf.govt.nz

Joan Breach, National Adviser, Pest Risk Assessment (Plant Imports), phone 04 474 4248, fax 04 474 4257, breachj@maf.govt.nz

www.maf.govt.nz/uo
New Zealand input to international animal welfare seminar

MAF Biosecurity Special Adviser and World Veterinary Association President, Jim Edwards joined speakers from England, India, Nepal and the United States at an international animal welfare seminar in Bangalore, India, in February, 2002.

The seminar was organised by the World Society for the Protection of Animals (WSPA) and the Commonwealth Veterinary Association, with support from the World Veterinary Association (WVA).

Dr Edwards presented four papers from New Zealand on animal welfare legislation, ethical controls in science, teaching animal welfare and sea transportation. These supplemented presentations from Dr Ray Butcher and John Callaghan from WSPA, United Kingdom, on animal welfare issues around the World. Victor Watkins, also from WSPA, spoke on wildlife issues, especially those related to bears.

There were around 125 participants in the seminar, including veterinarians and members of animal welfare organisations. The purpose of the seminar was to increase awareness of animal welfare and to promote its inclusion in the veterinary curriculum. The reputation of animal welfare in New Zealand was also promoted.

The seminar was judged a success. It is hoped that it will lead to increased communication on animal welfare issues and to similar gatherings in the future.

While in Bangalore, Dr Edwards also visited two local welfare organisations, People For Animals (PFE) and Compassion Unlimited Plus Action (CUPA).

Animal welfare codes set international standard

The animal welfare codes developed in New Zealand have been used as models for similar developments overseas. Countries as far away as Zimbabwe and Namibia and closer to home in Asia and Oceania have adapted the approach used in the New Zealand codes to suit their particular needs.

In Namibia, for example, the code for the Welfare of Deer During the Removal of Antlers has been used to help conserve the rhinoceros by removing the horn to make the animal no longer attractive to poachers, thus allowing numbers to grow. In the Philippines, Malaysia, Fiji and Singapore the New Zealand codes are being used as a model for local regulations.

Pam Edwards, Executive Coordinator of MAF Biosecurity Authority’s Animal Welfare Group, has travelled extensively over the last three years with husband Jim in his role as President of the World Veterinary Association.

Pam says that one of the benefits of her travels and meeting people has been to enable New Zealand to share its leading animal welfare practices. “Whenever we have displayed these codes, there has been strong interest, which has been followed up with supply of codes and advice by MAF. Now that our animal welfare codes are available on the MAF website, other countries have even more convenient access to them.”

OIE to play a role in animal welfare

The Office International Des Epizooties (OIE), the Paris-based world organisation for animal health, has broadened its area of activities to include animal welfare. The OIE has recognised animal welfare as an area of growing interest to both consumers and regulators. In light of this, the OIE is considering establishing its own welfare standards, which will be of significant assistance during bilateral negotiations on animal welfare issues.

It is anticipated that the transport of animals, by both sea and road, and the slaughter of animals will be amongst the first topics to be considered by the OIE. It is likely that the rearing conditions for certain animal species will follow consideration of transport and slaughter.

An OIE expert group appointed by the Director General met early last month in Paris to discuss the potential scope of OIE involvement. The group comprised representatives from five continents and recommendations from the group will be considered at the OIE General Assembly meeting of all 158 member countries in May.

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

David Bayvel, Director Animal Welfare,
phone 04 474 4251, fax 04 498 9888,
bayveld@maf.govt.nz
Animal Biosecurity consultation on cost-sharing options

The Animal Biosecurity Group of MAF Biosecurity recently consulted with key stakeholders on funding options in the event of an exotic disease incursion. The aim was to reach an understanding of industry and crown financial commitments in such an event.

The need for consultation on this issue arose because MAF is unable to guarantee government funding of responses. Government funds initial investigations but it is only at the time of an outbreak that the level of government support for ongoing management or eradication of the outbreak is decided. For some years, some industry groups have wanted more certainty about the government response. Possible cost-sharing arrangements could provide another avenue for direct industry input into New Zealand’s exotic disease preparedness programmes, which use a variety of mechanisms to protect New Zealand’s biodiversity and the health status of our animal populations.

Working group established

MAF Biosecurity wanted a flexible group with input from all the key industry stakeholders to consider this issue. For this task, the stakeholder group, the Animal Biosecurity Consultative Committee (ABCC) set up an Exotic Diseases Working Group in December 2000. The members of the working group came from a wide variety of industry organisations represented on the 25-member ABCC.

The working group’s terms of reference included reviewing overseas developments on cost sharing and developing recommendations suited to New Zealand, for consideration by industry.

Issues identified

An early step in the process was to draft a discussion paper for the industry members to use in taking the issues back to their industry organisations. The discussion paper identified that, in determining whether to go ahead with eradication or other government action in the face of an outbreak, government would consider:

- the public benefits of eradication (or other management options)
- the private benefits – including benefits to industry
- what contributions industries have made towards protection; and
- what level of industry contribution is warranted.

Consultation

ABCC delegates were asked to go back to their industries and seek reactions to the issues raised in the discussion paper. The delegates were encouraged to canvass a wide range of opinions within their respective industries in order to come back with the most robust recommendations and comments.

This process of consultation confirmed industry reluctance to commit to the concept of a specific cost-sharing arrangement.

Recommendations

The working group recommended to ABCC that it was not appropriate that cost-sharing should be the focus of ongoing discussions between industry and MAF on exotic disease preparedness but that the focus of ongoing collaboration should be on enhancing systems to manage and prevent outbreaks.

The working group further recommended that future discussions by the group should focus on developing and implementing biosecurity risk management frameworks, such as livestock identification systems and animal tracking, and on development of specific plans for the agreed highest priority exotic diseases. The working group saw potential to include organisations such as AgriQuality New Zealand Limited, MAF Food Assurance Authority, stock and station agents and the Road Transport Association in developing response plans and biosecurity risk management systems.

Future actions

ABCC accepted the working group’s recommendations, and agreed to consult with industry groups to prioritise the exotic diseases according to the likelihood of their entering New Zealand and their potential impact should they occur here. This consultation will provide a basis for further preparedness planning against the diseases considered by industry and MAF to be the greatest threats to New Zealand’s biosecurity.

Allen Bryce, Programme Manager, Surveillance and Response, phone 04 470 2787, fax 04 474 4133, brycea@maf.govt.nz
UK experience spur to better FMD preparedness

In New Zealand a single case of foot and mouth disease (FMD) would cause severe economic impacts. An outbreak on the scale seen in the United Kingdom in 2001 would present enormous challenges. The UK outbreak provided great learning opportunities. Our strategies for fighting this disease are prevention, early detection and aggressive immediate response.

Review of the risks from FMD

In response to the intense public anxiety that followed the FMD outbreak in the UK last year, MAF reviewed the risks to New Zealand from the disease. The review considered the pathogenesis and survival of foot-and-mouth disease virus, the major routes of infection and the most common methods of spread.

The key points coming out of the review are:

- the most common route of international spread of FMD virus is the movement of live ruminants and pigs, followed by the movement of meat and meat products
- the risk of introduction into New Zealand in legally imported animals and animal products is low, as a result of the application of risk management measures based on risk analyses carried out over many years
- the economic consequences of introduction would be extremely serious
- the most likely route of introduction into New Zealand is illegally imported meat
- the most likely outbreak scenario would be infection in pigs as a result of the feeding of infected meat
- border controls in this country are among the tightest in the world
- surveillance and response measures are aimed at early detection and eradication.

Prevention

New Zealand’s first line of defence is our biosecurity at the border and the conditions specified in our import health standards for importation of risk goods. Specific biosecurity measures at the border will not be revisited here because they have been covered elsewhere (Biosecurity 26:3, 28:6).

Another preventive measure that is being considered is whether regulatory control of swill feeding to pigs should be reinstated. The results of this review will be reported separately.

Early detection

The New Zealand Biosecurity Awareness Programme targets, among others, the people who form New Zealand’s front line for disease surveillance – farmers and veterinarians. The programme provides written and visual resource material and includes presentations around the country.

This increased awareness has resulted in an increase in suspect reports and investigations. During the full year July 2000 to June 2001, the National Centre for Disease Investigation investigated 93 suspect exotic organism incursions, of which 22 were vesicular diseases (a group of exotic diseases that includes FMD). For the six months from July to December 2001, the figures were 92 and 13 investigations respectively.

Response

MAF’s exotic disease response system operates at three levels: the National Coordination Centre, the Exotic Disease Response Centre and the Field Operation and Response Team. At each level arrangements are in place to work with external agencies to provide expertise, logistical support and regulatory approvals as required. This capability is tested through involvement in responses to actual incursions (the Brucella suis and Mycoplasma mycoides mycoides (large colony) responses are recent examples). There are also ongoing training and exercises conducted, and audits against the service standards.

The United Kingdom experience emphasised the need to be ready for an outbreak that would exceed the capability of MAF’s existing resources. MAF is currently working closely with other government departments so that a whole-of-government response can be coordinated if there is an outbreak that exceeds MAF’s immediate capacity.

The United Kingdom experience also confirmed the importance of data management and analysis tools to support strategic decision-making in a response, manage operations and provide a feedback loop. New Zealand has powerful tools in EpiMAN, a relational database with expert systems components developed by Massey
University, and the AgriBase database, which is a geographical information system of New Zealand farms.

Slaughter of infected and at-risk stock and disposal of carcasses created enormous difficulties during the UK FMD epidemic. The sheer scale of the problem helps explain why. Officially, just over 4 million animals were destroyed (594,000 cattle, 3,356,000 sheep, 142,000 pigs, 2,000 goats, 1,000 deer and 2,000 other animals). But this is considered an underestimate, as the figures may not include very young stock or animals culled for welfare reasons. An exercise of this scale is unprecedented, and has provided valuable experience.

MAF is working internationally with New Zealand’s quadrilateral partners (Australia, United States and Canada) on ways to avoid the wastage on the scale seen in the United Kingdom, and on reviewing new disposal methods. MAF is also working with New Zealand regional councils to ensure environmental impacts from disease control operations are minimised.

**Huge demand for veterinarians**

Because of the short incubation period for FMD, high risk properties and animals should be inspected every two to three days so that infection is detected as soon as possible. Again, the numbers tell a story. AgriBase tells us there are, on average, 42 farms and about 10,000 animals within three km of any given farm. A patrol vet can visit and inspect between two and six farms per day, depending on the circumstances. Even a moderate sized outbreak would create huge demands for veterinarians. Patrol vets would be drawn from MAF and AgriQuality New Zealand Limited, private veterinarians in New Zealand, Massey University, and overseas, through the International Veterinary Reserve Agreement.

**Vaccination options**

Finally, MAF is working through policies and procedures so that vaccination can be used as an FMD control measure when appropriate. Australia and New Zealand are jointly considering the future of the International Vaccine Bank (New Zealand has been a member since its establishment in 1985) and alternative options for contingency supply of FMD vaccine.

MAF Biosecurity is also defining a methodology for deciding to use FMD vaccine during a response and working though technical issues such as formulation and potency, the use of vaccination zones, vaccine application in the field, procedures for slaughter of vaccinated livestock, and the implications of vaccination for surveillance. Procedures for a field operation to apply emergency suppressive vaccination against FMD are also being prepared.

For a comprehensive briefing paper describing systems, resources and current projects within the New Zealand Exotic Disease Response Programme:

www.maf.govt.nz/exotic-disease-response

Matthew Stone, Programme Coordinator Exotic Disease Response, phone 04 498 9884, fax 04 474 4227, stonem@maf.govt.nz

For article reviewing FMD risks


Howard Pharo, National Adviser, Risk Analysis, phone 04-474 4137, fax 04-474 4227, pharoh@maf.govt.nz

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**Biosecurity People**

**International Animal Trade Team**

**Helen Beban** has joined the International Animal Trade team in Animal Biosecurity as a National Adviser.

Graduating BVSc with distinction from Massey University in 1975, Helen worked as a companion animal veterinarian and eventually settled in Levin where she and her veterinarian husband Russ developed Horowhenua Veterinary Services into a thriving dairy and companion animal practice.

Helen became interested in quality management as the result of a desire for practice improvement and Horowhenua Veterinary Services won a number of regional and national awards. She completed a Masters in Business Administration with distinction in 1997.

Helen is President of the New Zealand Veterinary Association Companion Animal Society and an NZVA Board member. She is also convenor of the NZVA Veterinary Practice Standards Scheme and has recently been appointed the NZVA Commonwealth Veterinary Association representative.

**Gillian Mylrea** recently joined MAF as a National Adviser in International Animal Trade.

Gillian has relocated from Hamilton where she was the Veterinary Technical Manager at Livestock Improvement Corporation (LIC). At LIC she was responsible for providing veterinary technical support to dairy farmers and veterinarians in the areas of reproduction and mastitis. Gillian was also involved in a project to develop recording and reporting systems that utilised the Livestock Improvement National Database to provide health, disease and treatment information to assist farmers improve productivity. She also played a key role in the development of Leptosure™, a risk management programme for the control of leptospirosis on dairy farms.

Gillian graduated from Sydney University in Veterinary Science in 1986 and went on to complete a PhD in reproductive physiology of deer. She then moved to New Zealand and worked in a dairy cattle practice in the Waikato.
Human case of *Brucella suis* sparks investigation

In January 2002 brucellosis was diagnosed in a human patient. The public health authorities believed the infection was recently acquired in New Zealand. MAF has been investigating the source of the infection.

The human case

In January 2002, brucellosis was diagnosed in a male patient from Auckland. The history, clinical presentation and epidemiological evidence suggested that the infection may have been recently acquired within New Zealand. During the expected incubation period, the man had butchered two home-killed weaner pigs for consumption at a family gathering. The disease was confirmed as brucellosis. Biochemical profiling of the bacterial isolate indicates it is *Brucella suis*. New Zealand declares itself free of *Brucella suis*.

The response

MAF has been working closely with the Ministry of Health, Auckland District Health Board, and the Pork Industry Board during the response. The public health authorities have identified and tested people linked to the human case and no other cases of brucellosis have been diagnosed.

MAF's part in the response has focused on:
- determining whether or not *Brucella suis* occurs in New Zealand pigs
- establishing the status and extent of any infection in the various sectors of the New Zealand pig herd (commercial herds, ‘back-yard’ pigs, and feral pigs); and
- considering control options.

At the time of writing, no infection has been confirmed in any pig following trace-back and testing of 37 back-yard herds most likely to have supplied the two pigs connected with the human case. 175 pigs have been tested, all with negative results. Identifying these herds has involved tracing back to the premises where the two pigs were purchased, then to a sale-yard, and then to the farms of all pigs in sale-yard pens from which the two pigs possibly originated.

A technical advisory group has been established to review the MAF report on the tracing and testing exercise and advise on further actions.

For human health:
- Dr Douglas Lush, Senior Advisor (Communicable Diseases), Ministry of Health, phone 04 495 4364, fax 04 496 2340, douglas_lush@moh.govt.nz

For animal disease:
- Matthew Stone, Programme Coordinator Exotic Disease Response, phone 04 498 9884, fax 04 474 4227, stonem@maf.govt.nz

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**Brucellosis in humans**

*Brucella suis* is a bacterial infection that can be spread from infected animals (usually pigs) to humans. Transmission can occur through a cut or break in the skin, from inhalation of infected droplets or by ingestion of infected meat. Those more at risk of transmission are people involved in the slaughter and dressing of carcasses. Consumption of properly cooked meat carries no risk of infection. Brucellosis sufferers experience fevers, headaches, joint pain, weight loss and depression. Arthritic complications may develop if the organism lodges in the bones and joints. There may be recurring bouts of illness for many years after the original infection. Infection in humans is treatable with antibiotics but, even so, can take many months to fully resolve. Brucellosis is not transferred from person to person except in rare and exceptional circumstances.

*Brucella abortus* was eradicated in New Zealand in 1989. Human cases of brucellosis are rare in New Zealand. Most that do occur are picked up through exposure to infected livestock or contaminated meat or milk while travelling overseas.

**Brucella suis in animals**

*Brucella suis* mainly affects pigs, where the main impacts are abortions and still births. Wild animals can also be reservoirs of certain types of *Brucella suis*. Cattle, horses, sheep, goats, dogs and humans can be infected as accidental hosts.

*Brucella suis* has never been isolated from pigs or other animals in New Zealand. Past surveillance has included a bacteriological survey of abortions in pigs, export serological testing, and investigations into suspect clinical cases by veterinary practitioners and animal health laboratories.

Models for control options exist in overseas countries. In Australia, where the disease occurs in some states in feral pigs, the commercial pig sector employs biosecurity measures to avoid infection. (The World Animal Health Organisation, or Office International des Epizooties, calls this strategy *compartmentalisation*.) In the United States, where *Brucella suis* occurs in commercial pig herds in some states, a control programme is based on herd accreditation, with various strategies used to rid infection from infected herds (mainly depopulation or ongoing test and slaughter).
Looking out for fire ants

The latest round of surveillance for fire ants is nearing completion with no finds to report.

Starting in late January 2002 and on course to be completed by early May, the surveillance has "gone without a hitch" says Amelia Pascoe, Programme Coordinator.

“We especially appreciate the assistance and cooperation from everyone involved at the sites we have been surveying throughout New Zealand – this includes MAF Quarantine Service staff, airport authorities, seaport authorities, garden centre staff and people who manage container storage and unpacking facilities.

“This surveillance programme, and indeed all our programmes, are largely dependent on working with those closest to risk pathways for pests and diseases and with the general public. We can’t do our job without those extra sets of eyes.

“While it’s good news that we have not found any other fire ant nests, there is no reason to be complacent. The confirmation of significant establishment of fire ants in Brisbane last year and the huge costs and challenges being faced there to attempt to eradicate this extremely invasive pest are big lessons to us. We will be continuing our programme and urging the public to remain on the look out for fire ants."

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

www.maf.govt.nz/fire-ants

A joint MAF and industry review has resulted in a honey bee surveillance standard that adopts a risk-based strategy to test for exotic disease and incorporates improvements suggested from routine audits. More samples will be collected with the assistance of beekeepers.

Honey bee surveillance a joint effort

The revised standard

Under the revised standard, the strategy for obtaining samples for testing will focus on 400 sites considered to be the highest risk for the introduction of exotic diseases. These sites include ports, cities and tourist destinations. To maximise the number of samples that can be tested, beekeepers who have received special training will do the collecting whenever possible.

Other important changes incorporated recommendations from regular audits of the honey bee disease surveillance programme. There are now more specific guidelines for:

Continued on Page 20
New import health standards issued

Bovine, ovine and caprine embryos from Australia

The following changes have been made to all three of the above standards:

• clarify the intent of the term ‘infected zone’ as it relates to these import health standards.
• clause 6 of Veterinary Certificate A amended so the embryos are required to be free of pathogenic organisms and sterilised by approved methods according to the Manual of the International Embryo Transfer Society. This follows feedback from industry that non-licensed products such as trypsin are used.

These standards are now dated 16 March 2002, and replace those dated 8 February 2002.

Cheese for human consumption from Cyprus

This is a new standard allowing cheese imports from Cyprus. The standard is based on the MAF risk analysis, The importation of dairy products – risks to New Zealand livestock, dated January 1998. The draft IHS was publicly consulted in Biosecurity 33:18. The standard is dated 22 March 2002.

Specified inedible animal products and biologicals

A type of heart valve, Pericardial Tissue Bioprosthetic Devices (of bovine and porcine origin), of USA or Australian origin only and manufactured by Edwards Lifesciences AG, Switzerland, has been added under clause 6.14. These surgical implants may be released unconditionally because they have been so highly processed that they are not considered to pose any disease risks.

This standard is now dated 20 February 2002 and replaces the one dated 7 November 2001.

Update

New import health standards issued

Bovine, ovine and caprine embryos from Australia

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This standard is now dated 20 February 2002 and replaces the one dated 7 November 2001.

Dogs and cats from specified countries and territories recognised as countries or territories in which canine rabies is absent or well controlled

After a country assessment, Yugoslavia has been added to the list of countries eligible to export dogs and cats to New Zealand (clause 7.2). The assessment was carried out in collaboration with AFFA (The Department of Agriculture, Fisheries and Forestry – Australia) so that Australia and New Zealand have harmonised import protocols for cats and dogs. The standard is now dated 16 February 2002 and replaces the one dated 31 March 2000.

Draft import health standards for consultation

The following draft import health standards (IHS) are available for public consultation.

Bovine semen from Japan

The existing standard is dated 25 February 2002. The following amendments are proposed in the draft IHS:

- all references to BSE removed. The previous standard required that the exporting country was free of BSE. Although Japan can no longer meet that condition, semen is not a vehicle for the BSE agent (reference the World Animal Health Organisation (OIE) Animal Health Code) and the requirement has therefore been removed
- semen must be collected after 1 October 2000. This follows Japan being declared free of FMD on 29 September 2000 as reported by the OIE
- incorporation of the relevant bluetongue requirements from the Animal Health Code in clause 6.2 of Veterinary Certificate A, following detection of bluetongue in Japan on 12 November 2001
• all references to the New Zealand Semen Standard 93/105S/NZ have been changed to either the Animal Health Code or a specific laboratory test.

**Masterfoods cooked chicken meat products for human consumption from Australia**

This standard is for cooked chicken meat products that are of New Zealand origin and have been exported to Australia in accordance with MAF requirements. On arrival in Australia, the cooked chicken meat products must be kept under quarantine bond during transport, storage, processing and packaging until they are re-exported to New Zealand. The cooked chicken is to be processed under AFFA quarantine supervision in a quarantine premises approved by NZ MAF.

This is a new standard based on the import risk analysis *Chicken Meat and Chicken Meat Products: Bernard Matthews Foods Ltd Turkey Meat Preparations from the United Kingdom*, dated March 1999.

**Unprocessed animal fibre from the Falkland Islands**

This is a new standard based on the Import Risk Analysis: *Unprocessed Fibre of Sheep and Goats*, dated November 1998. The development of this standard was initiated in response to requests from exporters in the Falkland Islands.

**Deer meat products for human consumption from New Caledonia**

This is a new standard based on the import risk analysis *Importation into New Zealand of Meat and Meat Products*, dated March 1991.

The venison must be sourced from premises licensed to export to the European Union, which will therefore comply with European Union hygiene regulations.

Jessie Chan, Technical Adviser, International Animal Trade,
phone 04 498 9897, fax 04 474 4227, chanj@maf.govt.nz
www.maf.govt.nz/biosecurity/consultation.htm

The deadline for submissions is 15 June 2002

**Draft risk analysis for consultation**

The following draft risk analysis is available for public consultation:

**Camel meat for human consumption from Australia**

An application was received to import camel meat from Australia for human consumption. The meat is derived from feral camels living in central Australia, and will be sourced from licensed abattoirs.

Jessie Chan, Technical Adviser, International Animal Trade,
phone 04 498 9897, fax 04 474 4227, chanj@maf.govt.nz
www.maf.govt.nz/biosecurity/consultation.htm

The deadline for submissions is 15 June 2002

**Changed requirements for avian transitional facilities**

The import risk analysis *Avian paramyxovirus type 1 (the causative agent of Newcastle disease) in hens’ hatching eggs* has been completed. Consequently, the requirements for avian transitional facilities have been revised and a draft standard is available for comment.

**Risk analysis**

None of the submissions received during public consultation on the risk analysis (see *Biosecurity* 26:6) disagreed with the conclusions and recommendations.

The risk analysis recommended two key safeguards for importation of hatching eggs of hens:

- pre-export testing of layer flocks to ensure that avian paramyxovirus type 1 viruses are not circulating
- post-arrival quarantine to ensure that any undetected avian paramyxovirus type 1 are contained.

**Transitional facility standard**

A draft standard for avian transitional facilities has now been developed to implement the last recommendation and is available for public consultation. The draft standard covers all importations of eggs and birds and would therefore replace all three existing (low, medium and high security) standards. Some of the requirements are:

- ventilation systems that maintain the pressure in the quarantine area between 40 and 50 pascals lower than outside
- filters on inlet and exhaust air that achieve at least 90% efficiency for the ASHRAE atmospheric dust spot efficiency test, or AS 1132 Test dust No 1 (F8 filters can be used)
- reference to specific requirements in the Building Code, which result in tighter controls on the materials and structural elements of the facility
- use of appropriate technical experts, such as engineers, to verify non-veterinary aspects of the facility.

The standard sets out the objectives and functional requirements. One acceptable solution is described but others are also possible and may be proposed to MAF.

For the import risk analysis and review of submissions:

Martin van Ginkel, Technical Adviser, Risk Analysis,
phone 04 474 4100, fax 04 474 4133,
vanginkelm@maf.govt.nz
www.maf.govt.nz/biosecurity/pests-diseases/animals/risk/index

For the draft transitional facility standard:

Kerry Mulqueen, National Adviser, Import Management,
phone 04 498 9624, fax 04 474 4132,
mulqueenk@maf.govt.nz
www.maf.govt.nz/biosecurity/consultation.htm

The deadline for submissions is 15 June 2002

**Codes of ethical conduct – approvals, notifications & 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
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

• Wool Research Organisation of New Zealand (Inc) (to use Lincoln University’s code)

Codes of ethical conduct revoked 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 Carsons, Senior Policy Adviser, Animal Welfare, phone 04 470 2746, fax 04 498 9888, carsonsl@maf.govt.nz

New biosecurity charges

Draft regulations with revised charges for various biosecurity services will be available for comment.

MAF’s biosecurity charges are outlined in the Biosecurity (Costs) Regulations 1993. These charges have not been updated for over eight years. MAF needs to revise them to ensure that they accurately reflect the cost of providing services.

Last year MAF issued a discussion paper on the proposed new charges. Taking into account submissions and discussions with stakeholders since then, new draft regulations have been developed and will be ready for comment shortly. Everybody who made a submission on the discussion paper will receive a copy of the draft regulations. Other interested parties should contact MAF as soon as possible.

Services that MAF charges for under these regulations include border inspections, treatment or destruction of risk goods, applications for import permits and supervision of transitional facilities (e.g. quarantine facilities).

New charges should be implemented within three months, subject to the outcomes of this consultation.

Mary Craythorne, Senior Policy Analyst, MAF Policy, phone 04 498 9830, fax 04 474 4265, mary.craythorne@maf.govt.nz for copies of the draft regulations

Notifiable organisms: revised list

A revised list of notifiable organisms takes effect from 9 May 2002 under the Biosecurity (Notifiable Organisms) Order 2002. The following organisms have been added to the list of notifiable organisms:

Organisms affecting the marine or freshwater environment

<table>
<thead>
<tr>
<th>Scientific name</th>
<th>Common name(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asterias amurensis</td>
<td>Northern Pacific seastar</td>
</tr>
<tr>
<td>Carcinus maenas</td>
<td>European shore seastar</td>
</tr>
<tr>
<td>Caulerpa taxifolia</td>
<td>A green seaweed</td>
</tr>
<tr>
<td>Eriocheir sinensis</td>
<td>Chinese mitten crab</td>
</tr>
<tr>
<td>Potamocorbula amurensis</td>
<td>Asian clam</td>
</tr>
<tr>
<td>Sabella spallanzii</td>
<td>Mediterranean fanworm</td>
</tr>
</tbody>
</table>

Organisms affecting honey bees

<table>
<thead>
<tr>
<th>Scientific name</th>
<th>Common name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aethina tumida</td>
<td>Small hive beetle</td>
</tr>
<tr>
<td>Varroa destructor</td>
<td>Varroa</td>
</tr>
<tr>
<td>(formerly known as Varroa jacobsoni)</td>
<td></td>
</tr>
</tbody>
</table>

Notifiable organisms are those that everyone in New Zealand is required to report to a chief technical officer if they become aware of their presence in an area for the first time. This can be done through the exotic pest and disease emergency hotline (see below).


Suzanne Main, Policy Adviser, Biosecurity Policy Coordination, phone 04 498 9930, fax 04 470 2730, email mains@maf.govt.nz

www.maf.govt.nz/uo for the complete list of notifiable organisms (contained in the register of unwanted organisms)

0800 809 966 to report a notifiable organism

Risk assessment for exotic spiders associated with table grapes

The risks posed by exotic spiders associated with the trade in imported fresh table grapes are being assessed. The assessment looks at the risk of the establishment of populations of these spiders in New Zealand and their potential impact on indigenous species.

The species of exotic spider covered by the assessment are those that have been found in association with imported table grapes from Australia, Chile, Mexico and the United States (State of California).

The risk assessment is being led by the Indigenous Flora and Fauna team, in association with the Ministry of Health and Department of Conservation. The results of this assessment will be used to review the import health standards for fresh table grapes.

Christine Reed, National Adviser (Indigenous Fauna and Flora), Biosecurity Coordination, phone 04 470 2756, fax 04 470 2741, email reedc@maf.govt.nz

www.maf.govt.nz/biosecurity/pests-diseases/index.htm – for copies of the risk assessment

Comments must be received by MAF no later than 13 May 2002
New organism records: 16/02/02 – 29/03/02

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 16/02/02 – 29/03/02, and held in the Plant Pest Information Network (PPIN) database. Wherever possible, common names have been included.

FOREST BIOSECURITY RECORDS 16/02/02 – 29/03/02

**Validated new to New Zealand reports:**

| Organism Host Location Submitted by Comment |
|--------------------------------------------|-----------------------------------------------|
| **Pseudocercospora lupini** *(no common name)* | **Lupinus arboreus** *(tree lupin)* | **Wanganui** | **Forest Research** | This fungus was collected and identified to genus level in February 2000. Identification to species level was completed in March 2002 by an overseas specialist. Minor leaf spotting was reported. |
| **Pseudocercospora myopori** *(no common name)* | **Myoporum laetum** *(Ngai) | **Auckland** | **National Plant Pest Reference Laboratory** | This fungus is described for the first time in Braun & Hill (2002). Additional information is very limited, and is possibly a fungus that is native to New Zealand. |

**New host reports**

| Organism Host Location Submitted by Comment |
|--------------------------------------------|-----------------------------------------------|
| **Holoclea sp. cf. triangulana** *(pink blackwood leafyfer)* | **Acacia longifolia sspp. sophorae (acacia)* | **Wanganui** | **Forest Research** | Other PPIN host records include Sydney golden wattle and gossamer wattle. |
| **Pseudocercospora myopori** *(no common name)* | **Myoporuminsulare x laetum** *(no common name)* | **Auckland** | **National Plant Pest Reference Laboratory** | Other PPIN host records include Ngai. |

**Extension to distribution reports**

| Organism Host Location Submitted by Comment |
|--------------------------------------------|-----------------------------------------------|
| **Pseudocercospora sawdae** *(no common name)* | **Laphostemon confertus** *(brush box)* | **Bay of Plenty** | **Forest Research** | Other PPIN distribution records include Auckland. |
| **Phyllostegha fragiatti** *(eucalyptus sawfly)* | **Eucalyptus nitens** *(shining gum)* | **Buller** | **Forest Research** | Other PPIN distribution records include Auckland, Bay of Plenty, Northland, Marlborough and Waikato. |
| **Anarsia trichodota** *(no common name)* | **Acacia sp. (Acacia)* | **Gisborne** | **Forest Research** | Other PPIN distribution records include Auckland. |
| **Dicanostena semipunctata** *(no common name)* | **Acacia melanoxylon** *(Tasmanian blackwood)* | **Bay of Plenty** | **Forest Research** | No other PPIN distributions. |
| **Holoclea sp. cf. triangulana** *(pink blackwood leafyfer, pink wattle gouter)* | **Acacia longifolia** *(Sydney golden wattle)* | **Gisborne** | **Forest Research** | Other PPIN distribution records include Auckland, Bay of Plenty and Wanganui. |
| **Trachymela sloanei** *(small eucalyptus tortoise beetle)* | **Eucalyptus viennis** *(Mana gum, ribbon gum)* | **Marlborough** | **Forest Research** | Other PPIN distribution records include Marlborough Sounds. |

**ANIMAL BIOSECURITY RECORDS 16/02/02 – 29/03/02**

**New host reports**

| Organism Host Location Submitted by Comment |
|--------------------------------------------|-----------------------------------------------|
| **Aphelenchoides fragariae** *(foliar nematode)* | **Verbena rigida** *(creeping verbena)* | **Auckland** | **NPPL** | This nematode has a very wide geographic distribution and host range. It is also known from several fern species. |
| **Aphelenchoides rizemabosi** *(chrysanthemum foliar nematode)* | **Helenium autumnale** *(sneezeweed), Oenothera fruticosa (sundrops), Mirabilis jalapa (four o'clock plant), Salvia farinacea (mealy sage)* | **Auckland** | **NPPL** | This nematode has a very wide geographic distribution and is recorded from several hundred host plant species. |
| **Myosphaerella mariea** *(no common name)* | **Verbascum arcticus** *(no common name)* | **Auckland** | **NPPL** | No other PPIN hosts are recorded. |

**Extension to distribution reports**

| Organism Host Location Submitted by Comment |
|--------------------------------------------|-----------------------------------------------|
| **Passalora punctum** *(blight)* | **Foeniculum vulgare (fennel)* | **Auckland** | **NPPL** | No other PPIN distributions are recorded. |

**PLANTS BIOSECURITY RECORDS 16/02/02 – 29/03/02**

**Validated new to New Zealand reports:**

| Organism Host Location Submitted by Comment |
|--------------------------------------------|-----------------------------------------------|
| **Ramularia hellebori** *(no common name)* | **Helleborus orientalis** *(Lenten Rose)* | **Auckland** | **NPPL** | This fungus is a minor pathogen known to infest only Helleborus spp. |
| **Spermosporina alismatis** *(leaf spot)* | **Alisma plantago-aquatica** *(water plantain)* | **Auckland** | **NPPL** | This fungus produces a leaf spot on an aquatic weed. It has only been recorded from Alisma spp. overseas. |
| **Pseudocercospora ocimicola** *(Pseudocercospora leaf spot)* | **Ocimum basilicum** *(basil)* | **Auckland** | **NPPL** | Industry has been notified of this chance detection in Auckland parkland. |
| **Pseudocercospora kurimensis** *(no common name)* | **Neurium oleander** *(oleander, rose-bay)* | **Auckland** | **NPPL** | Apart from New Zealand this fungus is known from Japan. It is only known to infest oleander. |

**New host reports**

| Organism Host Location Submitted by Comment |
|--------------------------------------------|-----------------------------------------------|
| **Aphelenchoides fragariae** *(foliar nematode)* | **Verbena rigida** *(creeping verbena)* | **Auckland** | **NPPL** | This nematode has a very wide geographic distribution and host range. It is also known from several fern species. |
| **Aphelenchoides rizemabosi** *(chrysanthemum foliar nematode)* | **Helenium autumnale** *(sneezeweed), Oenothera fruticosa (sundrops), Mirabilis jalapa (four o'clock plant), Salvia farinacea (mealy sage)* | **Auckland** | **NPPL** | This nematode has a very wide geographic distribution and is recorded from several hundred host plant species. |
| **Myosphaerella mariea** *(no common name)* | **Verbascum arcticus** *(no common name)* | **Auckland** | **NPPL** | No other PPIN hosts are recorded. |

**Extension to distribution reports**

| Organism Host Location Submitted by Comment |
|--------------------------------------------|-----------------------------------------------|
| **Passalora punctum** *(blight)* | **Foeniculum vulgare (fennel)* | **Auckland** | **NPPL** | No other PPIN distributions are recorded. |

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**References:**

Ruth Frampton, Director Forest Biosecurity, phone 04 498 9639, fax 04 498 9888, framptonr@maf.govt.nz

Plants records: George Gill, Technical Adviser, Pest Management, MAF Plants Biosecurity, phone 04 470 2742, fax 04 474 4257, gillg@maf.govt.nz

Biosecurity Issue 35 • 1 May 2002
Exotic disease and pest emergency hotline: 0800 809 966
Animal welfare complaint hotline: 0800 327 027
www.maf.govt.nz/biosecurity