Cruise news: clearance initiatives welcomed
Didymo message finding its mark
Link between animal abuse and violence

Fifth New Zealand Biosecurity Summit: Working Together at the Border
Biosecurity is published six-weekly by MAF Biosecurity New Zealand, with regular input from the Department of Conservation, Ministry of Health, Ministry of Fisheries and regional councils. It is of special interest to all those with a stake in the protection of New Zealand’s economic, environmental and social assets from the dangers posed by pests and diseases. Animal welfare issues are also covered. The articles in this magazine do not necessarily reflect government policy.

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Cover: The fifth New Zealand Biosecurity Summit held in Auckland on 24-25 October focused on biosecurity and trade and how those involved can work together at the border. See pages 10-14.
A big year for MAF Biosecurity New Zealand

To paraphrase Harold Wilson, a year is a long time in biosecurity, and this year has been a particularly full one for MAF Biosecurity New Zealand (MAFBNZ). In this, the final issue of Biosecurity for 2007 I'd like to touch on some of the year's highlights and the issues we've faced.

For our own organisation, the most significant day of the year was 1 July, when Biosecurity New Zealand and the MAF Quarantine Service merged to become MAFBNZ. The change has brought together policy, standard setting and operational functions into a grouping that strengthens our lead agency role and gives real impetus to the vision of the 2003 Biosecurity Strategy.

Throughout the year, work has continued on other 'infrastructure' changes to ensure we are deploying our resources as effectively as possible, and in places where they are needed. The Biosecurity Science Strategy, for example, has helped us identify the areas where we need to invest in the science that will underpin our policies and standards and to recognise the greatest risks to our biosecurity.

Significant contribution

The science carried out within, and on behalf of, MAFBNZ comprises a significant proportion of New Zealand’s research effort. Much of this work has a low public profile, but makes a significant contribution to our economy nonetheless. Scientists at the Animal Health Laboratory of the Investigation and Diagnostic Centre – WallaCeville, for example, developed a ground-breaking new molecular test for an important disease of cattle. This opened the way for a resumption of bovine semen exports to Europe – a specialised but valuable business.

IDC – Wallaceville, in Upper Hutt, is the site for an exciting new development that gathered pace during 2007: the establishment of a National Centre for Biosecurity and Infectious Disease. The combined resources of MAFBNZ, AgResearch, ESR and AsureQuality will create wonderful synergies at this centre of science excellence.

Surveillance strategies

We also have a team developing a Biosecurity Surveillance Strategy to help ensure our monitoring is done in the right places, using the best methods, resources, skills and systems. At the same time, we are working on resources such as our knowledge base and the skills of our people, to keep pace with the demands of our expanding role.

Earlier this year, Biosecurity focused on careers and training in biosecurity. This feature highlighted just how much biosecurity is emerging as a discipline in its own right. Our educational institutions are now responding to the demand for the kinds of people New Zealand’s biosecurity effort needs: scientists, risk analysts, policy makers, specialists in animal law, quarantine staff, frontline surveillance and pest management staff and many more.

Biosecurity incursions are a fact of life, and at any one time we may be responding to literally dozens of cases where a new organism has made an unscheduled arrival. In some cases, an incursion is over quickly. In other cases, such as that of didymo or the sea squirt Styela clava, the emphasis has shifted from eradication to containment and management.

Many incursion responses or pest management programmes involve widespread community consultation, education and social marketing. Ensuring we consult in a meaningful way, and that we can get the right information to people such as recreational water users – yachties and anglers for example – is another strand of our work that developed depth during the year.

Animal welfare is another important part of our work. The team within MAFBNZ has grown its capability this year as the implementation of the Animal Welfare Act 1999 continues. The group has developed strong linkages within MAFBNZ and other key organisations with an interest in animal health and welfare. This involvement also extends internationally, with the group leading our involvement in the World Organisation for Animal Health animal welfare initiative and European Union Welfare Quality project, among others.

This has been only a small sampling of the work we have been involved with during 2007. Next year promises to be just as exciting as our organisation settles into its new shape, and the rollout of our strategies continues.

Biosecurity is an important vehicle to communicate this work to our stakeholder groups, and I would like to thank the many of you who have supported and contributed to the magazine. Your input is always very welcome.

And, finally, to all our readers, our best wishes for a happy and safe Christmas, and a prosperous year ahead.

Barry O’Neil
Assistant Director-General
MAFBNZ
Incredibly, the numbers of cruise vessels and passengers visiting New Zealand have more than doubled from last season (Table 1).

With 17 million passengers cruising in 2006 worldwide, the New Zealand/Australia/South Pacific region handles only about 1 percent of the world’s total cruise passengers.

Larger cruise vessels are being deployed in New Zealand. Currently, the largest carries 2,750 passengers. In two years’ time we can expect to see vessels carrying 3,300 passengers.

Presently being built, and due for launch in 2009, is the 360-metre Genesis, capacity 6,400 passengers and displacing 220,000 tons.*

The combination of a significant increase in the number and size of cruise vessels presents many challenges. As a result, MAFBNZ has had to review the way it inspects and clears cruise vessels and en route passengers with biosecurity risk goods for entry into New Zealand.

Historically, MAF Quarantine Inspectors have met vessels in overseas ports and then processed passengers at sea en route to New Zealand (pre-cleared). Processing passengers on arrival can cause delays and inconvenience to all parties: MAFBNZ, Customs, port companies, tour operators and passengers.

The issue for MAFBNZ was to find sufficient numbers of Quarantine Inspectors to handle the increased volumes in this season’s cruise vessel arrivals (see Table 1).

New passenger clearance system

A project team was formed, comprising Sue Gould (Team Manager Offshore) and Mike Tana (Adviser Import Standards Group). Both had operational experience at the border through MAF Quarantine Service (now part of MAFBNZ). They worked with Ross Farnell (Project Manager) to find new ways to address the issue. Ross, who comes with a wealth of shipping experience as a Quarantine Inspector in Wellington, brought some very clever and innovative ideas.

The team was able to work quickly and collaboratively to develop a system in consultation with stakeholders that addressed this season’s passenger clearance challenges.

The new system is described below.

1. New biosecurity declaration card

A new card was designed to work in conjunction with the current New Zealand Passenger Arrival Card by asking the passengers to write their names and cabin numbers, along with the items they had declared, in section 3 of the arrival card. Using this new card, passengers are sorted into risk and non-risk, with the non-risk passengers then able to proceed with no further MAFBNZ intervention. The inspector/s can then concentrate on passengers with risk items. If a declared risk item needs further action, the declaration card is kept and the passenger proceeds to Customs for immigration. The inspection of the risk item/s is organised by sending an appointment (Letter of Inspection) to the passenger. The item/s are presented to the inspector at a prearranged time, inspected and processed. The declaration card is now the release document and provides a more accurate way of recording what items have been cleared or held.

Requiring passengers to provide clearer details of the risk items they are declaring reduces the amount of time needed to process them. This has allowed MAFBNZ to reallocate staff to cover the increased number of cruise vessels for the 2007/08 season.

<table>
<thead>
<tr>
<th>Cruise season</th>
<th>2006/07</th>
<th>2007/08</th>
</tr>
</thead>
<tbody>
<tr>
<td>Offshore vessel arrivals</td>
<td>21</td>
<td>55</td>
</tr>
<tr>
<td>Offshore passenger clearances</td>
<td>27,337</td>
<td>66,440*</td>
</tr>
<tr>
<td>Staff numbers (offshore)</td>
<td>38</td>
<td>62</td>
</tr>
</tbody>
</table>
2. New inspection procedures for stores
Coming into line with the new MAFBNZ requirements for vessels, greater emphasis has been placed on accessing the fresh and frozen stores on board vessels. These are inspected prior to arrival in New Zealand. This allows less intervention by MAFBNZ when assessing the risk of passengers taking prohibited food items ashore for day trips into New Zealand.

3. New communication materials
New communication materials with MAFBNZ branding have been designed to better inform passengers and crew of the key risk items to not bring ashore. The messages are on:
- the back of the new biosecurity declaration cards
- posters displayed on board
- banners at the top of the gangway
- amnesty bins in the biosecurity control area (wharf, terminal).

Trial of system
The Statendam, one of the first cruise vessels for New Zealand’s 2007/08 season, was selected for the first trial. It is a regular caller to New Zealand ports, cruising between Australia and New Zealand and carrying about 2,000 crew and passengers originating from all parts the world.

Her first voyage of the season to New Zealand departed from Fiji with experienced Quarantine Inspectors Gary Higgins and Russell Killgour on board. Both were keen to test the new system.

Gary and Russell found the new system worked well, with the colourful logo on the back of the declaration cards, banners and posters an effective reminder to passengers about what they must declare. They believed that the card should be implemented on all cruise vessels arriving to New Zealand.

“I really feel we are getting somewhere in making the public more aware of biosecurity,” Gary Higgins said. “It’s the best thing since sliced bread. Instead of just another series of boxes to tick, the passengers actually have to think about what they are declaring.”

The cards allow passengers to declare a larger number of items than declared on previous voyages. The large number of risk items presented by the passengers for inspection showed the success of the new system.

The cruise vessel and New Zealand Customs staff were also impressed with the new cards, which made their jobs a lot easier.

Although there was no evidence of either partridge or pear tree, items seized during processing included an eclectic collection:
- one bag of raw macadamia nuts
- two wooden items with borer
- three frangipani cuttings ex Hawaii
- Animal manure on shoes
- four ti plant cuttings ex Hawaii
- seven large pieces of staghorn coral
- eight flower leis
- nine jars of honey
- 12 green pandanus palm items.

The new system will continue to be trialled over this current cruise season. Consultation involving industry, MAFBNZ and other government agencies will lead to revised processes which can be utilised by MAFBNZ’s Cargo and Passenger Directorates to prepare for future seasons.

Importance to MAF, the cruise industry and New Zealand
The cruise industry in New Zealand generated $42 million in direct spending in the 1996/97 season. During the past decade, this figure has grown more than five-fold to $236 million (2006/07 season) and forecasts are for $378 million for the 2007/08 season*.

The cruise industry mantra is: You’re either a cruise-friendly country, or you’re not.

There are a number of integral parts to being ‘cruise friendly’, including border processing of cruise vessels, airports, hotels, port/berth, coaches, attractions, visitor experience, value propositions, weather, regional itinerary opportunities and more. Failure in any of these areas can defeat a country’s efforts to attract cruise visitors.

Bearing that in mind, strategic planning embracing a new and innovative system enables MAFBNZ to keep pace with the increasing demand of New Zealand’s international cruise industry as well as improving its biosecurity practices.

The Statendam on a visit to Wellington last month. Photo: Ross Farnell.

*Facts and figures supplied by Cruise New Zealand.

Acknowledgements:
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- MAFBNZ Quarantine Inspectors
- Master, Officers and crew of the vessel Statendam
Didymo:
Freshwater users getting the message

The Check, Clean, Dry message is getting through. New research carried out for MAF Biosecurity New Zealand (MAFBNZ) by The Nielsen Company shows increasing numbers of New Zealand freshwater users are aware of the risks of the invasive alga didymo. And more importantly, they’re doing something about it.

The research was carried out to measure the effectiveness of last summer’s Check, Clean, Dry campaign, and to inform MAFBNZ’s communications strategy for this summer. Some 1,550 freshwater users who enter multiple fresh waterways were interviewed. Those who move between waterways present a greater risk of spreading didymo than those who only use one lake or river. The overwhelming majority (89 percent) agreed that didymo is a serious threat for New Zealand. A large majority also recognised didymo as a threat to their sport (79 percent) or to their region (72 percent).

Perhaps not surprisingly, those living in the South Island, where didymo has invaded many rivers and lakes, were more likely (85 percent) to see it as a threat to their region compared with 65 percent for the North Island, where live didymo has not been detected.

Users taking action to stop spread

While the high levels of awareness are encouraging, so too is the fact that freshwater users are modifying their behaviour to help stop the alga from spreading. Three-quarters of those surveyed said they had taken different actions to avoid spreading didymo, well up from the 29 percent who were changing behaviours in 2006 (although it should be noted that the 2006 survey was conducted amongst all fresh waterways users, unlike the 2007 survey that targeted those most at risk of spreading didymo).

In the 2007 survey, about two-thirds of respondents said they always make an effort to check, clean and dry, with another quarter sometimes making an effort (see Figure 1).

Among the freshwater users interviewed, jet boaters and anglers were slightly more concerned about the threat posed by didymo to their sport than kayakers and recreational boaters.

The Check, Clean, Dry message has been widely recognised, particularly in areas where didymo has become established, the survey showed.

There were signs that those taking part in sports (e.g., kayaking) or areas (e.g., North Island) perceived to be low risk were less likely to regularly check, clean and dry. One misconception of concern that emerged in respondents’ comments – and something to be addressed in future communications – was that it was not necessary to take precautions if there was no visible didymo in the waterway.

Overall, though, the 2007 didymo communications campaign has been extremely successful, the survey concluded. Most high-risk freshwater users have been made aware of the risks, and encouraged to take action to prevent the spread of the alga.

Communications strengthened

In response to the survey findings, MAFBNZ intends to broaden the Check, Clean, Dry campaign to show that it is not just about preventing the spread of didymo, but about protecting a way of life.

Communications will also be refined to give greater relevance to specific activities and regions. This will be achieved through new regional and community partnerships to localise and personalise the message, and contacting freshwater users in a timely way through channels they trust.

While target audiences will continue to be high-risk waterways’ users – jet boaters, pleasure boaters, kayakers/canoeists and anglers – other groups who could

![Three-quarters of users say they have personally taken different actions to stop didymo spreading and two-thirds always make an effort to check, clean, dry](image)

*Have you personally taken any different actions when using freshwater recreational areas to help stop the spread of didymo?*

Base: n=1550, all respondents

![Always make an effort](image)

*Which of the following best describes your attitude towards the recommendation to check, clean and dry?*

Base: n=1550, all respondents
IT GETS EVERYWHERE

Canterbury angler Mike Bradstock saw first-hand why the ‘Check, Clean, Dry’ message is so important, during an early-season fishing expedition in the McKenzie country last month. While relaxing after a successful morning’s fishing in the Tekapo River – now one of more than 50 South Island rivers infested with didymo – Mike noticed clumps of didymo clinging to his wading boots and socks (pictured). He says the message to all water users about the dangers of spreading didymo is now well publicised in the area, and anglers are taking the message on board. Following the expedition, he and his companions carefully checked everything that had come into contact with the water to remove any visible clumps of didymo. They then made straight for the didymo cleaning station in central Twizel to disinfect their footwear and fishing gear (pictured).

They were also careful to keep their 4WD vehicle out of contact with the water, so as not to inadvertently pick up and spread didymo cells by that route.

Mike says didymo definitely detracted from the angling experience, with clumps of the alga frequently catching in his terminal tackle. Nonetheless, the invasion didn’t appear to have affected the trout.

“The numbers and condition of the trout in the Tekapo don’t seem to have changed since this time last year, when there was no didymo visible in the river. They were certainly on the bite the days we were there.

“While we are learning to live with didymo in the affected rivers, it’s horrible stuff and there is a strong incentive for us to do what we can to prevent its spread.”

Import risk remains

We may never know how didymo got into New Zealand, and we now have our hands full containing and managing the alga within our borders. The risk remains, however, that further introductions could come from overseas – for example, in fishing equipment that has not been properly checked, cleaned and dried.

To help manage this ongoing risk, MAFBNZ has strengthened the import health standard for equipment associated with animals or water, especially items with absorbent material, such as felt-soled waders.

MAFBNZ border staff are now required to treat equipment they deem to be a risk – that is, not completely dry or free of debris (inside and out), regardless of whether it has been cleaned before coming to New Zealand. This measure is additional to the requirement for passengers to declare on their arrivals card any used fishing equipment they are bringing into New Zealand.

Information about this change was distributed via domestic and international fishing networks and tourism organisations (Tourism New Zealand and Tourism Association of New Zealand) in September. Information about the change/requirements is on the MAFBNZ website.

www.biosecurity.govt.nz/didymo
Monitoring New Zealand’s waterways for the invasive alga didymo is a collective effort carried out by a number of organisations, including the Department of Conservation, regional councils, Crown entities, research laboratories and industry.

It is a data-intensive process, with many waterways sampled frequently as part of regional monitoring programmes, checking suspected sightings of didymo reported by members of the public, or for national delimiting surveys. Each sample is analysed in a laboratory, using either microscopic analysis or by DNA testing that can detect very low levels of didymo.

The extensive monitoring programme required an information management system that provides shared access to all the sampling data and enabled organisations to update records that could immediately be viewed by other organisations. The shared access was particularly important to give those involved in a regional didymo programme ready access to up-to-date information about sampling in their region.

Hosted by ESR, the National Didymo Samples Database was launched in September 2007 and is available online to partner organisations. It stores data about all didymo samples, including information about where, when and by whom each sample was collected, the laboratory that completed the sample analysis, the sample result, and the overall site result.

Geospatial information is recorded for each sample site, ensuring that infected waterways are correctly identified and correctly displayed on maps. A built-in mapping function enables users to view all sampling sites quickly, and see whether or not didymo has been found there.

To protect the integrity of the data, organisations can only update or change the records they have entered themselves.

www.biosecurity.govt.nz/didymo

This snapshot of the database map shows sample sites where didymo has been found, and indicates waterways infested with didymo.

Steve Stuart
Director Cargo Clearance – MAF Biosecurity New Zealand

Steve Stuart has been appointed Director Cargo Clearance, MAF Biosecurity New Zealand (MAFBNZ).

This directorate identifies and manages biosecurity risk goods and goods that may be contaminated with biosecurity risk organisms entering New Zealand. This work includes clearing all vessels, sea containers, personal effects consignments, used vehicles and machinery, mail and other risk cargo in accordance with biosecurity legislation and standards.

Steve comes to MAFBNZ after a 15-year career with the Ministry of Fisheries, where he held a number of positions. For the last three years he led the Fisheries Compliance Group of 180 Fishery Officers plus an additional 180 volunteers. Steve was also a member of the Fisheries Senior Management Team and contributed to a number of whole-of-government and international projects.

He has an MBA and has recently attended strategic leadership courses at Harvard and through the New Zealand Institute of Strategic Leadership.

Leanne Gibson
Director Passenger Clearance – MAF Biosecurity New Zealand

Leanne Gibson is the Director of the Passenger Clearance Directorate for MAF Biosecurity New Zealand. She was previously Acting General Manager of the MAF Quarantine Service (now part of MAFBNZ) and Chief Information Officer for MAF.

Before joining MAF, Leanne was with the Ministry of Social Development, where she was involved with delivering key IT services as well as implementing a number of large and complex business/technology projects.

Leanne’s previous experience also includes roles in the private sector with organisations such as IBM, Unisys and New Zealand Post.
1080 reassessment decision

On 13 August 2007, a decision on the future use of 1080 (sodium fluoroacetate) in New Zealand was released by the Environmental Risk Management Authority (ERMA New Zealand).

The announcement marked the end of an intense five-year process following an application by the Animal Health Board (AHB) and Department of Conservation (DOC) to ERMA for reassessment of 1080 for use in pest control.

ERMA has allowed the continued use of 1080, including aerial applications, but has tightened up conditions of usage and recommended additional research to fill some of the current gaps in knowledge about 1080 and its effects.

The new controls for aerial drops include:

- establishing a watch list and requiring reports on aerial 1080 drops to be provided to ERMA so operations can be monitored
- strengthening existing controls for aerial drops
- promoting best practice for pre-operation planning, consultation and notification as well as the management of aerial operations.

The tighter controls on all operations cover:

- licensing for all people who possess 1080
- the requirement to notify neighbours about 1080 operations and better warning signs to the public, to stay in place for longer in case poisoned baits or carcasses still remain (DOC is involved in trials on the degradation of carcasses and the persistence of 1080 residues in the carcasses. This will enable more accurate ‘reopening’ of areas for hunters and others after a poisoning operation.)
- public notification about aerial drops
- restrictions or changes to 1080 formulations which could affect risks
- better consultation with iwi about planned operations
- reporting to ERMA required on all aerial operations covering consultation, any incidents and post-operation monitoring.

AHB Communications Manager, Nick Hancox, says the reassessment outcomes have been very constructive, and the reassessment delivered an important independent judgement on the use of 1080.

“AHB and DOC initiated the Reassessment because we saw it as important to help maintain public confidence in the use of 1080, especially aerial operations for possum control.

“We are pleased with the results and there were no big surprises for us. The new controls are around consistency and best practice, with more clarity around information for the public. Restrictions on things like removal of chaff from carrot baits [a risk to birds] are commonsense and were already a requirement for any AHB operations. We want to be at the forefront of best practice.”

Nick says the tightened conditions will involve some additional costs, but these won’t be significant.

“AHB has already done a lot of the development work needed to set up a register of all aerial 1080 drops, through a system called VectorNet, which will feed the information required directly to ERMA. DOC has a similar system, PestLink, which will do the same job for its operations.”

The public register of 1080 operations will continue, but controls will be tighter.

ERMA has made recommendations for further research into the breakdown of 1080 in water, although AHB Research Manager Penny Fairbrother says it could be more cost-effective to model the dilution of the small amounts of 1080 that get into waterways and relate that to Ministry of Health guidelines on tolerable daily intakes for humans. Further discussions will be held with ERMA to determine the best research approach.

A soil transformation test has also been recommended, looking into how long 1080 takes to break down into harmless compounds in the soil. AHB and DOC are planning to undertake the recommended OECD tests for this research, taking into account temperature and presence of water – both of which affect breakdown.

Maori values are also catered for in the ERMA requirements, and AHB has already commissioned Lincoln University to investigate the risks from uptake of the 1080 toxin in watercress and puha, two important food plants for Maori.

A previous AHB research project undertaken by Lincoln University also looked into the effects of 1080 on two (one food and one medicinal) plants of significance to Maori: pikopiko and karamuramu. Even when 1080 bait was placed directly at the base of the plants, it was undetectable in the pikopiko foliage after the baits had leached out the toxin, and only detected at 5 parts per billion in the karamuramu – a negligible risk, and similar to the level of 1080 that may naturally be found in packaged tea leaves.

The AHB had anticipated the reassessment would require some additional research, and has allocated about $250,000 of its $2 million research budget for the purpose.

In the course of carrying out the reassessment, ERMA received 1,406 written submissions. More than 150 of these submitters also appeared at public hearings in Auckland, Hamilton, Wellington, Nelson, Christchurch and Dunedin.

The full ERMA report can be downloaded from:

Biosecurity Authority Clearance Certificates (BACCs) have dropped from 24 to 12 hours. She says a one-portal approach will help the express industry, which at present must deal with MAFBNZ, Customs, Medsafe and the New Zealand Food Safety Authority separately.

This will all help to facilitate legitimate trade and catch the bad guys at the border.

Improvement noted

The New Zealand Managing Director of multinational express forwarding company DHL, Brian Broom, told of the efforts his company is making to meet biosecurity requirements. The company is training senior managers in the rules and regulations so they can work more efficiently with MAFBNZ.

“If people don’t know the rules and regulations, then customers don’t get their goods on time. That affects the economy if goods are not on the shelves.”

Brian Broom told the Summit of some frustrations in dealing with MAFBNZ.

“Three or four months ago, trying to get hold of someone from MAFBNZ when there was a hold put on a product could take forever.”

“If a spray is needed on a product, the customer’s expectation is that MAFBNZ will come straight away. But there seemed to be no-one there to take the calls and faxes weren’t answered. From a business point of view, that was very frustrating. The situation has improved greatly in recent times.”

Documentation a challenge

An important biosecurity stakeholder is the trucking industry.

Martyn Freer of Tappers, who emphasised he was not speaking on behalf of the industry, said documentation is a major challenge. “It must always be clear with an ease of understanding and unambiguous communication – and too often that is not the case.”

For instance, a BACC may contain no reference to the necessity for fumigation for a consignment when indeed just that is required.

A proposal by customs brokers and freight forwarders for streamlining the relationship between MAFBNZ and industry stakeholders received a warm welcome from the Summit.

Resources stretched

Rosemarie Dawson, Executive Director of the Customs Brokers and Freight Forwarders Federation (CBAFF) summed it up.

“CBAFF’s proposals are for appropriately trained, MAF-accredited persons to take on a range of low-risk frontline functions currently carried out by the department, freeing MAF’s highly qualified staff to perform more essential and important tasks. It’s well known that MAF’s resources are stretched to the limit keeping up with demand for its services.

“Unquestionably it would be better for these highly skilled people to be out completing the essential and technically challenging jobs they are so well qualified to do rather than spending much of their time ploughing through paperwork.

“In such pressured situations there is a danger that medium- and high-risk consignments may not get the biosecurity attention they should – and that becomes a problem for New Zealand as a whole.”

CBAFF proposed that freight forwarding industry members would undergo a course run by approved trainers so they can become accredited by MAF to perform low-risk clearance, audited by MAF.

Rosemarie Dawson said an industry survey has shown that brokers and forwarders could take responsibility for a range of biosecurity functions, including Write Offs, Permits to Import, Personal Effects, Full Container Load and Less Than Container Load Clearances and Vehicle and LTSA inspections.

CBAFF has the infrastructure in place for its own courses and could offer training to meet the MAF standard, she said.

Fighting the paper war

MAFBNZ’s Assistant Director Cargo Clearance, Charles Hatcher, updated the Summit on the efforts MAFBNZ is making for increased efficiencies and integration at the border.

“What we’ve tried to do is create supply chain managers. We’ve also changed to rely a lot more on our mobile officers so we can actually get out and do these inspections.”

Charles noted some of MAFBNZ’s achievements. He told the audience mobile data collection has been a significant first.
“In terms of clearing cars down on the wharf, we do it all using a PDA (personal digital assistant), a system we implemented quite quickly. We have also trialled other systems, including laptops in the field.

“We’re also looking at some paperless clearances coming up shortly.”

The Summit heard how MAFBNZ is trying to make its standards clearer. Charles highlighted the criticism MAFBNZ receives over its paper war.

He said using faxes means 245 staff are spending more time being clerks than doing biosecurity inspections.

“We have a bank of fax machines – nine in Auckland – and they turn out 15,000 faxes each per month. We have the highest number of fax machines in the country. We have to file every single fax.”

And a single fax can run at up to 400 pages.

“We have 15-and-a-half storage containers – the half is rapidly filling up – across the country. If we need to check something we have to take a few days to have a look at it. So from our point of view, to make all that electronic is absolutely paramount.”

He said officers have won approval for a virtual single window which will allow brokers and importers to submit their BACC applications electronically. The new system should be in place by June next year.

2007 MAF Biosecurity Awards

Former Secretary for Transport Stewart Milne and Biosecurity Council Chair John Hellström were recipients of the 2007 MAF Biosecurity Awards at this year’s Biosecurity Summit.

The Minister for Biosecurity, Jim Anderton, presented the Awards, which recognise those who have helped achieve the goals outlined in the Biosecurity Strategy.

Stewart Milne has more recently been Executive Director of New Zealand’s Board of Airline Representatives. The award recognises his work with various border agencies on biosecurity, championing quarantine and biosecurity in various forums while representing the international airlines flying into New Zealand.

John Hellström, who was unable to be at the Summit in person, introduced the word ‘biosecurity’ into legislation for the first time anywhere in the world.

He set up the National Agricultural Security Service after leaving MAF in 1991 and, since then, has presided over the wide expansion of incursion response plans and introduced science-based risk assessment. In 1997 he was appointed Chair of the Biosecurity Council.
How can those involved in keeping New Zealand’s borders safe from biological invaders better collaborate?

A half-day session at the Biosecurity Summit, held in Auckland on 24 and 25 October, heard from MAF Biosecurity New Zealand’s Director of Policy and Risk, Douglas Birnie, that biosecurity management could be argued as coming down to taking responsibility and building trust.

“Is it really a case where we should be treating others as we want them to treat us? It’s all about accepting responsibility, because if you accept your part in the food chain, trust will improve. Relationships will then improve and compliance costs may even come down.”

While not dwelling on areas where stakeholders could improve trust, Douglas questioned whether some responses to diseases were becoming industries in themselves.

“Are we beginning to over-react to some and under-react to others?”

He gave the example of BSE, pointing out that far more people die from salmonella than from BSE.

Supply chain efficiency call

The concept of the supply chain in working together at the border was the Summit topic for former Ports of Auckland Chief Executive, Geoff Vazey, now a consultant to the company.

“Most people don’t realise 10–50 percent of every tangible product’s cost is a supply chain cost. There is huge room for improvement in taking costs out of the supply chain,” he said.

“Products don’t compete. Supply chains do. Businesses compete on their ability to get products to market rather than on product differentiation.

“There are lots of risks to the supply chain and biosecurity is one of them. The cost of a biosecurity breach can be colossal.

“Most people working at the border are not government people, they’re business employees. Most of the assets at the border are not government assets, they’re business assets. We’ll only get supply chain efficiencies by cooperation between all working at the border.

“For instance, the processing of information is an essential part of the supply chain. MAF’s systems are sub-optimal.

“If MAF needs to charge more to go to a digital communications system, business won’t object because faster electronic systems are win-win. Nobody I’ve spoken to in business disagrees.”

Geoff told the Summit that Ports of Auckland’s IT people have developed a paperless system called e-imports. It cut paper use by 7 tonnes a year – about 2 million pieces of paper. Ports of Auckland also introduced an electronic system to answer telephone inquiries.

All of that, said Geoff Vazey, ultimately helps to reduce the cost of biosecurity to the supply chain.

Streamlining passenger processing

The Summit got a peek into the future for airline passengers as they cross the border – and the implication of new airport self-help systems for biosecurity.

Air New Zealand Manager for Infrastructure Strategy, Eric Morgan, told guests that airlines are picking up on the ATM, cell-phone and on-line services now common in banking. For instance, in Japan, boarding passes are being replaced by the use of a bar-code on a passenger’s cell-phone.

He says only e-tickets will be sold by the end of 2008.

“Off-airport processing will have cell-phones as a key element. Boarding passes will be issued on-line. There’ll be kiosks for bag-tagging and a bag-drop area which will replace traditional full-service counters,” he said.

“Also, staff will be more mobile, with personal digital assistants (PDAs) instead of being stuck behind counters.”

New systems will mean fewer errors and can give customs and border agencies more information, which helps stop problems before they arrive at the border.

And to help with biosecurity enforcement, cases will be x-rayed on boarding. The images are then transmitted to the aircraft’s destination airport while the plane is still in the air, giving MAF Quarantine Officers an early warning of any risk goods that might be lurking in passengers’ luggage before they even touch down.
Biosecurity integral to dairy industry success

Fonterra’s General Manager of Sustainable Milk Supply, Mark Leslie, reminded the Biosecurity Summit of the scale of New Zealand’s dairy exports. Each month, he said, 200,000 to 250,000 tonnes of Fonterra’s product is shipped to markets in 140 countries.

“The absence of significant pathogens causing production losses is a key competitive advantage and economic driver for New Zealand in the international market relative to most other overseas animal industries. Maintaining this advantage is vital.”

Not only does the dairy industry need to be free of significant animal diseases such as foot and mouth and BSE, plant pests such as the clover root weevil can also affect the sector.

Varroa provides a similar example, not only affecting local honey production but increasing the costs of pollinating crops, including pasture, seed crops and kiwifruit.

For Fonterra, biosecurity is vital for maintaining trade.

“The absence of significant pathogens and the disease they cause implies healthy stock and a healthy product. That creates a positive perception of New Zealand goods. Some of Fonterra’s largest customers with big global brands select Fonterra and New Zealand-sourced product because of our products’ safety,” Mark said.

Key ingredient base

Some of Fonterra’s largest customers are Nestlé, Kraft, Danone, Wyeth and Abbott. They view New Zealand-sourced product as a key ingredients base because of safety and security of supply.

“One incident caused by an ingredient could destroy a major international brand. Fonterra relies heavily on customer partnerships. We aim to become so entwined in their businesses that we become their supply chain, their product development team. In short we become increasingly indispensable to their business success. But we need to be able to ensure consistent, safe supply reliant on biosecurity systems.”

Mark also pointed out the negative economic impact on the dairy industry of a human disease which might sneak across the border. He said an avian influenza pandemic would affect farm and manufacturing staff, all of whom are handling a perishable product.

He gave an example of the impact of a biosecurity breach not too far from home. When BSE hit Japan, 64 companies were forced into bankruptcy with a total liability of a third of a billion US dollars in the first nine months – a vivid example of the downstream effects from a single disease incursion.

Mark Leslie: Perceptions of New Zealand as a safe, secure source of product is vital to Fonterra’s business.

Bex Ansell has joined the Post Border Directorate of MAF Biosecurity New Zealand (MAFBNZ) as a Senior Adviser in the Pest Management Group. Bex comes from a private consultancy background, with expertise in project management, process analysis, IT training and documentation, and has worked in Canada, England and Scotland. She has also written a popular science book on New Zealand’s earthquakes and volcanoes.

Her Masters in Marine Biology investigates distribution of the cryptic red alga Bangia in Wellington harbour, using novel molecular protocols. Bex will initially focus on development and coordination of partnership programmes between central government, regional government and industry to build marine pest management capability.

Brendan Pollard has joined the Post Border Directorate of MAFBNZ as a Senior Adviser in the Animal Response Team. Brendan qualified as a veterinary surgeon in South Africa in 1977. He has experience in veterinary field services, poultry research and pathology, food safety, biosecurity and public health, as well as general veterinary private practice. He has worked in South Africa, Namibia, the United Kingdom and Hong Kong as well as New Zealand and has a special interest in infectious disease and immunology.

Jane McGrath joined the Post Border Directorate of MAFBNZ in October 2007 as a Systems Coordinator within the Systems Design Team. Jane has recently returned to New Zealand after nine years in the United Kingdom. She worked as a Business Analyst in the Programme Management Organisation Team for Fixed Income within the London headquarters for the French Investment Bank BNP Paribas.

Jane’s main focus as Systems Coordinator will be day-to-day support of the Incursion Response System as well as coordinating training in the system, testing and implementation of any enhancements or new applications.
Criminals who think they might be able to test the New Zealand border by using the internet might need to think again.

Nicola McKinney, New Zealand Customs Manager Targeting, told the October Biosecurity Summit how fraudsters, would-be smugglers and other criminals have been using social networking sites such as Second Life and Bebo to swap information on how to take on our border protection systems. She told the Summit how criminals can create virtual worlds in which they can test New Zealand’s ability to track down illegal attempts to cross the border.

That’s just one area analysts at the Joint Targeting Centre are looking at as a future tool in combating criminals trying to get around not only Customs but also biosecurity measures.

“Data mining gives us an opportunity to view transactions retrospectively to identify trends and patterns, Nicola said. “As with passengers, this can give us an opportunity to stream trade and help us identify areas of higher risk where we can concentrate our analytical resource.”

Analytical resources were an important part of Nicola McKinney’s presentation.

It all happens at the Joint Targeting Centre, which has been operating at Mangere near Auckland Airport for the past eighteen months.

She said the emphasis is on the “Joint” in the title of the centre, as Customs wants as many agencies working alongside it as possible. To date Maritime New Zealand, MAF Biosecurity New Zealand and Immigration have agreed to join Customs at the Joint Targeting Centre. Other agencies interested in participating in the facility include Inland Revenue, the Police and the Ministry of Fisheries, which would be helped in functions such as tracking illegal exports of paua.

Nicola described the Joint Targeting Centre, with its 50 Customs staff and a handful from other agencies, as something like a big call centre with banks of computers.

“There are TVs scattered throughout the premises and tuned to the BBC and CNN so international events can be monitored. As soon as something happens affecting New Zealand, or where we can help overseas agencies, we are able to provide a rapid response,” she said.

Nicola explained the important role played by the Cusmod (Customs Modernisation) database, set up ten years ago and about to become Cusmod II.

“Interactions at the border for Customs are based on profiling or alerts. Cusmod alerts include MAF, Police, SIS, Immigration and Justice alerts. The alerts electronically screen all of the people and goods transactions at the border and hit on matches. Compliance activity is then required.

“An activity report is entered into the system which gets assigned to an intelligence analyst. Other reports, not based on Customs activity but created when a Customs officer considers something to be of interest, can also be entered. For example it could be an anonymous phone tip-off. The relevant targeting team makes a risk assessment. This work can require entity and background checks, looking at things like history including travel recordings, premises and consumer checks. once the work is completed, the Alert Filters are either updated, deleted or new alerts created.”

Targeting looks at advance information and endeavours to identify the risk prior to or at the border crossing.

“If it is in the air, in the chair or on the sea – it’s targeting,” Nicola
Use of leg-hold traps restricted

Leg-hold traps have been used in New Zealand for many years to trap pest animals, such as possums, ferrets, stoats and feral cats. The trapping has been done in order to protect conservation values, enhance biodiversity, promote plant and animal health, and protect access to markets. The traps have metal jaws designed with the primary purpose of catching and holding an animal by a limb, including the foot.

Internationally, and within New Zealand, concerns have been raised over the humaneness of leg-hold traps. The main animal welfare concerns are the injury and distress caused by the traps, potential for escape and animals suffering if they are held in the trap too long. In addition, leg-hold traps set near residential dwellings and in other areas such as public walkways and picnic spots increase the risk of injury to cats and dogs.

Following consultation, new regulations have been made under the Animal Welfare Act 1999 to restrict the sale and use of leg-hold traps in New Zealand. The new regulations come into effect on 1 January 2008. From this date, no leg-hold trap may be used within 150 metres of a dwelling or in any area where it is probable a pet would be caught.

Prohibited traps may not be sold from 1 January 2008. From 1 January 2009, all long-spring traps size 1½ or larger and double-coil leg-hold traps larger than size 1½ are prohibited. All unpadded leg-hold traps of size 1½ are prohibited from 1 January 2011.

Exemptions can be sought for the sale or use of a prohibited leg-hold trap.

Any breach of the regulations is an offence under the Animal Welfare Act 1999 and punishable by up to six months’ imprisonment and/or a fine of up to $25,000 for an individual or up to $125,000 for a body corporate.

For further information on the new regulations:
- www.biosecurity.govt.nz/legholdtraps
**PEOPLE IN BIOSECURITY**

Cara Brosnanah joined the Investigation and Diagnostic Centre (IDC) – Wallaceville in October 2007 as the Aquatic Animal Diseases Technician. She will be working on a range of projects concerning aquatic animal health and will carry out a wide range of diagnostic, disease investigation and other testing. Cara has a degree in Science, majoring in Marine Biology from Victoria University of Wellington. She previously worked at NIWA as a bioactives technician for three years and then worked in South Korea teaching English.

Edna Gias has joined the Animal Health Laboratory at the Investigation and Diagnostic Centre – Wallaceville as a post-doctoral scientist in the Bacteriology and Aquatic Animal Diseases Team. She will be working on a project developing rapid molecular tests and cell culture procedures for the detection and identification of iridoviruses in ornamental fishes. Before joining IDC, Edna completed her PhD in Virology, followed by a brief employment as a research assistant at the University of Newcastle upon Tyne, United Kingdom, before moving to New Zealand.

Jane Martin has joined the Investigation and Diagnostic Centre – Tamaki as Laboratory Supervisor in the Virology and Post-Entry Quarantine Team. She will be responsible for managing laboratory procedures and related quality systems, and providing diagnostic support. She has a Biological Sciences degree from Waikato University and a post-graduate Microbiology degree from Massey University. Before joining MAFBNZ, Jane was a Teaching Technician at Auckland University where she ran practical classes for undergraduates and provided technical assistance in the School of Biological Sciences. Previously, she was at Genesis Research and Development, initially in immune therapeutics (overseeing mammalian tissue culture) before becoming involved in plant tissue culture and administration of PC2 containment. Jane has also worked for MAF before, as a Virology and Immunology Technician in the Animal Health Laboratory at Ruakura, Hamilton.

**BIOSECURITY SUMMIT:**

Biosecurity Science Strategy launched

One of the highlights for delegates to October’s Biosecurity Summit was the release of the 2007 Biosecurity Science Strategy for New Zealand. Strategic Science Team Manager, Dr Naomi Parker, gave an outline of the two-year process involved in getting the document together. It is the first Biosecurity Strategy to focus on science.

Experts from all areas of the science community were consulted and gave feedback on the draft. The final version increased the emphasis on: aquatic biosecurity, human health, industry, collections of species, taxonomy, internal borders (for pests such as didymo and varroa) and animal welfare (e.g., for slaughter in case of a major disease outbreak).

Among the research priorities is the need to analyse risk pathways and vectors for the entry and dispersal of priority pests and diseases. Naomi told delegates that this area could cover such challenges as biofouling from ships. She said science wants to be more pro-active and not reactive, with recognition of the need to be more systematic in identifying risks.

The strategy also puts a priority on enhancing tools for inspection and detection, for example, testing methods for containers, used cars and ballast water. The aim is to develop effective systems to detect pests and diseases in the air and water, which can indicate a risk.

Future research priorities and implementation of the strategy will involve a high-level science advisory committee overseeing implementation of the strategy with advice from a cross-sector science advisory group. That, in turn, will receive advice from aquatic, animal and plant science advisory groups.

**New biological control tool?**

A new strain of bacterium isolated from insects, Yersinia entomophaga MH96, could be an important step forward in the biological control of insect pests.

Announcing the discovery, AgResearch said the bacterium is deadly against an impressively wide range of insects including beetles, grass grub, moths and caterpillars – the major destroyers of agricultural and horticultural crops around the world.

The most common form of biological control for insects to date has been Bacillus thuringiensis (Bt). There are many strains of Bt and each strain targets a specific insect sub-group. AgResearch Scientist Dr Mark Hurst says Yersinia entomophaga provides an excellent ‘clean’ green alternative to control pests.

“Yersinia entomophaga is the first from this group of bacteria to contain potent insecticidal toxins,” he says. “The bacterium has evolved to efficiently invade an insect host and evade its immune system while barraging the host with highly potent toxins.

“Apart from its obvious use as a biological control agent, the bacterium can be used as a test bed for other research such as understanding how a bacterium invades a host and evades the host immune system using insects as a model system.”

The bio-control could be delivered through a variety of technologies including seed drilling, or through bait which would attract only targeted species.

www.agresearch.co.nz/ournews.asp
The future – outcome-based codes of welfare

The Animal Welfare Directorate of MAF Biosecurity New Zealand (MAFBNZ) and the National Animal Welfare Advisory Committee (NAWAC) are committed to improving animal welfare standards and practice in New Zealand. They are currently expanding the concept of outcome-based codes of welfare to better meet the welfare needs of animals and changing public expectations in New Zealand.

How do codes of welfare work?
The Animal Welfare Act 1999 is based on a duty of care philosophy which obliges the owners and persons in charge of an animal to meet the physical, health and behavioural needs of animals in a manner that is in accordance with both good practice and scientific knowledge. The Act provides for the development of codes of animal welfare, which are designed to help everyone care for animals. Codes ‘flesh out’ the provisions of the Act by setting minimum standards of care, which owners and persons in charge of animals are expected to meet. In addition, codes include recommended best practice and explanatory material intended to encourage optimum animal welfare that exceeds the requirements of the minimum standards.

What are ‘outcome-based’ codes of welfare?
Outcome-based standards in codes of welfare focus on defining welfare outcomes for animals based on known needs. They do this in a manner that requires those outcomes to be delivered, rather than prescribing specific requirements for facilities and management techniques and systems.

Why go ‘outcome-based’?

The challenge in developing codes of welfare is to integrate the various and often conflicting social, ethical, economic and production management value judgements with the available science in a way that does not stifle innovation or require frequent alteration of the codes. Codes of welfare should spell out the minimum acceptable standards for managing animals in a manner that accommodates new knowledge and the changes that will inevitably occur in housing and management systems. Therefore, minimum standards that focus on the animal and its minimum required welfare outcomes offer greater utility and are likely to be more long-lived than prescriptive facilities-based standards that become outdated by new developments and attitudes.

Our experience with prescriptive standards is if the intended outcome is not stated, there can be debate about the validity of the standard because of different interpretations of the intended outcome. Facilities specifications could be offered in support of outcome-based minimum standards but not be a part of them.

We believe outcome-based standards, which would include readily observable and measurable welfare indicators, as measures of the achievement of that outcome, would allow farmers (or owners) to use their own expertise, experience, available technology and judgement to meet the minimum standards and demonstrate compliance with them.

When will codes of welfare become outcome-based?
NAWAC is proposing to develop such outcome-based codes when it reviews the broilers, laying hens and pig codes of welfare in 2009. Significant research and development of appropriate welfare indicators for other animals is required before such codes can be developed for other species. As a first step toward this goal, NAWAC will sponsor a workshop with stakeholders, to be held in 2008, that will explore how animal welfare assurance can be provided.

For further information on codes of welfare:
- www.biosecurity.govt.nz/animal-welfare/codes/welfare
- Dr Cheryl O’Connor, Programme Manager Animal Welfare, phone 04 894 0371, cheryl.o’connor@maf.govt.nz

PEOPLE

Kylene Walker has joined the Diagnostic and Investigation Centre – Wallaceville as an Incursion Investigator. She will be working within the Incursion Investigation (Animals and Marine) Team on the investigation and initial response to suspected exotic animal or animal disease incursions within New Zealand, and on preparedness work.

Before joining MAFBNZ, Kylee lectured at Unitec in Auckland; her lecturing included veterinary pathophysiology and epidemiology.

Prior to this, Kylee was in clinical veterinary practice in Auckland and Otago, and spent two years in Samoa working as volunteer veterinarian.

She has a veterinary degree from Massey University and is currently undertaking an MVS in epidemiology at the Epicentre, Massey University.

Zoila Pérez has joined the Post-Entry Quarantine and Virology Team at the Investigation and Diagnostic Centre – Tamaki as a Senior Technician.

She trained and qualified as a biologist, working for five years at the International Potato Center, Peru. For the first two years she worked in biological control of fungal phytopathogens and for the last three years, Zoila worked in the Virology Department, developing serological and molecular diagnostics for viruses, viroids and phytoplasmas that infect high-value crops.
Enhancing the Biosecurity Response Knowledge Base

The Biosecurity Response Knowledge Base is an intranet website that is available to MAF and AsureQuality users. The knowledge base documents the management and operation of biosecurity responses.

As part of the ongoing implementation of the new response policy Preparing for and responding to unwanted pests and diseases (risk organisms), the scope of content on the knowledge base has recently increased. The new response model processes have been added to the existing exotic disease response content already on the site. This new content includes enhanced process maps and supporting procedures, tools and templates.

Over time, the old and new content will become integrated as exotic disease response processes are reviewed and plant, forestry, pest and marine response material is added.

Every process and procedure now has an owner, who is responsible for the accuracy, reliability and currency of the content. The technology behind the knowledge base is used to drive content changes quickly through review and approval and out to users on the intranet.

For further details on the knowledge base, contact the Knowledge Base Coordinator, Blake Dearsley:

blake.dearsley@maf.govt.nz

Preparing MAFBNZ staff for biosecurity responses

Specific stakeholder requirements included transparent, information-based decision-making and objectives and measures in place for all stages of a response. Ongoing improvement, or learning from responses, was also a focus.

The essential response leadership behaviours and attributes needed to meet these expectations are:

• future-focused strategic leadership
• management focus on outcomes
• strong decision-making skills
• effective relationships
• self-aware and empowered people
• learning from experience.

Recognising and enhancing people’s capability so that they are supported and able to lead responses is an integral part of the new system. This support is vital for success because many of the required behaviours only develop over time. They cannot be learned on the spot or on a course.

MAFBNZ is using the Lominger competency framework to help prepare people for responses (competencies are observable behaviours and qualities that are essential for high performance). Together, groups of managers and staff have identified key competencies that are essential for success in each aspect of response work.

Groups of these competencies are reflected in capability standards that describe the critical aspects of response performance. The standards are closely related to the work that people will actually have to do in a response.

The capability standards are further used to guide managers and staff to formulate individual response-related learning and development programmes. These learning programmes include MAFBNZ courses, coaching and mentoring, externally provided courses and written resources.

By 1 July 2008, a pool of people from across MAFBNZ will be using the new system to lead responses.

Rire Scotney, 04 894 0126, rire.scotney@maf.govt.nz
Over 1000 scientists, regulators, students, animal protection society representatives and others recently attended the Sixth World Congress on Alternatives and Animal Use in the Life Sciences in Tokyo, Japan. Dr Kate Littin from MAF Biosecurity New Zealand’s Animal Welfare Directorate, was one of four New Zealanders invited to present papers at the Congress.

Attendees enjoyed a packed programme that covered the application and barriers to implementation of all ‘Three Rs’ (the replacement and reduction of animal use in science and refinement to avoid suffering) and the improvement of public participation in decision-making on animal use in science and teaching.

A major focus was techniques to replace the use of animals. The difficulties in discovery and validation of replacements were discussed and it was emphasised that regulatory and other barriers (such as commercial ownership) too often delayed their wider establishment. As a solution, Dr Thomas Hartung, Head of the European Centre for the Validation of Alternative Methods – a key player in accelerating the development and international acceptance of replacement techniques – suggested ‘let’s go m.a.d.’ through making a difference, mutual acceptance of data and more adequate detection of risk.

Refinement was seen as being an immediately available and easier to implement ‘R’. Veterinarians (particularly lab animal specialists) and, more importantly, good communication between veterinarians, animal facility technicians and researchers, were seen as key in implementing refinement.

Improving public participation

Another focus was improving public participation in decision-making on animal use in experiments. Animal ethics committees and their overseas equivalents, open dialogue, web-based platforms for facilitating social networking and information sharing (‘Web 2.0’) and official information legislation were some of the options discussed for achieving this goal.

In an interesting twist, it was suggested that greater transparency would mean that assistance could be more quickly rendered to animals in labs in the event of natural disasters, such as the recent earthquake in Japan. A strong message coming from a number of animal protection organisations was that they represent community views on animal-based research.

Presenters from more than 30 countries showed that more importance is being placed on the Three Rs in more areas throughout the world. A number of parallel sessions for young scientists provided an opportunity for presentation of several original studies from many of these countries, ranging from a study of the impacts of conflict in the Middle East on animal use in science, to detailed descriptions of replacement techniques for research on bovine viral diarrhoea and tuberculosis in India.

Award for New Zealand young scientist

Tamara Diesch, a doctoral candidate from Massey University’s Animal Welfare Science and Bioethics Centre won a Young Scientist’s Award (see picture) for her work on pain awareness in newborn and young animals. Tamara uses Dr Craig Johnson’s novel anaesthesia technique in her research (see below).

Other papers from New Zealand covered foetal awareness and pain (Auckland and Massey universities), severity assessment of animal use in New Zealand (David Bayvel, Director Animal Welfare, MAF Biosecurity New Zealand), implementation of the Three Rs prior to submission of proposals to animal ethics committees (Massey and Otago universities, and the New Zealand Veterinary Association) and home-cage behaviour as an indicator of welfare state in genetically modified mice (Dr Kate Littin from MAF Biosecurity New Zealand, and colleagues from Europe). Also, Dr Craig Johnson from Massey University spoke about his innovative technique for delivering pain research without pain that won him last year’s National Animal Ethics Committee Three Rs Award.

Congratulations to Tamara Diesch from Massey University for her Young Scientist’s Award at the Sixth World Congress on Alternatives and Animal Use in the Life Sciences, seen here with Yasuo Ohno, President of the Congress Organising Committee.

Dr Kate Littin, Technical Adviser Animal Welfare, phone 04 894 0373, kate.littin@maf.govt.nz

www.wc6.jp

Sixth international conference on replacement and humane use of animals in experiments
The link between animal abuse and human violence

By Dr Ian Robertson

During the last 30 years, evidence has been accumulating of a link between animal abuse and violence to humans, or anti-social behaviour. Britain’s first major academic conference on this relationship was held in Oxford, England recently.

The conference parallels recent advances in New Zealand (see Biosecurity, 75:4, 1 May 2007). The conference explored the meaning of this link, and its implications for social and legal policy. In particular, it focused on the nature of animal abuse, the motivation that leads to cruel acts, and the implications for human and animal welfare.
Behind closed doors

“It was very raw, dealing with personal violence and abuse to humans and animals,” he says. “Although many animal welfare issues receive attention because of related human interests, the human interest in this conference entered areas that used to be considered private. It is one thing to consider human interests of trade and health, but quite another to discuss animal welfare in relation to physical and mental violence behind people’s closed doors.”

Another presenter, Dr Jeffrey Moussaieff Masson, psychoanalyst, author, and former Director of the Freud Archive, also has links to New Zealand. He is currently an Honorary Research Associate, Department of Philosophy, University of Auckland. Dr Masson spoke about intensive farming and institutionalised violence.

Ian Robertson spoke on the role of the veterinarian in safeguarding victims of abuse. He considered the implementation of a mandatory legal duty on veterinarians to report cases of suspected abuse – a move which is increasingly being implemented by veterinary bodies overseas, but is not in place in England or New Zealand.

Erin Pizzey, a founder of refuges for battered women and children, award winning humanitarian, author, poet and playwright, was one of the guests of honour at the conference. She explained that the turning point in her own life came when, as a child, she felt the loss of a pup which died of distemper. She went on to explain that experience affected her emotionally, and how she subsequently became involved with establishing shelters for battered women and their children.

Evidence of animal abuse

Frank Ascione, Professor of Psychology at Utah State University, United States is a leading expert on animal abuse and interpersonal violence. He referred to one study of human violence which identified that, in over 80 percent of cases involving physical abuse to humans, there was evidence of abuse to animals in the perpetrator’s history. Another study reported that, of battered women who had pets in the home, about half report that the animal has been abused and/or killed. Animal cruelty is also recognised as an indicator behaviour of children who have been exposed to domestic violence.

“Animal abuse is potentially the tip of a much bigger iceberg,” he said.

He also referred to the plight of women who “wouldn’t go to a shelter because the shelter wouldn’t take the dog”. A number of women’s shelters are now allowing pets to accompany families so that concerns for the pet’s safety do not get in the way of seeking help. Frank Ascione suggested that battered wives have suffered because of legislation which failed to take account of the pet’s safety in situations of domestic violence. However, the law is gradually responding, and in the last two years, six American states have allowed pets to be included in protection orders.

A presentation entitled The new canaries in the mine: The priority of human welfare in an animal abuse prosecution, suggested that animal cruelty cases are the indicator of danger to humans. It was suggested that animals are often treated as indicators rather than victims in their own right, and that there was merit in reforms that take into account the inherent value of the animal, as well as human interests in the animal. To achieve this, it was suggested that the law could define violence in terms of the action, rather than the species of the victim.

Barriers to reporting abuse

However, there are barriers to the reporting of suspected abuse. Alan C Brantley, former FBI Supervisory Special Agent with the FBI’s National Centre for the Analysis of Violent Crime, has compiled a checklist of 16 factors for use in assessing dangerousness in individuals. One of the factors is the presence of animal abuse. However, recognising a potential problem and reporting it are two different issues.

“Good people sometimes fail to act, even though they know about, or suspect, animal abuse and cruelty,” Mr Brantley said. Fear for personal safety, and concerns where the person believes they won’t be supported, also contribute to a lack of reporting.

Research has identified similar concerns among professional groups, including veterinarians. Fear of retaliation, financial repercussions, and questions about breaching client confidentiality are some of the concerns that have been expressed. In a recent study by the New Zealand Veterinary Association, 63 percent of the veterinarians who responded had seen cases of deliberate abuse.

Perhaps the key question, however, is how many of those cases were appropriately reported to enable support services to help. At least one study has shown that an ethical duty to report may not be sufficient to motivate veterinarians to report suspicions of animal abuse. In a United States study, 88 percent of veterinarians surveyed felt they had seen non-accidental trauma in their patients, but only 27 percent had filed a report.

Mandatory reporting removes moral dilemma

Dr Ian Robertson pointed out that a mandatory duty to report removes the moral dilemma for the veterinarian, and simplifies their decision making. Effective and efficient reporting of suspected abuse, he says, has important relevance for all those whose lives are affected by issues of abuse and violence.

The Oxford conference helped put the links between animal abuse and human abuse onto the agenda, academically and for the many organisations working with the consequences of abuse. The event brought together campaigners, professionals, activists and academics from over 10 countries to discuss this issue on a scale never before seen in the United Kingdom. There was solidarity across all the professional disciplines and fields of study represented. Lawyers discussed best practice with veterinary practitioners, animal protection workers swapped stories with health professionals and academics learnt from the experience of campaigners.

There are still challenges ahead, however. Codes of best practice need to be developed and professional training and assessment implemented, policy makers will need to consider how to apply best practice, and legislation and professional bodies will need to incorporate the latest research and thinking. In spite of the obstacles, animal abuse has enormous implications for victims – animals and humans alike, many of whom remain unseen behind closed doors.

For further information about the Oxford conference:

- www.animal-law.biz

Dr Ian Robertson LLB, MRVC, BVSc is a barrister specialising in animals and the law.
UPDATES

Notification of consultation: draft import health standards

Pig meat and pig meat products for human consumption from various countries
- pig meat for human consumption from the European Union
- pig meat and pig meat products for human consumption from the Sonora state of Mexico
- pig meat and pig meat products for human consumption from Canada and the United States
- pig by-products from Canada and the United States


Submissions on the draft import health standards for pig meat and pig meat products close on Monday 18 February 2008. Submissions can be made to the address below:

Amended import health standards

Marine fisheries products for human consumption from all countries (FISMARIC.ALL)

www.biosecurity.govt.nz/imports/animals/standards/fismaric.all.htm

This standard has been amended to include the following changes:
- The risks of dried anchovy and dried anchovy-like fish have been assessed as negligible and are now eligible to be imported without being identifiable as being of marine origin.
- In response to the outbreak of the abalone viral ganglioneuritis (AVG) on the Western Coast of Victoria, Australia, abalone coming in under this standard must now be shielded and cooked.

The standard is now dated 19 November 2007 and replaces that dated 18 September 2001.

Animal Imports, MAF Biosecurity New Zealand, PO Box 2526, Wellington, phone 04 894 0459, fax 04 894 0662, imports@maf.govt.nz

Milk and milk products for human consumption from the European Union (DAIEDIC.EEC)


This import health standard was previously updated on 28 August 2007. An omission was made in the update and as a result the model zoosanitary certificate did not resemble the EU–New Zealand Sanitary Agreement.

The following clause has now been updated to resemble the EU-New Zealand Sanitary Agreement:

II. Origin of Product
Name and official approval number(s) of establishment(s): ..................................

Product derived from animals born and reared: ..........................................................

(Does not apply to milk products produced within the EC)

.................................................. (List applicable countries or delete as appropriate).

This standard is now dated 23 November 2007 and replaces that dated 28 August 2007.

Animal Imports, MAF Biosecurity New Zealand, PO Box 2526, Wellington, phone 04 894 0459, fax 04 894 0662, imports@maf.govt.nz

Dogs and cats from the United Kingdom and the Republic of Ireland (DOMANIC.UKE)

www.biosecurity.govt.nz/imports/animals/standards/domanic.uk.e.htm

This import health standard is now dated 16 November 2007 and replaces the following import health standards:
- Dogs and cats from the United Kingdom (dated 11 September 2007)
- Dogs and cats from the Republic of Ireland (dated 11 September 2007)

The import health standard for dogs and cats from the Republic of Ireland did not include testing for heartworm or Ehrlichia canis, despite having an open border with the United Kingdom (from which we require tests for both).

The Republic of Ireland has been added to the import health standard for dogs and cats from the United Kingdom to ensure consistency between the health measures for both countries.

Animal Imports, Import Standards Group, Border Standards Directorate, phone 04 894 0459, imports@maf.govt.nz

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

Transfers of codes of ethical conduct approved: Nil

Code holder name changes: Nil

Amendments to codes of ethical conduct approved:
- Thermo Fisher Scientific Inc

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:
- AsureQuality Ltd (to use AgResearch Ltd’s code) (name change)

Codes of ethical conduct revoked or expired or arrangements terminated or lapse:
- Chemeq Ltd
- Zenith Technology Corporation Ltd

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 04 894 0370, fax 04 894 0747, linda.carsons@maf.govt.nz

Codes of welfare – update on development, issue and consultation since the last issue of Biosecurity

Codes of welfare issued 2007:
- Deer
- Companion cats
- Layer hens amendment notice

Consultation on codes of welfare:
- Commercial slaughter: recommended to Minister
- Dairy cattle: submissions being considered by NAWAC
- Dogs: public consultation closed 1 November 2007

Codes of welfare under development:
- Transport in New Zealand
- Sheep and beef cattle
- Temporary housing (including boarding establishments)

Cheryl O’Connor, Programme Manager Animal Welfare, phone 04 894 0371, fax 04 894 0747, cheryl.o’connor@maf.govt.nz

Animal manipulation statistics due

All organisations/individuals with a code of ethical conduct or who have an arrangement to use another organisation’s animal ethics committee are reminded that their annual return of animals manipulated during 2007 is due to be submitted to MAF by 31 January 2008. Returns must be in writing and should be made on the forms provided by MAF for this purpose.

A copy of the form is posted to organisations in December each year and is also available on the MAF Biosecurity New Zealand website:


Please do not use old versions of the form.

Kirsty Grant, Executive Coordinator Animal Welfare, phone 04 894 0366, fax 04 894 0747, animalwelfare@maf.govt.nz

Biosecurity is about managing risks – protecting the New Zealand environment and economy from exotic pests and diseases. MAF Biosecurity New Zealand 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 during 17/09/2007 – 09/11/2007 and held in the Plant Pest Information Network (PPIN) database. Wherever possible, common names have been included.


<table>
<thead>
<tr>
<th>Organism</th>
<th>Host</th>
<th>Location</th>
<th>Submitted by</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypoponera confinis (ant: no common name)</td>
<td>Soil sample (shingle)</td>
<td>Wellington</td>
<td>IDC (general surveillance)</td>
<td>Usually a tropical species, specimens were collected by Landcare Research from a shingle beach on Wellington Harbour. This species has no known adverse impacts.</td>
</tr>
</tbody>
</table>

### New host reports

<table>
<thead>
<tr>
<th>Organism</th>
<th>Host</th>
<th>Location</th>
<th>Submitted by</th>
</tr>
</thead>
<tbody>
<tr>
<td>No new host records during this period.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Extension to distribution reports

<table>
<thead>
<tr>
<th>Organism</th>
<th>Host</th>
<th>Location</th>
<th>Submitted by</th>
</tr>
</thead>
<tbody>
<tr>
<td>No extension to distribution records during this period.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Organism</th>
<th>Host</th>
<th>Location</th>
<th>Submitted by</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mastigiosporium album (fungus: no common name)</td>
<td>Phleum pratense (Timothy)</td>
<td>Taranaki</td>
<td>IDC (general surveillance)</td>
<td></td>
</tr>
<tr>
<td>Discocora yuccae (fungus: no common name)</td>
<td>Yucca elephantipes (yucca)</td>
<td>Coromandel</td>
<td>IDC (general surveillance)</td>
<td></td>
</tr>
<tr>
<td>Rachicladosporium luculiae (fungus: no common name)</td>
<td>Lucilia sp. (lucilia)</td>
<td>Auckland</td>
<td>IDC (general surveillance)</td>
<td></td>
</tr>
<tr>
<td>Proteuxoa sanguinipuncta (insect: no common name)</td>
<td>Mercury vapour light</td>
<td>Hawke’s Bay</td>
<td>Landcare Research</td>
<td></td>
</tr>
<tr>
<td>Fergusonina metrosiderosi (insect: no common name)</td>
<td>Metrosideros excelsa (pohutukawa)</td>
<td>Auckland</td>
<td>Landcare Research</td>
<td></td>
</tr>
<tr>
<td>Uloma sanguinipes (Tenebrionid beetle)</td>
<td>Pinus sp. (pine)</td>
<td>Auckland</td>
<td>IDC (general surveillance)</td>
<td></td>
</tr>
<tr>
<td>Diaportha abdita (fungus: no common name)</td>
<td>Melia azedarach (Persian lilac, pride of India)</td>
<td>Bay of Plenty</td>
<td>Ensis (high-risk site surveillance)</td>
<td></td>
</tr>
<tr>
<td>Emplesis bifoveata (weevil)</td>
<td>Syzygium paniculatum (brush cherry, creek lily pilly)</td>
<td>Auckland</td>
<td>Ensis (risk site surveillance)</td>
<td></td>
</tr>
<tr>
<td>Pythium heterothallicum (fungus: no common name)</td>
<td>Malus sylvestris var. domestica (apple)</td>
<td>Wellington</td>
<td>IDC (general surveillance)</td>
<td></td>
</tr>
<tr>
<td>Koeleria subterranea (grape root rot)</td>
<td>Vitis riparia (frost grape, river bank grape)</td>
<td>Auckland</td>
<td>IDC (general surveillance)</td>
<td></td>
</tr>
</tbody>
</table>

### Significant find reports

<table>
<thead>
<tr>
<th>Organism</th>
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<th>Submitted by</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>No significant find records during this period.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### New host reports

<table>
<thead>
<tr>
<th>Organism</th>
<th>Host</th>
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<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mycopsphaeria africana (fungus: no common name)</td>
<td>Griselina littoralis (Papauma, broadleaf)</td>
<td>Bay of Plenty</td>
<td>IDC (general surveillance)</td>
<td></td>
</tr>
<tr>
<td>Dothistroma pini (dothistroma)</td>
<td>Pinus densiflora (Japanese red pine)</td>
<td>Buller</td>
<td>Ensis (high-risk site surveillance)</td>
<td></td>
</tr>
<tr>
<td>Platypus apicalis (pinhole borer)</td>
<td>Acacia dealbata (silver wattle)</td>
<td>Hawke’s Bay</td>
<td>Ensis (exotic forest survey)</td>
<td></td>
</tr>
<tr>
<td>Isotenes miserana (orange fruitborer)</td>
<td>Camellia sp. (camellia)</td>
<td>Auckland</td>
<td>IDC (orange fruit borer survey)</td>
<td></td>
</tr>
<tr>
<td>Phytophthora sp. Asparagus (Phytophthora rot)</td>
<td>Beschormenia yuccoides (Mexican lily)</td>
<td>Auckland</td>
<td>IDC (general surveillance)</td>
<td></td>
</tr>
<tr>
<td>Sigchara acuta (green planthopper)</td>
<td>Macadamia sp. (macadamia nut)</td>
<td>Auckland</td>
<td>IDC (general surveillance)</td>
<td></td>
</tr>
<tr>
<td>Diplosca sp. (fungus: no common name)</td>
<td>Castanea sativa (European chestnut, sweet chestnut)</td>
<td>Auckland</td>
<td>IDC (general surveillance)</td>
<td></td>
</tr>
<tr>
<td>Deightoniella torulosa (black tip of fruit, deightoniella speckle)</td>
<td>Ensete ventricosum (Abyssinian banana)</td>
<td>Auckland</td>
<td>IDC (general surveillance)</td>
<td></td>
</tr>
</tbody>
</table>

### Extension to distribution reports

<table>
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<tr>
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<th>Host</th>
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<th>Submitted by</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discogloeum veronicae (fungus: no common name)</td>
<td>Veronica persicae (birdeye speedwell, common field speedwell, Persian speedwell)</td>
<td>Auckland</td>
<td>IDC (general surveillance)</td>
<td></td>
</tr>
</tbody>
</table>