



# Welfare Pulse

Animal welfare in New Zealand and around the world

### New code of welfare for goats

The code of welfare for goats was recently issued by the Minister for Primary Industries. The code, which was developed by the National Animal Welfare Advisory Committee (NAWAC), applies to all goats kept for management purposes in New Zealand, and encourages all those responsible for goats to adopt the highest standards of husbandry, care and handling. Goats are kept for a number of different reasons in New Zealand and are farmed for milk, meat and fibre as well as being kept for purposes of weed control, for display in safari parks or kept as pets. The code covers all aspects of goat management including food and water, housing, shelter, kidding does and milking.



The practice of tethering goats is also addressed in the code and additional requirements have been added around this practice. NAWAC chairman John Hellström says about the tethering of goats:

"We gave it very serious consideration because there are issues with goats that are tethered. But we concluded that the problems with tethering weren't about the tethering itself, but the conditions around that."

"The code allows for goats to be tethered, however, there are strict requirements around how a goat must be tethered, the equipment used to tether it and the provision of food, water and shelter whilst on the tether. In addition, tethered goats must be trained to the conditions and kept under close supervision."

NAWAC has also emphasised in the code that goats are sociable animals and companions are important to them. Companions of their own species are preferable, but goats can also live happily with other species such as sheep, cows or horses.

The code has been welcomed by Bob Douglas, the manager of the Goats Industry Group at Federated Farmers who says:

"The welfare code is a significant step in helping all goat owners ensure their animals are appropriately looked after."

The code was originally developed by an industry-convened writing group, with input from the milk, meat and fibre goat sectors, veterinarians and animal welfare representatives.

The Animal Welfare (Goats) Code of Welfare 2012 is available online at http://www.biosecurity.govt.nz/animal-welfare/codes/goats or by request from animalwelfare@maf.govt.nz



Growing and Protecting New Zealand

#### JUNE 2012 ISSUE 11

#### CONTENTS

New code of welfare for goats	1
Scientific seminar on ethics	2
How humane are our pest control tools?	3
CALLISTO	4
Hoof care for good equine welfare	5
Regenerative medicine and the Three Rs	6
Three Rs Award	6
Animal welfare strategy update	7
Owning the wild	8
Farm worker prosecuted	9
Services to animal welfare recognised	9
Rodeos Code of Welfare (2003) under review 10	
Welfare requirements for the export of horses 10	

### Scientific seminar on ethics

The Australian RSPCA's series of annual scientific seminars have become known for addressing controversial animal welfare issues in an environment that encourages audience participation provoking lively debate.

The 2012 Canberra seminar focused on ethics – Animal welfare and ethics: from principles to practice. With a line-up of speakers including philosophers, ethicists, anthropologists and lawyers as well as bioethicists, veterinarians and animal welfare researchers, it was always going to include some new and different approaches. One example of this was a presentation by Simone Dennis, Lecturer in Anthropology at the Australian National University. Simone spent time in laboratories with scientists, researching the relationships such people form with the animals they use. The result – For the love of lab rats: kinship, human-animal relations and good scientific research - revealed the ambiguity of the relationship, where kinship is recognised alongside utility. She found that while some researchers set themselves apart from the animals as a way of coping, others form a close relationship with them as a way of offsetting some of the procedures done to them. For instance, when euthanasia is necessary, some scientists choose to reduce the potential stress of their animals by killing them themselves rather than leaving the task to someone less familiar to the animals.

Another speaker, John Hadley, from the Department of Religion, Anthropology and Philosophy at the University of Western Sydney, questioned a commonly held view that humane euthanasia, as opposed to causing an animal pain or distress, is not a welfare issue. In *Pain, death and concern for animal life*, he argued that by acknowledging that animal pain is "bad", we grant animal life ethical consideration, and that perhaps it is illogical to then consider a painless death ethically acceptable. Peter Sandøe, Professor of Bioethics, University of Copenhagen, likewise questioned some of the assumptions made in animal welfare science. Despite the emphasis on science as informing decisions on managing animals, he exemplified ways in which ethical assumptions are intrinsic to the study and assessment of animal welfare as:

- the way we define animal welfare in the first instance;
- which indicators we choose as measures of welfare;
- the trade-offs that might be made when considering the net or average welfare of a group of animals; and
- how we deal with scientific uncertainty.

The seminar attracted 130 attendees from government, research institutions and universities, veterinary practices and industry groups, as well as animal welfarists.

Previous seminar titles have included *Cruelty to animals: a human problem* (2005), *How much space does an elephant need? The impact of confinement on animal welfare* (2007) and *Animals in transit: The journey ahead* (2008).

Full proceedings of the 2012 and all other seminars are available on the RSPCA website.

Virginia Williams Chair National Animal Ethics Advisory Committee naeac@mpi.govt.nz



#### Introducing the Ministry for Primary Industries

MAF changed its name recently to reflect the new functions of the organisation following its merger with New Zealand Food Safety Authority and Ministry of Fisheries over the past two years.

The new name, the Ministry for Primary Industries, Manatū Ahu Matua (MPI), came into effect on 30 April 2012.

We'll be updating our public presence to reflect the change of name over time. Our website address has changed to **www.mpi.govt.nz** and you will be directed there if you type in the MAF web address.

### How humane are our pest control tools?

### Applying a model to assess the welfare impacts of pest control tools in New Zealand

Some introduced species in New Zealand cause significant environmental damage, or carry diseases that threaten native flora and fauna and agricultural production. Increasingly, animal welfare is an important consideration when selecting appropriate "pest" control methods for such wildlife. Until recently, no formal approaches existed for systematic and transparent evaluation of the animal welfare impacts of control methods.

A welcome progression has been the development of a **model** for assessing the relative humaneness of pest animal control methods. The model grades animal welfare impacts based on a combination of available scientific and operational information and the judgement of a panel of experts.

In 2010, MAF commissioned an evaluation of this model using a selection of New Zealand's current and future lethal pest control tools. A range of vertebrate pesticides ("vertebrate toxic agents"), kill traps, leg-hold traps and methods for controlling rabbits in their burrows was assessed for corresponding "target" pest mammal species, and for selected non-target mammal species for some.

#### Applying the humaneness assessment model

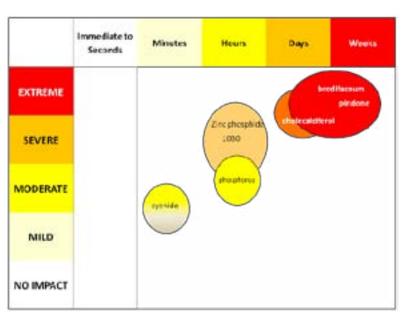
A review panel with expertise in animal welfare sciences, pest animal management, veterinary science and toxicology agreed that the model suited New Zealand control methods, but also identified and implemented some modifications to the original framework.

The modifications were intended to allow fuller use of available information and to increase resolution of the grading between different control method x species combinations, to make clearer distinctions between physical damage or injury and potential negative experiences (e.g. breathlessness) when grading welfare impacts, and also to indicate the level of uncertainty around grading where review information was especially limited. This helped identify control tools and pest species for which particular "welfare" data gaps existed.

The panel also concluded that an existing **guideline** developed by the National Animal Welfare Advisory Committee was appropriate for assessing the animal welfare impacts of kill traps and that previous assessments made using this guideline should stand.

#### So what are the welfare impacts of our tools?

The figure below shows an example ranking for vertebrate toxic agents in possums.



Padded and unpadded Victor No. 1 leg-hold traps for possums, using best practice, were ranked as intermediate. There was insufficient information to assess their use for cats and ferrets.

Cyanide (pelletised) for possums and wallabies was ranked with the lowest impact, with animals losing consciousness within minutes of a lethal exposure.

Sodium fluoroacetate (1080) was considered intermediate for all species considered (possums, rodents, mustelids, rabbits). More information is needed to make conclusions about the impact of the progressive reduction in consciousness on the duration and intensity of impacts.

For all species, anticoagulant toxic agents (e.g. brodifacoum, diphacinone, pindone, coumatetralyl) had the highest relative impact on welfare, with their grading reflecting possible severe or extreme pain associated with widespread haemorrhaging over days to weeks. Cholecalciferol (targeting possums) was also graded as having high welfare impact.

For toxic agents under development or newly registered for use in New Zealand, relative welfare impacts were intermediate, but with a high level of uncertainty because of less available information. Research is required to further characterise the welfare impacts of zinc phosphide and phosphine (in possums), and of the 'red blood cell' toxicants PAPP (in stoats and feral cats) and sodium nitrite (in pigs and possums).

#### A copy of the report is available online.

Penny Fisher Research Leader Pest Control Technologies Team, Landcare Research fisherp@landcareresearch.co.nz

### CALLISTO: Reducing the risk of zoonotic disease from companion animals



Most people view their companion cat, puppy or guinea pig as a cuddly, harmless bundle of fun, love and energy. However, fewer people are aware of the risks that companion animals may pose both to us and to other animals in the form of zoonotic disease. Zoonoses are diseases that can be transferred between species of animal and from animal to human. These diseases can be bacterial or fungal, viral or parasitic and can vary from those that are relatively harmless to humans and can be easily treated, such as ringworm, to those that, if left untreated, are likely to prove fatal, such as rabies. **CALLISTO** (Companion Animals multisectoriaL, interprofessionaL, Interdisciplinary Strategic Think tank On zoonoses) is a new European research programme that aims to examine companion animals as a source of infectious disease for people and production animals. This three year venture is financed by the European Commission and is being implemented by an international consortium led by the Federation of Veterinarians of Europe (FVE) and includes research institutes, universities and other animal health associations. Stakeholders include representatives of organisations from New Zealand and Australia (the OIE Collaborating Centre for Animal Welfare Science and Bioethical Analysis), as well as the USA and Canada.

Seven advisory groups have been established consisting of experts in viral, bacterial and parasitic infections, epidemiology, psychology and sociology as well as

persons with knowledge of, and expertise in, animal health and welfare policy. These advisory groups will, over the three year programme, prepare an overview of the current situation and the extent of companion animals as a source of zoonotic disease. The advisory groups will then aim to identify the knowledge and technology gaps for the most important zoonoses and ultimately develop targeted actions to reduce the risk of zoonotic diseases from companion animals. A companion animal can be great source of pleasure and friendship and bring many years of joy to his or her owner, but ensuring high standards of hygiene and a quick response to seek veterinary care when required can help to reduce the potential risks of zoonoses being transferred both to humans and to food producing animals. **CALLISTO** therefore aims to promote risk-awareness of zoonotic disease in companion animals with the aim of maintaining a healthy, happy, human-animal relationship.

#### Nicki Cross Technical Adviser, Animal Welfare Ministry for Primary Industries



### Hoof care for good equine welfare

A new code of welfare for equines is currently under development, which will set minimum standards and promote best practice for the care and management of all horses, ponies, donkeys and mules in New Zealand. Appropriate hoof care will be considered as part of this code.

Everyone associated with equines understands that healthy hooves are an essential component of overall welfare. But from a practical perspective, how can owners achieve this outcome? Although basic farrier tools are available for purchase at many saddlery shops, the process of trimming hooves or applying shoes without adequate training and experience could result in injury to the hoof or impair the horse's movement, possibly resulting in irreparable damage to the horse. It is therefore advisable to seek out a professional to perform these tasks.



One focus of the equine code of welfare will be achieving sound hooves that are healthy and functional on both the outside and the inside.

As with all existing codes of welfare, the equine code will set outcome-based minimum standards, supplemented by recommended best practices, to promote balanced progress towards higher levels of welfare. In this manner the code will focus mainly on desired welfare outcomes, and the responsibility for ensuring that the welfare outcome is achieved will lie with the owner or person in charge of the animal. By using outcome-based standards instead of a prescriptive list of requirements the code allows for flexibility and innovation.

In New Zealand there are two broad groups of hoof care professionals; farriers and barefoot hoof care specialists, both of whom list equine welfare as one of their primary objectives. Generally, shoes are applied to assist a horse's hooves when their exercise regime results in excessive wear to the hoof, when they need corrective work, or when they are working on surfaces where they need additional traction. Not all horses will require shoes, particularly those with an otherwise healthy lifestyle that are exercised moderately over mostly kind surfaces.

An experienced or qualified farrier can either apply shoes or trim a barefoot horse, depending on the needs of the horse and the objectives of the owner. The **New Zealand Farriers Association** works in conjunction with the New Zealand Equine Industry Training Organisation and the New Zealand Qualifications Authority to ensure that interested professionals have access to a range of nationally recognised qualifications.

As the name implies, barefoot specialists provide hoof care without applying shoes. The two organisations that offer structured professional courses for barefoot trimmers are the **Hoof** 



An objective for anyone in charge of equines is a healthy hoof that allows both horse and handler to enjoy a range of recreational or competitive activities over a variety of terrains. Author Katie Bicknell enjoys both competitive and social driving with her miniature horse Da Vinci

**Organisation of New Zealand Inc** and **Strasser Hoofcare**. Both of these organisations offer two-year certification programmes.

The best hoof care option for any particular horse/owner combination will depend on a variety of factors including the age, size and overall health status of the equine as well as the intended range of activities the owner would like to enjoy. Given that the responsibility for the welfare of the horse rests with the owner or person in charge, it is in the owner's best interest to ensure that they can recognise signs of poor hoof health at an early stage e.g. cracks, chips or overgrown hooves. Any owner with doubts about the health status of their horse's feet should consult an appropriately qualified equine vet.

#### Katie Bicknell

National Animal Welfare Advisory Committee nawac@mpi.govt.nz

### Regenerative medicine and the Three Rs

**The Three Rs stand for:** "Replacement" (the use of non-animal methods over animal methods where possible), "Reduction" (manipulating experimental design to obtain comparable levels of information from fewer animals or more information from the same number of animals) and "Refinement" (modification of techniques to minimise potential pain, suffering or distress to the animals).

Regenerative medicine is the process of replacing or regenerating cells, tissues or organs to restore or establish normal function in the human body. Together with tissue engineering, it has the potential to generate tissues including bone, cartilage, skin and eventually more complex organs such as spinal tissue. Regenerative medicine is also currently being used to produce advanced therapies for human health in treating medical challenges such as trauma and chronic illness.

However, regenerative medicine has also been recognised for its potential benefits for animals used in research, testing and teaching (RTT). It is important that all animals used in RTT are subjected to the minimum amount of pain and distress possible and for this reason, the guiding principles of the Three Rs are fundamental to the use of animals in RTT in many countries, including New Zealand.

The generation of tissues and organs for experimental purposes using regenerative medicine has the potential to align with the Three Rs by enabling procedures to be carried out on specific engineered tissues and organs rather than live animals, reducing the number of animals used. A **Consortium for Medical Device Technologies** created with the aim of growing the medical device industry in New Zealand features regenerative medicine as one of its six research themes. The Consortium also has the potential, with its broader focus on medical devices, to contribute to other Three Rs initiatives, such as non-invasive imaging.

New Zealand's capabilities in regenerative medicine are spread across universities, research institutes and district health boards. An Auckland veterinary clinic has recently launched a stem cell treatment service for arthritic conditions in dogs demonstrating New Zealand's ability to play a part in this new initiative.

Ultimately, the Consortium for Medical Device Technologies is aiming for regenerative medicine to constitute a new industry for New Zealand with positive impacts on the health of communities both nationally and internationally. However, its potential to benefit animal welfare in providing alternatives for the use of animals in RTT is also of interest.



Reg Harris Industrial Development Facilitator Consortium for Medical Device Technologies regharris@xtra.co.nz National Animal Ethics Advisory Committee (NAEAC) Three Rs Award – celebrating achievements in the implementation of the Three Rs in New Zealand

A reminder that applications for the 2012 NAEAC Three Rs Award close on Friday 20 July 2012. There is no application form, but you must provide:

- evidence of how the applicant or nominated individual, group or institution qualifies for the Award (maximum of three pages);
- curriculum vitae of the applicant(s) or nominee(s);
- the names and contact details of up to two potential referees (who may, at the Committee's discretion, be approached for comment).

Applications or nominations (with knowledge of nominee) should be sent to:

NAEAC Secretariat c/- Ministry for Primary Industries P O Box 2526 Wellington 6140

#### naeac@mpi.govt.nz

The prize will consist of a certificate and a financial award of \$2,000, which will be presented in Wellington at the NAEAC animal ethics committee workshop on Friday 16 November 2012. Receipt of the award will be publicised in selected media, although specific details of the work involved can be restricted if appropriate.

### Animal welfare strategy update

The Ministry for Primary Industries (MPI) is leading the development of a national strategy for animal welfare. The strategy will set the future direction of animal welfare in New Zealand and outline the Government's key priorities over the next few years.

Alongside the work to develop and implement the strategy, MPI is undertaking a review of the Animal Welfare Act 1999.

"The MPI project team has obtained input from key stakeholders such as vets, animal industries, animal advocacy groups, and users of animals in research and teaching. It has also worked with a specially-convened stakeholder advisory group", says MPI Policy Manager, Colin Holden.

"We have made good progress on the strategy and Act review, and we're on track to consult the public on proposals during August this year".

"Public consultation is important because it provides everyone with an interest in animal welfare the opportunity to have their say, and to help guide the direction of New Zealand's animal welfare system". The draft strategy is likely to focus on the integrity of our animal welfare system and ensuring that animals' welfare needs are met. The legislation proposals will aim to create a wider range of compliance tools in the Act, providing greater flexibility for managing animal welfare risks and allowing the animal welfare system to evolve as societal expectations shift. Some technical amendments will also be proposed.

"Linking the legislation review with the development of a national strategy will help to ensure that legislation fully supports our overarching vision", Colin says.

Final strategy and legislative proposals will be presented to the Minister for Primary Industries in late 2012 or early 2013. It is intended that an amendment Bill be introduced into the House during the first half of 2013.

"New Zealand has an excellent reputation for animal welfare. The development of this strategy and the review of the Animal Welfare Act is an opportunity to demonstrate our ongoing commitment to the welfare of animals," Colin says.

You can find further information of details of this work on our website.

### CODES OF ETHICAL CONDUCT

approvals, notifications and terminations since issue 10

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.

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

- Cognosco, Anexa Animal Health (to use AgResearch Ltd's code)
- MetriKlenz Ltd (to use AgResearch Ltd's code)

### Codes of ethical conduct revoked or expired or arrangements terminated or lapsed:

- A1 Genetic Services Ltd
- Animal Health Centre
- Four Rings Enterprises Ltd
- Innate Therapeutics Ltd
- IVP International New Zealand Ltd
- Ward, Christopher G

#### Linda Carsons

Principal Adviser, Animal Welfare Standards Ministry for Primary Industries linda.carsons@mpi.govt.nz

### Accredited reviewers for organisations with a code of ethical conduct

Organisations with a code of ethical conduct are required to undergo a review from time to time. Reviews must be carried out by independent reviewers accredited by the Ministry for Primary Industries (formerly MAF) for the purpose in accordance with section 109 of the Animal Welfare Act 1999. The following person has recently been accredited.

Dr Alan B Macleod 25 Milford Street Aotea PORIRUA 5024 Email: alanbmacleod@yahoo.com For a full list of accredited reviewers click here

### Owning the wild

#### Keeping exotic animals as pets

In New Zealand and the United States large wild animals seem to be in the news.

In Michigan a new law declared wild-type pigs an invasive species and so illegal to own. A number of farms that raised these pigs had to slaughter their entire stock to comply. (Another new addition to the list is the New Zealand Mud Snail, a tenacious mollusc now found across Europe and America.)

In Ohio a man committed suicide after releasing dozens of large cats, primate and bears. Only six were recovered alive – one killed by an accident at a zoo, and the five survivors (leopards, primates and a bear) returned to the owner's widow by the court. Hundreds of primate owners in Ohio fear that legislation being proposed in response may require them to euthanise their pets.

In New Zealand a zookeeper lost her life to an ex-circus elephant being prepared for transport to a sanctuary in California.

When interactions between human and large wild-type species go wrong the footage is heart breaking. Scenes such as whole farms depopulated, tigers laid out in rows in a paddock, catastrophic human injuries caused by a chimpanzee, a child killed by a ... the stories keep coming.

Large wild-type animals represent a unique challenge. Their welfare is hard to assure, they can be dangerous to people, and they often represent a last fading hope for an endangered species.

Decades of under-regulated imports and breeding have considerably raised the stake in the United States where the

New Zealand regulates the importation and containment of exotic animals ("new organisms") under the Biosecurity Act 1993 and the Hazardous Substances and New Organisms Act 1996.

national population of animals like tigers is frankly anyone's guess but probably runs into five figures, perhaps more than the number estimated in the wild. Ownership of pets is regulated at the state level which means that, in some states where libertarian ideals run deep, it is likely to remain essentially unregulated.

It is not that I don't understand the desire to own a piece of the wild. But the stakes are so much higher with these species even for the most qualified of experts under the most controlled of conditions. What makes the risk worth taking is not oneupping the pit bull next door, but genuinely contributing to the conservation of the species. Optimally through a managed breeding and habitat recovery program, but minimally by educating people about what these animals really are. Which is, and should be, wild.

For the vast majority of people the right companion animal is a fully domesticated animal like a dog or cat. And unlike most large wild-types, there are more than enough of these to go around.

Emily Patterson-Kane Animal Welfare Scientist American Veterinary Medical Association ekane@avma.org

### CODES OF WELFARE

- update on consultation, development and review

#### Issued

• Goats

#### **Recommended to the Minister**

Meat Chickens

#### In post-consultation process

- Layer Hens
- Llamas and Alpacas

#### **Under development**

- Equine
- Temporary Housing for Companion Animals (including boarding establishments)

#### Under review

• Rodeos

#### **Cheryl O'Connor**

Manager, Codes of Welfare Animal Welfare Standards Ministry for Primary Industries cheryl.oconnor@mpi.govt.nz

### Farm worker prosecuted

A Dunedin farm labourer has been convicted of ill-treating an animal, which later had to be put down.

Joshua Thomson was sentenced in the Nelson District Court for wilful ill-treatment of a calf in his care. A Ministry for Primary Industries (MPI) Animal Welfare Inspector visited an Outram farm in November 2010 after a complaint about Mr Thomson's treatment of the calf.

A vet who examined the calf, which was blind in one eye as a result of injury, said the animal would have suffered severe pain since and needed to be euthanased. When interviewed by MPI, Mr Thomson admitting hitting the calf in the face with a steel pipe out of frustration.

"When you are responsible for animals, the obligation to keep them fit and healthy is yours and you have a duty to prevent pain, suffering and distress. In this case, Mr Thomson lost control and failed in his obligations" said Ross Thurston from MPI.

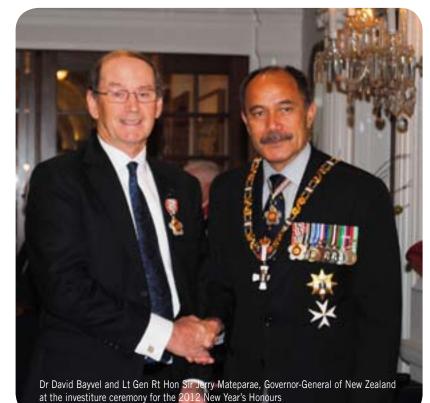
Mr Thomson was sentenced to community work, home detention, and disqualified from owning or having authority over animals for two years.

### Services to animal welfare recognised

Dr David Bayvel, former Director of Animal Welfare at what was then the Ministry of Agriculture and Forestry, was awarded the Queen's Service Order, for services to the State at a ceremony held in May. The QSO is awarded to those "who have rendered either, or both: valuable voluntary service to the community; or meritorious and faithful services to the Crown or similar services within the public sector, whether in elected or appointed office".

Dr Bayvel has had a major influence on the development of animal welfare policies and laws nationally and internationally. He is the Chair of the World Organisation for Animal Health's permanent animal welfare working group. He has helped to develop a series of recommendations, including the humane slaughter and transportation of livestock, which have been agreed by 178 countries.

Dr Bayvel received the World Organisation for Animal Health Meritorious Service Award in 2010 and the New Zealand Veterinary Association's President's Award in 2011. The World Society for the Protection of Animals recently announced that Dr Bayvel has been appointed as its Chief Veterinary Adviser.



### Animal Welfare (Rodeos) Code of Welfare 2003 under review

The Animal Welfare Act 1999 requires that all codes must be reviewed at intervals of not more than ten years. In anticipation of the review, members of the National Animal Welfare Advisory Committee (NAWAC) have been visiting rodeos in both the North and South Island and have reported back on their observations of these events. The draft rodeo code will be released for public consultation during the review and NAWAC welcomes submissions on any aspect of draft.

To read more about how codes of welfare are developed please click here.

National Animal Welfare Advisory Committee nawac@mpi.govt.nz



## Welfare requirements for the export of horses

The horse export industry and the Ministry for Primary Industries (MPI) have recognised the need to review the guidelines under which New Zealand exports horses by air and sea. MPI has initiated a review with the following terms of reference:

- Evaluate current New Zealand animal welfare practices for the export of horses by sea and air freight against the requirements of the Animal Welfare Act 1999, the MAF Standard for the Export of Horses by Sea from New Zealand, the International Air Transport Association Live Animals Regulations, and other relevant standards.
- Identify opportunities to improve the export process.
- In conjunction with the industry and targeted stakeholders prepare draft guidance material.
- Undertake public consultation on the draft guidelines.

The time-frame for completion of the project is June 2013, with the publication of revised guidelines.

To subscribe to receive alerts, including consultation on the horse export guidelines, please see our website.

### Welfare Pulse

*Welfare Pulse* is published three times a year by the Ministry for Primary Industries (MPI). It is of special relevance to those with an interest in domestic and international animal welfare developments.

The articles in this magazine do not necessarily reflect Government policy.

For enquiries about specific articles, refer to the contact listed at the end of each article.

For general enquiries contact:

Welfare Pulse Ministry for Primary Industries Animal Welfare Standards Postal address: PO Box 2526 Wellington 6140, New Zealand Tel: 64-4-894 0100

Email: animalwelfare@mpi.govt.nz

Animal welfare complaints: 0800 00 83 33

### Your feedback

We look forward to hearing your views on *Welfare Pulse* and welcome your comment on what you would like to see more of, less of, or something new that we have yet to cover. Please send your feedback to us by emailing **animalwelfare@mpi.govt.nz** 

### **General subscriptions**

If someone you know is interested in receiving *Welfare Pulse* by email, they can sign up for the alerts on our **website**. Click on animal welfare and then tick "*Welfare Pulse* magazine".

To unsubscribe from email alerts regarding *Welfare Pulse* please **click here** or follow the link provided at the bottom of the alert.