Plan of Action for Rabbit Management

Developed by New Zealand Rabbit Coordination Group

Purpose

Key stakeholders involved in rabbit management have collectively identified a series of issues that are current or potential barriers to effective and efficient management. This plan aims to set out and prioritise a range of actions that will address the issues identified.

Desired Outcomes

- The negative economic, environmental and social impacts of rabbits are minimised;
- The rabbit management system is collaborative, well coordinated and effective;
- Key players in the system are empowered to act by having clear roles, being well informed and having ready access to appropriate tools; and
- Management decisions are transparent and based on sound science.

Background

New Zealand has a long history of rabbit management, including periods of substantial public investment such as the pest destruction boards and the Rabbit and Land Management Programme.

The illegal introduction of rabbit haemorrhagic disease (RHD) virus in 1997 resulted in substantial rabbit population reductions. In highly rabbit prone areas of the South Island RHD provided land owners with a significant relief from the high costs of rabbit control. However, the reduction in control required also resulted in a gradual loss of experienced rabbit control personnel from the pest management industry. In addition a new generation of land owners are now present that have not previously experienced the impacts of high rabbit numbers.

In recent years the rabbit population in highly rabbit prone areas have increased again highlighting the need to ensure that those involved in rabbit management are acting collectively and are well informed. To this end, the Rabbit Coordination Group (RCG) was set up in 2007 to strengthen approaches to rabbit management, allowing key stakeholders to share information and collectively address issues. Members of the group include: affected regional councils, DOC, LINZ, Federated Farmers, Landcare Research, NPCA and MAF.

Following an approach to ministers by Federated Farmers, MAF Biosecurity New Zealand in association with the Rabbit Coordination Group commissioned a report 'The Current State of Rabbit Management in New Zealand' [The Lough Report] which has summarised trends in pre and post RHD rabbit populations in New Zealand. It draws on the knowledge and experience of scientists, pest managers and farmers to identify issues, options and recommendations for the future.

Process for Developing and Prioritising Actions

This plan of action draws on recommendations made in the Lough report and on recommendations from the RCG themselves. Key issues and needs in rabbit management identified below were considered in developing and evaluating a number of proposed actions. The proposed actions have been allocated a priority ranking depending on the RCG's assessment of which will provide the greatest benefit with available resources.

The RCG has also identified who is best placed to lead each of the proposed actions, but with the recognition that the RCG as a whole is committed to the proposed actions. All members of the group will have a role to play in ensuring the successful implementation of the action plan.

Key Issues and Needs Identified

The Rabbit Coordination Group has identified the following issues to be addressed in order to facilitate more effective management of rabbits in New Zealand.

Updated Best Practice Information

There is a need to update best practice information to reflect the changes in legislative requirements for toxin use and to incorporate information on RHD and its impact on rabbit control approaches. The RCG provides a good forum to develop a set of national best practice guidelines agreed between key parties involved in rabbit management.

Updated best practice information needs to be communicated wildly, effectively and constantly to those undertaking rabbit control or management. This is discussed further under communication.

There have been instances of unskilled licence holders carrying out substandard poisoning operations. This presents the risk of creating bait and poison aversion problems, as has occurred historically. If this is allowed to occur it would compromise the ability to effectively manage rabbit populations. It is therefore important to ensure that poisoning operations are carried out using best practice.

Training, Development & Skills Retention

There is a looming shortage of people who are experienced and skilled in rabbit control. Skilled and experienced rabbit control personnel have gradually been lost from the industry under the user pays system. This combined with insufficient training and accreditation mechanisms for operators entering the industry means that the required skills base for rabbit management is not being maintained. Regional councils have also identified that a process is needed to ensure that monitoring methodologies are applied in a constant and comparable manner across the country.

The seasonal nature of rabbit control work also presents a challenge for retaining a pool of skilled rabbit control operators. The majority of large scale rabbit control operations occur during the winter months when rabbit populations are naturally at their lowest and limited food availability makes baiting most effective. This result is a high demand for operators over the winter and then a reduction in work for the remainder of the year. There is a need to have personnel skilled across a range of work and for there to be a greater continuity of work throughout the year.

Support for Collective Action

The initial reduction in large scale rabbit control operations following the arrival of RHD, combined with the earlier dispending of rabbit boards and a move to user pays, has generally resulted in a less collective approach to rabbit management by land owners.

There would seem to be benefit in encouraging landowners (including the Crown) to act more collectively in addressing rabbit populations. A collective approach to rabbit management would enable control to be carried out to the boundary of the rabbit population, or to a suitable

rabbit barrier, irrespective of the land titles it extends over. This would allow more effective control and help mitigate reinvasion issues. Acting collectively would also allow land owners to more readily access information and reduce costs through sharing of resources and reducing duplication of effort.

Groups of land occupiers forming together as a mechanism to collectively address rabbit and/or other pest issues is supported by members of the Rabbit Coordination Group (RCG). Regional councils already support community initiatives and are well placed to undertake a greater facilitation role in future. Federated Framers are well placed to assist them by encouraging farmers to act collectively and engage with the appropriate agencies.

Communication of Information

The current resurgence in rabbit numbers has highlighted the need for a more proactive approach to disseminating information to landowners. Landowners need to be well informed so that they can identify and respond proactively to increasing rabbit numbers to reduce the need for large scale poisoning operations.

Currently the communication of information on rabbit control and related issues is carried out by the various agencies involved in rabbit management or research. The RCG provides a good opportunity for a coordinated campaign to raise awareness of the issue and encourage landowners to take appropriate action.

The RCG has also been working to provide greater consistency of information distributed. The current development of updated and agreed best practice information should provide further benefits in this area.

Appropriate tools

Currently the control of rabbits at high population densities relies heavily on a very limited number of primary control tools. The loss of these tools would make effective rabbit control, where populations have exceeded the Maximum Allowable Limit (MAL), unachievable in rabbit prone areas. For this reason it is important that access to existing tools is maintained and alternatives are explored.

There is also a need to better understand if conventional control and RHD can be complementary in achieving control of rabbit populations. If so, it will need to be understood how and when to use conventional control methods in association with RHD outbreaks to obtain the most effective and efficient control. Better understanding in this area may allow a reduction in the amount of toxin use required

In addition, there are indications that rabbits may be developing genetic resistance to RHDV, which would have significant implications for managing rabbits. Australian researches are seeking to gain a better understanding of this process. There are potential befits to be gained by New Zealand supporting this ongoing research.

Review of Rabbit and Land Management Programme

The term of Land Improvement Agreements registered against land titles during the Rabbit and Land Management Programme have now expired. There may be benefit in taking the opportunity to review what value was gained from those agreements and the associated monitoring. Capturing the lessons learnt may provide useful information for informing future work.

Need Identified	Proposed action	Description and Resulting Benefit	Priority Priority ranking: 1 = high priority 2 = medium priority 3 = low priority	Current status	Timeframe	Lead organisation
Updated Best Practice Information	Develop aerial 1080 best practice guidelines.	These are primarily focussed on identifying the legislative requirement that must be met when carrying out aerial 1080 operations for any target species, including both possums and rabbits. Benefit: These guidelines address a recommendation made during the ERMA 1080 review and should make operators aware of their legal requirements in this area.	1	Work in progress	By 31 December 2010	NPCA in conjunction with key agencies
	Develop regional council standard operating procedure (SOP) for aerial 1080 application.	These are a more detailed set of procedures to sit under the 1080 best practice guidelines. They will describe how operational activities should be carried out. The SOP will again cover both possums and rabbits but will be specific in relation to how each type of operation should be carried out. Benefit: The SOP should enable operations to be carried out to a high standard and ensure that best practice methods are used.	1	Work in progress	By 31 December 2010	NPCA in conjunction with Biosecurity Managers Group (BMG)
	Update rabbit management best practice guidelines	This updated best practice will be based on the NPCA's Pest Rabbits Monitoring and Control publication and The Rabbit Managers Fact Pack. It will include control and monitoring methods along with land-use considerations. It will also communicate that investing adequate resources to carry out control operations properly will be most cost effective in the longer term The target audience for this best practice includes; landowners, rural collectives, operators / contractors and farmers. . Benefit: The provision of this information will ensure those involved in managing rabbits are well informed of the issues and available control methods. This should allow them to take appropriate and timely action to manage rabbits. This best practice information will inform the communications plan discussed below.	1	Work in progress	By 31 January 2011	NPCA in conjunction with key agencies
	Develop a code of practice for rabbit poisoning operations	This will define processes and set minimum standards for carrying out a rabbit poisoning operations. While a code of practice is voluntary it could be reflected in	2		Within 5 years	RCG

		regional pest management strategy rules as appropriate. The code of practice will be informed by the updated best practice information. Benefit: The code of practice being included in RPMS rules would provide a mechanism to address situations where sub-standard rabbit control operations are carried out. It would provide a basis for compliance action to be undertaken if required.				
Training , Development & Skills Retention	Develop training course for operators	This could comprise several modules including; use of control tools, monitoring and Aerial 1080 operations SOP. There will be a need to have an independent assessor. Potential for this to be delivered by an AgITO. Benefit: This training will help to address the current lack of training for rabbit control operators entering the industry.	1		Within 3 years	Biosecurity Managers Group (BMG) and MAFBNZ; Agriculture Industry Training Organisation (AgITO)
	Training and certification for operators.	Once the training course above has been developed it will be run on an ongoing basis to train and certify new operations entering the industry. Benefit: The certification will provide evidence that operators have achieved a required level of competency in each module completed.	1		Ongoing	Agriculture Industry Training Organisation (AgITO)
	Professional development of [regional council] pest management staff for rabbits	Ongoing training to help people obtain required standards and knowledge. There will be a focus on developing staff that are capable of planning and running rabbit operations. This could be done through training modules and through on the job training. There is a need to make sure staff are trained on differences between abnormal and normal. May be opportunity to align with DOC's in house training in some areas. Benefit: This training will help to develop and retain knowledge of rabbit control within the pest management industry. It will also help to develop sufficient staff capable of planning and running rabbit operations.	2		Ongoing	Biosecurity Managers Group (BMG) and MAFBNZ; Agriculture Industry Training Organisation (AgITO); Rabbit Management Staff.
	Rabbit monitoring accreditation	This is to ensure a consistent and standardised application of monitoring techniques across the country, with a particular focus on compliance monitoring. A similar system already exists with NPCA's Possum monitors accreditation system. The potential to expand the NPCA system to include rabbits will be explored.	2		Within 2 years	NPCA in conjunction with Biosecurity Managers Group (BMG)

		<u>Benefit:</u> This action will provide a more constant and robust application of monitoring methods throughout the country and across organisations.				
	Continuity of employment for rabbit operators	Advocate for providing continuity of work throughout the year, for a pool of skilled rabbit control and monitoring operators, so that skilled operators are retained. Explore the opportunity to engage in the 'seasonal work marketplace' initiative led by the Department of Labour to insure alternative work for times of the year when less rabbit work is undertaken. Additional opportunities to utilise operators for other off season work will also be explored. <u>Benefit:</u> To provide rabbit operators with ongoing employment throughout the year so that they are not forced to leave the industry.	3		Ongoing	RCG
Support for Collective Action	Promote, encourage and facilitate land owners acting collectively in managing rabbits	This will assist affected parties to develop collective approaches for responding to rabbit issues. Where required a facilitator could be used to try and seek agreement between the parties involved. A collective approach is particularly important where rabbit issues involve multiple properties, resulting in reinvasion issues if control activities are not coordinated. <u>Benefit:</u> Acting collectively should assist landowners to better coordinate rabbit control activities , resulting in more effective and efficient use of resources. A collective approach by landowners will also make it easier for management agencies to engage and provide advice and information as outlined below	1		Ongoing	Federated Farmers, Regional Councils, DOC, LINZ and RCG
	Provide high quality information and advice to groups managing rabbits	This will allow landowner groups to be well informed of current rabbit best information and available resources such as suitable contractors. Information provided could also include the experience of landowners who are managing rabbits effectively and who are prepared to share their knowledge. Information provided needs to follow best practice, be consistent across agencies and with messages in the communication plan below. <u>Benefit:</u> This will allow landowners to make well informed decisions on how best to manage their rabbit issues	1		Ongoing	Regional Councils

Communication of Information	Develop a communication plan	This will set out the key information that needs to be communicated to various stakeholders. It will also identify mechanisms for getting the message out to target audiences, e.g. Television, radio, newspapers and publications such as Federated Farmers newsletters Benefit: A structured and proactive communication plan agreed by RCG members will help to ensure greater awareness of rabbit issues and updated best practice information.	1		Within 1 year	RCG with support from MAFBNZ
	Better use of websites for communicating information on rabbit management.	Ensure council and DOC websites are updated to reflect updated best practice. Websites should provide comprehensive information, including RHD information, and could link to the updated NPCA best practice document. Benefit: This action will ensure that those seeking information on rabbits can easily access consistent messages that reflect current best practice.	2		Within 2 years	Councils and DOC
	Regular field days for land owners	Councils to hold regular field days for land owners on request. Could be used to aid implementation of updated best practice information. Federated Farmers to help organise the community interest groups/meetings, and the Councils will supply people to provide information and advice. DOC and LINZ to be involved as land managers where appropriate, as success will depend on all land occupiers being involved. Benefit: Field days will provide another mechanism to provide best practice information. They are also a good forum to initiate collective approaches to rabbit issues.	1		Within 2 years	Councils and Federated Farmers
Appropriate Tools	Research to optimise use of existing toxins	Address information gaps on use of existing toxins. Research is being conducted looking at opportunities to use existing tools more efficiently, including how best to use them in the presence of RHD. Additional questions to address include; the non-target risks posed by carrot chaff, small baits and oat bait (Landcare Research just starting to look at chaff). Benefit: This research will help to address some existing knowledge gaps and will inform further refinement of best practice and better use of existing tools.	1	Work in progress	Ongoing, but initial results within 3 years.	Landcare Research and RCG

	Support development of alternative toxins	Need to go through science strategy, FORST funding (noting this will take some time). Closing gaps covers work on native and non-native species. DOC holds some responsibility to close these gaps (for example: soil, invertebrates, birds). Benefit: Potential to reduce the current dependence on a very limited number of primary control methods, i.e. methods that can be used to regain control of high density populations.	2		Ongoing	RCG
	Determine the need for and potential for refining cELISA assay	The members of the RCG in conjunction with experts will establish the need and potential for refining the cELISA test for RHD exposure. Benefit: To determine what need exists for further research in this area.	3		Within 5 years	RCG
	Investigate genetic resistance to RHD	Further investigation of genetic resistance and its management implications to be carried out by regional councils and research organisations as funding allows. Maintain links with research being carried out in Australia and support this where possible. Benefit: Understanding genetic resistance and the associated management implications will be important for adapting best practice so that RHD benefits can be maximised.	2		Ongoing	RCG
Review of Rabbit and Land Management Programme	Investigation of whether Rabbit and Land Management Programme plans were effective in locking in benefits from public funds	Crown could consider another alternative to this in the future. Land improvement agreements were monitored annually to ensure land occupiers were meeting the requirements. Benefit: Capturing the lessons learnt may provide useful information for informing future work.	3		Within 5 years	RCG
	Review effectiveness of land condition monitoring conducted by Rabbit and Land Management Programme	Rabbit and Land Management monitoring has now ceased as the term of the Land Improvement Agreements that were registered against property titles has expired. Benefit: There may be benefit in taking the opportunity to review what value was gained from those agreements and the associated monitoring. Capturing the lessons learnt may provide useful information for informing future work.	3		Within 5 years	RCG

Table showing proposed timelines for actions

Need Identified	Proposed action	2010	2011	2012	2013	2014	Ongoing
Updated Best Practice Information	Develop aerial 1080 best practice guidelines.						
	Develop regional council standard operating procedure (SOP) for aerial 1080 application.						
	Update rabbit management best Practice guidelines						
	Develop a code of practice for rabbit poisoning operations						
Training , Development & Skills Retention	Develop training course for operators						
	Training and certification of operators						
	Professional development/ ongoing training of rabbit management staff						
	Rabbit monitoring accreditation						
	Continuity of employment for rabbit operators						
Support for Collective Action	Promote, encourage and facilitate land owners acting collectively in managing rabbits						
	Provide high quality information and advice to groups managing rabbits						
Communication of Information	Develop a communication plan						
	Better use of websites for communicating information on rabbit management.						
	Regular field days for land owners						
Appropriate Tools	Research to optimise use of existing toxins						
	Support development of alternative toxins						
	Determine the need for and potential for refining cELISA assay						
	Investigate genetic resistance to RHD						
Review of Rabbit and Land Management Programme	Investigation of whether Rabbit and Land Management Programme plans were effective in locking in benefits from public funds						
	Review effectiveness of land condition monitoring conducted by Rabbit and Land Management Programme						

Key:

	Initial Action
	Ongoing activity