



Victorian
Rabbit Action
Network

A Catalyst for Change Victorian Rabbit Strategy

Victorian Rabbit Action Network



Cover: Bellarine Rabbit Control Working Bee, Drysdale.
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Acknowledgement of Country

The authors acknowledge the Aboriginal Traditional Owners within Victoria, their rich culture and their spiritual connection to Country. We also recognise and acknowledge the contribution and interest of Aboriginal people and organisations in the management of natural resources.

Disclaimer

Every effort has been made to ensure that the information in this Strategy is accurate. The Victorian Rabbit Action Network does not guarantee that the publication is without flaw of any kind and therefore disclaims all liability for error, loss or other consequence that may arise from relying on any information in this Strategy.

Inside Cover: Aerial photo of the Ned's Corner Property, Photographer Darren Grigg

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**Victorian
Rabbit Action
Network**



Australian Government
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**Economic Development,
Jobs, Transport
and Resources**

AGRICULTURE VICTORIA



Table of Contents

01

VICTORIAN RABBIT ACTION NETWORK

3

Goal of VRAN

3

02

RABBITS – A PEST

4

Rabbits

4

The Impact

4

Distribution

5

Control Options

5

03

RABBIT CONTROL IN VICTORIA

6

04

ACHIEVEMENTS

8

VRAN Initiatives and Influence

8

Opportunities

10

05

GOAL, OBJECTIVES AND ACTIONS

12

Actions

13

1. Increase land managers' awareness and use of best-practice rabbit management information

2. The level of community participation and effectiveness in on-ground rabbit control will be increased across Victoria

3. A state-wide network of community, industry, science and government participants with rabbit control expertise will be established

4. VRAN will extend its reach throughout Victoria to build state-wide leadership and expertise in sustained rabbit control

5. VRAN will be a well-governed and resourced group with capacity to function beyond the life of this Strategy

06

Measuring Success

16



FOREWORD

The Victorian Rabbit Action Network (VRAN) Strategy is about far more than just rabbits.

The principles on which this Strategy are based can be applied to the resolution or management of a number of issues including but not exclusive to – invasive species, biosecurity, natural resources and infrastructure.

The principles I refer to are based on 'empowerment,' acknowledging people's local experience and knowledge into the design and delivery of policies and programs. If we want sustained community-led action it is critical that those who are impacted by the problem have ownership of the process for resolving the issue. Reference to people can range from individuals, to communities, to corporations and governments over all land tenures.

Rabbits have been a pest across the Australian landscape ever since they were introduced into Victoria in 1859. They are a constant threat to food and fibre production, cultural heritage, biodiversity and infrastructure. The impacts of rabbits that are often unmeasured are the adverse social and mental health consequences on land managers.

Rabbit management cannot be seen as a "fix and forget". We have to accept that rabbit management is a long-term proposition and that this applies regardless of tenure. We will only be successful if the changing generations continue the sustainable management of rabbits.

We have good technology, sound technical skills and excellent communication tools at our disposal. The challenge for all of us is to use our people skills, to work together in partnership to the best of our ability.

By working together, we can achieve a lot and pass on a legacy for future generations to follow.



Gerald Leach
VRAN Chair

**"By working together,
we can achieve a lot
and pass on a legacy
for future generations
to follow."**



Image: On-ground rabbit control, Photographer Mark Farrer

Victorian Rabbit Action Network

The Victorian Rabbit Action Network (VRAN) is a partnership between community representatives, industry and government agencies that enables a more collaborative approach to rabbit management.

VRAN was established in 2014 on the basis that rabbit management is only effective if all affected individuals, groups and organisations take a coordinated approach over the long-term. The partnership gives community members an equal voice with agencies in identifying and addressing opportunities to improve rabbit management in Victoria. It means that solutions are built around on-ground knowledge and capacity, are locally relevant, and create a sense of community and agency ownership.

VRAN is guided by four community leaders, including the Chair, and three representatives from government agencies. VRAN's role is to invest in and champion rabbit action that is both collaborative across these sectors, and led by the communities impacted by rabbits.

At the local scale, VRAN aims to support communities affected by rabbits to have the motivation, knowledge and capability to reduce the impact of rabbits in a sustained way. Established pests, such as rabbits and weeds, are a constant challenge for individual land managers not least because successful control

requires knowledge of best-practice methods and synchronisation of effort between all affected land managers. This challenge applies equally to cropping or grazing land managers, rural lifestyle properties, urban or peri-urban settings, as well as public land managers such as state government agencies and local government.

At the state scale, VRAN seeks to strengthen relationships and communication between government agencies, industry groups and communities in order to 1) raise awareness of the impact of rabbits, 2) share knowledge with partners about the effectiveness of collaboration in rabbit management, and 3) work with partners to develop rabbit management tools and capabilities in response to need.

With financial support from the Australian Government's Agricultural Competitiveness White Paper, VRAN has developed this five-year Strategy that sets out what it wants to achieve and the actions necessary to get there.

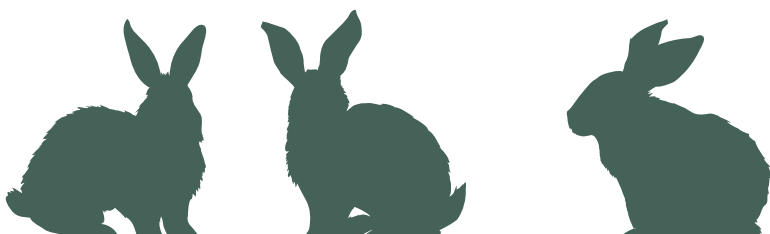
It is intended that the Strategy will guide VRAN in its work to strengthen coordinated and collaborative approaches to rabbit management and investment in Victoria, building upon the momentum and achievements of VRAN to date.

GOAL OF VRAN

VRAN will be a catalyst for change in how rabbit management occurs in Victoria. By 'helping people, help the land', VRAN aims to create a strong collaborative culture in Victoria whereby local communities are able to successfully manage rabbits in their area through partnerships with land managers, industry and institutions.

The ultimate goal of VRAN is for a long-term reduction in impact by rabbits on agriculture, the natural environment, cultural heritage, infrastructure and community assets.

To achieve this goal, VRAN is focused on identifying and responding to opportunities to support communities and institutions to be knowledgeable and capable to deal with rabbits wherever they occur across Victoria.



Rabbits – a pest

RABBITS

A familiar sight across Victoria, the European rabbit (*Oryctolagus cuniculus*) has successfully established itself throughout much of the state. Two features of the rabbit in particular have helped it become such an invasive pest to land managers and the environment.

Firstly, the rabbit has an extremely high reproductive capacity. A single pair of rabbits can produce around 180 individuals within 18 months. Typically, breeding commences at the autumn break and continues until vegetation dries off in early summer. Rabbits are sexually mature at three to four months. Their gestation period is 28 – 30 days and they have litters of between four and six kittens, and mating can recur immediately after giving birth. Mortality is high amongst the young, with more than 80% of rabbits dying before reaching three months of age. In the wild, rabbits can live for 1.5 – 2 years¹.

Secondly, rabbits have the ability to form extensive burrows or warrens for shelter. The warren provides protection from predators and environmental extremes. The burrow is essential for the successful and rapid breeding successes of the rabbit. Rabbits can readily dig a short burrow for breeding, however they prefer to inhabit an existing warren enlarging and increasing its complexity. Rabbits can also persist successfully where there is protective surface harbour such as fallen timber, logs, rocks and dense thickets of weeds especially woody spiny plants and even in some thick, low native vegetation.

Rabbits are usually active from late afternoon to the early morning. Rabbits will typically stay above the ground during the night unless disturbed. They will feed mostly in areas of short vegetation, and will generally maintain a small territory or home range of approximately 0.2 – 2 per hectare. Rabbits prefer areas of low rabbit density and will disperse short distances to establish in new areas.

THE IMPACT

The damage caused by rabbits on the natural environment and agricultural productivity in Australia has been extensive, and continues to be so. Rabbits are estimated to cause more than \$200 million in agricultural production losses nationally each year³. In combined data for Tasmania and Victoria, rabbits are estimated to cost approximately \$30 million in lost production for the beef, lamb and wool industries per year⁴. Rabbits graze more closely to the ground than domestic stock, weakening perennial grasses during summer, potentially eliminating them from established pastures and enabling invasion by broadleaf weeds and annual grasses. Rabbits can damage grain crops, significantly reducing crop yields. Soil erosion due to reduced ground cover and burrowing also impacts farm productivity.

In terms of the natural environment, rabbits severely impact the regeneration and recruitment of critical vegetation communities, due to the selective grazing of seedlings. Studies have found that rabbit populations above 0.5 per hectare can severely damage native species⁵. The loss of native vegetation can lead to an increase in noxious or unpalatable weed species and expose soils to erosion causing off-site problems such as reduced water quality. Native fauna can also be displaced by the loss of, and direct competition for, habitat and food. It is also thought that rabbit populations may sustain numbers of feral predators such as cats and foxes, placing further pressure on native fauna⁶.

Rabbits can have significant impact on Aboriginal cultural heritage where burial sites and artefacts become exposed as a result of rabbit burrowing activities or overgrazing, leading to soil erosion. Similarly, it is important that rabbit control works do not harm Aboriginal cultural heritage.

¹ Agriculture Victoria (2017a)

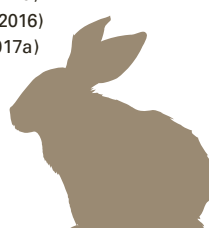
² Agriculture Victoria (2017a)

³ Agriculture Victoria (2017a)

⁴ Agriculture Victoria (2017a)

⁵ Australian Government (2016)

⁶ Agriculture Victoria (2017a)



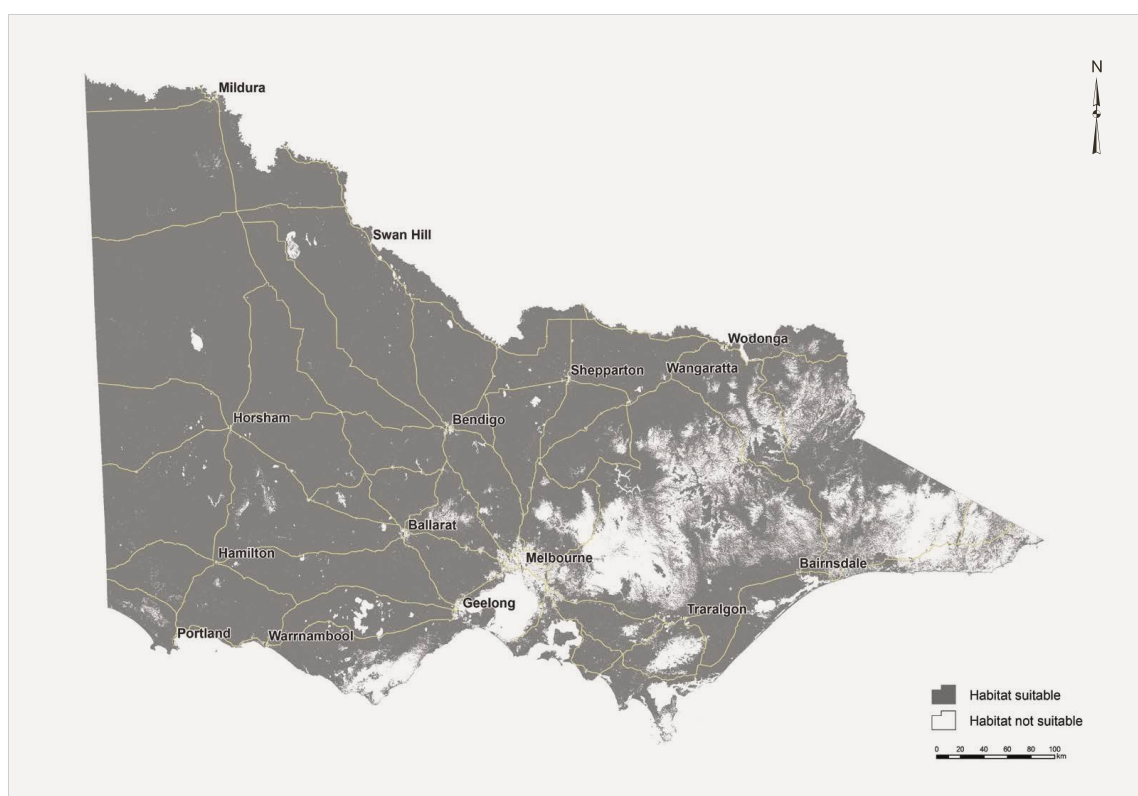


Figure 1. The estimated distribution of European rabbits in Victoria (map prepared by Arthur Rylah Institute, 2018).

DISTRIBUTION

It is thought that rabbits have reached the extent of their geographical spread in Victoria⁷, under the current climate. Rabbits will inhabit a wide range of environments and in temperate regions can occur almost anywhere except dense forests or above 1500m. This is reflected in Victoria, where they occur throughout the state except in alpine and closed forest environments (Figure 1).

Vegetation and soil type are two influences on rabbit density. Rabbits require a high-quality diet with preference for plants, or parts of plants, with the highest nutrient content. Rabbits will also preference deep, well-drained soils (sands and light loams) that are often found on the most productive agricultural land. Here they can form large and complex warrens.

CONTROL OPTIONS

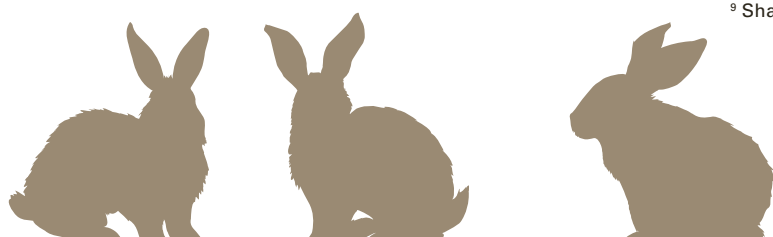
Integrated pest management using a combination of control methods is recommended by Agriculture Victoria as the most effective rabbit management approach⁸. Control needs to be done on a tenure-blind basis. The methods include baiting, harbour removal where applicable, fumigation and warren ripping.

Regular and sustained monitoring of rabbit numbers is also a critical component of any effective rabbit management program. Animal welfare considerations are addressed in the nationally-adopted code of practice for the humane control of rabbits⁹. As stated in the code, some control techniques for rabbits have the potential to cause animals to suffer. To minimise any potential suffering the most humane techniques that will achieve the control program's aims must be used. These will be the techniques that are the most effective and efficient and cause the least amount of pain and suffering to the target animal. They will reduce the potential to harm non-target animals, people and the environment.

⁷ Parliament of Victoria (2017)

⁸ Agriculture Victoria (2018)

⁹ Sharp and Saunders (2012)



Rabbit control in Victoria

Rabbit management in Victoria involves a myriad of stakeholders, including private land managers, professional pest controllers, government, community organisations, recreational hunters, Conservation Management Networks and Landcare groups. Rabbits do not recognise or obey land boundaries, and the current legislative framework for invasive species management in Victoria has been criticised for being “convoluted and confusing”¹⁰.

Acknowledging the complexity of rabbit management, VRAN used a systems-strengthening approach to provide a way to understand how rabbit management works in Victoria. This approach had not been applied to established pests before in Victoria. Information was gathered from a range of perspectives to test theories, co-design and implement a series of initiatives that have sought to strengthen the system, that is to make it more effective and efficient.

A 2017 Parliamentary inquiry into the control of invasive animals on Crown land recommended that “providing a single point of contact for people and organisations undertaking control activities... would contribute to application of the tenure-blind approach that is required for effective invasive species control”.

The stakeholders and community members operating within the rabbit management system echo the need for a more coordinated approach to rabbit control.

At the end-of-project workshop for the Facilitating Community-Led Rabbit Management in Australia project, stakeholders largely supported the and existence of a body such as VRAN that:

- Operates independently of government, and acts as a broker between community and government,
- Has a direct link to community, works with and for community,
- Can facilitate partnerships,
- Shares information with community and government, to help people think beyond their experience and tenure, and
- Directly supports community-led action¹¹.

A 2016 national survey that sought to understand pest animal and weed control by agricultural land managers also highlighted the value of a coordinated approach. The survey of 6470 land managers found that participation and awareness were greatest when pest animal and weed management activities were delivered through a central coordinating body; in the context of the survey this included regional Natural Resource Management (NRM) groups, local government and Landcare¹².

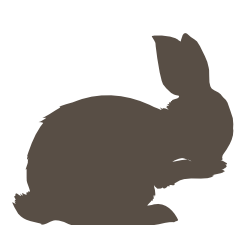
Within Victoria there is already a relatively informed community, who are taking action. The 2016 survey of agricultural land managers revealed that land managers in Victoria were comparatively more aware of rabbits on their property than their counterparts in other states and territories (between 74 – 92% of Victorian respondents said they were aware of rabbits on their property in the past 12 months)¹³. This high level of awareness may reflect both the extent of the problem and the extension and engagement that has occurred on rabbit management in the past.

¹⁰ Parliament of Victoria (2017)

¹¹ VRAN (2017)

¹² ABARES (2016)

¹³ ABARES (2016)



The stakeholders and community members operating within the rabbit management system echo the need for a more coordinated approach to rabbit control.



Image: Belanne Landcare Rabbit Control demonstration, photographer Geoff McFarlane

Achievements



VRAN INITIATIVES AND INFLUENCE

VRAN's initiatives are a direct response to many issues identified by community and government stakeholders. In its first phase, these included:

- **Rabbit management 'boot camp':** An education program to build technical expertise across state and local government, farmers, community groups and industry.
- **Learning network:** A support program that brings together different knowledge sets and experiences, extending integrated rabbit management practice and strengthening networks across Victoria.
- **Mentor program:** Using industry and government expertise to support leadership development and institutional change with Learning Network members and other mentees.
- **Community conference:** A "rabbit conference" that challenged the typical conference paradigm by featuring community leaders as keynote speakers.
- **Community innovation grants:** A bottom-up approach to supporting local-scale innovation.

VRAN has recently secured Commonwealth Government funding (via the Agricultural White Paper Project) for a second phase of programs, to extend their learnings and solidify the network's participatory, community focused approach to rabbit management in Victoria. VRAN is already undertaking a suite of activities as part of the second phase, including:

- A state-wide workshop with stakeholders to plan for the national release of a new biological control, RHDV1 K5.
- Community grants program to support Victorian community groups to maximise the effect of RHDV1 K5 across the state.
- Individualised support for groups, e.g. linking them with the relevant agencies, stakeholders and mentors and demonstrating best-practice rabbit management.

- Additional rabbit management boot camps and learning networks to increase technical expertise and support ongoing learning.
- Development of guidelines to assess the practices of contractors involved in rabbit control.

VRAN has introduced a fresh approach for bringing stakeholders from across community and government together to build relationships, promote inclusion and participation in rabbit control. To further understand VRAN's impact and how processes could be improved VRAN commissioned two independent evaluation studies - a Formative Evaluation¹⁴ and an Impact Analysis¹⁵.

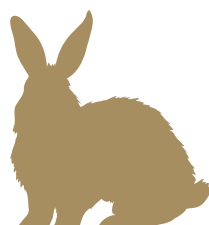
As a result of the initiatives delivered in the first phase, the evaluations revealed that VRAN has engaged more than 5,200 stakeholders. The Impact Analysis identified that significant mindset and practice changes were directly attributed to VRAN, and included:

- Increased in motivation to control rabbits (59% of respondents);
- Increased in confidence to manage rabbits (55%);
- Changed views on collaboration in rabbit management (55%) and
- Adoption of a more integrated approach and enhanced capacity-building for rabbit management (84%).

Within Victoria, the establishment of VRAN has already influenced a shift in the rabbit management system. As VRAN's reach has increased, a "ripple effect" has been unfolding. Individuals directly influenced by VRAN's initiatives have gone on to influence other individuals and communities. For example, more than 80% of people have shared their new knowledge gained through their own networks

¹⁴ Furze (2016)

¹⁵ ACIL Allen (2017)



CASE STUDY

Learning and sharing through the Leaps and Bounds learning network

Peter Barnes is the station manager of Neds Corner Station, a Trust for Nature conservation reserve in far north-west Victoria. The property was badly infested with rabbits when Peter started at the property, and so an extensive control program was implemented involving warren ripping, baiting, shooting and exclusion fencing.

In 2015, Peter and 25 other land managers, contractors and government staff participated in a three-day rabbit boot camp. The event focused on training and sharing knowledge around best-practice rabbit management.

“Although we had done a lot of work, most of the people involved ‘in the boot camp’ had spent a lot of years working on rabbits, so it helped us to refine our efforts even more. We learnt to manage the rabbits and to mitigate the impact of rabbits, as much as kill them. We’re good at killing them, but not so good at controlling them.”

The key change for Peter was about improved integration and timing of control methods.

“The way that the group has changed things for me here is probably more using each method at the right time. Before, we tried to kill rabbits, but we didn’t put [the methods] in the right order to control rabbits. It’s more obvious now, but you have to try to knock the numbers down and then you destroy the warrens ... we just went straight into ripping and so all of a sudden you had a massive population of rabbits just living on the surface, in the bush, already re-establishing before we finished treating them.”

It also emphasised the importance of follow up work and persistence

“Once you get down to low numbers you just cannot stop working. Now if we notice rabbits in a spot or reinfesting an area, we’ll treat that as it comes up.”

“Once you get down to low numbers you just cannot stop working. Now if we notice rabbits in a spot or reinfesting an area, we’ll treat that as it comes up.”



Image: Peter Barnes, Neds Corner Station, photographer: Darren Grogg



“We just need
to think outside
the square,”

OPPORTUNITIES

VRAN acts as a facilitating institution, in that it is continually working with community, industry and government to explore and co-design initiatives to strengthen the effectiveness and impact of rabbit control.

A recent analysis of the rabbit management system in Victoria identified a number of future opportunities including:

- **Supporting local communities** – helping local communities to access information and advice from a range of accredited sources and tap into rabbit control networks will help them be more effective and efficient.
- **Best-practice control** – there is an opportunity to increase the knowledge and use of best-practice control methods, including animal welfare considerations, in rabbit control programs by public land agencies, community groups, catchment management authorities and local government.
- **Improving landscape literacy** – the impact of rabbits on native vegetation can be hard to appreciate without sound knowledge. There is an opportunity to help increase people’s ability to gauge the impact of rabbits on the landscape, and inform their approach to land management and rabbit control.
- **Cultural heritage values** – Land managers have reported confusion and frustration in understanding cultural heritage legislation and its implications for compliance with on-ground control works that are consistent with what is known to be best-practice. Improved guidance is required to help land managers control rabbits and reduce risks to Aboriginal cultural heritage.



A photograph of a person wearing a hat and a dark vest over a red shirt, standing in a field with dry grass and trees in the background. They are holding a small object up to their eye, possibly a camera or a pair of glasses. A small yellow speech bubble icon is visible on the right side of the image.

CASE STUDY

Community-led action

The Barrabool Hills district, on the western outskirts of Geelong, has a long history with rabbits in the landscape.

Rabbits are infamously recorded to have been first introduced at Barwon Park, near Inverleigh, by Thomas Austin in 1854, however historical property records show they were present on other properties in the district well before their introduction for recreational hunting.

Kaye Rodden is a farmer with her husband Brent in the Barrabool Hills which lie on the western boundary of Geelong and stretch to the basaltic plains of Victoria's Western District. Kaye is the current president of the Barrabool Hills Landcare Group.

"Our group was established in 1994 to counter the deterioration of the local landscape and the management of animal and plant pests, such as rabbits, serrated tussock and gorse."

"Barrabool Hills is a mix of farming families and small block owners. The Landcare Group has for the last 14 years been facilitating a major rabbit baiting program which reaches over 100 landholders. In recent years though, we started noticing that people were losing interest in rabbit control. They'd become so used to rabbits in the landscape, residents no longer saw them as a problem," Kaye said.

"We needed to look for a new way to highlight the rabbit issue. We recognised that if we wanted to make a long-lasting change, our rabbit action focus had to be on something involving everyone in the community."

From this realisation "The Feral Feast – the art of cooking rabbits in the Barrabool Hills" cook book idea was conceived.

The recipe book was developed by a group of local people, who hadn't been significantly active in the Landcare community, but shared the same rabbit issue and postcode. These included a resident chef, an artist, a farmer, a photographer and an editor," Kaye said.

The book was produced and published solely with the Landcare Group's resources and was a celebration of everything they had achieved over two decades.

"It is the culmination of the efforts of the wonderfully talented members of our community and contains 21 recipes, with local anecdotes and quotes," Kaye said.

"Since the release of the book, people in our community are now talking about rabbit control."

"The cook book was an innovative way to engage those who were not typically involved in rabbit management. In their own way the rabbit recipes were able to illustrate how this insidious pest has impacted on society," Kaye said.

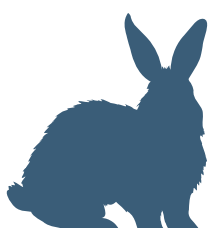
"The cook book has done more than build community capacity and increase Landcare membership, it has also enabled us to generate additional funding for the group."

"Sales of the book have been strong enough for the group to start making a profit, which is put towards subsidising the cost of bait for Landcare rabbit control programs. " This now on-going funding stream has given our group more flexibility and independence, we don't need to solely rely on government grants to get money for pest control."

"The book not only promotes the capacity of our Landcare group and the Barrabool Hills, but also has provided freedom and created a long-lasting legacy."

For Kaye, the recipe book is a great example of how communities can lead, innovate and build ownership of both the problem and a solution.

"We just need to think outside the square," she said. "There are lots of people in the community who can do things and make change. Communities can be self-reliant and don't need to always depend on government to do things."



Goal, Objectives and Actions

5

GOAL


VRAN will be a catalyst for change in how rabbit management occurs in Victoria. By 'helping people, help the land', VRAN wants to create a strong collaborative culture in Victoria whereby local communities are able to successfully manage rabbits in their area through partnerships with land managers, industry and agencies.

The ultimate goal of VRAN is for a long-term reduction in impact by rabbits on agriculture, the natural environment, cultural heritage, infrastructure and community assets.

To achieve this goal, VRAN is focused on identifying and responding to opportunities to support local communities and organisations to be knowledgeable and capable to control rabbits wherever they occur across Victoria, and to support communities to act effectively together in response to the impact of rabbits.

OBJECTIVES

From its analysis of how rabbit management occurs in Victoria and an assessment of the activities it has delivered to date, VRAN has set five objectives to guide its work over the life of this Strategy:

1. Increase land managers' awareness and use of best-practice rabbit management information 
2. The level of community participation and effectiveness in on-ground rabbit control will be increased across Victoria
3. A state-wide network of community, industry, science and government participants with rabbit control expertise will be established
4. VRAN will extend its reach throughout Victoria to build state-wide leadership and expertise in sustained integrated rabbit control
5. VRAN will be a well-governed and resourced group with capacity to function beyond the life of this Strategy.

Actions to achieve these objectives are described below.



ACTIONS

1. Increase land managers' awareness and use of best-practice rabbit management information

Why is this important?

VRAN's research has found that the effectiveness of rabbit control projects varies considerably despite the best intentions of the land managers, organisations and government agencies involved. Projects are most effective when best-practice integrated rabbit control methods are understood and rigorously applied.

Therefore VRAN will:

- 5.1. Work with its partners to improve access to best-practice information that is relevant to land managers across the different regions of Victoria.
- 5.2. Engage directly with catchment management authorities, water authorities, public land managers and local government to promote delivery of best-practice rabbit control as part of their own land management responsibilities and through their programs with communities.
- 5.3. Influence the influencers – engage with the agricultural industry peak bodies, real estate, livestock, agronomy and pest management industries, the education sector and Traditional Owner and Victorian Aboriginal networks to share knowledge about best-practice rabbit management.

ACTIONS

2. The level of community participation and effectiveness in on-ground rabbit control will be increased across Victoria

Why is this important?

VRAN's consultation has found that there are many communities and agencies that accept rabbits as part of their landscape. This acceptance is partly attributable to the impact of biological control agents on rabbit populations, the challenge of getting a coordinated control program off the ground, as well as a decline in government staff working on rabbit control and the message this has sent over time to the broader community.

VRAN believes it is essential that local communities are inspired, motivated and supported to conduct effective control programs that suppress rabbit numbers over the long-term and lead to improved environmental, social and economic outcomes.

Therefore VRAN will:

- 2.1 Communicate to the broader community the impact of rabbit and that rabbits can be controlled successfully using best-practice approaches.
- 2.2 Explore the opportunity for collaboration with other community pest management groups to increase the number of community-led projects that involve rabbit control within an integrated approach to land management.
- 2.3 Facilitate opportunities for public land managers and government agencies to partner with local communities in coordinated rabbit control projects.
- 2.4 Engage with the Landcare community and other community-based organisations to promote best-practice rabbit control.



ACTIONS

3. A state-wide network of community, industry, science and government participants with rabbit control expertise will be established.

Why is this important?

VRAN has commenced the establishment of a network of participants from community, industry, science and government to rebuild Victoria's expertise in rabbit control to counter concerns that there has been a decline in the extent of expertise available over many years. The network has the potential to be a source of expertise for communities and organisations across the state and in doing so increase the number and effectiveness of rabbit control programs.

Therefore VRAN will:

- 3.1** Continue delivery of rabbit education programs to achieve wide geographic coverage and participation across the range of stakeholders.
- 3.2** Support the development of leaders in rabbit management to build capability and opportunities for mentoring.
- 3.3** Continue to strategically expand and strengthen the state-wide network.
- 3.4** Provide leaders of local community rabbit control programs with opportunities to learn from and share information with the state-wide network.

4. VRAN will extend its reach throughout Victoria to build state-wide leadership and expertise in sustained rabbit control



Why is this important?

Evaluations of VRAN's activities have shown it to be well-regarded and influential by those who have been engaged. It is necessary now to extend the reach of VRAN to a much wider audience to enable VRAN to continue to make a significant and ongoing contribution to rabbit management in Victoria. VRAN acknowledges that the rabbit management system in Victoria is complex and involves many stakeholders. Consequently, it will seek to strategically build partnerships with those who are going to make the biggest impact on local communities.

Therefore VRAN will:

- 4.1** Develop and implement a communications and engagement plan to raise the visibility, profile and reach of VRAN.
- 4.2** Build partnerships and affiliations with organisations, such as Catchment Management Authorities, Landcare Victoria Inc., the Victorian Farmers Federation and local government, to help extend the reach of VRAN and promote the importance of resourcing for sustained rabbit management.
- 4.3** Seek opportunities for collaboration with community pest management groups and relevant government and industry programs, including those involved in sustainable agriculture, biodiversity, cultural heritage, and invasive species management.





ACTIONS

5. VRAN will be a well-governed and resourced group with capacity to function beyond the life of this Strategy

Why is this important?

VRAN requires further, secured funding to deliver on this five-year Strategy. Furthermore, a significant strength is its skills-based committee of community, industry and government members. As VRAN moves from its initial “emerging” phase to a more substantive role via this Strategy, it is likely that the membership will need to be expanded. Over the life of this Strategy, VRAN may adapt its approach and structure, both in response to opportunities for improvement, as well as changes in government policies and/or regulations that may occur.

Therefore VRAN will:

- 5.1.** Secure funding for the VRAN committee and executive support function.
- 5.2.** Secure funding for implementation, regular evaluation and review of the communications and engagement plan.
- 5.3.** Develop the business case for funding support for VRAN beyond its current commitment to 2019.
- 5.4.** Establish and implement a monitoring and evaluation framework that considers social, economic and environmental outcomes, to enable an assessment of the impact of VRAN’s activities.
- 5.5.** Ensure membership of VRAN has the collective skills, expertise and networks needed to govern effectively and to successfully deliver this Strategy.

Measuring Success

In order to know whether the Strategy is making steps towards its objectives, VRAN must monitor its progress and measure its impact. With this knowledge, VRAN will also be able to adapt its activities to increase its effectiveness where and as required.

The impact pathway described in the VRAN Impact Analysis identifies four social outcomes that could be used as indicators for VRAN:

- **Increased reach of VRAN** – number of people engaged; area of land managed by those people (and/or influence the management of the land); number of institutions engaged, number of active partnerships established
- **Information sharing and dissemination** – extent to which people share knowledge gained through VRAN with others
- **Change in mindset** – extent to which people engaged by VRAN change in their motivation to control rabbits, confidence in managing rabbits and views on collaboration
- **Increase in the implementation of on-ground best-practice control** – use of integrated control methods, use of capacity building methods, change in local rabbit populations and reduction in impacts



In relation to assessing changes in rabbit populations and any resulting economic and environmental outcomes arising from VRAN's activities, they would need to be determined as part of a rigorous monitoring and evaluation framework.

This Strategy marks an important stage in the development and implementation of a new collaborative approach to the management of rabbits in Victoria. An end-of-Strategy review is proposed to gauge the impact of VRAN and to inform future approaches to reducing the impact of rabbits in Victoria.

This Strategy marks an important stage in the development and implementation of a new collaborative approach to the management of rabbits in Victoria.



Image: X and X from Woka Walla Natural Resource Management Crew. Photographer: X



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Appendix 1:

Legislation and policies

The Australian Pest Animal Strategy 2017–2027 – provides a national framework for addressing pest animal issues whilst maintaining the profitability and sustainability of Australia’s primary industries and reducing the impact of pest animals on the environment.

The Strategy embodies eight principles that underpin effective pest animal management.

1. Prevention and early intervention to avoid the establishment of new pest animal species is generally more cost-effective than ongoing management of established populations.
2. Pest animal management is a shared responsibility between land managers, community, industry and government.
3. Management of mobile pest animals requires a coordinated approach across a range of scales and land tenures.
4. Management of established pest animals should focus on the protection of priority assets (for example, a lambing paddock or a threatened ecological community) but also usually requires a ‘buffer’ management area around the asset to account for pest animal mobility.
5. Pest animal management should be based on actual rather than perceived impacts and should be supported by monitoring to measure whether impact reduction targets are being achieved.
6. Best-practice pest animal management balances efficacy, target specificity, safety, humaneness, community perceptions, efficiency, logistics and emergency needs.
7. Best-practice pest animal management integrates a range of control techniques (including commercial use where appropriate), considers interactions between species (such as rabbits and foxes) and accounts for seasonal conditions (for example, to take advantage of pest animal congregations during drought) and animal welfare.
8. The cost of pest animal management should be borne by those who create the risk and those who benefit from its management. Governments may co-invest where there is a net public benefit from any such intervention.

Threat Abatement Plan (TAP) for competition and land degradation by rabbits (2016) – this Australian Government plan establishes a national framework to guide and coordinate Australia’s response to the impact of rabbits on biodiversity. The plan includes objectives to increase engagement of, and awareness by, the community of the impacts caused by rabbits and the need for integrated, landscape scale control. It has four objectives:

- a. Strategically manage rabbits at the landscape scale and suppress rabbit populations to densities below threshold levels in identified priority areas
- b. Improve knowledge and understanding of the impact of rabbits and their interactions with other species and ecological processes
- c. Improve the effectiveness of rabbit control programs, and
- d. Increase engagement of, and awareness by, the community of the environmental impacts of rabbits and the need for integrated control.

The successful implementation of the TAP will depend on a high level of cooperation between land managers, community groups, non-government conservation organisations, local government, state and territory conservation and pest management agencies, and the Australian Government. Success will depend on all participants allocating adequate resources to achieve effective on-ground control of rabbits at critical sites, improving the effectiveness of control programs, and measuring and assessing outcomes.

Agricultural Competitiveness White Paper – the White Paper is the Australian Government’s plan to build a more profitable, more resilient and more sustainable agricultural sector. It outlines initiatives across five priority areas for action. The Established Pest Animals and Weeds Measure is a \$50 million investment over four years to 2018–19 to improve the tools, technologies, information and skills farmers and their communities need to tackle pest animals and weeds. It includes:

- The acceleration of research and development projects delivering new and improved tools and technologies for controlling established pest animals and weeds

- On-the-ground state and territory government projects that build the skills and capacity of farmers, industry and the community to fight pest animals and weeds
- Providing land managers and communities useful information about the benefits of management and the costs of inaction, through a national pest animal and weed management survey of farmers and landowners
- New or improved pest animal and weed control tools and technologies by providing \$10.5 million through the Control tools and technologies for established pest animals and weeds competitive grants programme.

Victorian Catchment and Land Protection Act 1994 – The Act is Victoria’s primary legislation for noxious weeds and pest animals. The Act places a duty on all land owners, including the Crown, public authorities and licensees of Crown lands, in relation to their land, to prevent the spread of, and as far as possible, eradicate established pest animals including feral and wild populations of rabbits.

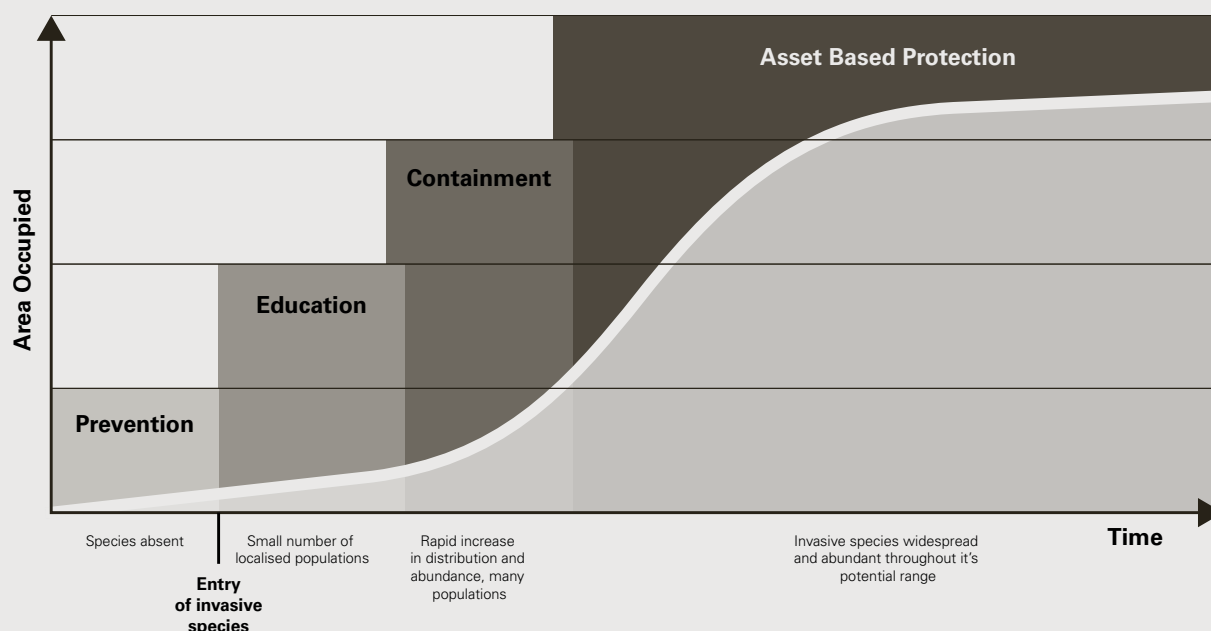
The Invasive Plants and Animals Policy

Framework – presents the overarching Victorian Government approach to the management of existing and potential invasive species.

The framework is underpinned by the recognition of the importance of partnerships and building capacity and confidence of land managers in achieving effective invasive species management.

The policy is based on the ‘generalised invasion curve’ (Figure 2) which implies that preventing the entry of new invasive species is the most cost-effective method. In the case of rabbits, which are widely established in the landscape and have passed the point where they can be eradicated or contained, the policy suggests that government’s investment is best focused on asset protection. Assets such as native vegetation, threatened species, waterways and agricultural productions that are gauged to be of high value are likely to be more eligible for support than low value assets.

Generalised invasion curve showing actions appropriate to each stage



Economic Returns (Indicative Only)

1:100 Prevention	1:25 Education	1:5 - 10 Containment	1:1 - 5 Asset Based Protection
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Figure 2. The generalised invasion curve (Agriculture Victoria 2017b)



Parliamentary inquiry into the control of invasive animals on Crown land (2017) – The Environment, Natural Resources and Regional Development Committee held an inquiry into the benefits of Parks Victoria and other agencies such as the Game Management Authority’s use of community hunting organisations and individuals in the control of invasive animals on Crown land.

As stated in the Chair’s Foreword, the inquiry focused on the role of shooting in invasive animal control, particularly the role of recreational hunters. There was general agreement that recreational hunting cannot manage Victoria’s invasive animal problem by itself. However, it may be part of the solution in some circumstances, if the hunting effort can be focused at particular times and places and integrated into a broader control program involving multiple methods of animal control. This report considers in more detail when and how recreational hunters can be most helpful in terms of animal control.

The inquiry also identified potential improvements in the way that invasive animals are managed by government bodies. Effective animal control programs require a co-ordinated, long-term, strategic approach.

But the responsibility for invasive animal control is currently spread between multiple bodies. There is no single point of accountability. It can be difficult for groups wanting to work together with government bodies to co-ordinate action.

The subsequent Victorian Government response addresses each recommendation made by the Committee.

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