

Further information

Department of Primary Industries (DPI)

DPI has a good range of Landcare Notes that provide further detail on many of the topics discussed above.

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Rabbit Control

in urban and peri urban areas

How to protect your property and minimise the damage



What is the problem with rabbits?

Rabbits are one of Victoria's most destructive and problematic pest animals.

They cause damage by:

- destroying vegetation (through eating, ring-barking and soil disturbance)
- competing with stock and native animals for food and habitat
- causing erosion, soil loss and creek and river bank destabilisation.

Rabbits inflict significant economic cost on the agricultural and horticultural sector and reduce amenity value of parks and gardens by feeding on plants and digging up turf.

Rabbit control in urban areas is particularly difficult. Traditional methods of shooting and poisoning with 1080 are not possible and the smaller lot size of properties means control programs on individual properties have limited success unless undertaken in conjunction with neighbouring properties.

This brochure aims to help people living in urban areas to understand the control options available and to plan a successful rabbit control strategy.



Your legal responsibility

All landowners are legally required to take measures to control rabbits on their property.

State legislation under the *Catchment and Land Protection Act 1994 (CaLP Act)*, requires landowners to control declared pest plants and animals, which includes rabbits on their land.

Control is defined as taking action to minimise their impact and to prevent their spread.

The Victorian Government through the Department of Primary Industries (DPI) has responsibility for the administration of the *CaLP Act* and regulating rabbit control.

How to monitor your property

Monitoring rabbits on your property is crucial.

By regularly monitoring rabbit numbers and mapping where rabbits are living and feeding you can observe changes in population, target your control program and assess whether your program is effective.

For residential properties monitoring can be simple.

1. Set a walking route around your property that you can follow each time, which accesses various aspects of your property (e.g. bush, pasture, grasses). Draw the route on a map or aerial photo.
2. Count and record the number of active burrow entrances you can find.
3. Note any areas providing shelter that rabbits are using for protection (where they run to).
4. Walk the route and count the number of dropping piles within one metre on either side.
5. At dusk, count and record the number of rabbits you see from a fixed point on your block on the same dates each year (one date before and one date after an activity like baiting or fumigation is ideal).

Record your findings and repeat them each year. Try to find a relationship between your findings and management techniques used that year so you can then spend your resources more wisely.

Rabbit control – a planned approach

Effective rabbit control requires a variety of measures, not just one or two. There is no quick fix solution and landholders need to be persistent. Plan your program and consider the following.

Rabbits will easily move between properties, so it is important to act in unison and swap ideas with your neighbours.

Monitor your property

Start by recording how many rabbits you see and where they are living and feeding on a map of your property so you can target your program. See over for more information on monitoring.

Work with your neighbours

Rabbits will quickly and easily move between properties so it is important to act in unison and swap ideas with your neighbours.

Set goals

With your neighbours, determine what resources you have and what you want to achieve. Using the Rabbit Control Wheel, prepare a plan of action. It is a good idea to set short term goals (for a 12 month program) and how you will continue an ongoing program to ensure numbers do not return to the original population.

Use a combination of methods

The Rabbit Control Wheel shows seasonal and year-round controls. They are most effective when used together – none will achieve long-term success on their own. Warren closure and harbour removal are particularly important elements.

Timing

Launch each method when it is going to have the best effect.

Continue monitoring

Keep monitoring to judge how effective your program is and update your plan accordingly.

Methods to control rabbits

Harbour reduction

Harbour reduction involves removing the shelter and homes for rabbits. Removing shelter exposes rabbits to the elements and predators and reduces the amount of reinvasion from other areas.

When: Harbour removal can be undertaken all year round but is most effective after numbers have been reduced and especially effective after breeding when young rabbits are dispersing.

‘Harbour removal can result in the death of more than half of rabbits under one year old.’

(Department of Primary Industries).

Potential harbours

- rabbit warrens and weedy patches
- wood heaps and rubbish piles
- any structure or vegetation that provides shelter from predators or weather (e.g. sheds, decking, under tennis courts).

Step-by-step guide to collapsing a warren:

1. Identify entrances, searching carefully for holes or using a smoke machine.
2. Dig from the entrance and follow the tunnel with a pick, mattock or straight crow bar.
3. Collapse the tunnel, following it to the end.
4. Compact the earth well.
5. Repeat with other entrances.
6. Monitor entrances for opening and collapse again if necessary.
7. Large warrens can be excavated with a small machine and bucket, using the same principles.



When removing harbour and warrens be aware of any native fauna that may also be using it as habitat. Also remember that excavation and native vegetation removal may require a council permit, particularly in environmental or culturally sensitive areas.

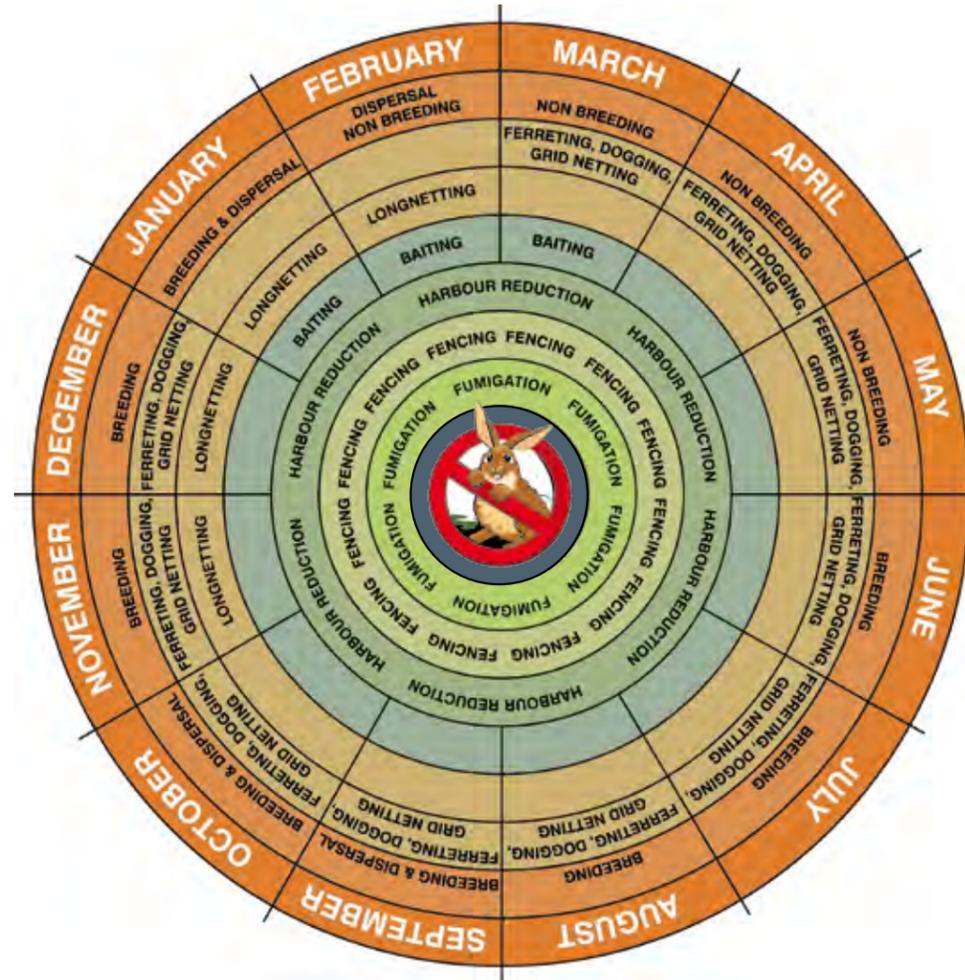
Fumigation

Fumigation is a good method in wildlife areas where there is a risk of off-target poisoning with baiting. You need a specific permit to use fumigants. If you don't have one, you can hire a contractor.

When: Fumigation is the most effective during the breeding season and a good follow-up method to use three to four weeks after a baiting program.

Step-by-step

1. Prepare for fumigation by locating and marking warren entrances. A smoke machine can assist with identifying all entrances.
2. Walk the area, disturb undergrowth and make loud noises to ensure rabbits are in the burrows.
3. Treat each entrance of every burrow and seal securely, ensuring it is air tight.
4. Follow-up three to four days later and repeat the procedure on any holes that have been re-opened.



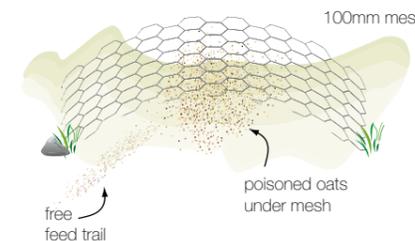
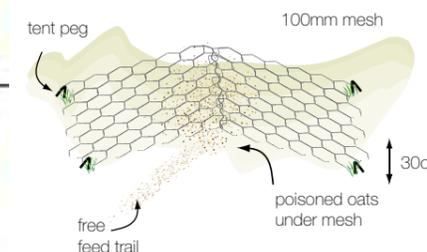
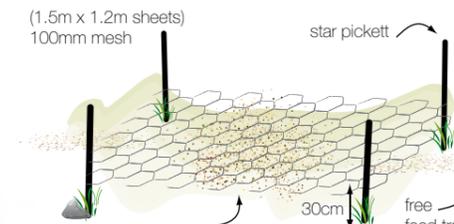
Ferreting, dogging, long-netting and grid-netting

Ferrets and dogs enter burrows and/or chase rabbits into nets where ferreters catch and euthanise them. This method can be used around any structure including burrows, houses, sheds, log piles and swimming pools.

Long-netting is used to catch rabbits on the move. At night they are used to catch rabbits returning to cover from feeding grounds, often after being deliberately disturbed by a person with a dog and/or spotlight (this is traditional long-netting). During the day the nets are used in conjunction with dogs and ferrets, but in this case the rabbits are being driven from cover into the nets. In rabbit proof fenced areas, nets are used to divide the area into sections or grids, which are then scoured by dogs and ferrets. There are lots of positives with the use of nets because of their motionless nature and rabbits are killed quickly and any off-target animals can be released. It is however limited to a small number of contractors or ferreters who are skilled in this type of work.

When: Long-netting is most effective when rabbits are active and out of their burrows usually during the warmer months. Ferreting, dogging and grid-netting are more effective when rabbits are in warrens.

Simple bait station ideas



Baiting

Baiting often achieves a quick reduction in numbers but is most effective when used with other methods. Pindone is the only poison that can be used in urban areas as there is an antidote available (Vitamin K) should any off-target poisoning occur. Pindone is mixed with either oats or carrots. Oat bait is available for over the counter purchases, while carrot bait must be supplied by a licensed contractor.

Tips for baiting

- Identify where rabbits are feeding to assess where to lay bait.
- Conduct a free feed (food which does not contain poison) to assess how much bait to use.
- Baiting is most effective when there is little other feed available.
- Bait in conjunction with neighbours – councils can help coordinate baiting programs.
- Protect pets, birds and other native animals by restricting access and removing rabbit carcasses every day while baiting.
- Always follow the instructions on the product label.

Note: Bait can affect wildlife, so protect kangaroos, wallabies and wombats by using bait stations (a low cage over the bait) to ensure only rabbits access the poison.

* Cover any uneaten bait at the end of the program.

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Other options for urban areas

Trapping

Soft-jawed traps (with rubber-padded jaws) can be used in urban areas. The Department of Primary Industries (DPI) Agricultural Note AG0010 outlines a code of practice to use these traps. Foot plate operated cage traps, like possum traps, can also be used with some success. These are usually baited with carrot or apple.

Some cages are designed to be placed at the entrance to burrows to catch rabbits as they exit. Trapping is useful if you are concerned about off-target (native) animals but it can be very time consuming and leaves you with a live rabbit to dispatch.

Shooting

Shooting is a common method used in rural areas but is limited in urban areas where the use of firearms is prohibited. It can be carried out under a Populous Place permit in some semi-rural urban areas when other techniques are inappropriate. These permits are available from the police.

Diseases

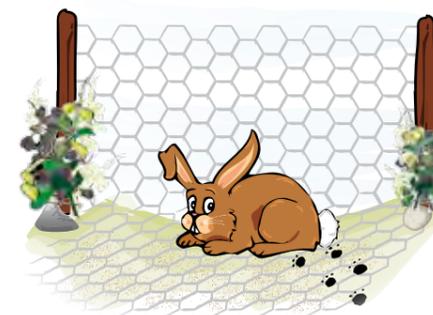
Myxomatosis and Rabbit Calicivirus virus are rabbit-specific diseases and have been released in Australia as biological control agents. Both are still present in urban populations but cannot be relied on to control rabbits alone.

Some rabbits have developed immunity to these diseases and will survive an outbreak. Using a variety of control methods when the disease is active can capitalise on the outbreak.

Fencing

By installing a fence you can become rabbit free but regular maintenance is essential. Rabbit proof fencing will prevent movement of small animals and consideration should be given in wildlife habitat areas.

When: Rabbit proof fencing is an appropriate measure to take at any time of the year but it needs to be followed-up with another method to remove any rabbits within the fenced area.



Installing a fence

Fences consist of wire netting at least 90cm high with holes no larger than 4cm. To stop rabbits digging under a fence, bury the bottom of the net 30cm underground. If the ground is very hard, bend the netting into an L shape with a 30cm wide skirt running along the ground and pegged at regular intervals.