

Bandicoots and rabbit control

Southern Brown Bandicoots are the last remaining species of bandicoots and bilbies naturally occurring in South Australia. Recently listed as a nationally endangered species, the Southern Brown Bandicoot is under threat in the Mount Lofty Ranges. Threats may include competition with European Rabbits for resources and unsuitable rabbit management strategies.

Interactions between rabbits and bandicoots

Competition for habitat

The introduced European Rabbit may compete for resources with the Southern Brown Bandicoot. Rabbits prevent regeneration of shrubs and other perennial plants that provide shelter for bandicoots. Dense ground cover is critical to protect bandicoots from introduced predators.

Direct competition for food may occur between rabbits and bandicoots, as has been reported with Yellow-footed Rock Wallabies, Burrowing Bettongs and Bilbies. Competition may contribute to the local extinction of small mammals.

Rabbits are also known to behave aggressively towards rabbits not of the same social group and other species, such as the European Brown Hare. Hence, interspecific aggression may occur at sites occupied by rabbits and bandicoots and may prevent the coexistence of the species in areas where rabbit numbers are high.

Integrated Pest Control

Rabbits are an important source of prey for introduced foxes and cats. Both cats and foxes are known to switch target species depending on availability, or abundance, of prey. High rabbit populations in good seasons sustain high numbers of foxes and cats. Low numbers of rabbits following a poor season (i.e. drought), rabbit haemorrhagic disease (RHD) and / or myxomatosis may lead to increased predation of native wildlife by cats and foxes.

It is important to establish integrated pest control programs to include effective management of introduced foxes, feral and stray cats and introduced rabbits.

Bandicoot friendly rabbit control

Prior to active rabbit management, the presence of bandicoots should be determined and techniques adopted to minimise disturbance on resident animals and their habitat.

A number of methods have been used to control rabbits in the past. These include steel-jaw traps, fumigating, ripping warrens and poisoning using 1080.

Small steel-jawed traps (rabbit traps) are illegal to use in South Australia under *Prevention of Cruelty to Animals Act (1985)*. Trapping is also not considered an effective form of rabbit control.

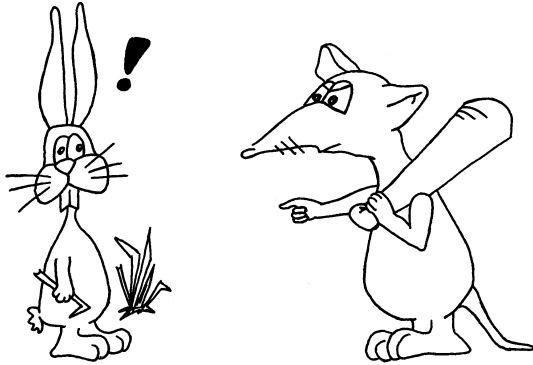
The destruction of rabbit warrens is an effective method to reduce rabbit density through the reduction in breeding site locations. However, Southern Brown Bandicoots have been observed to occupy rabbit burrows in the Mount Lofty Ranges. In areas occupied by bandicoots, fumigation and ripping of rabbit warrens must be undertaken with care to ensure that bandicoots are not affected.



Southern Brown Bandicoot



The use of 1080 poison is an accepted method of rabbit control. Southern Brown Bandicoots have a greater tolerance and are less susceptible to the baits used to control European Rabbits. Southern Brown Bandicoots need to consume roughly 500 oat grains for a lethal dose and it is unlikely that a bandicoot is capable of consuming sufficient bait fast enough to cause harm the animal. Placing bait trails further from scrub margins may also reduce this risk.



Recommended rabbit control program

Steps for undertaking a bandicoot sensitive rabbit program include:

- 1) identify the objective of the program,
- 2) integrate program with fox and feral cat control,
- 3) map all warrens,
- 4) bait with 1080 oats away from vegetation edges and during late summer/ autumn when breeding minimal,
- 5) destroy warrens by ripping or explosives,
- 6) fumigate any reopened warrens,
- 7) undertake follow-up work.

Main points

- Rabbits may compete with bandicoots for food and shelter.
- Rabbits sustain high populations of introduced foxes and feral cats that can threaten bandicoot populations.
- Before commencing active rabbit control programs, identify whether bandicoots are present and use bandicoot friendly techniques.
- Rabbit control programs should consist of a long term integrated pest control program to manage rabbits, foxes and cats and limit the impact on bandicoots.

References

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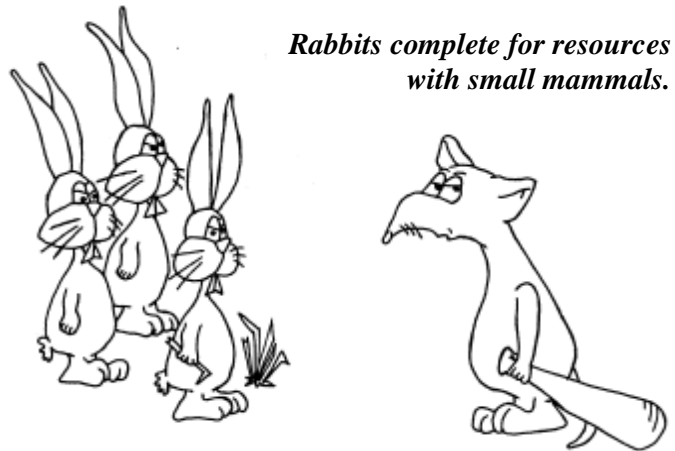
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Rabbits compete for resources with small mammals.



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