

Background

The introduced European rabbit (*Oryctolagus cuniculus*) has a significant impact on agricultural production and the environment. Rabbit control methods include poisoning, warren fumigation, warren and harbourage destruction, biological control with rabbit haemorrhagic disease (RHD) and myxomatosis, shooting, trapping and exclusion fencing.

Trapping is not considered an effective or efficient rabbit control technique, although it is occasionally used in areas with small isolated rabbit populations.

Traditional steel-jaw leg-hold traps are still permitted for catching rabbits in some States and Territories however their use is strongly discouraged as they cause unnecessary pain and suffering and are considered inhumane. Where leg-hold traps are to be used, padded-jaw traps are the more humane alternative.

This standard operating procedure (SOP) is a guide only; it does not replace or override the legislation that applies in the relevant State or Territory jurisdiction. The SOP should only be used subject to the applicable legal requirements (including OH&S) operating in the relevant jurisdiction.

Application

- Trapping is labour intensive and is an inefficient method for large-scale rabbit control in Australia.
- Trapping is ineffective in significantly reducing rabbit populations or even maintaining them at low levels. 'Mopping-up' or maintenance control of rabbits is best done using re-ripping, baiting and fumigation.
- Traps have the potential to cause significant injuries, suffering and distress so should only be used when there is no suitable alternative.
- Humane and successful trapping requires extensive training and experience.
- Selection of appropriate traps and trap sites will maximise the chance of capture and minimise the distress caused to target and non-target animals.
- Every effort must be made to avoid target and non-target deaths from factors such as exposure, shock, capture myopathy and predation.
- Trapping using leg hold traps is not suitable in urban areas.
- Traps must be used in accordance with relevant State and Territory legislation (*see Appendix*). In some States, for example, Western Australia, a permit may be required to trap within certain municipalities.
- Once trapped, rabbits are euthanased by either by neck dislocation, or, stunning, with a sharp blow to the back of the head, followed by neck dislocation. This technique requires mastering to ensure that unconsciousness is rapidly induced.

Animal Welfare Considerations

Impact on target animals

- Traps must be inspected at least daily to prevent suffering and possible death from exposure, thirst, starvation, predation and/or shock.
- It is preferable to set up traps at sites where vegetation can provide shade and shelter. However, sites should be avoided where there is a risk of the trapped animal becoming entangled in understorey vegetation, which could result in dislocation of the limb.
- Where possible, trapping should be avoided when adverse weather conditions threaten the welfare of trapped animals.
- Leg-hold traps cause pain and distress in three ways; pressure of the trap jaws on the captured limb; restraint of the animal; and injuries sustained in trying to escape. Padded –jaw traps cause less trauma than unpadded traps but injuries will inevitably occur to some rabbits. These range from swelling of the foot and lacerations to dislocations and fractures. To reduce capture distress, trapped rabbits must be destroyed as quickly and humanely as possible following capture.
- Trapped rabbits may also be preyed upon by foxes, cats and wild dogs causing significant distress.
- Captured animals must be approached carefully and quietly to reduce panic, further stress and risk of injury.
- If lactating females are caught in a trap, reasonable efforts should be made to humanely destroy dependent young, otherwise they will die a slow death from starvation.
- Trapped rabbits are euthanased by neck, or cervical, dislocation. This involves separation of the skull and the brain from the spinal cord by pressure applied posterior to the base of the skull. The brain stem - which controls respiration and heart activity – is consequently damaged, stopping breathing and reducing blood flow to the brain, leading to death. Studies in rats have shown that electrical activity in the brain persists for around 13 seconds following cervical dislocation. This may represent a period of remaining consciousness.

Impact on non-target animals

- Traps are not target specific, so a wide range of non-target species may be caught. These can include birds (eg. ravens, magpies, pied currawongs), kangaroos, wallabies, hares, echidnas, goannas, wombats, possums, bandicoots, bilbies, quolls and sheep.
- Different groups of non-target animals suffer different levels of injury and distress. For example:
 - Wallabies often experience serious injuries eg. dislocations, due to the morphology of their limbs and because they become very agitated when restrained.
 - Goannas (e.g. lace monitors) also suffer from dislocations and can die from hyperthermia.
 - Birds and other small animals may be preyed upon by foxes, cats and wild dogs while caught in traps.

- Traps must not be set near areas such as waterholes or gully crossings that are regularly frequented by non-target species.
- Live non-target animals caught in traps must be examined for injuries and signs of illness or distress and dealt with as follows:
 - Animals which are unharmed or have only received minimal injuries such as minor cuts or abrasions should be immediately released at the site of capture.
 - Animals which have more severe injuries or which are suffering from thermal stress should receive appropriate attention. An animal suffering from thermal stress can initially be placed in a suitable quiet holding area which provides warmth or shade to allow recovery before release. Animals with treatable injuries that cannot be immediately released or those failing to recover from thermal stress should be presented to a veterinarian or a registered wildlife carer for treatment.
 - Animals that have injuries which are untreatable or which would compromise their survival in the wild should be euthanased using a technique that is suitable for the species. For more information on euthanasia techniques refer to *GEN001 Methods of Euthanasia*.
- If a domestic pet is caught, it should be taken to the nearest veterinarian, animal shelter or council pound where it can be examined for injuries, scanned for a microchip and the owner contacted, or assessed for suitability for re-homing.
- If wild dogs or foxes are caught in the trap they must be euthanased quickly and humanely by a shot to the brain using an appropriate firearm (refer to *DOG001 Trapping of wild dogs using padded-jaw traps and FOX005 Trapping of foxes using padded-jaw traps*).

Health and Safety Considerations

- Operators should be wary of the risks of injury when placing and setting traps. Protective clothing, boots and leather gloves may help prevent injuries from shovels, hammers and trap jaws.
- Long sleeved, heavy duty overalls and long trousers should be worn to protect the operator from being scratched by rabbits during handling. Protective gloves may be used if required, although these may hinder dexterity.
- Operators must be protected by tetanus immunisation in case of infection of scratches and bites.
- Good personal hygiene is encouraged when handling wild animals. Routinely wash hands and other skin surfaces contaminated with faeces, blood and other body fluids.

Equipment Required

Traps

- Approved padded-jaw traps suitable for catching rabbits must be used eg. Victor Soft-Catch trap no.1. It is illegal to use steel-jawed traps in most States.
- Traps must have the following characteristics:
 - The jaws have no teeth.

- Each jaw has a rubber-like pad to cushion the impact of the jaws on the limb and to prevent the limb sliding out.
- The jaws are offset to increase the space between them when closed. (ie. a distance of 6-8mm remains when the jaws are closed).
- Traps should also have:
 - A spring placed in the anchor chain to act as a shock absorber, reducing the chance of dislocation of the captured limb. Swivels are located on both ends of the anchor chain allowing the trap to twist as the animal struggles to escape.
 - Adjustable pan tension so that an appropriate force is required to depress the pan and trigger the trap. This minimises the chance of non-target animals setting off the trap.

Procedures

Selection of trap sites

- Traps should be set only in areas where rabbits are known to be active i.e. near entrances to warrens and burrows, around hollow logs, dung heaps or earth mounds. Do not set traps near fences and other objects such as small trees, bushes etc. in which the trapped rabbit may become entangled.
- The location of all trap sites and number of traps must be accurately recorded and marked. This information should be readily available to others in case the trapper is unable to return to check the traps.

Setting of traps

- It is preferable to set traps at the end of each day and check early each morning. If traps are left set during the day, they should be checked again in late afternoon.
- Before setting each trap ensure that it is functioning properly.
- Traps should only be anchored to stakes or fixed objects if there is a shock absorbing device such as a spring fitted to the anchor chain and a swivel attaching the chain to the trap. It is recommended to use a short length of chain (approx. 50 cm). Alternatively the trap can be tied to 'drags'; objects such as rocks or small logs that will move when the rabbit pulls against the trap.
- Set the trap and place into position in the hole in the ground. Ensure that surrounding shrubs or debris will not interfere with the trap mechanism.
- Carefully camouflage the area around the trap with leaves, grass debris etc. but leave a slightly cleared area (10-15cm) over the area of the plate.

Euthanasia of rabbits

- Trapped live rabbits must be euthanased as soon as possible after capture. The most appropriate technique is either (1) neck dislocation, or (2) stunning, by a sharp blow to the back of the head, followed by neck dislocation:

Neck (cervical) dislocation

- This technique should only be used on smaller rabbits (<1 kg). In larger rabbits, greater muscle mass in the neck region makes manual cervical dislocation physically more difficult; accordingly, it should be performed only by individuals who have demonstrated proficiency in euthanasing heavier animals

or preferably, after the rabbit has been stunned by a blow to the head (see below).

- Hold the rabbit head downwards by grasping the hind legs in one hand; turn the palm of the other hand towards the rabbit head and take the neck between the thumb and index finger or between the index and middle fingers. Push down so that the neck is stretched and the head moves backwards, until dislocation is felt. Although considerable kicking and other muscular movements may take place, once consciousness is lost, the animal is not sensitive to pain.

Stunning followed by neck (cervical) dislocation

- This technique should be used on larger rabbits (>1 kg).
 - Suspend the rabbit by the hind legs, grasping around both hocks with the left hand. Deliver a single, heavy, sharp blow to the back of the skull, behind the ears, with a blunt metal or heavy wooden bar. Alternatively, if no implement is available, the rabbit can be picked up by the hind legs and swung so that the back of its head hits a hard surface such as a rock or post.
 - Dislocate the neck using the technique described above.
- Death of the animal should always be confirmed by observing the following:
 - Absence of rhythmic, respiratory movements;
 - Absence of eye protection reflex (corneal reflex) or 'blink';
 - A fixed, glazed expression in the eyes; and
 - Loss of colour in mucous membranes (become mottled and pale without refill after pressure is applied).
 - Euthanasia should be only be performed by trained operators. Acquiring (or re-acquiring) the skills to use physical methods of euthanasia may be accomplished by practising the techniques on dead animals, preferably those recently killed, and be subject to close scrutiny by those with experience in the method.

Further Information

Contact the relevant Commonwealth, State or Territory government agency from the following list of websites:

Commonwealth	Department of Environment and Heritage http://www.deh.gov.au/
ACT	Environment ACT http://www.environment.act.gov.au/
NSW	NSW Agriculture www.agric.nsw.gov.au
NT	Parks & Wildlife Commission www.nt.gov.au/ipe/pwcnt/
QLD	Department of Natural Resources and Mines www.nrm.qld.gov.au
SA	Animal & Plant Control Commission http://sustainableresources.pir.sa.gov.au
TAS	Department of Primary Industries, Water & Environment www.dpiwe.tas.gov.au
VIC	Department of Primary Industries, Agriculture & Food www.dpi.vic.gov.au
WA	Agriculture WA www.agric.wa.gov.au

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References

- American Veterinary Medical Association (2001). 2000 Report of the AVMA Panel on Euthanasia. *Journal of the American Veterinary Medical Association* **218**, 669-696.
- Australian & New Zealand Council for the Care of Animals in Research and Teaching (2001). *Euthanasia of animals used for scientific purposes*. Second Edition. ANZCCART, Glen Osmond, Australia.
- Boggess, E. K. et al. (1990). Traps, trapping and furbearer management: A review. The Wildlife Society. Technical Review 90-1. 31pp.
- Canadian Council on Animal Care (2003). *Guidelines on the care and use of wildlife*. CCAC, Ottawa, Canada.
- Fleming, P.J.S., Allen, L.R., Berghout, M.J., Meek, P.D., Pavlov, P.M., Stevens, P., Strong, K., Thompson, J.A. and Thomson, P.C. (1998). The performance of wild-canid traps in Australia: efficiency, selectivity and trap-related injuries. *Wildlife Research*, **25**: 327-338.
- Korn, T. and Hosie, R. (1988). Effective rabbit control. Agfact A9.0.11, Department of Agriculture New South Wales.
- Meek, P. D., Jenkins, D. J., Morris, B., Ardler, A. J. and Hawksby, R. J. (1995). Use of two humane leg-hold traps for catching pest species. *Wildlife Research*, **22**: 733-739.
- UFAW (1988). *Humane killing of animals*. 4th edition. Universities Federation for Animal Welfare, Potters Bar, England.
- Williams, K., Parer, I., Coman, B., Burley, J. and Braysher, M. (1995). *Managing vertebrate pests: rabbits*. Australian Government Publishing Service, Canberra.

Relevant State and Territory Animal Welfare and Related Legislation Relevant to the Use of Traps

- **New South Wales**
Prevention of Cruelty to Animals Act 1979
Use of steel-jaw traps is prohibited. Trapping with padded-jaw traps, cage traps and treadle snares is permitted.
- **Queensland**
Animal Care and Protection Act 2001
Steel-jaw traps are *not* prohibited traps.
- **Australian Capital Territory**
Animal Welfare Act 1992
Use of steel-jaw traps is prohibited. Trapping with padded-jaw traps, cage traps and treadle snares is permitted.
- **Northern Territory**
Animal Welfare Act 2000
Steel-jaw traps are *not* prohibited traps.
- **Tasmania**
Animal Welfare Act 1993
Leg-hold traps and snares are prohibited.
- **South Australia**
Prevention of Cruelty to Animals Act 1985
Small steel-jaw traps are prohibited. Large steel-jaw traps are prohibited in most areas except for wild dog control along the dingo fence and for research purposes. The large steel-jaw traps are required to be bound with cloth soaked strychnine or modified.
- **Victoria**
Prevention of Cruelty to Animals Act 1986
Large steel-jaw traps and neck snares are prohibited, with exceptions for wild dog control in some areas. Snares and padded-jaw traps are permitted, and small steel-jaw traps are permitted for rabbit control.
- **Western Australia**
Animal Welfare Act 2002
Agriculture and Related Resources Protection (Traps) Regulations 1982
Steel-jaw traps are permitted for wild dog control. The jaws must be bound with cloth soaked strychnine. Only padded steel jawed traps are permitted for fox control and use in research programs. Permits are required to set traps in metropolitan areas. Neck snares are illegal.