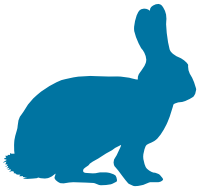


NSWRAB SOP10 Trapping of rabbits using cage traps

Background

The introduced European rabbit (*Oryctolagus cuniculus*) has a significant impact on agricultural production and the environment. Trapping is not considered an effective or efficient rabbit control technique, although it is occasionally used in areas with small, isolated rabbit populations. In urban/residential areas, cage traps are preferred over foot-hold traps as fewer injuries are sustained, non-target animals can be released unharmed and trapped rabbits can be transported away from the area for euthanasia.

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

Individual SOPs should be read in conjunction with the overarching Code of Practice for that species to help ensure that the most appropriate control techniques are selected and that they are deployed in a strategic way, usually in combination with other control techniques, to achieve rapid and sustained reduction of pest animal populations and impacts.

Application

- Trapping is time consuming and labour intensive and is therefore an inefficient method for large-scale rabbit control in Australia. It can be effective in controlling small populations, particularly in urban and semi-urban areas.
- Trapping is ineffective in significantly reducing rabbit populations or even maintaining them at low levels.
- 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.
- Traps must be used in accordance with relevant state legislation (*Prevention of Cruelty to Animals Act 1979 s 23*). In NSW, cage traps and padded-jaw traps are permitted and use of steel-jaw traps is prohibited.
- Once trapped, rabbits must be euthanased in a humane manner. This can be done by neck or cervical dislocation, or stunning, with a sharp blow to the back of the head,

followed by neck dislocation. This technique requires training to ensure that unconsciousness is rapidly induced.

- Shooting of rabbits in traps should only be performed by skilled operators who have the necessary experience with firearms and who hold the appropriate licences and accreditation. Storage and transportation of firearms and ammunition must comply with relevant legislation requirements.

Animal welfare implications

Target animals

- Trapped rabbits must not be left in traps any longer than necessary. Traps must be inspected daily (preferably early morning) and left open during the day to prevent suffering and possible death from exposure, thirst, starvation, predation and/or shock.
- Adequate food (bait) such as diced carrot should be provided in the trap to sustain a captured rabbit for a number of hours.
- The number of cage traps set in the field should be limited to that which can be checked and cleared within 2-3 hours.
- Trapping must cease if there is an unusually high number of mortalities in the animals captured.
- It is preferable to set up traps at sites where vegetation can provide shade and shelter.
- Where possible, trapping should be avoided when adverse weather conditions threaten the welfare of trapped animals. Shade cloth or hessian can be for used for protection during extremes of weather.
- Trapped rabbits may also be attacked by foxes, cats and wild dogs causing significant distress. Where this becomes common, trapping should cease.
- 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.
- Trapped rabbits must be killed as quickly and humanely as possible.
- Neck, or cervical, dislocation 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.

Non-target animals

- Traps are not target specific, so a wide range of non-target species may be caught. These can include birds, echidnas, goannas and possums.
- Different groups of non-target animals suffer different levels of injury and distress. For example:

  - goannas (e.g., lace monitors) can die from hyperthermia.
  - birds and other small animals may be attacked by foxes, cats and wild dogs while caught in traps.
- Traps must not be set near areas 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 that 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 that 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 that are untreatable or that 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 *NSWDOG SOP1 Trapping of wild dogs using padded-jaw traps* and *NSWFOX SOP5 Trapping of foxes using padded-jaw traps*).

Workplace health and safety considerations

- Operators should be wary of the risks of injury when placing and setting traps.
- 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.
- Good personal hygiene is encouraged when handling wild animals. Routinely wash hands and other skin surfaces contaminated with faeces, blood and other body fluids.
- Firearms are hazardous. All people should stand well behind the shooter when a rabbit is being shot. The line of fire must be chosen to prevent accidents or injury from stray bullets or ricochets.

Equipment Required

Traps

- Wire mesh cage traps are used. These can be obtained from commercial suppliers and are available in a variety of sizes (e.g., 740 x 310 x 310 mm, made of 2.5 mm welded wire with a mesh size of 12.5 x 25 mm). The traps have a spring door that is activated either by a treadle plate or hook mechanism. Only traps with treadle plates are recommended for catching rabbits as the hook mechanism is only suitable for attaching meat baits to catch predators.

Firearms and ammunition

- Where shooting is the most appropriate means of euthanasia, smaller calibre rifles such as a .22 rimfire, with hollow- or soft-point ammunition, are suitable for euthanasia at short range (from 5-25cm away).

Procedures

Selection of trap sites

- Traps should be set in areas where rabbits are known to be active, e.g., around warrens or where rabbit droppings are present around pasture.
- Free feeding with bait, e.g., diced carrot, for a number of nights before setting traps will help identify likely trapping sites as well as enhancing capture rates.
- 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.
- Do not place traps in areas where they may be interfered with or damaged by large stock or humans.

Setting of traps

- It is preferable to set traps at the end of each day and check early each morning. Traps should be left open during the day.
- Before setting each trap ensure that it is functioning properly.
- Diced carrot is the preferred bait for attracting rabbits into traps. However, in some circumstances alternatives can be used such as in and around horticultural crops where rabbits are a problem, e.g., use broccoli where this is the crop being damaged.

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 animals should always be confirmed by observing the following:
    - no heartbeat
    - no breathing
    - no corneal reflex (no blinking when eyeball is touched)
    - no response to a toe pinch (a firm squeeze of the pad or large toe).
- 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.

Shooting

- Trapped live rabbits can be euthanased by shooting whilst still held in the cage trap.
- Unnecessary people should keep away from the area of the trap. The shooter should approach the animal in a calm and quiet manner.
- Never fire when the rabbit is moving its head, be patient and wait until it is motionless before shooting. Accuracy is important to achieve a humane death. One shot to the head should ensure instantaneous loss of consciousness and rapid death without resumption of consciousness.
- Effectiveness of shooting is dependent upon the destruction of major centres at the back of the brain near the spinal cord. This can be achieved by one of the following methods (see also Figure 2).

Frontal position (front view)

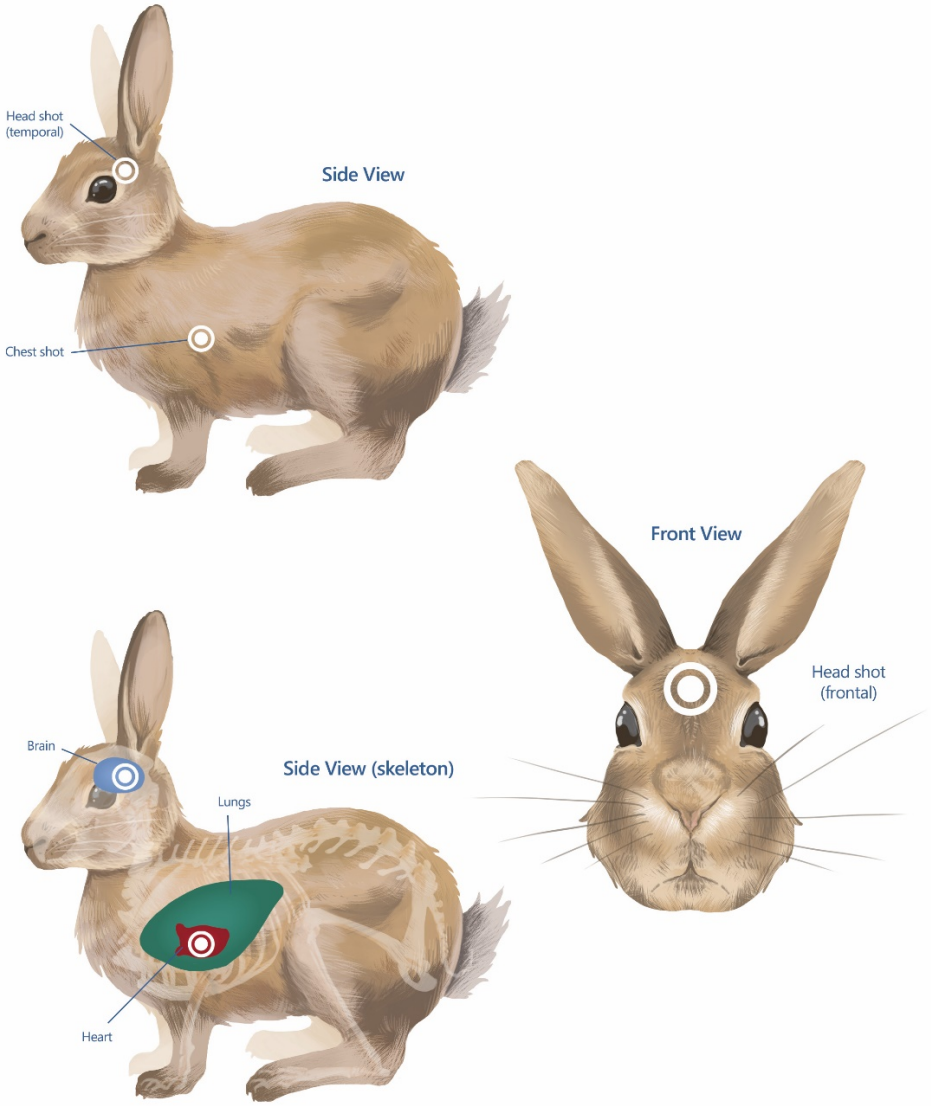
- The firearm is aimed at the centre of the head slightly below a line drawn midway between the ears.

Temporal position (side view)

- Shoot from the side aiming behind the ear so that the shot will pass through the brain towards the opposite eye.
- Death of shot animals can be confirmed by observing a combination of the following:
  - no heartbeat
  - no breathing
  - no corneal reflex (no blinking when the eyeball is touched)
  - no response to a toe pinch (a firm squeeze of the pad on a toe).

If death cannot be verified, a second shot to the head should be taken immediately.

Figure 2: Shot placement for rabbits. Head shots (temporal or frontal) should be used for shooting rabbits caught in traps.



Note that shooting an animal from above or below the horizontal level as depicted here will influence the direction of the bullet through the body. Adjustment to the point of aim on the external surface of the body may need to be made to ensure that the angled bullet path causes extensive (and therefore fatal) damage to the main organs in the target areas.

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