

Background

Although trapping is considered an ineffective tool for large areas, it may be useful in urban/residential areas where domestic cats are present, or in areas where populations have already been reduced and individual cats need to be targeted.

Live trapping followed by euthanasia is one of the main methods of control currently used. In urban/residential areas, cage traps or soft net traps are preferred over foot hold traps as fewer injuries are sustained, non-target animals can be released unharmed and trapped feral cats can be transported away from the area for euthanasia. Refer to NSWCAT SOP2 Trapping of Feral Cats using Cage Traps and GEN003 Trapping using soft net traps. Foot-hold (paddedjaw) traps should only be used at sites where the animal can be killed by shooting whilst still held in the trap. Foot-hold traps may be more effective than cage traps for hard-to-catch cats that have had minimal exposure to humans.

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 Standard Operating Procedures 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 feral cat control in Australia.
- 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. Trapping by inexperienced operators can result in 'trap-shy' cats that are difficult to catch because they have previously escaped from a carelessly prepared and presented trap. Similarly, poor technique can result in greater rates of injuries and non-target captures.
- 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.

- Before euthanasing a trapped cat, first establish that it is a feral cat, rather than a
 domestic pet or stray cat. Trapped cats that appear to be domesticated/owned i.e.
 wearing a collar or have a friendly temperament, should be taken to the nearest council
 pound for assessment. It is recommended that the public be notified before
 commencement of a feral cat trapping program.
- Once trapped, feral cats are euthanased by shooting whilst still held by the trap.
- Traps must be used in accordance with relevant NSW legislation (*Prevention of Cruelty to Animals Act 1979*). In NSW, use of steel-jaw traps is prohibited. Trapping with padded-jaw traps, cage traps and treadle snares is permitted.
- Shooting of feral cats 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

- Foot-hold traps cause pain and distress in two ways, pressure of the trap jaws on the captured limb and restraint of the animal. These range from swelling of the foot and lacerations to dislocations and fractures.
- To reduce capture distress, trapped feral cats must be killed as quickly and humanely as possible following capture.
- Traps must be inspected daily to prevent suffering and possible death from exposure, thirst, starvation 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.
- Captured animals must be approached carefully and quietly to reduce panic, further stress and risk of injury.
- To minimise the animal welfare implications of leaving dependant kittens to die a slow death from starvation, it is preferable not to undertake trapping when females are lactating e.g., September to March in non-urban habitats. There is a high probability that any female cat over six months old that is caught during this time will be pregnant or lactating.
- If lactating females are caught in a trap, efforts should be made to find dependent kittens and kill them quickly and humanely either by shooting (with a single shot to the brain) or manually applied concussive blow to the head. Litters may be found near to the trap site in the base of hollow tree trunks, among boulders etc.

Non-target animals

- Traps are not target specific, so a wide range of non-target species may be caught. These can include birds (e.g., ravens, magpies, pied currawongs), kangaroos, wallabies, rabbits, hares, echidnas, goannas, wombats, possums, bandicoots, quolls and sheep.
- Different groups of non-target animals suffer different levels of injury and distress. For example:
 - o Wallabies often experience serious injuries e.g., dislocations, due to the morphology of their limbs and because they become very agitated when restrained.
 - o Goannas e.g., lace monitors also suffer from dislocations and can die from hyperthermia.
 - o Birds, rabbits and hares can 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.
- Non-target animals caught in traps must be examined for injuries and signs of illness or distress and dealt with as follows:
 - o 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.
 - o 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.
 - o 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 animal shelter, council pound or veterinarian 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 (refer to NSWDOG SOP2 Trapping of wild dogs using cage traps and NSWFOX SOP5 Trapping of foxes using padded-jaw traps).

Workplace health and safety considerations

Trapped cats can be dangerous to handle. They will be nervous and aggressive and can
inflict serious injuries with teeth and claws. If feral cats are killed at the site of capture,
there should be no need to handle them directly. However, if handling is necessary,
leather gloves and a catching pole should be used. Operators must be protected by
tetanus immunisation in case of infection of scratches and bites. Bite wounds often result
in serious infections and should be treated by a doctor.

- Care must be taken when handling feral cat carcasses as they may carry diseases such as toxoplasmosis, ringworm and sarcosporidiosis that can affect humans and other animals. Routinely wash hands after handling all carcasses.
- Operators should be wary of the risks of injury when placing and setting traps. Suitable protective clothing will help prevent injuries and limit disease risk.
- Firearms are hazardous. All people should stand well behind the shooter when an animal is being shot. The line of fire must be chosen to prevent accidents or injury from stray bullets or ricochets.
- Firearm users must strictly observe all relevant safety guidelines relating to firearm ownership, possession and use.
- Firearms must be securely stored in a compartment that meets state legal requirements. Ammunition must be stored in a locked container separate from firearms.
- The shooter and others in the immediate vicinity should wear adequate hearing protection to prevent irreversible hearing damage, and safety glasses to protect eyes from gases, metal fragments and other particles.

Equipment required

Traps

- Approved foot-hold traps suitable for catching feral cats must be used e.g., Victor Soft-Catch® trap.
- Traps must have the following characteristics:
 - o The jaws have no teeth.
 - o The jaws are offset to increase the space between them when closed. (i.e. a gap (minimum 6mm) remains when the jaws are closed).
 - o 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 padding fills the offset gap when the jaws are closed.
- All traps should be checked for damage, sharp surfaces and malfunctions e.g., loose rubber pads, before they are taken into the field.
- Traps should be handled in a way that eliminates contamination with human related scents. Gloves should also be used when handling and setting traps.
- Traps should also have:
 - o 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.
 - o Pan tension adjusted to suit the target species 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.

Lures

• A variety of olfactory, visual or auditory stimuli may be used to lure cats into trap sets. Olfactory lures include synthetic fermented egg, catnip, tuna oil, cat urine and anal gland preparation and also soiled cat litter from a cattery. Visual lures such as bird feathers and

cotton wool can be used, although these may not be needed if the trap is clearly visible or the meat bait has a strong odour. Cat calling machines or 'felid attraction phonic' devices, which emit a cat meowing sound, can also be used as a lure.

 The attractiveness of lures will vary with season and location. Choose lures that do not attract localised non-targets e.g., avoid meat-based lures where quolls or goannas are present.

Meat baits

- A handful of meat bait is placed near the trap. Rabbit, chicken, beef, fish, lamb, kangaroo, tinned cat food, sardines and tuna have all been used as bait.
- Capture efficiency may be improved by using bait that reflects the cat's staple prey for the area rather than being novel.
- Attractiveness and palatability of the bait will vary with season and location.

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).
- 12-gauge shotguns with shot sizes of BB or AAA may also be used.
- The accuracy and precision of firearms should be tested against inanimate targets prior to the commencement of any shooting operation.

Procedures

Selection of trap sites

- Traps should be set in areas where cats are known to be active and may be placed under bushes, beside vehicle tracks and at rabbit warrens. They can be set at the entrance to fallen hollow logs so as to provide cover for the trapped cat and also to allow the bait to be hidden from view of non-target bird species. Do not set traps near fences and other objects such as small trees, bushes etc. in which the trapped cat (or non-target) may become entangled.
- Do not set traps where non-target captures (including livestock) are likely.
- The location (GPS coordinates) of all trap sites 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.
- The recording of target and non-target captures as well as injuries can also be valuable in the constant improvement of trapping technique.
- On-line apps such as FeralScan may assist in these processes: https://www.feralscan.org.au/.
- Signage should be deployed on public lands to advise that traps are being used in the area.

Placing and setting of traps

- Traps should be set at the end of each day and checked 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. 30-50 cm). Alternatively, the trap can be tied to 'drags', objects such as solid pieces of steel or timber that will move when the cat pulls against the trap. The drag may need to be sufficient to restrain larger predators such as dogs. Use of drags should be minimised as they can potentially have greater welfare concerns than anchor points.
- Set the trap and place into position in the hole in the ground. Ensure that surrounding shrubs or debris will not interfere with the spring mechanism.
- Carefully camouflage the area around the trap with leaves, grass debris etc. but leave a slightly cleared area (10-15 cm) over the area of the plate.
- Place the meat bait approximately 10-15 cm behind the plate of the trap. Lures should be placed in suitable positions around the trap.

Identification of feral cats

- Feral cats, which survive with limited to no human contact or assistance, are the main target of control programs. Feral cats are unowned, unsocialised, have no relationship with or dependence on humans and reproduce in the wild. Feral cats are solitary and predominantly nocturnal, spending most of the day in the safety of a shelter such as a burrow, log or rock pile.
- Domestic cats may be quite docile and easily handled, but some will become anxious and distressed in cage traps and their behaviour will resemble that of feral cats unless they can be identified with a collar and tag.

Shooting of feral cats

- Trapped feral cats should be euthanased by shooting whilst still held by the trap.
- It can be difficult to shoot feral cats humanely as they become very nervous and agitated when restrained and in the presence of people. Unnecessary people should keep away from the area. The shooter should approach the animal in a calm and quiet manner.
- Never fire when the cat is moving its head, be patient and wait until the cat 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.
- To maximise the impact of the shot and to minimise the risk of misdirection the range should be as short as possible e.g., 5-25 cm from the head if using a rifle, or 1–2 metres if using a shotgun.
- 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 3).

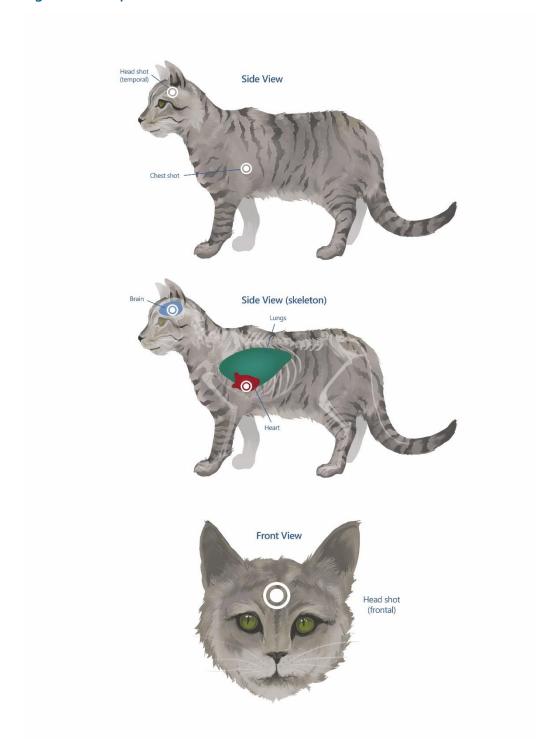
Frontal position (front view)

• 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 should always be confirmed by observing the following:
 - o no heartbeat
 - o no breathing
 - o no corneal reflex (no blinking when eyeball is touched)
 - o no response to a toe pinch (a firm squeeze of the pad or large toe).
- If death cannot be verified, a second shot to the head should be taken immediately.

Figure 3: Shot placement for feral cats



Head shots (temporal or frontal) should be used for shooting feral cats caught in traps. See text for details.

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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NSWCAT COP: Feral Cat NSWCAT Code of practice and standard operating procedures for the effective and humane management of feral cats

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