

Standard Operating Procedure CAT002: Trapping of feral cats using cage traps

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Background

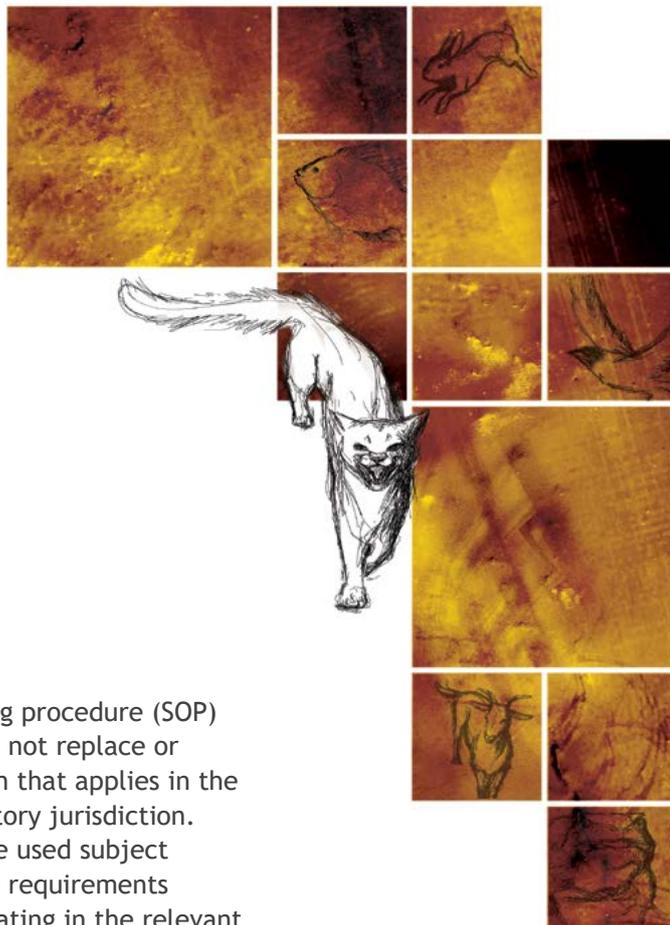
Feral cats prey upon a wide range of mammals, birds, reptiles, amphibians and insects. In some areas of Australia, especially many of the offshore islands, feral cats represent a significant threat to vulnerable and endangered native fauna. They may also have an indirect adverse impact on wildlife and livestock through the transmission of diseases such as toxoplasmosis and sarcosporidiosis. A variety of control methods have been used including shooting, trapping, poison baiting and exclusion fencing. Although cage trapping is considered an ineffective tool for large areas, it may be useful in urban/residential areas where domestic cats are present, or where populations have already been reduced and individual cats need to be targeted.

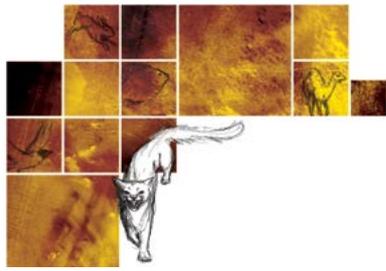
In urban/residential areas, cage traps are preferred over leg hold traps as fewer injuries are sustained, non-target animals can be released unharmed and trapped feral cats can be transported away from the area for euthanasia. Soft net traps may also be useful for capturing individual problem animals in similar situations - refer to [GEN003 Trapping using soft net traps](#). Padded-jaw, leg-hold traps should only be used at sites where the animal can be killed by shooting whilst still held in the trap. Leg-hold traps may be more effective than cage traps for hard-to-catch cats that have had minimal exposure to humans. Refer to [CAT003 Trapping of feral cats using padded-jaw traps](#).

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 time-consuming and labour intensive and is therefore an inefficient method for large-scale feral cat control in Australia. It can be effective in controlling problem individuals in urban and semi-urban areas.
- Cats are naturally cautious animals and can be reluctant to enter the enclosed space of a cage trap. Also, if food sources are readily available they may not be hungry enough to approach a baited trap.
- Trapping in non-urban areas should be restricted to late autumn and early winter when food availability is generally low and the likelihood of non-target species capture is reduced.
- Traps have the potential to cause significant suffering and distress so should only be used when there is no suitable alternative.
- Selection of appropriate traps and trap sites will maximise 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 or shock.





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Trapped feral cat wearing a tracking device. Image: Andrew Bengsen

Animal welfare considerations

Impact on target animals

- Feral cats are likely to suffer distress from being confined in a cage trap and they can sometimes be injured while trying to escape. Facial injuries are common.
- Traps must be inspected daily to prevent suffering and possible death from exposure, dehydration, starvation and/or shock.
- It is preferable to set up traps at sites where vegetation can provide shade and shelter.
- Shade cloth or hessian can be used for protection during extremes of weather. In hot weather, water should be provided and in cold weather bedding should be available inside the cage. 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.
- Trapped feral cats must be killed as quickly and humanely as possible.
- If transporting a trapped cat away from the capture site to be euthanased, the cage should be covered with hessian or a blanket to provide shelter from direct sunlight, wind and rain and to minimise stress from visual threats. Cats must not be transported in enclosed car boots.
- 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 eg 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. Litters may be found near to the trap site in the base of hollow tree trunks, among boulders etc.

Impact on non-target animals

- Traps are not target specific, therefore other species such as birds and reptiles may be caught.
- 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 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 animal shelter, council pound or veterinarian where it can be scanned for a microchip and the owner contacted, or assessed as to suitability for rehoming.
- If wild dogs or foxes are caught in the trap they must be euthanased quickly and humanely (refer to [DOG002 Trapping of wild dogs using cage traps](#) and [FOX006 Trapping of foxes using cage traps](#)).

Health and safety considerations

- Trapped feral cats can be dangerous to handle. They will be nervous and aggressive and can inflict serious injuries with teeth and claws. If these cats are killed whilst still in the cage, there should be no need to handle them directly. However, if handling is necessary, leather gloves and a catching pole, or a crush 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.
- Firearms are hazardous. All people should stand well behind the shooter when a cat is being shot. The line of fire must be chosen to prevent accidents or injury from stray bullets or ricochets.

- Care must be taken when handling live cats and 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.

Equipment required

Traps

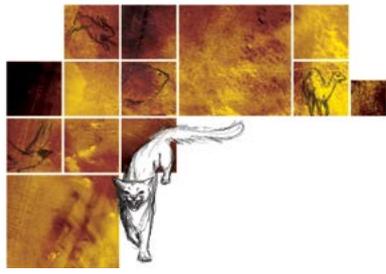
- Wire mesh cage traps are used. These can be obtained from commercial suppliers and are available in a variety of sizes (eg 740 x 310 x 310 mm, made of 2.5 mm welded wire with a mesh size of 12.5 x 25 mm). The traps have a spring door that is activated either by a treadle plate or hook mechanism. Only traps with treadle plates are recommended for catching cats as the hook mechanism can cause injuries to the trapped cat and handling and/or transferring of the cat is easier through the rear plate of the cage. Also, cats normally eat from the ground and may not take food from the hook.

Lures

- A variety of olfactory, visual or auditory stimuli may be used to lure cats into the trap. 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



Image: Craig McMillan



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*Feral cat baited with fresh rabbit carcass.
Image: Chris Lane*

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.

Meat baits

- A handful of meat bait is placed at the rear of the cage.
- Rabbit, chicken (including fried), beef, fish, lamb, kangaroo, tinned cat food, sardines and tuna have all been successfully 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, firearms no smaller than a .17 calibre rimfire with hollow/soft point ammunition are recommended for euthanasia.
- The accuracy and precision of firearms should be tested against inanimate targets prior to the commencement of any shooting operation.

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.
- The location of all trap sites must be accurately recorded. 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 /damaged by large stock or humans.

Placing and setting the trap

- Before setting each trap ensure that it is functioning properly.
- It may be useful to partially enclose the trap in a large hessian bag to prevent the cats from attempting to take the bait through the side or back of the trap. This also helps to reduce the visibility of bait to non-target species such as raptors and corvids.
- Cage traps should be set squarely on the ground and the doors of the trap bent upward to increase the openness of the trap space.
- The trap should be pegged to the ground to prevent the cat or some other animal from tipping it over and injuring itself and/or releasing the trap door.
- Place meat baits inside the trap and lures in suitable positions inside and outside of the trap.
- Cage traps should be clear of vegetation so that the cat can walk completely around the trap before entering.
- It is preferable to set traps at the end of each day and check early each morning. When traps are open during the day there is a greater risk of birds, such as magpies and currawongs, entering and triggering the trap.
- If traps need to be left open during the day, they should be checked again in late afternoon.

Identification of feral cats

- Feral cats are similar in appearance to domestic cats; however when in good physical condition, the feral cat has increased overall muscle development, which is especially noticeable around the head, neck and shoulders, giving the animal a more robust appearance.
- Feral cats are predominately short-haired with coat colours ranging between ginger, tabby, tortoiseshell, grey and black. White markings may be present, particularly on the chest, paws and abdomen, but

Diagram 1: Recommended shot placements for feral cats

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

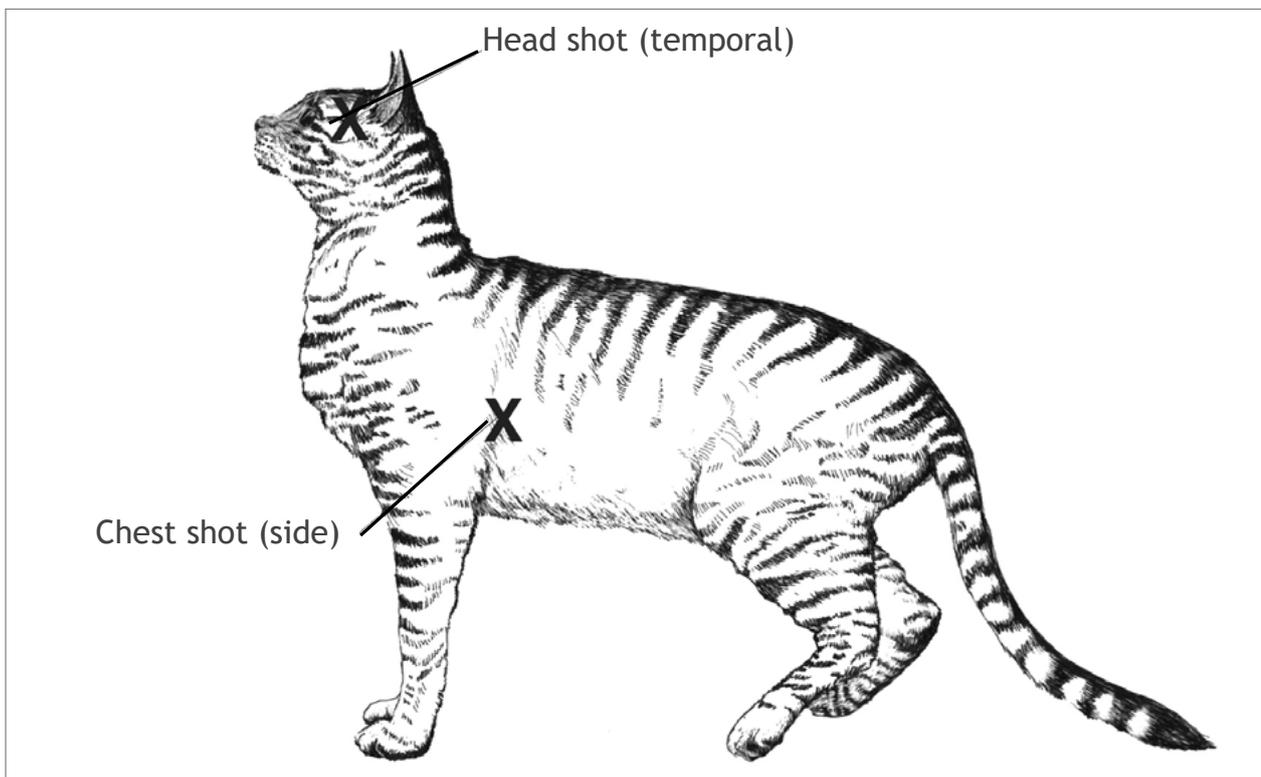
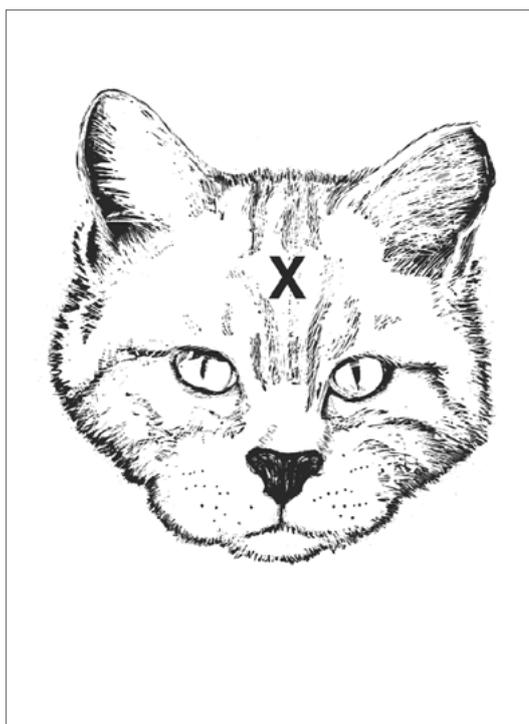
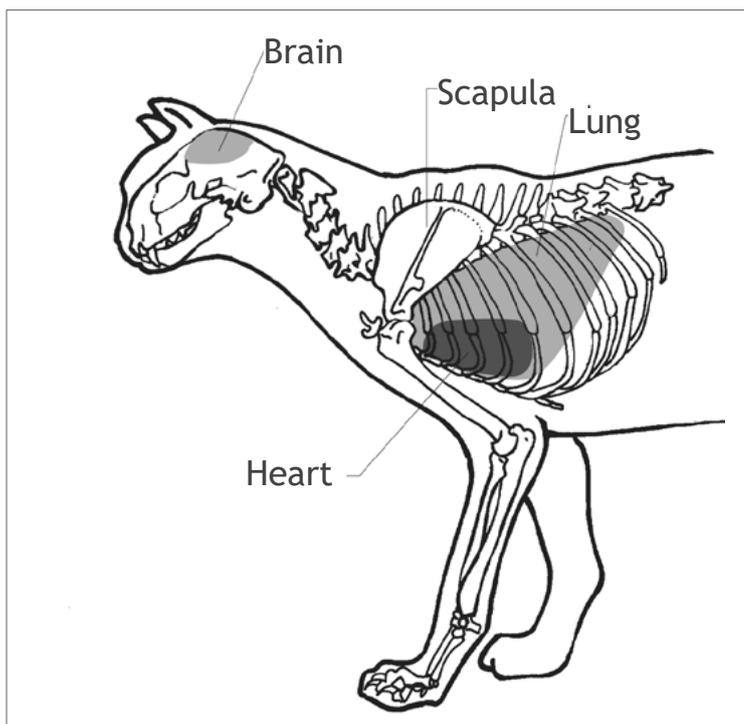
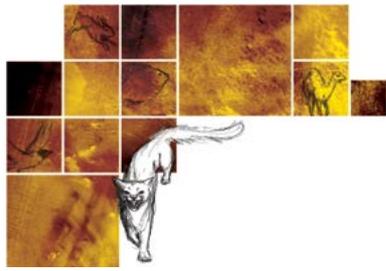


Diagram 2: Side view (skeleton)

Diagram 3: Head shot (frontal)





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completely white cats are very rare.

Ginger cats are more likely to be found in semi-arid and desert areas, while grey and black cats are found in scrub and forests.

- Domestic cats may be quite docile and easily handled, but some will become anxious and distressed in cage traps and will resemble feral cats unless they are identified with a collar and tag.

Euthanasia of feral cats

- Trapped feral cats can be killed humanely using one of the following methods:

Overdose of barbiturate

- These procedures can only be performed by, or under the direction of, a veterinarian or other authorised person.
- An intramuscular or subcutaneous injection of a sedative (ketamine at 20 mg/kg or xylazine at 1-2 mg/kg) can be administered to the cat through the wire mesh without the cat being handled. This is easier to perform if the cage has a 'crush' or 'squeeze-back' to restrain the cat at one end of the cage. Once the cat is sedated it is euthanased with an intravenous or intraperitoneal injection of sodium pentobarbitone.

If the cat cannot be sedated with an injection, anaesthetic gas (eg halothane or methoxyflurane) or carbon dioxide can be introduced into a plastic bag that has been placed around the cage. The animal will become unconscious quickly and quietly, followed by death after a short period depending on the gas used and its concentration. If preferred, once the animal is unconscious, it may be removed from the cage and euthanased with an intravenous or intraperitoneal injection of pentobarbitone sodium.

Shooting

- Trapped live feral cats can be euthanased by shooting whilst still held in the cage 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 ie 5–20 cm from the head.
- 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 Diagrams 1, 2 and 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)

- Aim horizontally from the side of the head at a point midway between the eye and the base of the ear.
 - Death of shot animals 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
 - Loss of colour in mucous membranes (become mottled and pale without refill after pressure is applied).
- If death cannot be verified, a second shot to the head should be taken immediately.

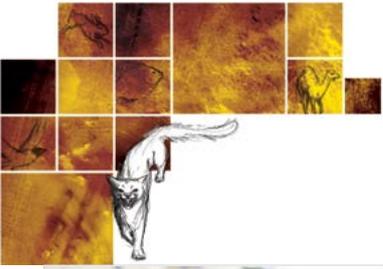
Further information

Contact the relevant federal, state or territory government agency from the following list of websites:

- Australian Department of the Environment and Energy
<http://www.environment.gov.au/>
- Australian Department of Agriculture and Water Resources
<http://www.agriculture.gov.au/>
- ACT Transport Canberra and City Services
<http://www.tccs.act.gov.au/city-living>
- NSW Department of Primary Industries
<http://www.dpi.nsw.gov.au>
- NT Department of Land Resource Management
<https://landresources.nt.gov.au/>

Table 1: Relevant state and territory animal welfare and related legislation relevant to the use of traps

State	Legislative Act	Description
New South Wales	<u>Prevention of Cruelty to Animals Act 1979</u>	Use of steel-jaw traps is prohibited. Trapping with padded-jaw traps, cage traps and treadle snares is permitted.
Queensland	<u>Animal Care and Protection Act 2001</u>	Steel-jaw traps are not prohibited traps.
Australian Capital Territory	<u>Animal Welfare Act 1992</u>	Use of steel-jaw traps is prohibited. Trapping with padded-jaw traps, cage traps and treadle snares is permitted.
Northern Territory	<u>Animal Welfare Act 2000</u>	Use of steel-jaw traps is prohibited. Trapping with padded-jaw traps is permitted.
Tasmania	<u>Animal Welfare Act 1993</u>	Leg-hold traps and snares are prohibited.
South Australia	<u>Animal Welfare Act 1985</u>	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	<u>Prevention of Cruelty to Animals Act 1986</u> <u>Prevention of Cruelty to Animals Regulations 2008</u>	Mandatory features of traps, conditions of use, inspection periods and where traps may be set are specified for all trap types. All steel-jaw traps are prohibited. Padded traps are permitted for wild dogs, foxes and rabbits. Confinement traps, net traps and rodent kill traps are permitted. Lethal snares are illegal. Non-kill snares and kill traps require Ministerial approval.
Western Australia	<u>Animal Welfare Act 2002</u> <u>Agriculture and Related Resources Protection (Traps) Regulations 1982</u>	Steel-jaw traps are permitted for wild dog control. The jaws must be bound with a cloth soaked in 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.



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Image: Jessica Marsh

- QLD Department of Agriculture and Fisheries
<https://www.daf.qld.gov.au/>
- SA Department of Primary Industries and Regions
<http://www.pir.sa.gov.au/biosecurity>
- TAS Department of Primary Industries, Parks, Water and Environment
<http://dpiwwe.tas.gov.au/>
- VIC Department of Economic Development, Jobs, Transport and Resources
<http://economicdevelopment.vic.gov.au/>
- WA Department of Agriculture and Food
<https://www.agric.wa.gov.au/>

Also refer to:

The Centre for Invasive Species Solutions

<https://invasives.com.au/>

or <http://www.pestsmart.org.au>

References

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