

NATSOP-HOR001 NATIONAL STANDARD OPERATING PROCEDURE: GROUND SHOOTING OF FERAL HORSES

Voluntarily adopted by the Vertebrate Pest Committee 2012 with the Invasive Plants and Animals Committee endorsing minor updates September 2017.

BACKGROUND

Feral horses (*Equus caballus*) can cause significant environmental damage and losses to rural industries. Although considered pests, feral horses are also a resource, providing products such as pet meat for the domestic market and meat for human consumption for the export market. Control methods include capture (by trapping, mustering or roping), exclusion fencing, ground shooting and shooting from helicopters.

Ground shooting is best suited to accessible and relatively flat areas where there are low numbers of problem horses. It is also used for euthanasia of sick or injured horses. It involves the shooter approaching a group of horses on foot with the intention of culling all the animals in the group. Shooting from a helicopter is considered a more humane control method, as mobile wounded animals can be promptly located and killed. It is also a more effective method of quickly reducing feral horse populations. Refer to [NATSOP-HOR002 National Standard Operating Procedure: Aerial shooting of feral horses](#).

Shooting can be a humane method of destroying feral horses when it is carried out by experienced, skilled shooters, the animal can be clearly seen and is within range, and the correct firearm, ammunition and shot placement is used.

This National Standard Operating Procedure (NATSOP) is a guide only. It does not replace or override the legislation that applies in the relevant state or territory jurisdiction. The NATSOP should only be used subject to the applicable legal requirements (including OH&S) operating in the relevant jurisdiction.

APPLICATION

- Shooting should only be used in a strategic manner as part of a coordinated program designed to achieve sustained effective control.
- Ground shooting is time consuming and labour intensive, and is therefore not considered an effective method for largescale control.
- Ground shooting as a means of population control is not suitable in inaccessible, wooded or rough terrain where sighting of target animals and accurate shooting is difficult, or when wounded animals cannot easily be followed up and killed.
- The optimal period for ground shooting is during dry seasons or droughts, when many groups of horses are forced to congregate around areas with limited access to water and feed. Shooting during drought reduces the number of horses that would otherwise die slowly of hunger or thirst.
- Sporadic shooting from the ground might teach horses to avoid certain areas, making overall control difficult.
- Shooting of feral horses 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 legislative requirements.

ANIMAL WELFARE CONSIDERATIONS

Impact on target animals

- The humaneness of shooting as a control technique depends almost entirely on the skill and judgement of the shooter. If properly done, it can be a humane method of destroying feral

NATSOP-HOR001 NATIONAL STANDARD OPERATING PROCEDURE: GROUND SHOOTING OF FERAL HORSES

horses. On the other hand, if done inexpertly, shooting can result in wounding that can cause considerable pain and suffering.

- Shooting must be done with the appropriate firearms and ammunition and in a manner that aims to cause immediate insensibility and painless death.
- Shooters should not shoot at an animal unless it is clearly visible and they are confident of killing it with a single shot.
- Only head (brain) or chest (heart/lung) shots must be used. Shots to the head are preferred over chest shots as they are more likely to cause instantaneous loss of consciousness. Chest shots do not render the animals instantaneously insensible and are likely to result in a higher incidence of wounding. Shooting at other parts of the body is unacceptable.
- Group flight response is a limiting factor for humane and instantaneous killing of horses.
- If possible, all horses in a group should be killed before any further groups are targeted.
- Wounded horses must be located and killed as quickly and humanely as possible with a second shot, preferably directed to the head. If left, wounded animals can escape and suffer from pain and the disabling effects of the injury.
- Culling programs should be timed to minimise the risk of orphaning dependent foals or causing abortion when females are in late pregnancy.
- If lactating females are inadvertently shot, efforts should be made to find dependent young and kill them quickly and humanely with a shot to the brain.
- Dogs should not be involved in any phase of horse culling programs. Horses are easily distressed and frightened by dogs and might injure themselves by running into fences and other obstacles.

Impact on non-target animals

- Shooting is relatively target specific and does not usually impact on other species. However, there is always a risk of injuring or killing non-target animals, including livestock, if shots are taken only at movement, colour, shape or sound. Only shoot at the target animal once it has been positively identified and never shoot over the top of hills or ridges.

HEALTH AND SAFETY CONSIDERATIONS

- All participants in the culling program 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.
- Adequate hearing protection should be worn by the shooter and others in the immediate vicinity of the shooter. Repeated exposure to firearm noise can cause irreversible hearing damage.
- Safety glasses are recommended to protect the eyes from gases, metal fragments and other particles.
- Care must be taken when handling feral horse carcasses, as they can carry diseases such as melioidosis, ringworm and dermatophilosis that can affect humans and other animals. Routinely wash hands and other skin surfaces after handling carcasses. Carcasses can be heavy, so care must be taken when lifting or dragging them.

NATSOP-HOR001 NATIONAL STANDARD OPERATING PROCEDURE: GROUND SHOOTING OF FERAL HORSES

EQUIPMENT REQUIRED

Firearms and ammunition

- Large calibre, high powered, centre-fire, bolt action or semi-automatic rifles should be used. Preferred calibre is .300 Magnum ballistics or greater, with cartridges of .308 Win performance being the minimum. Rifles should be fitted with quality telescopic sights of at least 4x magnification. Soft-point ammunition with heavily constructed, controlled expansion projectiles (eg Winchester Fail Safe, Barnes X, or Nosler Partition) should be used. Minimum weight is 150 grain for .308, and 180 or 200 grain for .300 Magnum.
- Shotguns are NOT recommended for use on feral horses. If they must be used in an emergency situation, rifled slugs are to be used as ammunition.
- The accuracy and precision of firearms should be tested against inanimate targets before any shooting operation.

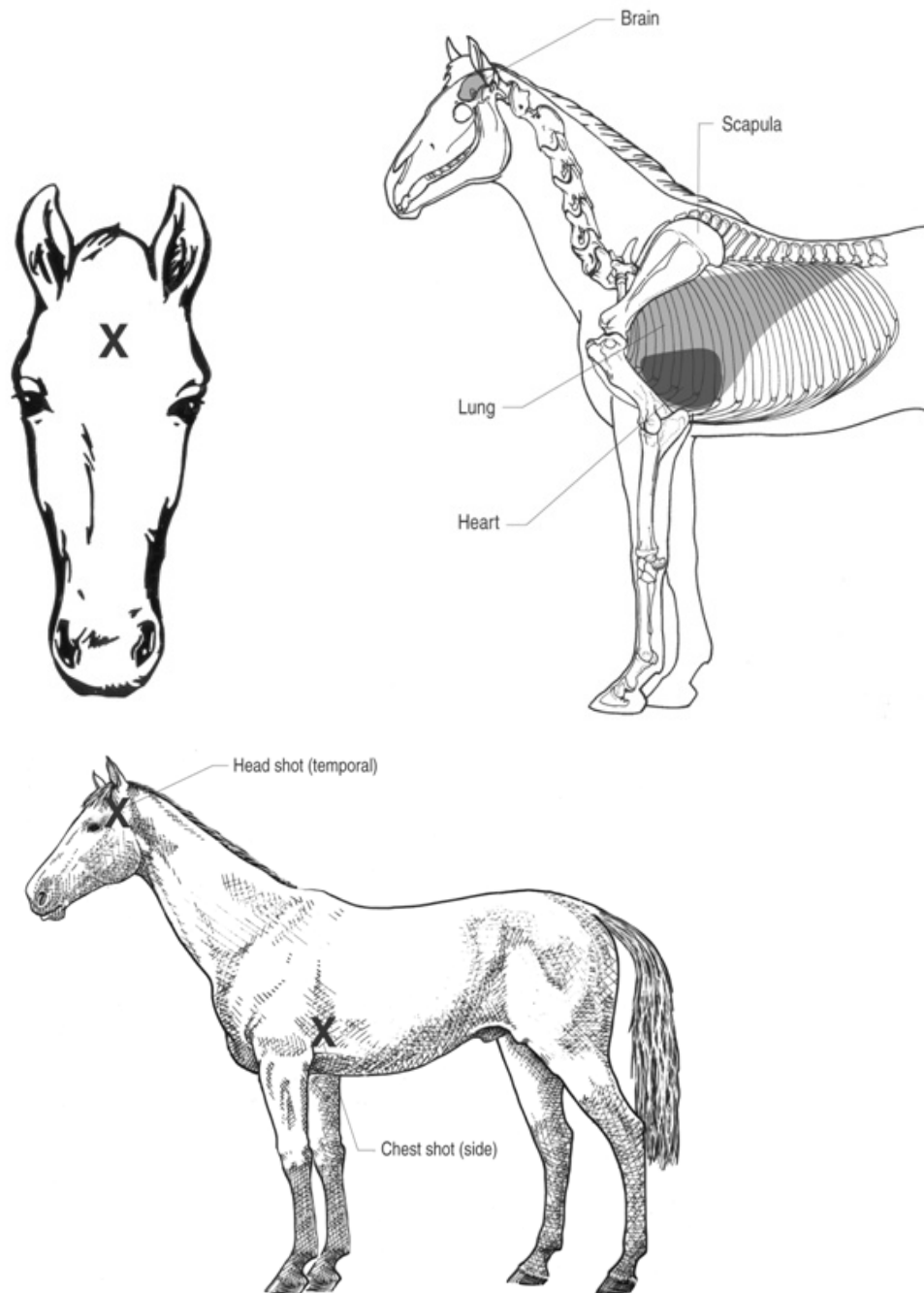
Other equipment

- lockable firearm box
- lockable ammunition box
- personal protective equipment (hearing and eye protection)
- first aid kit
- appropriate maps identifying access trails and land tenure.

PROCEDURES

- Horses must NOT be shot from a moving vehicle or other moving platform, as this can significantly detract from the shooter's accuracy.
- Ensure you are in a firm, safe and stable position before taking a shot.
- The objective is to fire at the closest range practicable in order to reduce the risk of non-lethal wounding. Accuracy with a single shot is important to achieve an immediate and therefore humane death. A horse should only be shot at when:
 - it is stationary and can be clearly seen and recognised
 - it is within the effective range of the firearm and ammunition being used
 - a humane kill is probable. If in doubt, do NOT shoot.
- Ensure there are no other horses behind the target animal that could be wounded by the shot passing through the target.
- Although horses are large animals, the vital areas targeted for clean killing are small. Shooters should be adequately skilled; that is, able to consistently shoot a group of at least three shots within a 10cm target at 100 metres. Shooters should also be able to accurately judge distance, wind direction and speed and have thorough knowledge of the firearm and ammunition being used.
- The shooter must aim either at the head, to destroy the major centres at the back of the brain near the spinal cord, or at the chest, to destroy the heart, lungs and great blood vessels. This can be achieved by one of the following methods (see diagrams):

NATSOP-HOR001 NATIONAL STANDARD OPERATING PROCEDURE: GROUND SHOOTING OF FERAL HORSES



Recommended shot placements for feral horses

NATSOP-HOR001 NATIONAL STANDARD OPERATING PROCEDURE: GROUND SHOOTING OF FERAL HORSES

Head Shots (this is the preferred point of aim)

Frontal position (front view)

The firearm should be directed at the point of intersection of diagonal lines taken from the base of each ear to the opposite eye. The bullet should be directed horizontally.

Temporal (side view)

The horse is shot from the side so that the bullet enters the skull midway between the eye and the base of the ear. The bullet should be directed horizontally.

Chest Shot

Side view

- The horse is shot from the side so that the bullet enters the chest at a point behind the foreleg, slightly above and immediately behind the elbow joint.
- Shooting of individuals should stop when the flight response of the herd limits further accurate shooting.
- Older females should be shot first, as one of these will be the matriarch mare. Shooting the lead mare first will generally confuse the remaining horses, slow their retreat and increase the chances of effectively culling all the horses in the group. Where the stallion poses no threat to operators or other horses, he should be shot last so that the other horses remain as calm as possible. If the stallion is shot first the mares might panic and escape with their foals.
- The target animals in a group should be checked to ensure they are dead before moving on to the next group of animals. Always approach the animal from the dorsal (or spinal) side to prevent injury from kicking legs. Death of shot animals can 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.

NATSOP-HOR001 NATIONAL STANDARD OPERATING PROCEDURE: GROUND SHOOTING OF FERAL HORSES

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