

NSWDON SOP1

Ground shooting of feral donkeys

Background

Ground shooting is best suited to accessible and relatively flat areas where there are low numbers of problem donkeys. It is also used for euthanasia of sick or injured donkeys. It involves the shooter approaching a group of donkeys 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 donkey populations. Refer to *NSWDON SOP2: Aerial shooting of feral donkeys*.

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

This standard operating procedure (SOP) is a guide only - it does not replace or override the relevant NSW or federal legislation. 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

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

- Sporadic shooting from the ground may teach donkeys to avoid certain areas, making overall control difficult.
- Shooting of feral donkeys 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 (See [Firearms Act 1996](#), [Firearms Regulation 2017](#)).

Animal welfare implications

Target animals

- The humaneness of shooting as a control technique depends almost entirely on the skill and judgement of the shooter. If properly carried out, it can be a humane method of killing feral donkeys.
- Shooting must be done with the appropriate firearms and ammunition and in a manner that aims to cause rapid insensibility and quick death.
- When shooting an animal, it must be clearly visible and able to be killed with a single shot due to the difficulty of follow-up shots from the ground, particularly in difficult terrain. A solid rest or support should be utilised to ensure accurate shot placement.
- Only head (brain) or chest (heart-lung) shots must be used. A well-placed shot to the head to destroy the brain will result in instantaneous insensibility and a quicker death compared to a well-placed shot to the chest. Chest shots to destroy the heart can present challenges for accurate placement and may not always result in rapid death. For this reason, under ideal conditions, head shots are preferred over chest shots, however in some situations (e.g., where: close approach is not possible; the head is obstructed or cannot be targeted; the animal is already wounded; or a second 'follow-up' shot can be quickly taken), because the chest is a larger target, a chest shot may be the most suitable option. Shooting at other parts of the body is unacceptable.
- Correctly placed head shots cause brain function to cease, and insensibility will be immediate. Death from a shot to the chest is due to massive tissue damage and haemorrhage from major blood vessels. Insensibility will occur sometime after, from a few seconds to a minute or more. If a shot stops the heart functioning, the animal will lose consciousness very rapidly.
- The shooter must be certain that each animal or defined group of animals is dead by physical inspection before another is targeted.
- Wounded donkeys 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 shot, reasonable 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 donkey culling programs. Donkeys are easily distressed and frightened by dogs and may injure themselves by running into fences and other obstacles.

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 at movement, colour, shape, sound or when spotlighting, eye reflection ('eye shine'). Only shoot at the target animal once it has been positively identified and never shoot over the top of hills or ridges.
- Shooting should be used with caution around lambing paddocks as it may disturb the lambing flock and cause mismothering. Also avoid paddocks containing sensitive livestock, e.g., horses. They are easily frightened by spotlights and gunshots and may injure themselves by running into fences and other obstacles.

Workplace health and safety considerations

- Firearms are hazardous. Everyone 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.
- Shooting from a vehicle is potentially dangerous. An agreed safety procedure between the shooter and others in the vehicle must be in place to ensure that people do not enter the field of fire or disturb the taking of a shot.
- 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.
- Care must be taken when handling feral donkey carcasses as they may carry diseases such as meliodosis, ringworm and mange 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/dragging.

Equipment required

Firearms and ammunition

- Large-calibre, high-powered centrefire rifles fitted with a telescopic sight must be used.

- The minimum firearm and ammunition requirements for the ground shooting of feral donkeys are:
 - calibre: .308 inches
 - bullet weight: 150 grain
 - muzzle energy: 2649 ft-lbs.
- Examples of acceptable firearm and ammunition combinations with maximum shooting distances are included in the table below:

Cartridge	Bullet weight (gr)	Muzzle velocity (ft/sec)	Muzzle energy (ft-lbs)	Maximum distance (metres)
.308 Winchester	150	2820	2649	200
.300 Win Mag	150	3275	3572	200

Source: <https://press.hornady.com/assets/pctumbs/tmp/1410995911-2019-Standard-Ballistics-Chart.pdf>

- Ammunition must expand and should be heavily constructed, controlled expansion or bonded core projectiles.
- Shotguns are NOT recommended for use on feral donkeys. 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 prior to the commencement of 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

- Donkeys must NOT be shot from a moving vehicle as this can significantly detract from the shooters' accuracy.
- Ensure you are in a firm, safe and stable position before taking a shot.

Target animal and shot placement

- 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 donkey 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; and
 - a humane kill is probable.
 - if in doubt, do NOT shoot.
- Ensure there are no other donkeys behind the target animal that may be wounded by the shot passing through the target.
- Although donkeys are comparatively large animals, the vital areas targeted for clean killing are small. Shooters should be highly skilled and experienced at shooting and be able to accurately judge distance, wind direction and speed and have a 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 greater blood vessels. This can be achieved by one of the following methods see Figure 1.

Head shot

Frontal position (front view)

The firearm is aimed at the middle of the forehead at the crossing point of two imaginary lines drawn from the eyes to the tops of the opposite ears. The bullet should be directed horizontally into the skull. The flat facial conformation and the extensive sinus structure of the mature donkey skull can make penetration of the projectile into the brain difficult with this shot. It is therefore more suited to younger animals and instances where there is only a short distance between the shooter and animal.

Temporal position (side view)

This method is preferred for mature/older animals. The firearm should be aimed at the side of the head so that the bullet enters the skull at a point midway between the eye and the base of the ear on the same side of the head.

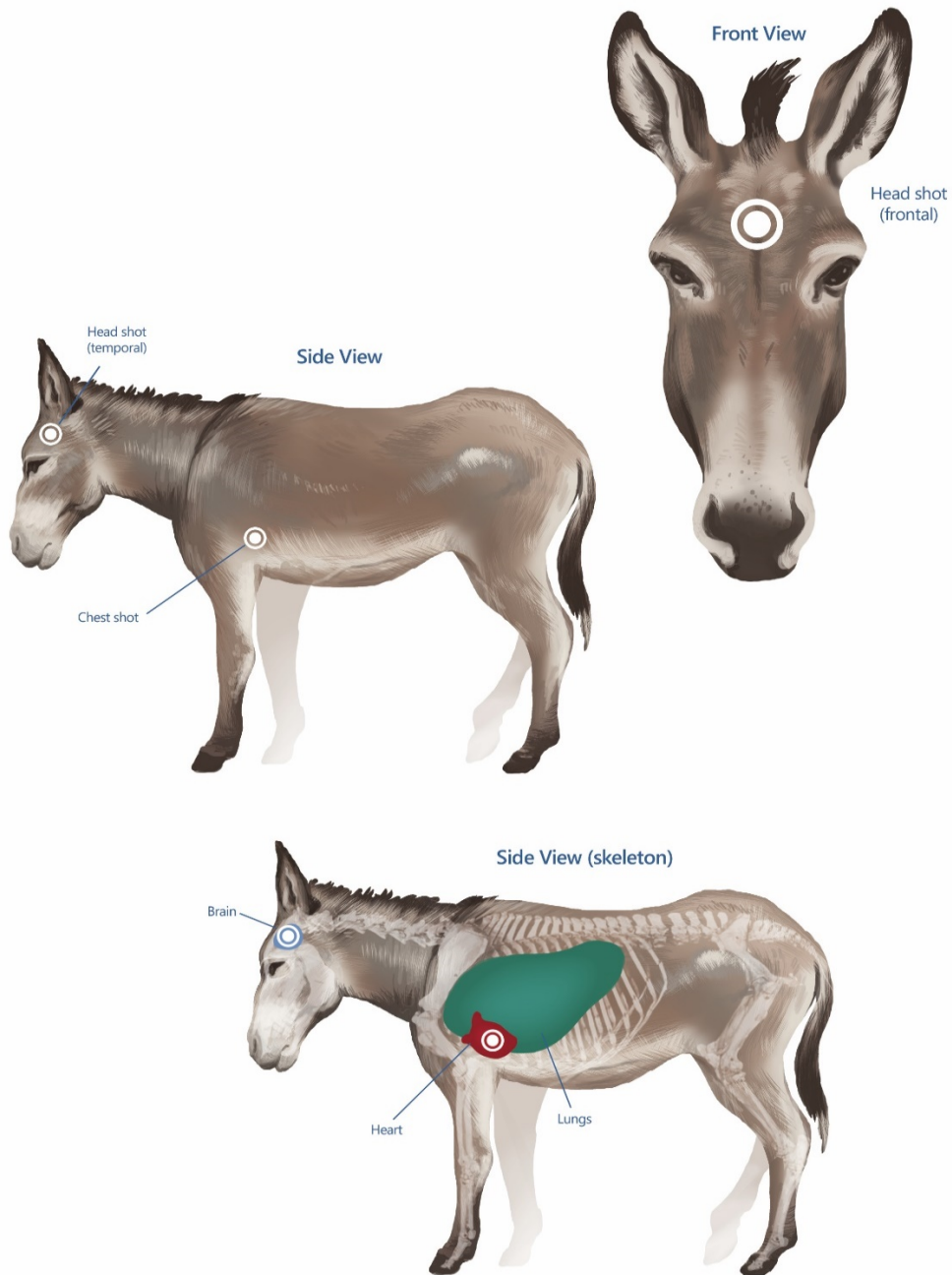
Chest Shot

Side view

- The firearm is aimed horizontally at the centre of a line encircling the minimum girth of the animal's chest, immediately behind the forelegs. The shot should be taken slightly behind and below the shoulder at the point immediately behind the elbow. This angle is taken because the scapula provides partial protection of the heart from a direct side-on shot.
- Shooting of individuals should stop when the flight response of the herd limits further accurate shooting.

- In family groups containing a mature jack with jennies and foals, the jack should be shot first. This tends to confuse the rest of the family group, slows their retreat and increases the chances of culling them. Unweaned foals should be the next targeted to prevent them being separated from the mob and therefore making them difficult to find.
- 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 the involuntary kicking legs. 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 painful stimulus (e.g., a pinch of the ear tip).
- If death cannot be verified, a second shot to the head should be taken immediately.

Figure 1: Shot placement for the ground shooting of feral donkeys



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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