

BACKGROUND

Feral pigs (*Sus scrofa*) have a significant impact on the environment and agricultural production and are a potential reservoir and vector of exotic diseases. Control methods include poisoning, trapping, exclusion fencing, ground shooting and shooting from helicopters. Commercial harvesters also use traps to capture pigs for export as wild boar meat.

Prior to trapping, free feeding of bait is offered at sites where pigs are active. After selecting a suitable site, a trap is then erected and free feeding is continued for a number of days before the trap is set. After pigs have been caught they are shot whilst still inside the trap. Good trapping techniques may enable whole groups of pigs to be caught at one time with minimal impact on non-target animals.

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 should only be used in a strategic manner as part of a co-ordinated program designed to achieve sustained effective control.
- Trapping is effective for reducing numbers of feral pigs in areas where 1080 poisoning cannot safely be used or when pig populations are relatively low. It is often used as a follow-up control method after initial reduction of high pig populations.
- It is most successful when food resources are limited.
- Maintenance of traps is time consuming. Therefore, it is only suitable to use traps in situations where the operator has time to check them on a regular basis.
- Shooting of pigs 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 CONSIDERATIONS

Impact on target animals

- Traps should be set up at sites where vegetation can provide shade and shelter. Pigs have poor thermoregulation and can suffer greatly when exposed to extremes of heat and cold.
- To minimise the possibility of dehydration and heat or cold stress, all traps must be inspected daily. Shade cloth or hessian can be used for protection during extremes of weather.
- The trap should be constructed in a way so as not to cause injury from loose wire, sharp edges or malfunctioning gates.
- Captured animals must be approached carefully and quietly to reduce panic, further stress and risk of injury.
 - Trapped pigs must be destroyed by shooting as quickly and humanely as possible.
- If lactating sows are caught in a trap without their young, efforts should be made to find dependent piglets and kill them quickly and humanely.



Impact on non-target animals

- Traps are designed for the capture of feral pigs and so pose only a small risk of capturing other species. Use of a pig-specific gate trip mechanism minimises the risk of catching some species e.g. cassowaries and wallabies. Placement of a steel post across a funnel trap entrance at a height of 1 m above the ground will prevent cattle from entering.
- 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 Methods of Euthanasia.
- If a trap continually catches non-target animals, an alternative bait attractant could be considered or the trap could be moved to another site where it will have minimal effect on other species.

HEALTH AND SAFETY CONSIDERATIONS

- During construction of traps, operators should be wary of the risks of injury from lifting heavy items. Leather gloves and eye protection will help prevent injuries from wire, steel panels and hammers
- Firearms are potentially hazardous. All people should stand well behind the shooter when pigs are 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 pig carcasses as they may carry diseases such as leptospirosis, Q fever, brucellosis, sparganosis, melioidosis and tuberculosis that can affect humans and other animals. Routinely wash hands after handling all carcasses. Carcasses can be heavy (>100 kg), so care must be taken when lifting/dragging.
- Never enter a trap with a captured adult pig. Feral pigs can be aggressive and will attack, especially in situations when they, or their dependent piglets, are distressed or threatened.

EQUIPMENT REQUIRED

Traps

- Several trap designs exist, differing mainly in their gate construction. These include the silo trap, the drop-gate trap, the panel trap and the box trap. All are basically an enclosed area with a one-way gate
- It is best to use steel mesh with a small grid size eg 50 mm x 75 mm or 50 mm x 100 mm. A grid larger than this will damage the pigs' snouts if they charge the mesh.
- The minimum height needs to be 1.5 m.
- Entrance to the trap can be a funnel entrance, a tripped gate or a pig specific trigger.
- Choice of trap design will depend upon habitat, material available and accessibility to site.



- Details of trap specifications and construction can be obtained from relevant State pest control manuals and guidelines, for example:
 - o NSW Agriculture Agfact A9.0.15 Feral pigs: Trapping in NSW (1989)
 - NSW Agriculture Pest Control Manual (2003)
 - o QLD NRM Facts Control of feral pigs (2001)

Bait

- Bait preferences can vary from area to area. Current diet will sometimes determine how readily the pigs will accept an alternative food.
- Pigs will be more attracted to bait with a strong odour.
- Bait can include grain, or fermented grain (eg. wheat, oats, barley or triticale that has been soaked in water with molasses added), commercial pig or poultry pellets, vegetables and fruit.
- Feeding meat or carcasses to feral pigs for the purposes of control may be illegal in some jurisdictions.
- Large amounts of bait will be required; around 10—20 kg each time the trap is set.

Firearms and ammunition

- Smaller calibre rifles such as .22 magnum rimfire with hollow/soft point ammunition are adequate for euthanasia of pigs at short range (<5 m).
- 12 gauge shotguns may also be used with shot sizes of SG or SSG for large pigs over 40 kg, and BB or AAA cartridges for small pigs less than 40 kg.

PROCEDURES

Selection of trap sites

- Free feeding should be undertaken at sites where pigs are active, for example, near watering points, holes in fences, wallow areas or old carcasses that pigs are feeding on. This helps to retain pigs in the area and will give an indication of the most suitable trap site. Leave 3 to 10 kg of bait at each selected site. If necessary a trail of bait can be used to lure pigs to a chosen trap site
- Cease any activity in the area that will disturb normal feeding behaviour eg. shooting, use of dogs or chasing.
- If possible, choose a site that is in a shady area with as much natural vegetation as possible.

Placing the trap

- Build the trap at a site where bait is being regularly taken.
- Place fresh bait both inside and outside the trap to keep pigs feeding for 1 to 2 days.
- Once the pigs have become accustomed to the trap and are still regularly feeding, only place bait inside the trap. Keep feeding until all pigs within a group are going into the trap to feed before it is actually set. This may take 1 to 2 weeks.



Setting the trap

- Once bait is being taken inside the trap, set each evening and check the following day, preferably in the morning.
- Continue to set the trap each evening until no more pigs are caught. A change of bait may be tried to entice more pigs, with free-feeding again for 1 to 2 nights before activating the trap.
- Traps can be left at permanent sites and reactivated when fresh pig activity is detected or they can be moved to new sites depending on requirements.
- Some baits e.g. grain, may attract birds. Where this happens, lightly cover the bait with vegetation. Alternatively, grain that has been dyed green may help to deter consumption by birds.

Shooting of pigs

- Caught pigs should be destroyed by shooting inside the trap.
- Shooting must be conducted to cause sudden and painless death with minimum distress to the animal. Only head shots are acceptable.
 - The shooter should approach the animals in a calm and quiet manner.
- To prevent unnecessary agitation of the trapped pigs, other people should keep away from the area until shooting is completed.
- DO NOT SHOOT THROUGH THE TRAP. To maximise the impact of the shot and to minimise the risk of misdirection the range should be as short as possible.
- Never fire when the pig is moving its head, be patient and wait until the pig is motionless before shooting. Accuracy is important to achieve a humane death. One shot should ensure instantaneous loss of consciousness and rapid death without resumption of consciousness.
- Shots must be aimed to destroy the major centres at the back of the brain near the spinal cord. This can be achieved by one of the following methods (see diagrams recommended shot placements, side view skeleton and head shot frontal).

For smaller pigs

Frontal position

The firearm should be aimed at a point midway across the forehead and about 2cm above the level of the eyes. The bullet should be directed horizontally into the skull.

For larger pigs

 These methods are preferred for adult pigs due to the heavier bone structure of the front of the skull.

Behind the ear

• The firearm is aimed at a point behind the ear directed towards the opposite eye.

Temporal position

- The firearm is aimed from 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. The bullet should be directed horizontally into the skull.
- Death of shot animals should always be confirmed by observing at least 3 of the following:
 - o absence of rhythmic, respiratory movements
 - o absence of eye protection reflex (corneal reflex) or 'blink'



- o 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.
- If small piglets (>5 kg) are caught in the trap, the adult pigs should be shot first and then the piglets shot preferably with a shotgun since they are small targets and likely to be moving rapidly around the pen.

Disposal of carcasses

 Carcasses should be removed from the trap. Although pig carcasses can attract others into a trap, they are not the most effective bait to catch all pigs in an area.



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