



Aerial and ground shooting for feral pig control

Aerial shooting

Aerial shooting from helicopters is useful for rapid population reduction in large, inaccessible areas. Where pig densities are high, aerial shooting can kill many pigs at a time, quickly knocking down pig numbers in the short term. Aerial shooting is also useful when pigs show avoidance behaviour to baits, traps, vehicles and/or people on foot. Pigs can modify their behaviour if aerial shooting exercises are extended, making their detection harder.

“ Ground shooting is not suitable for population-scale management across large areas ”

Aerial shooting works best in open terrain or remote/inaccessible areas, such as swamps, marshes or seasonally inundated areas. Such areas tend to have reasonable numbers of pigs and are open enough for the operator to see pigs from the air. Aerial shooting can be the only viable option in some areas where vehicle access is limited, or environmental conditions, such as widespread rainfall, severely limit the effectiveness of other ground-based control methods.

Aerial shooting is best carried out when pigs are most active (in the early morning or late afternoon, even during daylight hours in winter on cooler, overcast days) and when they are away from cover (during dry seasons or droughts). To maximise the effectiveness, timing for shooting should be balanced between winter (when pigs are more active than usual in daylight) and summer (when pigs concentrate around water points and light cover) although this will depend on local conditions.



Image: Mal Leeson

Successful aerial shooting requires proficient marksmen, spotters and pilots. There are inherent safety risks associated with operating any aircraft at low attitudes above ground level. In some States (eg NSW) a qualified, trained marksman is required to be on board even when operating above private properties. In this case, it is important to consult with the landholders before the operation to confirm their property boundaries and hotspots to target. Hotspots can be identified by the landholders one or two days before the operation by looking for fresh pig tracks or diggings. Using aerial images of the property can be an effective way to discuss the hotspots. As a regulatory requirement, helicopter operators must have approval from the Civil Aviation Safety Authority and shooters need to be accredited for competency. In NSW, they must complete the Feral Animal Aerial Shooter Training (FAAST) course.

To maximise kill rates, pigs should always be shot from the tail end of the mob first and move forward until the line has been shot. The most suitable weapons in aerial shooting include automatic shotguns or semi-automatic large calibre (.308) rifles. ‘Judas’ pigs may be useful in locating groups of pigs although previous results have been highly variable. Judas pigs are radio-collared individuals released to associate and reveal the location of pigs in an area that are difficult to find by other methods. They are used mostly for removing remaining pigs in the last stages of eradication campaigns. It is not effective to use Judas pigs when pig densities are high.

Ground shooting

Ground shooting using large calibre, high-powered rifles can be a useful technique for controlling small, isolated feral pig populations or where other techniques cannot be used. It is often used as a secondary control method, or during 'mop up' operations after the initial reduction of high density pig populations by aerial shooting or baiting. Ground shooting should not occur prior to, or during trapping and poison baiting programs because it is 'intrusive' and can disrupt pig activity, causing pigs to move to other areas. In open terrain, night vision scopes attached to rifles should be used so that pigs are not aware of where the firing originates and multiple numbers of pigs in a group can be shot before they disperse. Ground shooting is not suitable for population-scale management across large areas, particularly when the pig density is low.

Animal welfare

It is important to address animal welfare and safety considerations in both aerial and ground shooting. Chest (heart-lung) shots are preferred over head shots when aerial shooting, but head shots are preferred over chest shots when ground shooting. For aerial shooting, one or more shots should be fired into the chest or head of the animal to ensure a quick death. For both aerial and ground operations, it is preferable not to shoot when sows have recently farrowed because dependent piglets can be left to die from starvation. Farrowing normally occurs 112-114 days after the mating season, which usually occurs after the flush of green vegetation or heavy rain or flooding. If lactating sows are shot, shooters should try to find and kill dependent piglets. To safely conduct ground shooting, all people should stand well behind the shooter when an animal is being shot and shooters should wear adequate hearing protection. Refer to relevant state and territory legislations regarding use of firearms and regulations on permission to hunt or shoot feral pigs. In many states, hunting is limited to private properties with landholders' permission to hunt on the property.

Ground-based hunting can also involve the use of trained dogs. Dogs can be used to locate any remaining pigs after initial control through poison baiting or trapping. For a safe and effective operation, operators need to be skilled and experienced with well-trained dogs, so that potential



Feral pigs seen from the air. Image: Robynne Wells Budd

injuries to both dogs and pigs can be avoided. Dogs must be easily controlled by a whistle or call, obey the handlers' commands and not chase or attack animals including livestock. Trained dogs are useful to locate and flush animals out of thick cover, such as dense vegetation or sugar cane paddocks, but should not be used to attack and bring down pigs. Use of chest, neck and/or body plates for dogs is recommended to prevent injuries inflicted by pigs. It is recommended that dogs wear a working VHF collar so they can be located quickly when lost. Refer to the [Standard Operating Procedures](#) for more information on aerial and ground shooting, and the use of dogs in pest animal control.

Further reading

1. Sharp T (2004) [Standard Operating Procedure \(GEN002\): The care and management of dogs used in the control of pest animals](#). Invasive Animals Cooperative Research Centre, Canberra.
2. Sharp T (2012). [Standard Operating Procedure \(PIG002\): Aerial shooting of feral pigs](#). Invasive Animals Cooperative Research Centre, Canberra.
3. Sharp T (2012). [Standard Operating Procedure \(PIG003\): Ground shooting of feral pigs](#). Invasive Animals Cooperative Research Centre, Canberra.

See also:

- [PestSmart Toolkit for Feral Pigs](#)
www.pestsmart.org.au/pestsmart/feral-pigs

Invasive Animals Ltd has taken care to validate the accuracy of the information at the date of publication [January 2014]. This information has been prepared with care but it is provided "as is", without warranty of any kind, to the extent permitted by law.