



Tools and strategies for wild dog management

Tools to control wild dogs

There is a variety of different lethal and non-lethal tools available to control wild dogs. These include poison baits, traps, shooting, fencing, guard animals and aversion techniques (such as lights, alarms, and flagging). Not all tools are useful for a given area; each tool varies in its effectiveness, depending on a range of factors specific to the local situation. The use of many control tools is also subject to various laws and regulations. Wild dog control officers are familiar with these and are able to advise people on what is and is not permitted in your local area.

Poison baiting

Sodium fluoroacetate (or '1080') is currently the main toxin used in baits to control wild dogs, however a new toxin called 'PAPP' (para-aminopropiophenone) is now available in some states depending on their progress towards including PAPP-use in regulations. 1080 poison baits can be made from pieces of animal meat or offal (such as kangaroo, cattle or horse meat) cut to about the size of a tennis ball or larger. Average and minimum weights vary between States so check the size you require. Stable and accurately dosed manufactured baits (such as DOGGONE® (1080) and DOGABAIT® (PAPP) or De-K9® (1080)) can also be bought from approved suppliers. Both 1080 and PAPP are expected to be available into the future, whereas Strychnine is no longer permitted for use in poison baits in any jurisdiction.

“ Effective wild dog management usually involves a combination of control methods and strategies ”



Image: Invasive Animals CRC

Ejectors

An ejector is a small cylindrical device that is buried in the ground, leaving only a 'bait head' exposed on the surface. The bait head contains a replaceable capsule of poison and is about the size of a cylindrical golf ball. When an animal puts its mouth over the bait head and pulls it, the poison is ejected into the mouth in a quick puff or spurt. Ejectors are like a permanent one-shot bait station.

Trapping

Leghold traps may be used to capture live animals for later euthanasia, usually by shooting. A range of different trap types are available, but not all trap types are permitted for use in each jurisdiction. The most humane and efficient traps are called 'soft-catch' traps, including Jakes, Victors, or Bridgers. Each has slightly different design features for use in various situations. Professional wild dog trappers are also available to contract in many areas.

Shooting

Firearms may be used by landholders, professional wild dog controllers, or hunting groups to shoot wild dogs in a safe and humane manner, in accordance with the relevant laws and guidelines.



Fencing

Fencing is perhaps the best method of excluding wild dogs from an area, but a high level of maintenance is needed to keep fences dog proof. Netting or electric fencing can both be effective barriers, but it is necessary to eradicate dogs from inside fenced areas. Well-maintained fences can stop wild dogs from crossing over, but they can't stop dogs from going around them, and might also prevent wild dogs from leaving once they have got in.

Guard animals

A variety of guard animals are used all around the world to protect livestock from predators. In Australia, guard dogs (such as maremmas), llamas and alpacas, or donkeys are sometimes used with varying degrees of success. Using guard animals is designed to prevent livestock attacks, but they might not exclude wild dogs from a given area.

Aversion techniques

A range of different aversion techniques and devices have been suggested. Aversion methods include flashing lights, sounding alarms or objects flapping in the wind, such as coloured flags. Limited information is available on the effectiveness of these tools.

“ Effective wild dog control depends on a little bit of work from a lot of people, not a lot of work from just a few ”

Strategies to control wild dogs

Working with nature

The ecology and behaviour of wild dogs follows a seasonal and cyclical pattern each year as dogs transition from breeding season, to whelping, to dispersal and back to breeding season again. Wild dog management strategies can be optimised if the biology and nature of wild dog populations are carefully considered. For example, many control programs are run in autumn to try and target mature dogs before they have a chance to breed. Alternatively, control programs can be run in spring in attempts to target juvenile dogs before they disperse. Control programs run over the summer try and target migrating dogs. The best time to control wild dogs will depend on your local situation.

Working with people

Wild dog management strategies are most successful when people work together. Because wild dogs do not respect tenure boundaries such as fences, borders or land uses, wild dog managers in one area are likely to be affected by the actions or inaction of people in surrounding areas. Working together ensures that all stakeholders have input into a management approach that covers the views of each interest group. This typically requires a little bit of work from a lot of people, rather than a lot of work from a few people.

Adaptive management

An adaptive approach to managing wild dogs broadly involves: defining the issue, developing a plan of action with achievable and measurable goals, putting the plan into action, monitoring progress, evaluating the plan, and making adjustments and improvements before trying it again. Defining the issue is usually the most difficult and time-consuming part, but is critical for success. It must take into account all the socio-ecological components and current knowledge before further planning or further action can proceed successfully. Compromise might be needed to progress, and new information might mean that changes to working plans need to be made along the way.

Choosing the right control tool

The destruction of wild dogs might not always be needed to resolve the problems you face. However, when the control of wild dogs is required, both lethal and non-lethal control tools can be used inside an adaptive management framework that incorporates the views of each stakeholder. There are limited control tools available, but each has advantages and disadvantages – not all tools will be useful in every situation.

The most effective approach usually involves using a range of tools (an ‘integrated’ approach), and not relying on just one tool. The table on the back page shows some of the basic pros and cons of common control tools. The advantages and disadvantages described might be different for each situation, and local knowledge and consultation can help determine the best tools to use for a given situation. Note that some control tools might not be allowed in certain areas.

Choosing the right control tool is an important step towards succeeding with a wild dog control program. No one tool is best overall and a variety of control tools are often used together in a community control program. Reducing wild dog numbers is best achieved when control is applied across broad areas at the same time, and repeated on a regular basis, leaving no gaps in space or time.

It is most important to remember that reducing wild dog numbers might not actually reduce wild dog impacts, so control programs should only be considered successful when wild dog problems have ceased or been reduced to an acceptable level.

More information

For more information on control tools visit www.pestsmart.org.au. Detailed instructions on how to develop a wild dog management plan can be found at this website, where you can download the *Working Plan to Manage Wild Dogs (Green Book)* and the *Guidelines for Preparing a Working Plan to Manage Wild Dogs (Brown Book)*. Further information can also be found in *Managing the Impacts of Dingoes and Other Wild Dogs* (2001) and *Guardian Dogs - Best Practice Manual for the Use of Livestock Guardian Dogs* (2011), by Linda van Bommel.



Image: Ben Allen

Invasive Animals Ltd has taken care to validate the accuracy of the information at the date of publication [June 2016]. This information has been prepared with care but it is provided “as is”, without warranty of any kind, to the extent permitted by law.



PestSmart Toolkit

Control tool	Advantages	Disadvantages	Common uses
1080 baiting	<ul style="list-style-type: none"> can be applied on a broad scale by vehicle, plane or helicopter can be flexible with bait type, using manufactured products or meat from various animals is relatively cheap requires relatively little time 	<ul style="list-style-type: none"> has restricted use in peri-urban areas is dangerous to pet dogs and some other non-target animals results in a relatively slow death to poisoned animals 	<ul style="list-style-type: none"> most commonly used to protect livestock across broad areas in less-populated regions small-scale campaigns can sometimes be run in peri-urban areas, but they usually need a high level of preparation
PAPP baiting	<ul style="list-style-type: none"> an antidote is available to and administered by vets which offers a chance of treating dogs that have accidentally been poisoned by PAPP potential use around peri-urban areas (or in areas where the risk of unintentional poisoning of working and companion dogs is increased) because of the availability of an antidote provides a relatively quick and humane death manufactured bait types containing PAPP are less attractive to many non-target species feral cats may also take PAPP baits 	<ul style="list-style-type: none"> no concentrate is available can only be applied by ground placement as it is not approved for aerial baiting at this time presents risks to some non-target species the antidote can only be administered by a vet because PAPP works quickly, the antidote is not guaranteed to be effective PAPP baits are subject to same access, use restrictions as 1080 baits. 	<ul style="list-style-type: none"> approved for Fox control (FOXECUTE baits) and for wild dog control (DOGABAIT)
trapping	<ul style="list-style-type: none"> can be selective and target specific can be done in peri-urban and other areas where poison baiting is not suitable can confirm the control of specific individual animals enables a relatively quick and humane death is relatively cheap 	<ul style="list-style-type: none"> has limited broadscale application requires a high level of technical ability and local knowledge captured animals may be distressed for some time requires relatively high time inputs 	<ul style="list-style-type: none"> commonly used in areas with high risks to people, working dogs and other non-target species is used to capture specific individuals
ejectors	<ul style="list-style-type: none"> is highly target specific can be used with either cyanide, 1080, or PAPP is relatively cheap requires relatively little time 	<ul style="list-style-type: none"> limited to on-ground application requires a moderate level of technical ability and local knowledge 	<ul style="list-style-type: none"> used to provide 24/7/365 control used for point-specific application of poison
shooting	<ul style="list-style-type: none"> is selective and target specific can be done in areas where poison baiting is not suitable can confirm the control of specific individual animals enables a relatively quick and humane death is relatively cheap 	<ul style="list-style-type: none"> has limited broadscale application requires a high level of technical ability and local knowledge requires relatively high time inputs 	<ul style="list-style-type: none"> commonly used together with trapping programs is used to target specific individuals
fencing	<ul style="list-style-type: none"> is capable of completely excluding wild dogs from an area removes the need for additional livestock fencing probably involves relatively little ongoing time inputs once constructed in some places 	<ul style="list-style-type: none"> is relatively expensive to construct and maintain in a dog-proof condition limits movements of other wildlife does not remove wild dogs already present in the exclusion zone 	<ul style="list-style-type: none"> most frequently used in local areas to protect high-value assets, such as livestock studs and threatened wildlife reserves
guard animals	<ul style="list-style-type: none"> can provide ongoing control of wild dog impacts does not require the killing of wild dogs has limited non-target impact 	<ul style="list-style-type: none"> often requires significant investment in time and training is relatively expensive has limited broadscale use 	<ul style="list-style-type: none"> most frequently used in restricted areas to protect high-value livestock
aversion techniques	<ul style="list-style-type: none"> does not require the killing of wild dogs has limited non-target impacts is relatively cheap requires relatively little time 	<ul style="list-style-type: none"> typically provides only very short-term control has limited broadscale use 	<ul style="list-style-type: none"> most frequently used in association with fencing