

product information

HogHopper™

Responsible Feral Pig Management



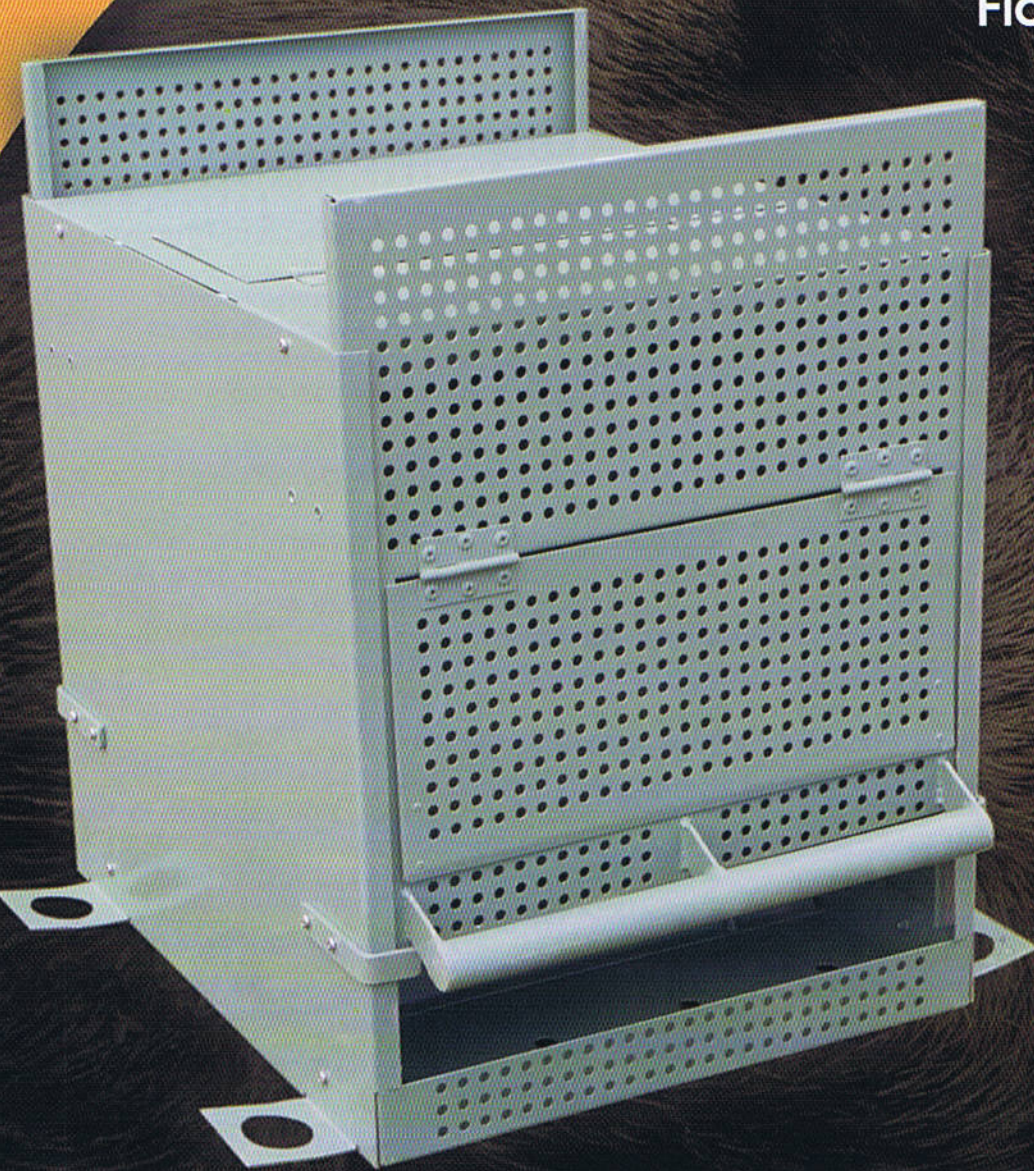
Australian Designed

Australian Made

Rugged Construction

Flat Packed Delivery

Easy to Assemble



Serving up baits to feral pigs.



In Australia, one of the most common control techniques used to suppress feral pig densities in rural areas is toxic baiting. Sodium fluoroacetate (1080) is the primary toxin utilised and it is commonly added to substrates found palatable to feral pigs or available as the shelf stable PIGOUT® Feral Pig Bait. Unfortunately, some wildlife species may also be attracted to these substrates which may increase the chances of non-target poisoning. Traditional feral pig baiting can also be labour intensive, as bait stations must be checked daily to replenish consumed bait. As a consequence, many remote feral pig affected areas are baited improperly or they are omitted from baiting campaigns altogether.

The HOGHOPPER™ is designed to exploit unique feral pig feeding behaviour and attributes such as reach, size, and strength to prevent as much as possible non-target exposure during baiting campaigns. It has been developed by the Invasive Animals Cooperative Research Centre (IA CRC) from a project initiated in 2007 to overcome baiting obstacles. The HOGHOPPER™ holds enough PIGOUT® Feral Pig Bait to eliminate daily operator maintenance, making it suitable for baiting more remote, environmentally sensitive areas.

The HOGHOPPER™ has been subjected to extensive pen and field testing to ensure that an optimum final product was created. During the final field efficacy trial, the HOGHOPPER™ reduced the populations of feeding feral pigs by 90-100% when delivering either 1080 laced grain or PIGOUT® Feral Pig Bait. What's more, the HOGHOPPER™ successfully excluded all non-target species, including small rodents.

This field user guide has been devised to help ensure you get the most out of your HOGHOPPER™. We include the following information on feral pigs and baiting that you may find useful:

Stage 1 - Know your target

It is important to have an understanding of the ecology and biology of your target species before you begin to develop a baiting campaign. This helps to determine why,

when, where and how often you should bait to achieve the greatest results.

Diet

- Pigs must drink at least once a day in hot weather.
- Opportunistic omnivores.
- Will readily switch foods and feeding places.
- Have high protein requirements, particularly for successful young rearing.

Reproduction

- Sows can produce 2 weaned litters in 12-15 months.
- The average litter size is 6 piglets.
- They can reproduce at 6-12 months of age.
- Fecundity increases with age and body weight.
- Breeding usually peaks in May and October, although pigs will breed throughout the year in good conditions.

Habitat and home ranges

- Home ranges are generally determined by resource abundance.
- A daily home range can range from 0.7-1.4km².
- An annual home range can be as large as 43km² (mature boars) or 20km² (mature sows).
- Feral pigs typically live in areas that provide them with reliable food, water and shelter.

Behaviour

- Usually most active from late afternoon to early morning.
- Movements can be affected by shelter, food, water, disturbance and topography.
- Generally travel on well marked trails for feeding, water and bedding.
- Wallow in mud and dust to reduce parasite infection and/or for thermoregulation.

Common signs of pig presence

- Rooting.
- Holes under fences.
- Wallows and tree rubs.
- Tracks.
- Scats.
- Carrion consumption.



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▶ Stage 2 - Timing

Baiting is usually most effective when temperatures are high and resources such as food and water are limited. In these conditions, feral pigs often congregate near permanent water and they are more inclined to consume bait. This does not apply for all areas and sometimes trial and error may be your best approach. Additionally, you should always coordinate baiting with your neighbours to increase the target area and slow re-invasion.

▶ Stage 3 - Site selection

Identify all feral pig hotspots in the target area based on historical records and/or habitat and resource requirements. Assess each hotspot for feral pig presence (tracks, scats and rooting). If pigs are active in the area, assemble your HOGHOPPER™ where feral pigs are most likely to come into contact with the device. If you are using multiple HOGHOPPER™s be sure to distance them far enough apart so that the same animals do not feed from multiple devices. Remember, feral pig home ranges can vary greatly according to the environment (temperate, alpine, rangeland, tropical rainforest etc), resource availability, climatic conditions, the age and sex of the animals and topography. Therefore, it is not possible to provide set distance, although as a general rule of thumb place one HOGHOPPER™ at each hotspot unless they are closer than 1-2 kilometres to each other. Thereafter, you may need to adjust HOGHOPPER™ locations accordingly. Motion sensing cameras can be extremely valuable for determining whether the same pigs are feeding from multiple HOGHOPPER™s.



Feral pigs visiting water on a well used travel pad.

Always place the HOGHOPPER™ in a shady and discrete location eg under trees or bushes near water holes or wallows. The cooler temperatures will prolong the life of bait material and feral pigs will feel less exposed whilst

feeding. On public lands HOGHOPPER™s should remain out of site to avoid tampering by the public.

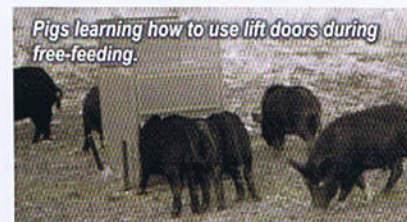
▶ Stage 4 - Free-feeding

Make sure your HOGHOPPER™ is set up for free-feeding (see right image). This stage is vital to the success of your program as this is when you teach the feral pigs to use the lift doors. If you skip this stage and close the doors completely, your efforts will be in vain.



HogHopper™ set up for free-feeding.

Load the HOGHOPPER™ with the non-toxic free-feed bait, PIGOUT® Feral Pig Bait Free Feed. Various free feeds can be used such as grain or pellets. It is a good idea to use PIGOUT® Feral Pig Bait Free Feed as you will then not have to recruit them over again before toxic baiting. Don't be concerned if pigs do not feed straight away, as it can take several days to recruit them onto bait from natural foods. Continue to deploy PIGOUT® Feral Pig Bait Free Feed every 3-4 days once the animals have begun feeding. When the feeding population plateaus and you are confident that all feral pigs have learnt how to use the lift doors (motion sensing cameras can be highly valuable at this point), you can move on to Stage 5.



Pigs learning how to use lift doors during free-feeding.

▶ Stage 5 - Toxic-baiting

Remove any left over free-feed bait material from the HOGHOPPER™, and remove the bottom door stoppers to allow the doors to close completely. Do not remove the top door stoppers as the pigs will lift the doors off and expose non-target species to toxic bait. Load the device with sufficient toxic PIGOUT® Feral Pig Bait material based on free-feed bait uptake and place a small amount of



A feral pig that was present during free-feeding consequently knows how to use the lift door when the doors are fully closed.

free-feed bait (**non-toxic**) on the ground in front of each door to encourage feeding. Continue to toxic bait with PIGOUT® Feral Pig Bait until bait uptake ceases (typically 3-4 days).

➤ Stage 6 - Follow-up.

You should always run a follow-up phase once toxic bait uptake ceases, as new animals may have arrived during toxic baiting that have not learnt how to use the lift doors. As such, return to stage 4 (free-feeding), but make sure you have removed all toxic bait from the HOGHOPPER™. When you believe that the new animals have learnt how to use the lift doors, proceed to stage 5 (Toxic-baiting). Alternatively, if there is no bait uptake it is likely that you have successfully removed all feral pigs in that area.

➤ Stage 7 - Pack-up.

Remove all unused PIGOUT® Feral Pig Bait or grain from the site and either incinerate or bury to a depth of 1 metre in a disposal pit and covered with a minimum 500mm of soil. Reasonable steps must also be taken to recover carcasses for up to 14 days post baiting and carcasses should be incinerated or buried to a depth of 1 metre in a disposal pit and covered with a minimum 500mm of soil. HOGHOPPER™s should be triple rinsed to ensure that toxic residues do not remain in the device upon the completion of your baiting program.

If you do not find any carcasses during your carcass recovery phase don't assume that you have not fatally poisoned feral pigs. Studies where intensive carcass searches were undertaken have confirmed that carcasses can be found anywhere between 20m to 1200m from bait stations. Remember, that's only including carcasses that were actually found. Additionally, the IA CRC

implemented a paddock trial using wild caught feral pigs to determine whether the HOGHOPPER™ could be used to eradicate a small mob whilst delivering PIGOUT® Feral Pig Bait. All animals (10/10) fed from the HOGHOPPER™ on the initial night (54 toxic PIGOUT® baits in total) which resulted in 100% mortality. Yet the time until death was highly variable ranging from 8 hours to 48 hours (animals only displayed visual symptoms for last hour). This again highlights how far a feral pig could travel after toxic bait consumption.

What if the carcasses are not found?

Extensive research has been undertaken to evaluate the actual risk to non-target species should they scavenge the carcass of a 1080 baited feral pig. Interestingly, each study concluded that there is little to no risk to non-target native scavengers as those of highest concern (birds of prey, corvids and monitors) have a high tolerance to 1080. Conversely, dogs and foxes may be at risk due to their low 1080 tolerance, particularly if they consume contents from the gastro intestinal tract or vomit. Therefore, farm dogs should never be allowed to scavenge poisoned feral pig carcasses. Rapid decomposition of carcasses will reduce the amount of edible material and 1080 concentration within days.

Regulations for the use of HOGHOPPER™s.

Because the HOGHOPPER™ is being used to deliver toxic bait, toxic baiting rules and regulations do apply. Users must adhere to:

- Relevant State, Territory and other Commonwealth legislation.
- Up-to-date information on conditions of use including distance restrictions, public notification and bait preparation, distribution, storage, transportation and disposal.
- Standard Operating Procedure PIG005: Poisoning of feral pigs with 1080, prepared by Trudy Sharp & Glen Saunders, NSW Department of Primary Industries.

Acknowledgments.

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For further information visit www.animalcontrol.com.au
email enquiries@animalcontrol.com.au or call (03) 9308 9688.

PIGOUT®

Feral Pig Bait - the ideal partner in your feral pig control program!

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HOGHOPPER™ is a product which has been developed through a successful partnership between the Australian Government, Invasive Animals CRC and Industry.



Invasive Animals Cooperative Research Centre
www.invasiveanimals.com



Australian Government

Australian Bureau of Agricultural and Resource Economics – Bureau of Rural Sciences