

POSSUM CONTROL - FERATOX® IN BAIT BAGS, BAIT STATIONS OR 'STRIKERS' (CONTROLLED SUBSTANCES LICENCE REQUIRED)

MATERIALS

Bait

- [Feratox](#) is encapsulated cyanide pellet used for possum control. The cyanide gas emissions from Feratox pellets are virtually undetectable as a result of the encapsulation process which overcomes potential bait shyness. The pellets are embedded in about 15 g of [Ferafeed](#) paste bait and placed in [bait bags](#) or [bait stations](#); alternatively, the pellets are supplied ready to use in '[Strikers](#)' which are attached directly to trees.
- It offers a humane method of eliminating possums (unconscious within 2-5 minutes), and also permits recovery of the carcasses for fur.
- Rats remove Feratox pellets (but have low susceptibility to the poison) resulting in low possum kills [1,2]: where rat numbers are high, a [Ferafeed paste of low palatability to rodents](#) can be used.
- Only freshly manufactured baits should be used. Bait and poison capsules that have previously been placed in the field must not be reused. Only buy as much bait as you need for the operation. This ensures high bait palatability, which has a direct influence on success. Old Feratox pellets may have started to breakdown and give off cyanide gas. This may result in sub-lethal dosing and/or allowing possums to detect and avoid toxic pellets.

Antidote

- Cyanide is a rapidly acting poison so an antidote, in the form of [Amyl nitrite capsules](#), must be carried at all times when handling cyanide. Amyl nitrite capsules are available from suppliers of cyanide-based possum baits.
- In the event of suspected poisoning, a capsule of amyl nitrite is crushed between the fingers and held under the patient's nose. Inhalations should be administered for up to 30 seconds every 2 minutes, using a fresh capsule each time until signs of recovery occur. Up to 8 capsules may be given while waiting for medical attention, if necessary, for administration of intravenous antidotes.
- Memorise the safety instructions for the safe use of these capsules, and check that capsules have not expired before planning the control operation.

BAIT LAYOUT

- Pre-feeding significantly increases possum kills [3]. Pre-feed using Ferafeed in the same manner intended for Feratox i.e. in bags, bait stations or Strikers. Pre-feeding must be carried out for 3 to 10 nights before the toxic bait is put out. (Note: This may need to be extended during wet weather or if baits have been set in a raised position to minimise the risk to non-targets). Pre-feeding results in more toxic bait being eaten at a population level [3] and individually [4] as it reduces wariness (neophobia) of possums to toxic bait [5] and encourages possums to revisit the site to forage [6].
- Place baits up to 20m apart along lines no more than 150m apart in forest habitats [7]. Additional baits should be placed in between where possum sign is plentiful. The average home range of male possums is 1.9ha and females is 1.3 ha [8]. The aim is to place bait within the home range of all possums.

- For all delivery methods (baits, bags, and Strikers), place 3-5 baits at each baiting point, depending on possum density. This is to ensure all possums have a chance of eating toxic bait.
- Look for sites where possums have been active, as indicated by droppings, bark biting, browsing, and runs (i.e. tracks)
- Bait bags, bait stations or Strikers should be attached to the side the possum runs up (or the dry side) of trees 30 cm to 1m above the ground. The aim is to make them easily accessible to possums, unavailable to non-targets, and to protect them from rain and water splashing from the ground as this will reduce field life of the bait/toxin.
- In areas where kiwi or weka are present, baits must be presented at least 70 cm above the ground.
- A flour/icing sugar blaze beside the bait bag may help attract possums [2]. Possums respond to visual cues.
- Mark the location of all baits along routes using GPS waypoints to ensure that all bait bags can be checked during the operation and removed on completion.
- When returning to put out Feratox baits, remove any remaining prefeed and use the 'take' of prefeed to adjust the number of Feratox baits used, placing one bait where prefeed was untouched and up to 5 baits where prefeed was interfered with.
- Once toxic bait is out, revisit bait lines after 4 - 5 days where possum population density is moderate to high, or longer where density is lower.
- Remove uneaten bait at the end of the operation. This reduces the chance of possums being exposed to poor quality bait and becoming bait-shy through sub-lethal doses [9]. Dispose of surplus bait following the label advice.

SUSTAINING POSSUM CONTROL OVER THE LONG TERM

- Monitoring conservation outcomes is essential to judge effectiveness of the control programme. Control operations are useless unless outcomes are achieved.
- Pre- and post-operational monitoring is essential to determine the effectiveness of the operation. A comparison of pre- and post- data gives the most robust estimate of the kill result. Post- data cannot reliably be compared between operations.
- Reinvasion of possums into controlled areas can be reduced by using natural boundaries e.g. waterways and pasture, and buffer zones of at least 3km wide [10].
- Alternating bait types, toxins, lures and techniques are important in ongoing control programmes. Continuous use of a single pesticide use is not recommended.

LIMITATIONS

- The method is labour intensive.
- The toxic bait is relatively expensive.
- Pre-feeding increases labour costs.
- Labour costs increase in difficult terrain.
- Bait bags can take a considerable time to biodegrade and toxic baits may persist for several months when bags are not retrieved.
- Dogs are susceptible to poisoning if they eat bait containing cyanide.

REFERENCES

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