

POSSUM CONTROL – HAND-LAID PHOSPHOROUS PASTE (CONTROLLED SUBSTANCES LICENCE REQUIRED)

Bait

- Available as a fruit-based paste, PestOff '[phosphorised possum paste – double strength](#)', and in non-toxic form as prefeed.
- The pastes should contain a flavour (i.e. cinnamon, orange) to attract possums and mask the garlic odour of phosphorous.
- Phosphorous paste kills possums in around 18 h [1].

Prefeeding

- Avoid laying paste in wet weather as possum activity is reduced [11,12] and bait may deteriorate rapidly.
- Place 15-20 g prefeed paste on upturned earth spits (particularly suitable on farmland as baits can later be easily buried), or in small bait stations (more suitable in bush), at intervals of 5 – 10 m along transects 100 m apart. Additional baits should be placed in possum preferred habitat. Average home range of male possums is 1.9ha and females is 1.3 ha[7].
- In rough terrain, place on ridges and spurs with additional lines located on 100 m contours using an altimeter. Inaccurate location of lines will cause gaps in coverage where pockets of possums can persist.
- Use GPS to mark baiting points/routes for ease of relocation.
- Pre-feed for at least 4 days [2]. Pre-feeding with non-toxic baits increases the average possum kill when using fast-acting poisons [3-5]. Prior exposure to non-toxic bait (i) reduces possums' wariness (neophobia) to toxic bait [28,29], (ii) leads to possums revisiting the prefeed sites [6] increasing the likelihood that possums will subsequently discover toxic baits, and (iii) reduces the likelihood of bait-shyness occurring in possums that may survive [7,8]

Phosphorised paste

- At the end of the pre-feeding phase, remove/destroy the non-toxic paste and replace with 10-15g of 1080 paste. Mixing pre-feed and toxic bait can result in possums being sub-lethally poisoned and becoming bait shy.
- Where non-toxic paste has been eaten from consecutive locations, put in additional toxic bait [2]. This ensures sufficient bait is available where possums are present.
- After 3 – 6 nights the toxic baits should be buried or removed from the operational area[2]. Baits not destroyed will degrade slowly and may sub-lethally poison possums resulting in bait shyness.

Sustaining possum control over the long term

- The technique should not be repeated more frequently than once every 3 - 4 years unless the previous operation achieved a very high kill. Many surviving possums are highly likely to be bait shy, making frequent repeated use of ineffective [17].

- Continuous use of a single pesticide use is not recommended. Changing method/technique completely or changing bait types and toxicants can be effective if bait shyness is present [13-15].
- Reinvasion of possums into controlled areas can be reduced by using natural boundaries e.g. waterways and pasture, and treating buffer zones of at least 3km wide [16].
- High rat numbers may affect the success of the operation. Higher application rates may be needed to compensate for baits eaten by rats.

Limitations

- Paste baits dry out rapidly in hot weather and become less effective. They may then pose a hazard, particularly on farmland, if blown away from the location where they were laid.
- The method is labour intensive and relatively expensive because of the need to ensure, on completion, that toxic bait is buried or removed.
- Labour costs increase in difficult terrain.
- Native birds may be at risk if they learn to feed from the bait stations [18].
- Community views on poisoning can vary, so effective consultation is required, but phosphorous paste is often acceptable to communities where 1080 is not.

References

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