# POSSUM CONTROL – HAND-LAID 1080 PASTE (CONTROLLED SUBSTANCES LICENCE REQUIRED)

### Bait

- Two types of 1080 paste are available: <u>PestOff Professional</u> (with 0.15% 1080) is a water soluble fruit paste while <u>PestOff Exterminator</u> (with 0.08% or 0.15% 1080) is a less water soluble peanut paste. Both paste types are available in non-toxic form as prefeed.
- The paste should contain a flavour (i.e. cinnamon, orange) to mask the odour of 1080 that possums otherwise detect[1].
- Use paste containing 0.15% 1080: on average, 10 g will present a lethal dose to at least 90% of possums weighing up to 3 kg [2]. (Note: pellet baits containing 0.08% 1080 were less effective than those containing 0.15% [3]).

## Prefeeding

- Avoid laying paste in wet weather as possum activity is reduced [4,5] 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[6].
- 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 [7]. Pre-feeding results in more toxic bait being eaten at a population level [8] and individually [9], it reduces wariness (neophobia) of possums to toxic bait [9], and reduces the likelihood of 1080 shyness occurring in possums that have survived 1080 poisoning [10]

#### 1080 paste

- At the end of the pre-feeding phase, remove/destroy the non-toxic paste and replace with 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 [7]. This ensures sufficient bait is available where possums are present.
- After 3 6 nights the toxic baits should be destroyed or removed from the operational area[7]. Baits not destroyed will degrade slowly and may sub-lethally poison possums resulting in bait shyness.

#### Sustaining possum control over the long term

• While repeated use of 1080 paste bait can be very effective, 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 likely to be bait shy, making frequent repeated use of 1080 ineffective [11].

- Continuous use of a single pesticide use is not recommended. Changing method/technique completely or changing bait types and toxicants can be effective if 1080 bait shyness is present [12-14].
- 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 [15].
- 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 [16].
- Community views on poisoning can vary, so effective consultation is required.

#### References

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