



Department of Agriculture

Farmnote

Landholder use of 1080 One-shot oat rabbit bait

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This Farmnote should be read in conjunction with Farmnote 'Safe Use of 1080 Poison'.

Status and management

In Western Australia, rabbits are declared pests in categories A1, A3 and A5 under the *Agriculture and Related Resources Protection Act 1976* and landholders are required to control them on their properties. All control activities must comply with requirements under the *Animal Welfare Act 2002* and *Animal Welfare (General) Regulations 2003*. It is an offence to release any declared pest back into the wild.

1080 is one of the most lethal pesticides known. So it is important to follow each of the steps below for your own safety, and to also ensure you get good rabbit control. Do not take any short cuts. There are two options for obtaining 1080 One-shot oats for rabbit control:

Purchase 'Ready-to-lay' oats from a S7 retailer, or

Contract a Licensed Pest Control Operator (LPCO), to prepare and lay your bait mixes.

The Department of Agriculture may also provide this service if the baiting program is part of a coordinated community control program. Purchasing and laying the Ready-to-lay oats is probably the most practical and cost effective option for most landholders.

Why use 1080 One-Shot oats?

Poisoning is the most cost-effective way to control large rabbit populations, and it can be used to target rabbits that survive outbreaks of rabbit haemorrhagic disease (RHD) or myxomatosis. However, the effectiveness of poisoning depends on correct timing and application.

1080 (sodium fluoroacetate) One-Shot oat bait, including the premix Ready-to-lay product, is laid directly without prior free-feeding. However, an extended period of at least 10 days without rainfall or heavy dew is required for effective rabbit control (see below). Baiting is also best undertaken when other food supplies are limited.

For the following reasons baiting is likely to be more successful if it is carried out during late summer (January to March):

Less feed is available, and so the bait may be more attractive. However, do not allow stock to graze off too much feed before the poisoning, because the rabbits may move their feeding areas to adjacent areas with better feed.

Rainfall is less likely within the baiting period. Even small amounts of rain can reduce the effectiveness of 1080 One-Shot oat baiting (see below).

It takes advantage of the extended feeding areas of the rabbits, which do not strictly maintain their territories during the non-breeding season. Because rabbits are moving further afield, more will find the bait.

A long-term reduction in rabbit numbers is more likely. Rabbit numbers are decreasing in late summer, and any further reduction before the main breeding period, which starts at the break of the season, will maximise the benefits of control programs.

Restrictions and precautions

Trained landholders can purchase bait products containing 1080 after they have obtained Baiting Approval from an authorised officer of the Department of Agriculture Western Australia. Only appropriately trained and licensed personnel (for example, LPCO, DAWA staff) can prepare bait mixes.

Steps for landholders

Farmnote 'Guide to the safe use of 1080 poison' details important precautions when using 1080, including:

- notification of your neighbours;
- erection of warning signs;
- careful use of 1080 in high risk areas;
- responsible security, storage and disposal of baits; and
- effective personal safety.

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The keys to successful baiting

If you can poison more than 80 per cent of the rabbits, you have a greater chance of achieving a longer-term benefit. Target the difficult-to-poison rabbits with your baiting effort. This can be done by laying up to three parallel trails in areas of high rabbit density.

Whether you are using the 'ready-to-lay' product or you engage the services of a Licensed Pest Control Operator to mix and lay your bait using the 'One Shot' oats, the biggest effect on the success of rabbit baiting is how many rabbits can be tempted into feeding on the bait trail. The attractiveness of the oats as a food item is an important factor.

When using the 1080 'One Shot' method, remember that large, plump, fresh oats, free from any chemicals (for example, do not use 'pickled' grain), should be used. This will improve the chance of success. The total cost of the oats will be small compared to the potential rewards from a successful baiting campaign.

Trail placement – bush areas

When laying poison bait trails, you are targeting the feeding behaviour of rabbits. Where paddocks adjoin dense bush in which the rabbits are living, it is unlikely that any rabbits confine their feeding activities to the scrub area. The availability and the quality of the feed in the paddock is usually superior to that available in the bush and no advantage is gained by laying the first trail in adjacent dense bush.

Laying baits in bush areas may increase risks to any small native animals that are present and which, unlike rabbits, are likely to restrict their activities to the bush remnants.

The trails

Generally, the first trail should be placed close to, but not in, rabbit shelter areas so that they have to cross it to get to the feeding area in the paddock. This trail is important but it is not the one that will provide the main benefit. Additional trails should be placed in the rabbits' feeding areas in the paddock to pick up those individuals that ignore the first trail.

It is suggested that the first trail is placed about 10 to 20 m from the bush remnant and the second trail is placed about 40 to 50 m into the main feeding area of the rabbits, and so on. Bait-take should be monitored and the trails topped up as required.

Rabbit feeding areas are often difficult to identify, but likely places are open areas where the grass is short and where scratchings are common. There is often a distinct rabbit-graze line. Ideally, feeding areas and rabbit densities should be confirmed by spotlighting before the

trails are laid. During spotlighting it is important that the rabbits are not shot at or harassed. Baiting is also best avoided if myxomatosis or RHD are active. So, do not bait until about four weeks have elapsed from seeing evidence of either disease.

Widespread control

Widespread control efforts are usually more effective because pest animals are eliminated over a large area and the chances of re-infestation from adjoining areas is reduced. Therefore, coordinate your control efforts with your neighbours. Such an approach costs less over the long term, and enhances the productive use of scarce resources.

Bait laying instructions

All stock must be removed from the paddock before baiting begins.

You should bait only if at least five days (preferably 10 days) of dry conditions are expected. Damp soil or even heavy dew can affect the result. As little as 6 mm of rainfall can reduce the poison content of an oat to the point where it may no longer be toxic to the average adult rabbit. If rain occurs within 10 days of poisoning, re-baiting may be necessary because 1080 is washed out of bait by water.

If rain falls

Rainfall can affect 1080 baits in two ways:

1080 is water-soluble and can be leached from baits, and

the palatability of baits can be reduced.

If heavy dew or rain falls after baiting, the number of rabbits killed should be monitored for 10 days after the baits were laid. If the kill rate is lower than expected (that is, less than 60 per cent) re-baiting the area should be discussed with your local Department of Agriculture Biosecurity officer.

When to re-stock the baited paddock

Once the poisoning program has been completed, it is your responsibility as a landholder to determine whether or not it is safe to re-stock the paddock. Generally, unless substantial rain has fallen since the bait was laid, the bait trail must be covered with soil before the paddock is restocked.

Presentation of the bait and rate of lay

You may lay the bait as either a compact, narrow band with or without a furrow (furrow baiting and ribbon baiting) or as a broad swath of widely spaced grains (scatter baiting).

Furrow baiting

A shallow furrow, about 10 cm wide and 2 cm deep, is cut with a disc bait layer, and the bait is laid within this furrow. This type of trail is useful under normal pasture conditions. It gives the operator the opportunity to assess 'bait take' by the rabbits and allows the bait to be later buried. A rate of lay of 6 kg/km should be used. Care is required with this method so as to avoid creating soil erosion in some soil types as rain run-off may channel down the furrows.

Ribbon baiting

A narrow band of bait (preferably about 10 cm wide) is laid on the natural surface of the soil. The rate of lay is again 6 kg/km. This type of trail is useful where a furrow could cause erosion or cannot physically be cut. Ribbon baiting also gives the operator an opportunity to assess 'bait take' by the rabbits.

A shallow furrow (less than 2 cm) may be used as a marker when laying a ribbon trail but the oats are not laid in the furrow. Research has shown that a furrow is not required to attract rabbits, although you may find it a useful way to locate the position of the bait trail.

When laying a ribbon trail on loose sandy soils, it is better to lay the oats directly onto a fresh tyre track. This partially stabilised sand helps to prevent the oats becoming buried in windy conditions. If the area to be baited contains patches of loose sandy soil, you will usually get a better kill with a ribbon trail compared to furrow baiting.

Ribbon baiting does not require elaborate equipment to be successful. A watering can is suitable for this type of bait-laying. Determine the correct vehicle speed that will produce a rate of lay of 6 kg/km with a practice run with some unpoisoned oats, well away from the baiting area.

Scatter baiting

This method of poisoning is useful where other trails could cause erosion. The trail is laid so that most of the bait is spread over a width of about 5 m. Most scatter trails will have some oats out to a total width of 10 m and a higher concentration of oats near the centre. All oats should be well separated from each other. The typical spacing for oats near the centre of the trail would be about 15 cm (6 in) apart. A rate of lay of 10 to 12 kg/km should be used.

There are two methods commonly used to lay a scatter trail. The oats are either blown out in a continuous stream from a modified mister or similar unit or they are spread by a spinning disc in much the same way as fertiliser is distributed from a super-spreader.

If you are contemplating using a piece of machinery that is also used to lay other materials, it is vitally important that it is free from contaminants. If possible, thoroughly clean all components that will come in contact with the oats, both before and after baiting is undertaken.

After laying the bait

Leave both the bait and the rabbits undisturbed for at least 10 days. Monitor all control efforts and top-up bait trails if required at the recommended rate (6 kg/km for furrow and ribbon baiting and 10 to 12 kg/km for scatter baiting).

Other options

Conventional 1080 oats can also be used to control rabbits. However, this technique requires rabbits to be fed for several days with unpoisoned oats before the poison bait is laid. It differs from the One-Shot technique in that all oats contain a very small amount of 1080. Pindone (an anticoagulant) poisoned oats can also be used, but these are generally more expensive than 1080 products. Further, unless their use is well managed, pindone-oats may pose a greater potential risk to non-target species. Rabbit-proof fencing can be a viable option for small holdings.

Further information

For further advice and assistance in controlling rabbits, contact your local Department of Agriculture office.

See also Farmnotes:

Farmnote 89/2001 'Options for rabbit control'

Farmnote 63/2001 'Guide to the safe use of 1080 poison'

Farmnote 101/96 'Rabbit warren and harbourage destruction'

Farmnote 20/2004 'Fumigation for rabbit control'

