

● Use of Traps for Possum Control

Introduction

Possums are a major ecological and agricultural pest throughout New Zealand. They feed on a wide variety of native and introduced vegetation, as well as invertebrates, eggs and fledgling birds. They also contribute to the spread of Bovine Tb in cattle and deer.

By continually browsing on favoured tree species possums change the structure of a forest and make it less suitable as a habitat for native wildlife. Exotic forests can also suffer from possum browsing, with bark stripping and the breakage of soft growing tips.

Possums strip fruit from orchard trees, damage shelter belts and will travel long distances to feed on crops. They will happily live in urban areas where they can severely damage flower and vegetable gardens.

Trapping is a well-established method of catching possums, either for skins or for pest control. There are several different types of leg hold trap available, along with kill traps (e.g. Timms) and cage traps.

Trapping is a time-consuming method of control in large-scale situations, but offers efficient control if carried out correctly. Trapping can also be a safe and effective method of removing possums from urban areas and household gardens.

Possum Sign

Before implementing any control measures, correctly identify the pest. Like all animals, possums leave certain telltale signs which will confirm their presence.

Possum browsing is distinctive, particularly on broadleaf tree species. Possums will typically hold branches in their paws and use their teeth to tear the foliage from around the midrib of leaves. This normally leaves the leaf stalk, base and midrib and some tattered remnants of foliage. Trees that are heavily browsed will appear to have little foliage left in the top third of the canopy. Heavy and persistent possum browsing will kill a tree.

Possums are untidy feeders, and the ground beneath feed trees will often be littered with discarded and partially eaten leaves, flowers and fruit. Small branches are often broken at the top of the tree.

Along with this damage, possums will leave other signs. When moving to and from feeding areas there are often pad runs (tracks) which are used each night by the possums. These are very distinctive in grassed areas.

Possums are territorial and fights are common where there is a high population. As a result fur often appears throughout their habitat. Claw marks on trees, fence posts, gates and bark biting (horizontal bites) on trees are



Possum scratch marks

also good indicators of possum presence.

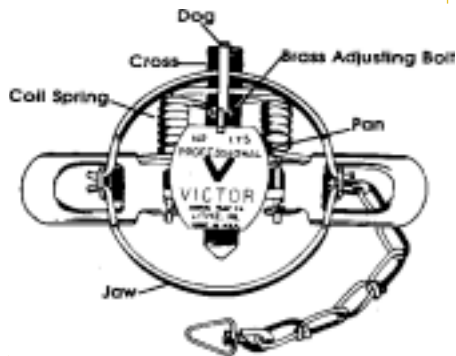
Possum droppings will also be scattered under food trees and may be found in branch forks of the tree. They are approximately 2.5 cm long, and slightly thicker than a pencil. Pellets are normally dark green and coated with a slimy film when fresh, although the colour will depend on diet. If feeding on pine tree pollen in early spring for example, pellets will be yellow coloured.

Suitable Traps

Whatever trap type is used, the trapline must be checked at least once a day. Trapped possums should be killed humanely and carcasses should be incinerated or buried.

Leg-hold Traps

Several types of leg-hold traps have been used for trapping possums in New Zealand. Leg-hold traps are effective because the possum does not have to enter a cage or box, or try new foods. Leg-hold traps catch possums that are behaving naturally.



Victor No. 1 coil spring trap

The Victor No.1 coil spring trap is recommended. It is small and light to carry and has adequate spring tension for its non-serrated jaws to hold possums without causing major injury. Successful trapping depends on good trap placement. Traps should be placed where possums will encounter them during normal movements. Good trap sites include the base of trees and posts displaying obvious possum sign, and on pad runs.

When setting a trap, make sure it is level and steady. Ensure that the 'dog' is oriented to the tree, or in the case of a pad set, to the side of the run. Set the trap a hand width from the base of the tree.

Where there is a risk of catching ground birds or other non-target animals, traps can be placed on a raised set or shielded on both

sides with sticks or rocks. If using raised sets, ensure that the trap chain is secure, and long enough to allow the trapped animal to fall to the ground without being suspended.

Well-placed traps do not necessarily need to be lured. However, if lures such as scented flour are used, rub them on the tree trunk directly behind the trap. **Never apply lure to the plate of the trap.** This may result in a possum being caught by the head.

In forested areas traplines are normally no further apart than 100 m. Traps are spaced at 20–40 m intervals along the line depending on the level of possum infestation. Once a trap line is in place, work the traps until the capture rate drops to one possum per 20 traps.

Check traps in the early morning. Captured possums should be approached and handled with caution. They are capable of



Victor trap set out in correct position. Note lure preparation on base of tree

inflicting injuries with their claws and teeth. To kill a trapped possum, approach from behind and grasp it by the end of the tail. Then quickly pull it out to the length of the chain and deliver a sharp blow with a hammer or stout stick between and slightly forward of the ears. This will only stun the animal. Its head should then be placed over a rock or solid tree root, where a hard blow to the same area of the head can be applied to kill it. Remove all dead possums from the trap area for disposal.

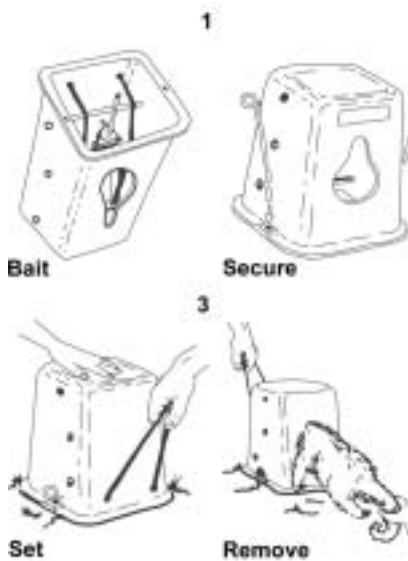
If a non-target species such as a pet cat or a bird is caught, cover with a coat or blanket to keep it calm while the leg is carefully released from the trap. Keep the cat or bird covered and determine if it has suffered any physical injury. Injured birds or animals should be treated immediately and the owner notified. In the case of native birds, notify the Department of Conservation who can arrange appropriate care.

Timms Trap

The Timms trap is a humane kill trap and when used carefully is an effective way to deal with urban or garden possums. The Timms kill trap is made of polythene plastic and is lightweight and compact. The light colour of the trap is an effective lure to the naturally curious possum.

The possum goes straight to the keyhole opening because the bait's scent is strongest at this point.

Timms traps can be set on the ground, or may be attached to a tree, fence or roof. Secure the



Setting the Timms trap. Traps can be unset manually or by a sharp impact.

trap by pegging into the ground. Alternatively, drill holes on the back and sides, thread strong cord or bungy cord through and tie to a branch or platform. If not secured, a possum could topple the trap, wind could blow it over or a scavenging dog could run off with a dead possum and trap.

Traps should be set overnight with a piece of fresh (firm) fruit as bait. Quarters of apple or orange, or pieces of carrot are effective baits. Baits should be replaced every two days. A mix of cinnamon, icing sugar and flour sprinkled around the trap and coating the fruit acts as additional lure.

To avoid catching cats never bait a Timms trap with meat or fish. To give a pet cat an aversion to the Timms Trap, let the cat sniff/ investigate the trap housing, then set the trap and drop it on a firm surface near the cat. The loud bang of the trap springing will frighten the cat and discourage it

from approaching the trap in future.

Precautions

- Keep fingers clear of the front opening at all times.
- Set the trap late afternoon/ early evening.
- Release set trap early morning.
- Ensure family pets are restrained indoors while trap is set – young cats and some breeds are inquisitive.
- Use food types for bait that don't attract cats etc.

Live Capture Traps

These traps are mainly used in urban areas where the likelihood of catching domestic animals is high. Live capture traps, commonly called cage traps, can be purchased from most stock and station agents.

It is important to site traps close to the damaged plants or trees, or beside a possum pad run, with the door facing the direction of likely possum approach. Make sure that the trap is far enough away from the tree so the possum cannot climb down on top of it, thereby triggering the door prematurely. Place the trap on firm ground and check its operation to ensure the door closes properly when triggered.

Attach bait such as apple, kiwifruit, orange or carrot to the trigger arm of the trap. Set the trap by lifting the door and holding open with the trip pin. Insert the trip pin only far enough to prevent a light wind from releasing the door.

As the possum reaches for the bait on the trigger arm, the trip pin is released allowing the door to slam shut. If you are using a new trap, leave it outside to weather for a few days.



Possum caught in live capture trap

Disposal of Possums

It is illegal to release possums in New Zealand and all live captured possums must be properly disposed of. Veterinary practitioners, MAF or SPCA officers are all able to humanely put down captured possums and may be able to offer this service. **Never attempt to handle or kill a live possum unless you have previous trapping experience.**

Possums have sharp claws and teeth and are capable of inflicting serious injuries to a careless or inexperienced trapper.

To kill a live captured possum, use the following method:

- Coax the possum towards the back of the trap, movements should be very deliberate so as not to disturb the possum too much.
- Grasp the end of the tail and remove the possum from trap.

- If it attempts to climb up your arm, keep the tip straight and steadily swing the possum back and forward. Alternatively, allow its front paws to maintain some contact with the ground as it will be more intent on trying to escape, rather than to attack, the handler.
- With a thick stick or hammer, hit it hard between and slightly forward of the ears to deliver a stunning blow, and finish with a killing blow.

Lures

With all types of traps, the use of suitable lures to coax possums to the traps is recommended.

Oil essences and powdered spices can be mixed with flour and icing sugar to make up a suitable lure to sprinkle around traps to draw possums to the bait, and ensure a better chance of capture.

Environment Bay of Plenty

Environment Bay of Plenty pest animal officers are available to assist with assessing possum infestation levels and will offer advice on appropriate traps and trapping methods if required. Timms traps can be purchased from Environment Bay of Plenty.

For Supply of Traps

Pest Management Services
P O Box 121
Waikanae
Ph 04 293 1392
Fax 04 293 1456

M.S. Woodcraft Limited
128 Marine Parade
Mount Maunganui
Ph 07 575 5920



For further information and advice, contact your local pest animal officer at Environment Bay of Plenty:

Telephone: 0800 ENV BOP (368 267)
Facsimile: 0800 ENV FAX (368 329)
Pollution Hotline: 0800 73 83 93
Email: info@envbop.govt.nz
Website: www.envbop.govt.nz
Address: 5 Quay Street, P O Box 364,
Whakatane, New Zealand

This fact sheet was prepared by Greg Corbett

This fact sheet was last updated November 2004