

# Intensive Pest Animal Management

## Setting up bait or trap grids

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### Setting out grids

To achieve effective pest control down to consistently low residual numbers or over a larger area, a grid system of bait stations or traps is necessary. Having a grid system in place ensures no gaps in coverage of the area which is particularly important for control of pest animals with small home ranges e.g. possums and rats.

To achieve numbers low enough for forest regeneration and successful bird breeding, a residual trap or track catch index ([RTC](#)) of <3% for possums and <5% for rats will need to be maintained. Mustelids should also be controlled to low levels.

- When targeting possums only, use a grid system of approximately 200 x 100m.
- For rats only, a grid of 50m x 100m or 75m x 75m is recommended.
- For combined control, a grid of 100 x 100m can suffice, provided numbers of both pests have been initially reduced and the grid is being used to maintain the low population level.

### Rats and possums

#### Laying out a grid

To lay out a grid line, look at a map of the area to determine which bearing the grid will be best placed on. The topography may mean that a bearing that mainly follows contours will be easiest rather than one which continually takes people up and down steep gullies. Having said that, ridge lines are easy to follow and it may be easier to move up or down slopes rather than always be sidling across them. Whatever your preference, take the ability of your volunteers into consideration and once a bearing is chosen it's best to stick to it.

### Measuring it out

Use a compass or GPS unit to navigate with, otherwise it's easy to end up way off track, straight lines are difficult to achieve in the bush even for the most skilled navigator. To measure distances use a hip chain instead of relying on pacing out the distance. This will ensure even coverage and will avoid differences in operator placement. Hip chains are available from the ARC on loan, as are GPS units. A hip chain attaches to your waist and after the cotton is tied off at the starting point, will accurately measure distance. The cotton is surprisingly hardy and doesn't usually break even when scrambling through dense vegetation. For this reason, we recommend the cotton is retrieved once the task is finished as sometimes birds (or people!) can become caught in it.

### Marking the way

Be sure to mark the route well between bait stations with flagging tape. The route needs to be easy to find again and bear in mind that someone else may not retrace the route for up to 3 months so any evidence of previous thoroughfare will be long gone. Place the tape so that you can always see the next piece, and use trees or branches that aren't likely to fall off in the near future.

### Numbering the stations

It's important to number the stations with a permanent marker so that future baiters will not miss any and so that you can differentiate between different lines. Records from each station can be kept if desired to identify 'hotspots' or areas with very low bait take.

### Bait station placement

If pets, stock, kiwi or weka are present, stations should be placed at a minimum height of 1.5m or above, and a 'running board' or stick placed against the tree so that rats are ensured easy access. Otherwise, place stations at a height of 30cm above the ground.

## **Why use a bait station?**

Using a bait station ensures that –

- Bait is kept dry and is effective over a longer period
- Access to non-target animals is restricted or prevented
- Allows the placement of signage
- Makes setting up a permanent bait network easier.

The bait station we recommend is the mini Philproof. This station has a good design and is large enough for most pest animal control operations. We may be able to supply Philproofs to you at cost. Please contact your local Biosecurity Officer for details.

## **Mustelids**

Traps should be set at approximately 200m spacings along tracks or bush edges. These traps will need to be checked regularly so it's important that they're easy to access. Because mustelids will use tracks, ridges or follow fencelines, and have such large home ranges, it is not necessary to cover the area completely but rather use good trap placement to ensure success