

A GUIDE TO

# **Stoat control**

#### Swift, smart and deadly

This guide focuses on stoat control and assumes you're familiar with general predator control practices. For general predator control advice, visit <u>predatorfreenz.org</u>.



# **Understanding stoats**

Stoats are one of New Zealand's most devastating predators.

They're also infamously hard to catch and need a targeted, continuous, long-term and large-scale approach to achieve real gains for native wildlife. Controlling stoats at scale is crucial, as individual stoats can disperse 65km or more from their den.



#### **Behaviour insights**

- Unique and individualistic: Stoats are opportunistic and flexible hunters. This means observation and experimentation are important when targeting stoats: don't assume that one method will work for all stoats.
- Cautious: Stoats are often reluctant to interact with traps, so extra effort, such as pre-feeding or additional scented lures, can make the difference.
- Active day and night, feed regularly and cache food: Keep an eye on your lure supplies.
- Prolific breeders: Stoats have litters of 8-10 (max 20) and breed from September to November. Already pregnant juvenile females disperse from November to March, so maximise control efforts before breeding season to hit hardest when

- it counts. (Double-set traps can help catch family groups dispersing in late spring and summer.)
- Highly mobile and adaptable:
   They can disperse up to 65km and are found in almost any habitat.

  Even if catch numbers drop, keep monitoring as they might reappear in your area from elsewhere, particularly after the young disperse from burrows in early summer.
- Good swimmers: Stoats can travel over 1.5km or more in water, which means water provides no barrier, so set up trap buffer zones to prevent new arrivals.
- Scent-motivated: They're attracted to other stoats and the scent of prey.
   To exploit this, use double-set traps, flour blazes, and scent dragging.

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# Lures: Meaty morsels

Meat lures work best for stoats, the fresher the better. Choose tasty lures in large chunks. Mix things up to maximise interest.

### **Top lures**

- Rabbit (fresh is best, but doesn't last long) or Erayz
- Egg (or egg-based products like Eggsellent or mayo)
- Raw mutton fat (ask your butcher or local home kill)

Venison



- An automatic dispenser can provide a constant stream of mayonnaise lure — handy, but can be expensive.
- Try sourcing eggs locally, as commercial hens' eggs are usually washed and lose their scent. Release the scent of egg by breaking it gently, mixing the yolk with a stick and dropping some of the contents in and around the trap box. Fresh is best.
- Fish oil, pellets or spray can add extra luring power.
- Try a combo of a tasty 'fresh' lure (like rabbit) and a longer-lasting lure (an egg) to cover your bases.
- Secure lure up high to keep stoats looking up, away from the trigger plate. This also allows the scent to travel. A tea strainer or nail on the inside wall of the trap box works well.

A note on toxins for mustelids: Most cereal-based toxins rely on stoats eating poisoned rodents (known as 'secondary poisoning'). To target stoats directly, acute toxins delivered in meat lures are required (e.g. PAPP or 1080 in meatballs or sausage baits). These are under development.

- Acute toxins require a CSL and are not covered by this guide. We recommend that groups contact a professional contractor for assistance with targeting mustelids using toxins.
- Contact your regional council, local DOC office or PFNZ for a list of contractors. For further information, visit the <u>Predator Free NZ</u> website for a summary of toxins.

# Traps: Types, placement and timing

## **Recommended trap**

The stainless steel DOC 200 in a wooden box is a long-lasting and proven method.

**Double-set DOC 200s are a good choice:** they increase the number of available traps, and a caught rat or stoat in one trap can attract another.

#### Other trap options

• If you also have ferrets in your project area, consider using the DOC 250.

#### **Important**

 The exterior mesh entrance for your wooden box should be 60mm x 60mm (based on a 20mm mesh).

Some experts advise that increasing the exterior entrance (but not the interior baffle) can catch larger stoats, but the box length needs to be longer to ensure the safety of non-target species — check the DOC trap box dimensions online.

Get advice from predator control experts in your local area. Caution must be taken with non-target species, especially weka, kiwi, kea and pets.

- In areas with kiwi, weka, and kea, the trap box design will be different — longer vestibule lengths, side entrances and/or metal fittings may be required. Check the DOC trap box dimensions online.
- Secure your trap box with metal stakes to prevent movement which can cause misfiring in double-set traps, especially in areas with kea or pigs, which might disrupt the box.

**Tip:** Ensure traps have sufficient clearance inside the box to fire correctly (check DOC build dimensions).

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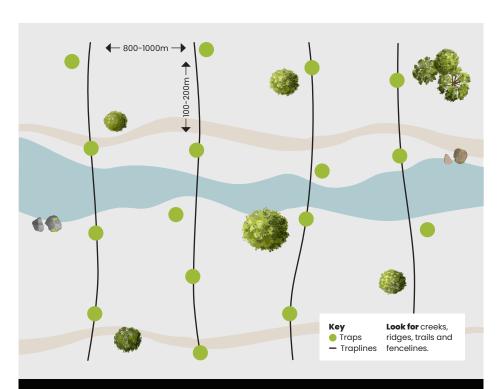


# Trap density and grid

Your trap density and grid will vary based on your goals and capacity.

#### **Recommended grid**

- 800-1000m between traplines
- 100-200m between traps along traplines
- A tighter grid may be necessary depending on objectives and resources available, for example, if you're planning a kiwi translocation, 500m between traplines and 100m between traps may be necessary to get stoat numbers low enough



**Tip!** Keep the size of your trap network consistent, even if catch numbers drop — stoats travel long distances and densities vary seasonally.

**In river valleys**, especially when protecting whio, a single or double line of traps on either side of the river can make a big difference.

### **Trap location and placement**

Stoats follow natural lines in the landscape.

It's better to pick good natural features than stick to a rigid grid. Wander up to 10-15 metres from the grid to find a good spot. Look for:

- · Riversides, creeks
- Ridges, trails, game trails, tracks, spurs, fencelines and contours

#### Trap site must-haves

- Ensure box entrances are clear (of grass and debris). Clear mesh ensures animals can see through the trap and smell the lure.
- Smooth mesh around entrances, as sharp edges deter stoats.

## Trap checking frequency

- High stoat numbers/bird breeding season: Weekly
- Ongoing: Monthly

#### Pay attention to seasons

In November to March, stoat numbers are high and young are dispersing: a good time to check traps more frequently.



**Tip:** Try pre-feeding if your catch rates are decreasing, but you suspect stoats are still around. Shut down lured traps for 2-4 weeks and then reset them.

- Try placing lures outside and just inside the entrance to the box to familiarise the stoat with the box. Use cameras to see what's happening around the traps.
- Early to mid-winter is a good time to try pre-feeding before focusing on reducing numbers that lead into the stoat breeding season.



## **Notes**

