

A GUIDE TO

Norway rat control

Stocky suburban swimmers

This guide focuses on Norway rat control and assumes you're familiar with general predator control practices. For general predator control advice, visit predatorfreenz.org.

Understanding Norway rats

It's helpful to know if you're dealing with ship rats or Norway rats, as they behave differently and like different lures. However, it can be hard to tell what species is present and you might have both.

You'll probably need to catch a few rats before you can tell which species is present. Try experimenting with different lures to see which are eaten first: Norway rats prefer meaty or oily baits (rabbit, bacon, fish oil), ship rats prefer sweet or starchy foods like fruit, seeds, sugar, nuts.

As a general rule of thumb, ship rats are more common, especially in forests. If you're near waterways or urban areas, Norway rats are more likely. (Kiore are not covered in this guide.)



Behaviour insights

- **Hefty:** Norway rats weigh up to 500-600g, and therefore require more powerful traps than ship rats.
- **Social and communicative:** Norway rats can live in large social colonies where they communicate food preferences and scents. Scented flour blaze and pre-feeding lures are especially useful for attracting them.
- **Excellent swimmers:** They are often found near waterways and can travel across rivers and large stretches of water.
- **Ground lovers:** They don't climb as much as ship rats, so traps are best positioned on the ground.
- **Highly exploratory:** Home ranges can span 5-6 hectares (300m x 200m+), depending on food, season, and population density. Even if you're not catching as many rats, maintain the size and density of your trap network.
- **Urban dwellers:** Norway rats are often found near human activity, especially compost bins, sheds, rubbish areas and drains.
- **Very neophobic:** They are cautious of new things. To overcome this, try pre-feeding: leave traps lured but unset or bait stations filled with non-toxic bait for a week or two.
- **Widespread, frequent, fast breeders:** Norway rats reproduce fast. Focus on getting numbers down at the key times of vulnerability for native species you're protecting.



Lures: Fatty proteins

Norway rats prefer fatty meat-based lures and proteins.

Top lures

- Cooked bacon
- Fish oil
- Dried pet food and Erayz

Pre-feeding works

Pre-feeding — placing non-toxic lure in unset traps or bait stations — helps rats become familiar with a trap and lure and reduces their natural caution.

Scented lures will appeal to Norway rats

in particular. Throwing flour blaze or fish oil around traps will increase interest by providing an appealing scent.

They'll communicate this back to their colony, carrying the scent of food on their breath, fur, and scats.

Use flour blaze when the ground is dry, or instead try savoury lures on the ground in and around the trap box.

For example, a large chunk of rabbit in a mesh cage pinned to the ground, cat biscuits, dog roll, egg mayo, fish oil or salmon pellets.

Try putting 1/3 of your lure in a trap, 1/3 in the box, and 1/3 around the site.



A note for monitoring:

If you're already using peanut butter (or aniseed) in chew-cards or tracking tunnels, stick with it: consistency is key for quality monitoring data.

If you have no results, try monitoring some lines with cooked bacon bits, fish oil, sardines mixed with oats or fish food pellets, etc, to see if anything changes. Stick with your chosen monitoring lure for some time (a few seasons).

Tip: Avoid mice eating up your lure by:

- Placing a mousetrap at the end of the trap box. A caught mouse will have the bonus benefit of attracting rats and stoats.
- Place lure in a container like a tea strainer or hang it up high to protect it from nibbling mice.

Traps: Types, placement and timing

Recommended trap

The stainless steel DOC 200 in a wooden box is a solid long-term choice. They are robust, durable and also ideal for targeting Norway rats, stoats, hedgehogs, and heavier weasels.

Other trap options

- Some groups prefer the **DOC 150** as a lighter, cheaper, more compact option, but it targets fewer species and can be harder to set by hand than the DOC 200.
- **Victor Professional traps** (modified or otherwise) are also frequently used, but many Norway rats are too large for them to be humane and effective, and can be scared off.

Important: In areas with kiwi, weka, and kea, the trap box design will be different — longer porch lengths, side entrances and/or metal fittings may be required. [Check the DOC trap box dimensions online.](#)



Note: The exterior mesh entrance on the wooden box needs to be larger than for ship rats — we recommend up to 60 x 60mm for a DOC 200 box or rat tunnel.

Rats are more likely to enter a trap box if they can see through it — mesh is good for visibility.

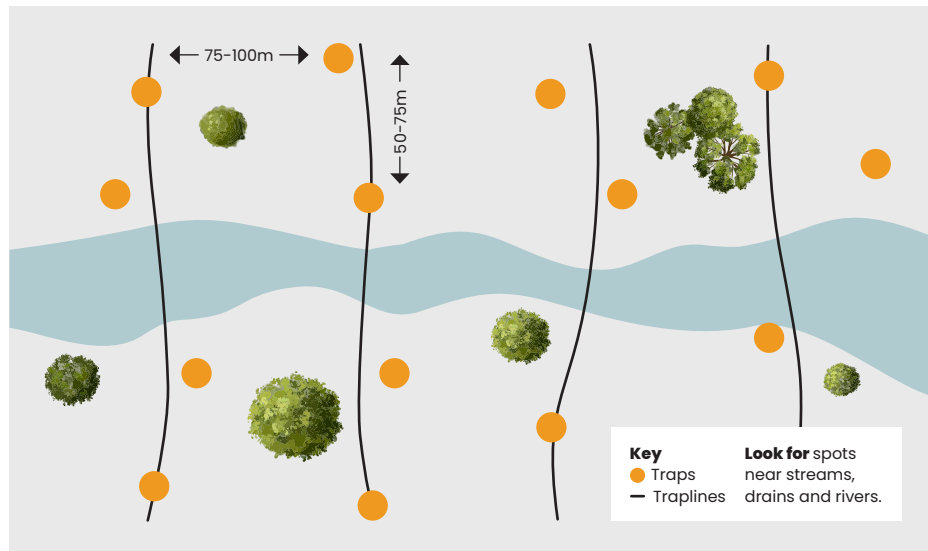
Trap density and grid

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

Recommended grid

Understanding habitat and where the 'hot spots' are is especially important for targeting Norway rats. Start near streams, drains and rivers where you know Norway rats are present and extend your grid a few hundred metres from there. This spacing is a rough guide:

- 75-100m between traplines
- 50-75m between traps along traplines
- Consider placing traps closer together for initial knockdowns, areas with high rat populations, or at the edges of your project zone



Tip: Prioritise good trap sites over rigid spacing. For example, if the grid point is in a damp hollow or down a bank, move the trap to a nearby level ground where rats are more likely to travel, especially near water.

Maintain trap density even as rat numbers decline. As Norway rat populations drop, their home ranges increase, meaning wider travel and continued risk. Trap density must stay high to remain effective.

Trap location and placement

Norway rats are common around waterways.

A grid layout is recommended, but it's not a rule. It's worth wandering 10-15 metres away from the grid point to find the best trap site on level ground. Unlike ship rats, Norway rats are more confident to go out into the open, so traps do not need to be as well-covered. Place traps near:

- Bodies of water (such as rivers, estuaries, lakes, drains)
- Human activity (e.g. compost bins)
- Be aware of fluctuating water heights to avoid submerging traps or traps being washed away in floods. Norway rats also use other linear features like gullies, fence lines, pathways and tracks, etc. Cameras and chew cards are great for identifying rat hotspots

Trap checking frequency

- **Initial knockdown:** Check traps as frequently as possible
- **Suppression:** Every 2-4 weeks

Pay attention

- Record your trap checks – remember recording no catch is as useful as catches. Lots of groups use Trap NZ to log trap checks.
- Adjust timing as needed based on higher rat populations and vulnerable times for the species you're protecting.



Toxins for Norway rats

Toxins are a powerful tool for rat control — especially in rough terrain, when there are high numbers, or across large areas.

Use toxins to reduce rat populations at the most vulnerable times for the species you protect. Consider when natural food sources are low (e.g. late winter): toxins will become more appealing to rats when there is less to eat. This advice covers toxins that don't require a Controlled Substances Licence (CSL). For further information around toxins for rats, head to predatorfreenz.org/toolkits.

Norway rats are 'caching' creatures: they store food. Be especially mindful when using toxins, as it can appear as though huge amounts of your toxin have been eaten, but much will be stored. Use the recommended contained, lockable bait stations to avoid this.

Recommended toxins

- **When on private land**, use Contrac (Bromadiolone) as bait blocks: only a single-feed is required for a lethal dose, but limit the amount of bait available to avoid using up too much.
- **When on Public Conservation Land**, use Ditrac (Diphacinone) as bait blocks: also a potent single-feed toxin.

Bait blocks on pins are best for Norway rats as their caching behaviours mean they will empty bait stations of toxin pellets, and store them.



Recommended bait station

The black Tomcat bait station offers secure pins for bait blocks and a clear line of sight through the station, which will encourage rats to enter.

- As per your traps, use ground scuffing and scented flour blaze at each bait station to increase interest in the site and communication between Norway rats.
- A cheaper, more basic option than cameras is using Velcro strips (the hook side) stuck near/on your bait stations which collect animals' fur so you can see if rodents or possums are taking bait.
- Generally, it's best to stock bait stations with tasty non-toxic lure to encourage rats in, before switching to toxins. However, this pre-feeding isn't critical for slow acting toxins like Ditrac (Diphacinone), Contrac (Bromadiolone) and even multi-feed Pindone.

Toxin timings (seasonal)

Toxins are useful for knockdown at critical periods. Use them to reduce rat numbers at the most vulnerable times for the species you protect. This means late winter and early springtime for fledgling birds, wintertime for bats and year-round for invertebrates. Consider that when natural food sources are low, toxins will become more appealing to rats.

Bait station location and placement

Similarly to your trap network, place bait stations in dry spots frequented by Norway rats, up to a few hundred metres from rivers, drains, estuaries, lakes, and compost bins. You could also backfill to a grid of 75-100m (between lines) and 50-75m (between bait stations along lines), depending on feasibility. A tighter grid is especially effective in high food/urban areas.

Ensure bait stations are placed on the ground as Norway rats aren't good climbers.

Safety to yourself, others and non-target species

- **Storage and handling:** Wear gloves and wash your hands thoroughly after handling toxins and storage containers. Ensure storage bins are firmly sealed, labelled, and out of reach of kids and pets.
- **Let people know:** Post appropriate signage in areas where the toxin has been distributed.
- **Think about pets and wildlife you want to protect:** Carefully consider the potential effects on pets and native species in the area.
- **If you suspect poisoning:** Call the National Poisons Centre on 0800 POISON (0800 764 766).

Note on Brodifacoum: We recommend particular caution with Brodifacoum because it can get into the food chain (e.g., through slugs, snails, possums, and pigs), and can cause secondary poisoning to pets and non-target species. DOC restricts its use on the mainland, and MPI is currently reviewing it. In the future, it may require a handler's certificate.