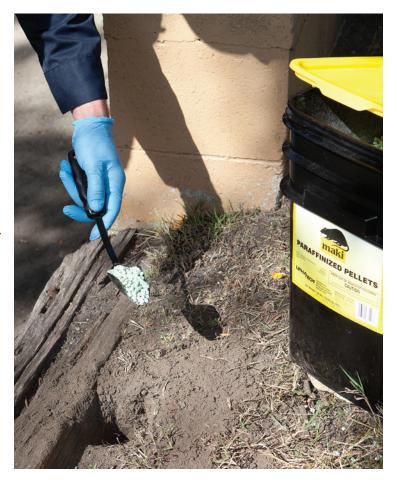


Burrow Baiting for Norway Rat Control

The easiest and most effective way to kill Norway rats is to attack them where they live. In cases of infestations this usually means treating their burrows with appropriate rodenticides. Individual "rogue rats" are another matter. This technical bulletin will focus on eliminating infestations by using their natural behaviors against them.

Norway Rat Behaviors — A Review

Norway rats are by nature ground dwelling, or "burrowing" rodents. Their social hierarchy means that the strongest males and females (alphas) in the colony have the best places to live and the best



food sources including first access to the food. This contributes to the survival of the fittest. The weaker animals (betas & omegas) live some distance away from the alphas, often in less desirable harborage. In situations where Norway rats are living above ground, it is likely they are betas and omegas which could not find good burrowing sites underground.

Norway rats are neophobic, which means they fear new things. This includes strange new foods such as place packs and wax blocks which suddenly appear in their burrow.

Norway rats work very hard to keep a clear primary opening to their burrow. In addition, Norway rats have an emergency escape opening commonly called a "bolt hole".

When rodents are out in the open seeking food, they are vulnerable to predators. Norway rats do not like to eat outside of their burrow. They will try to carry food back to their burrow if they can. They very much prefer to have "food" delivered to their burrow. Rats seem to perceive loose bait as "seeds" blown in naturally by the wind and are more likely to accept them than blocks or packs. Remember, they also do not like new objects such as traps and bait stations, introduced into an established territory.



Effective Burrow Baiting Tips

The most effective way to eliminate Norway rats is to apply a rodenticide directly inside their burrows. These additional helpful hints will aid in success:

- Choose a rodenticide labeled for burrow application. (e.g. Maki® or Generation® paraffinized pellets or BlueMax™ meal)
- Do not use place packs or block baits.
 - NOTE: The revised label language that the EPA issued in 2012 specifically states that certain formulations, including traditional wax blocks, soft bait, and place packs, may not be used in burrows. This is because of the possibility of the rats expelling them into the open, allowing for the possibility of non-target exposure.
- Use a long handled spoon or other device to put loose pellets or meal bait at least six inches into the burrow.
- Do not cave in burrow openings. Rats often relocate
 when stressed in this way. At the very least they will kick
 out the bait as they work to re-open the entry and bolt
 holes. It's best to leave the burrow as undisturbed
 as possible.
- Return in three to seven days. Re-treat all burrows which are believed to remain active.
- Repeat the process once or twice a week until none of the burrows are active.
- Once burrow activity has ceased, you can shovel them shut.





 Make notes and sketches depicting the locations of the burrows. Inspect these areas as part of routine service visits. New rats coming into the area are also likely to find the site attractive.

Follow these simple steps to effectively control Norway rat infestations by treating them in their burrows. By doing so, you can develop a simple, yet successful strategy for all of your accounts with Norway rat burrow problems.



Determining Burrow Activity

Even pellets six inches down in a burrow may still be visible. Their presence or absence during a follow-up visit can be used as a continued activity indicator. If the freshly applied rodenticide is not visible, some rodent control professionals cover the burrow with a page from an old phone book and push it in a few inches with the spoon. If the burrow is still active, a rat will either push it out or pull it in for nesting material. Another method is to drop a few bits of dog food into the opening so it is still visible, even though it is not six inches deep as required by the label for the rodenticide. As long as the dog food continues to disappear, there may be rats still living in the burrow.