



## Recommendations on the Use of Rat Bait for Pest Management Professionals

Rat bait can help to wipe out rats when used in conjunction with other structural and mechanical controls. If you plan to use rat bait in your rat management efforts, make sure you're aware of all New York City and New York State laws regarding pesticide use. Every time bait is applied, read the label on the product to ensure that the application is appropriate.

There are many choices of products, formulations and methods of application for rat bait. You should first discuss a treatment plan with your client. How often you treat, provide service and what types of product you use should be tailored to the unique situation of the client. This fact sheet provides recommendations to help guide these choices.

### Using Exterior Bait Stations

Bait boxes or "bait stations" are useful in rat management programs as monitoring tools and as methods to deliver rodenticide. Below are some general guidelines for using bait boxes:

#### Placing Bait Stations

Position exterior bait boxes at intervals of about 50 feet around buildings, or along landscaped areas surrounding buildings.

The number and distance between bait stations should be based on the severity of infestation. The table below can be used as a guideline for selecting the best distance between bait stations.

<b>Severity Level of Rats</b>	<b>Distance between bait stations</b>	<b>Service Intervals</b>
Minor	75 feet	Monthly
Moderate	50 feet	Twice monthly
Severe	25 feet	Weekly

Label each bait station with the date, the type of bait, and the servicing professional's initials at each service visit.

## **Choosing a Bait Station**

Use heavy-duty, tamper-resistant exterior bait stations. Never use the cheaper, thin plastic bait boxes that are not classified as tamper-resistant because they are designed for interior use only. Some bait stations are designed to look like rocks, these are best for landscaped areas and parks. All bait stations should be secured.

## **Securing Bait Stations**

Secure poison block baits on rods inside the bait boxes. This prevents rats from carrying bait outside of the boxes and dropping poison on the ground where dogs, cats, or children might discover them. Install bait so that if bait stations become disturbed and overturned, the secured baits will not fall out. Secure the stations into the dirt (usually using duck bill anchors and 16-24 inch cable) or to fences using cable wire or small chains.

## **Placing Bait within the Stations**

Install 4 to 8 blocks inside each box if rats are active in an area. Use 1 to 4 blocks of bait in each bait station once the rats have been brought under control. For maintenance baiting programs where few or no rats are left, use the lowest dose rate of one block per station.

## **Servicing Bait Stations after Installation**

Service all bait stations at least once a month. For serious infestations, service bait stations every other week until the problem has been brought under control. Use fresh bait in the bait boxes at all times. Change bait on a monthly basis on a need-it-or-not basis. Use the label to track and record each visit.

## Direct Baiting of Rat Burrows

If burrows are present on a property, directly bait the burrows to supplement the installation of bait stations. Always apply the rodenticide deep into the rat burrow. A burrow baiting schedule for a quality service can be conducted as follows:

### Week 1:

- Identify active rat burrows. Typically, each rat burrow system has 3 holes. Most active rat burrows contain at least one hole where dirt is freshly excavated out of the burrow.
- Install baits into active systems according to the label directions of the bait. Most rat baits state that 4 to 16 ounces of bait can be applied to rat burrows at a spacing of 15 to 30 feet.
- Apply baits using long-nosed funnels to ensure the bait is inserted deep down into the burrow where it is not accessible to pets or children.

### Week 2:

- Allow 7-10 days for bait to take effect.
- Cave-in or collapse the previously baited burrows and fill them with dirt.
- Inspect for burrows that have remained or become active since the initial visit.

### Week 3-4:

- Check for re-opened burrows and re-bait with about half the amount of bait previously used.
- Cave-in or collapse the previously baited burrows and fill them with dirt.
- Inspect again for burrows that have remained or become active since the previous visit.

### Week 5-6:

- Survey the area to determine:
  - Has the number of active burrows diminished?
  - Are new burrows still emerging?
- If control has been achieved, switch the area to a monitoring schedule (monthly inspections and/or install bait stations.)
- If rats are still active, maintain a weekly baiting schedule.
- Close up rat burrows in sidewalks or building foundations after baiting and control has been achieved and seal holes with sealant or cement.

## Common Mistakes when Exterminating Rats

### 1. Relying on glue boards.

Glue boards are less effective for rats and mice than snap traps or baits. Putting out a sticky trap for a rodent infestation will have little or no impact by itself.

### 2. Choosing the wrong bait formulation.

For both safety and effectiveness, the bait formulation must be chosen carefully to suit the area where the bait is to be used. Bait formulations include:

- Bait blocks (bait chunks)
- Pellets
- Packets
- Ground-meal
- Tracking powders

Choose bait block formulations for secure installation on rods inside of bait stations. Pellets or ground meal are appropriate for direct burrow treatments. Always follow label instructions.

### 3. Using loose baits and bait packets incorrectly.

Never use loose bait in situations where children, pets or non-rat wildlife can reach it. Loose bait should not be thrown over fences, stuffed into tree cavities, or thrown into outdoor junk piles. Indoors, baits must never be tossed into ceiling voids or behind household appliances or placed underneath or behind furniture.

### 4. Not securing bait stations.

Never leave bait stations unsecured. Exterior bait stations must always be secured to the ground, fence or some other permanent type of anchor. When a bait station is no longer being serviced, it should be removed.

### 5. Inappropriate use of tracking powders.

Tracking powders should never be used in situations where human, pet or wildlife exposure can occur. Rats can carry tracking powder out of their burrows and trail it along their runs. All tracking powders are restricted use pesticides, and can be used only in extremely limited situations.

### 6. Over or under-applying bait.

Using too much bait is a waste of time and money, and leaves too much pesticide in the environment. On the other hand, not using enough bait will result in poor control. Always adhere to the bait dosages on the product label when baiting for rats in direct burrow baiting or with bait stations.

### 7. Closing treated rat burrows too soon.

Do not cave in, collapse or fill rat burrows right after applying bait. Doing so may keep rats from getting to the bait, or encourage rats to just push the bait out as they reopen the burrow. Burrows should remain open until the bait has taken effect.