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The Need for Speed to Control Rodents

Fast control is critical with a rodent infestation to prevent contamination, disease and negative food safety audits.

When food safety is at risk, rodent control should be measured in days, not weeks.

With the likely arrival of the regulatory authorities or third-party food safety auditors, food processing and storage operations must eliminate rodent infestations in a timely manner. One rodent dropping can create unimaginable consequences with issues ranging from a food contamination incident to failed inspections. A rat can produce 50 faecal droppings daily and a House Mouse can produce twice as many, with one dropping being one too many. Since rodents are known to carry food borne pathogens such as *Salmonella* and *E.coli*, the control of rodents is a pre-requisite for a successful food safety program. A lack of prevention and control, especially during times of extreme cold or heat, or other circumstances known to disrupt rodent activity, can rapidly create a problem in food processing and storage operation areas within a few days. The speed to control the rodents should also be equally as rapid.

Heightened rodent activity calls for faster control.

In most rodent control programs, certain circumstances will periodically create a need for speed to control rodents. Many rodenticides are designed for multiple feedings which can be challenging when competing with nearby food sources. In addition, continually using the same rodenticide active may promote rodent resistance. Speed to control rodents is critical during certain circumstances. Here are four examples:

- 1. Proximity to Infested Site.** An out of control rat population in a metropolitan commercial area becomes disastrous. At an urban grain processing facility, an infestation of Norway rats from a neighboring and defunct grain elevator was creating immigration pressure, resulting in a dangerous situation. Speed to control was of the essence. External use of rodenticide was implemented in conjunction with efforts to clean the closed grain elevators. Control was partially achieved in a few months and the rat population became “manageable.” Not so speedy.



It's estimated that rat-borne diseases have killed more humans in the last 10 centuries than the casualties of all wars and revolutions combined.

(source: www.fws.gov/pacificislands/publications/Ratsfactsheet.pdf)

below:

Routine inspection is a key component to achieving a proactive integrated pest management program keeping your facility rodent free.



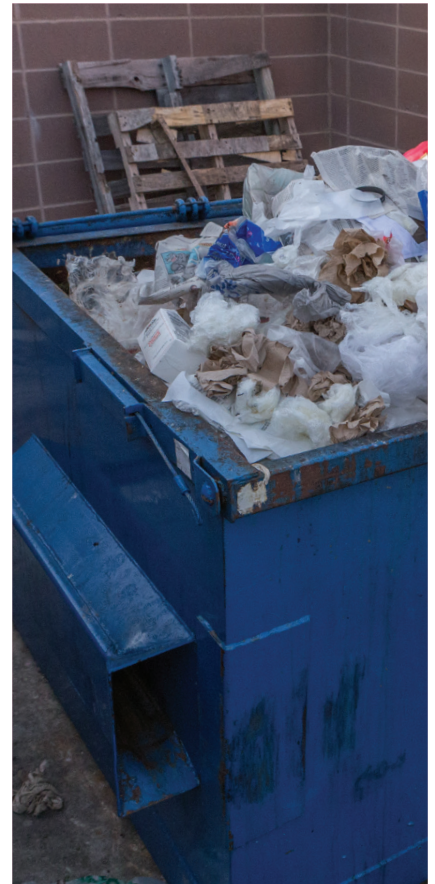
2. Proximity to Woodlands. Food processing and storage facilities near an infested woody swamp land became targets for persistent infestation by Roof rats. In this case, the outside rat population was placing increasing pressure at entry points to the food processing factory. The need for speed to control rodents was paramount as a third-party food safety audit was imminent. The day before the audit a Roof rat was observed inside the building, thankfully it was captured, but this added a last minute challenge to pass the audit. External use of rodenticide was undertaken in addition to some creative trapping efforts. Control was partially achieved in a few months and the rat population became “manageable.” Not so speedy.

3. During times of food shortage and habitat loss. During a crop harvest, rodents’ habitat and food sources are disturbed or destroyed to the point where they seek harborage elsewhere. Such was the case of a Roof rat invasion at a large food processing and storage facility where a large rat population was creating immigration pressure. Speed to control is of the essence during harvest time. Rodenticide treatment was undertaken along with customized trapping efforts. Control was inconsistent throughout the harvest months and the rat population became “manageable” but not controlled; creating risk to the site. Not so speedy.

4. During times of environmental stress. An industrial site was encountering a Norway rat invasion due to a serious flooding. These rats were on the move looking to relocate to high and dry harborages. Thus, placing increasing pressure at the entry points of a number of nearby food processing and storage buildings. External rodenticide treatment was undertaken in conjunction with extensive trapping efforts. Control was achieved in a few months and the rat population became “manageable.” Due to the rodenticide not achieving complete control, this control program was extended and the rodent migration heightened the threat of disease. Not so speedy.

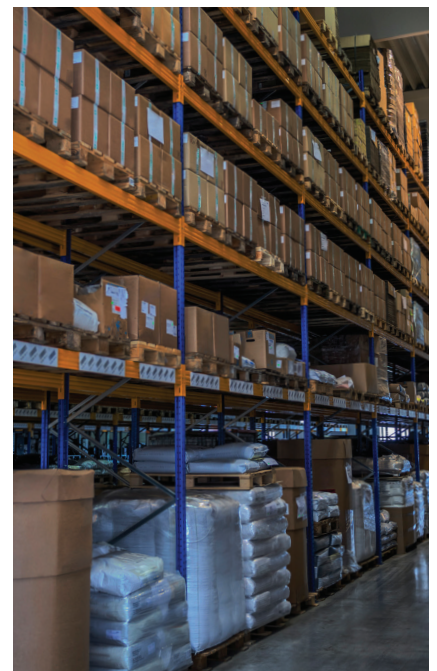
Putting the Brakes on Control

These are just four examples highlighting the need for more efficient control of rodents. There are circumstances in the food industry where rodents are just being managed, not controlled. These establishments are managing their rodent risk, not eliminating the rodent activity. Despite efforts to eliminate or reduce the availability of food, water, shelter and other conducive conditions, some environments are still susceptible to undesirable rodent activity. Speed to control rodents, using rodenticides, is being hindered by site-specific restrictions, multiple feeding delays, competing food sources and temperature stability, all creating a slow to control scenario. Beyond non-chemical integrated pest management (IPM) efforts, it seems the use of rodenticides for external rodent control is being reduced to a minimum number of tamper resistant devices, secured only along buildings and using the same rodenticide actives (anticoagulants) with pest service technicians replacing bait on an as-needed basis.



above:

Waste receptacles are often the first location rodent activity is spotted before entering a food processing facility.



above:

Inspect incoming freight for rodent activity. They can hide away and later move from box to box searching for food and water.

Efficient Control in Days, not Weeks

Most Pest Management Professionals (PMPs) make numerous calls per day and are pressed for time. The pest management industry needs a rodenticide with the ability to control rodents in a matter of days, not weeks or months, and with fewer bait applications. Less baiting with better control is what PMPs need to make their time more efficient and effective.

In a discussion with Stephen Wawrzyniak, Executive Director of the Strategic Alliance of Food Experts (S.A.F.E.) with 40 + years' experience in the food industry, Steve stated: "Slow acting rodent baits are frustrating to use and have limitations on effectiveness. These baits require time-consuming repeated feedings, sometimes resulting in rodents becoming bait shy. The need for a fast-acting, effective and safe means of rodent control, through rodenticides, is as necessary today as it was in years past, if not more so."

PMPs need something better from rodenticide manufacturers. For example, a more efficient bait that would require fewer bait applications, saving time and allowing for speedier control.

Summary

Rodents have been a problem in the food industry for many years causing contamination, disease, food damage and loss. Rodents are great survivors and will continue to cause damage and loss to the food industry. Although rodent infestations will continue to be a problem, a need for speed to control and to prevent rodent infestation issues is a must. It is important for the food industry to be in control of rodent infestations all the time and equally important for the PMPs to provide a rodent control service in an effective, efficient and economical manner.

Sources

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The late Ole Dosland, President of Quality Centered Consulting Services, Kansas City, MO has 40+ years' experience in the quality assurance, food safety and pest control aspects of the food industry. Uniquely credentialed by working the education, pet food, human food and pest control industries, he offers practical solutions with a long term impact. He is a columnist (Practical QA Solutions) for 10 + years for the Quality Assurance & Food Safety www.qualityassurancemag.com magazine and along with PCT articles has written over 100 publications.

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