

Nature in the Neighborhood – October 2025

Rats!

Scurrying around the blood-soaked dioramas and giant skeletons popping up on suburban lawns this October, you may find a red-eyed and sharp fanged rubber rat or two. Because of their perceived menacing demeanor, as well as their historic association with disease and decay, rats fit in rather nicely with Halloween.

Whatever the reason, many people have a strong aversion to and fear of rats. Let's face it, a rat isn't as cute as, say, one of its close relations: the squirrel. Rats have thin, hairless tails, not bushy fluffy ones, and long sinister noses, not dog-like snouts. They also live in dark places feasting on garbage, not up in the trees munching on nuts and berries. And they are usually not active during the day but only come out at night – the “witching hour.”

Others feel rats have gotten a bad rap. Contrary to popular belief, rats are clean, grooming themselves often, as well as highly intelligent (think of all those experimental mazes they have to maneuver in the name of science). They're also very social, playful, and are said to form strong bonds with pet owners. And, for the record, they likely weren't the main spreader of the Black Plague in the 14th Century; human fleas and lice are the more probable culprits.

There has been, however, a surge in rat populations in cities world-wide, due in part to climate change. As temperatures rise during the colder months, rats have more time to forage for food and raise young. Rat infestations are a real problem as they can damage infrastructure, contaminate food, and, because of the diseases they may carry, present a health hazard.

This has led New York City's mayor to call them "public enemy number one" and initiate an all-out war against them (though it is questionable who is actually winning, given the recent announcement of the resignation of his appointed "rat czar"). Given how quickly rats reproduce and their ability to adapt, NYC as well as other cities have come to realize that focusing on extermination is not the solution. Implementation of an integrated pest management plan that addresses the underlying conditions that enable rats to thrive is the best course of action.

The 2024 Boston Rodent Report highlighted the various causes of rodent infestation and emphasized that poor trash mitigation, storage, and removal was the main problem. "The key to quality urban rodent control is eliminating and limiting access to food, water, and shelter, all of which rodents need to thrive." The City has embarked therefore on a program to educate property owners and residents about proper trash storage.

While property owners and renters seem to believe that putting out bait boxes containing rat poison is what's needed, the report underscored that "sound science research has shown this practice, without the elimination of the rat's food sources, is essentially 100% ineffective."

Aside from being ineffective, those black bait boxes that you often see at the base of retail and residential buildings contain rodenticides that can have an adverse effect on other wildlife and potentially pets and children.

Typically, the boxes contain second-generation anticoagulant rodenticides (or SGARs) that are designed to kill rodents by preventing their blood from clotting. In other words, they cause the animal to slowly bleed to death. Unfortunately, these poisons have had unintended victims when wildlife, like hawks and owls, eat the rats that have consumed the bait. As it can take days for the rat to die, it becomes easy target for the birds.

As a result, many hawks, owls, and even Bald Eagles, have suffered a slow and painful death as a result of eating contaminated rats – including in our own neighborhood. For instance, a red-tailed hawk in Salem recently succumbed to rodenticide poisoning, resulting in the city pushing for a ban of SGARs.

In 2020, California passed the *California Ecosystems Protection Act of 2020* banning SGARs with just a few exceptions, such as for agricultural food production sites.

Here in Massachusetts, more than 250 concerned citizens flocked to the Massachusetts State House this past July to encourage legislators to support *An Act Restricting the Use of Rodenticides in the Environment* (H.965/S.644). Mass Audubon and MSPCA-Angell coordinated the event in order to garner political support for the bill that would phase out the use of anticoagulant rodenticides throughout the state and protect raptors, pets, and other wildlife. For more information on Mass Audubon's Rescue Raptors program, visit: massaudubon.org/rescueraptors.

In our neighborhood, Swampscott just rolled out a new pilot program to reduce the rodent population without using poisons: black boxes filled, not with rodenticides, but a nontoxic compound that interferes with the reproduction mechanisms of rats. In other words, rat contraception. A rat birth control initiative was launched in NYC at the beginning of the year. It is known as Flaco's Law, named after a beloved owl who had escaped from the Central Park Zoo and was later found dead after consuming rat poison. The success of that initiative is being evaluated, but there are indications of progress in the reduced number of rat sightings.

You can help manage rodent problems in our neighborhood without rodenticides by removing any sources of food rodents eat, such as bird seed and garbage, placing all trash in secure containers, and closing or repairing any exterior openings that may allow rodents to enter your home.

To safely respond to rodent problems, you should start with baited snap traps as they provide a faster and more humane death. If you hire a pest control company, you should choose a licensed provider that uses integrated pest management approaches and avoids relying solely on poisons. Question the company on its extermination methods and, as their automatic choice is often SGARs, specifically request they not be used.

Whether it's Halloween or not, some people are terrified by rats, especially if they're underfoot. As it happens, rats are terrified by what soars over their heads. By hunting rodents, hawks, owls, and other birds of prey turn out to be excellent natural pest control agents. It's ironic,

therefore, that by using rodenticides, we are inadvertently killing one of the best ways to keep rats under control in our neighborhood.

Perhaps, if we deal with the underlying conditions that attract and allow rats to flourish rather than resorting to rodenticides, then by next Halloween it will only be the decorative plastic red-eyed rats we encounter.

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