Think of any community, town or city in this country, and somewhere they are dealing with rats—specifically, the Norway rat. Having hitchhiked their way around the globe with people, rats cause damage and destruction that affects food production, ecological function and human health. Yet nowhere are rats more reviled than our nation’s cities—where large populations thrive on the waste generated by people each day.

To combat rat problems and respond to resident complaints, city governments undertake large-scale rat control. Yet despite their common goals and shared challenges, it is surprising that until recently, there was no network for municipal rodent control programs to easily interact. Therefore, in 2021 the Municipal Rodent IPM Working Group was formed to connect city rodent managers with experts who have practical skills and insights, including pest management industry representatives (manufacturers, consultants and applicators) and academics.

As you might envision, managing rats within large urban areas is highly complex, and not simply a scaled-up version of commercial or residential rodent Integrated Pest Management (IPM). Nevertheless, many of the concepts learned at the city level can offer useful insights to pest professionals everywhere.

COLLABORATE FOR SUCCESS. Perhaps the biggest challenge in urban rat management is that populations extend beyond property boundaries. Rats may be feeding at a restaurant you service but nesting in a nearby park and using the street sewer line to commute between the two. Collaboration allows all stakeholders to unite and address the problem on the scale at which it occurs.

When dealing with a rat problem, be sure to identify the sources of food, water and shelter that sustain the population, and work to mitigate each one. If you don’t have access to all components, collaborate with other pest management companies or the local municipality. If you are unable to collaborate, consider isolating your account from pest pressure with effective exclusion.

The spirit of collaboration should also be applied to sanitation issues, where the responsible party might be convinced to play their role by removing conditions that support rats. Alternatively, municipalities
might have the ability to use enforcement measures for non-compliance with local codes and sanitation violations. Working with others can offer unique solutions to otherwise unsolvable problems.

VISUALIZE WITH MAPS. Research has shown that rat populations are not evenly distributed in cities, but often clumped around resource-rich environments. Therefore, to identify and prioritize management zones, municipalities may combine data from active rodent sign (ARS) inspections and resident reports in an interactive city map. Two examples include the NYC Rat Information Portal and the City of Cambridge Rodent Sighting Heat Map.

Barcode technology and pest control software, as well as remote monitoring systems, can offer mapping features that show activity hot spots in an account. Devices with high feeding or capture rates should trigger inspections to identify a nearby entry point, harborage area, food source or other attractive condition. If you don’t use any of those technologies, writing capture dates on a facility map by hand can offer the same visual results.

STAKEHOLDER EDUCATION. Municipalities invest in multiple-language websites with rat management information, while some offer classes and other training opportunities to specific interest groups such as community gardeners.

To educate your consumers, keep in mind that every situation is different, so a standard rat management fact sheet is often not useful. Consider having your technicians suggest three actions customers can take to address sources of food and shelter — and prioritize those items in terms of importance. Offering a short list of site-specific recommendations is more likely to capture the customer’s interest and attention, and thereby lead to better outcomes — even if the list is only partially completed.

PUBLIC PERCEPTION. Municipalities are often scrutinized by a public that reflects a diversity of viewpoints and opinions, especially related to pesticide use. For example, city residents may have zero tolerance for rats in their neighborhood, yet equal intolerance of rodenticide use due to concerns for raptors (birds of prey) and pets living in the city. Rat management programs must be keenly aware of risky approaches that could lead to negative outcomes. Different management options that are situation-dependent must always be considered at the beginning stages of any program.

For example, in parks where raptors forage for rodent prey, municipal programs now utilize carbon monoxide or carbon dioxide burrow treatments instead of rodenticides. Municipalities also deploy bait stations with nontoxic monitoring blocks, or snap traps or remote monitoring sensors.

To avoid risks and improve public perception of the industry, train technicians to evaluate sites based on potential risks and consider which of the available tools best fits the situation. Are there children and pets on site? What tools would minimize exposure risks but also effectively mitigate the rodent problem? Too often, a standardized approach is used for every account despite differences in risk factors, sensitivities and even product efficacy at that location. Implementing a management plan that accounts for the location-specific risks and operational challenges will likely elevate your company’s standing with customers and minimize liability concerns.

EXPERIMENTATION & EVALUATION. Municipal rodent control programs face constant pressure from the endless hordes of rats that thrive in cities. At the same time, residents, politicians and other stakeholders place demands on programs to do more and address ever-increasing issues. This leaves municipalities searching for management tools that provide...
long-term rat control and creates a willingness to experiment with new technologies. To expand your rodent control repertoire, visiting manufacturer booths at local and national meetings and registering for events such as PCT’s Virtual Vendor Showcases provide opportunities to learn about new technologies.

Also, test new products at a subset of similar accounts and compare results with your current strategies, especially considering the advantages and disadvantages of new techniques for specific settings. Ask yourself: Did it reduce rat populations more quickly? With less risk? Was it easier to deploy? Did it use a different method that met with customer expectations such as non-rodenticide or non-lethal approaches? How did the price compare? What did your technician think, and did the technology teach them — and you — something valuable about rodent management programs?

**OPPORTUNITIES FOR PMPs.** Whether you work in a small town or large city, there is likely a local government agency that addresses public rat complaints. Consider introducing yourself and your company as a valuable ally in rat management (or general pest control). By working with municipal programs, companies with expertise in rodent control can be part of a larger effort to protect the health and safety of residents in their service area.

Matt Frye is a senior extension associate, New York State IPM Program, Cornell University; Ray Delaney is the environmental health program administrator, city of Philadelphia Department of Public Health; Bobby Corrigan is the founder of Bobby Corrigan Consulting; Jody Gangloff-Kaufmann is a senior extension associate, New York State IPM Program, Cornell University. The Municipal Rodent IPM Working Group was funded by the Northeastern IPM Center through Grant #2018-70006-28882, Accession Number: 1017389 from the USDA National Institute of Food and Agriculture, Crop Protection and Pest Management, Regional Coordination Program.