

Waging War on Pests
Devising a strategy that combines knowledge,
technology and chemistry can defeat even the toughest invaders
by Terry E. Walton

Pest management means considerably more than simply using pesticides and other weapons to kill insects and other small invaders. These kinds of efforts are only one part of a more comprehensive program to control the facility environment and prevent pest problems from developing and inflicting damage.

In most organizations, pest control is the responsibility of the maintenance department. In fact, various federal, state and local laws mandate that specified organizations maintain their own pest-control programs.

Facilities' pest-control efforts can be successful by focusing on several common small animals and birds that present the most persistent threat. These efforts include some combination of proven tactics to reduce the damage that pests can do to both buildings and landscapes.

When dealing with animal pests, perhaps a maintenance manager's best weapons are knowledge of pests' habits and movements, as well as a fair amount of persistence, patience and a good sense of humor. Unfortunately, in some cases, facilities simply may have to learn to live with the presence of pests and the problems they cause if the situation simply cannot be brought under control.

Mice and Rats

Controlling rodents is an ongoing effort. Managers and crews must have a successful strategy that includes being familiar with all physical aspects of the property. Managers must pay special attention to areas that can cause problems outside a building. These include but are not limited to:

- standing water
- creeks and streams
- dirty waste containers
- sewer drainage systems
- neighboring businesses
- excessive shrubbery.

Mice feed on stored food products and all kinds of seeds, including bird and lawn seed. Mice love dark areas, such as closets, garages, attics, crawl spaces, and any other areas where they can stay concealed and close to their food supply.

Once mice are inside of a building, workers can track them by locating their droppings where they are foraging for food. But beware: Large roach droppings can look the same as mice droppings, so workers should be careful not to confuse the two.

The key strategy in this instance is to remove anything that could serve as a home for mice around the outside of a facility. Grounds crews should keep weeds down and grass mowed closely -under shrubs and trees. Also, they should avoid storing mulch piles in the fall because warm mulch is a perfect place for

mice to spend the winter.

Rats will move into any structure. They are excellent climbers and can enter property by climbing up stucco, brick or wood siding walls.

Rats can enter a building through even the smallest point of entry, one that often is difficult to locate. Workers should pay particular attention to areas such as vent pipes, gable vents, spaces around soffits, the spaces between fascia boards, and any exhaust-pipe holes.

If rats cannot find an available opening, they often will chew their way into a building. They can be located by tracking their droppings, which often are about the size of a red or black bean.

Rodent-control methods usually consist of live traps, snap-shut traps, poisons and glue boards. Rodenticides are a common ingredient of rodent-control efforts, but one problem can occur with this type of product. The rodent can die within a wall or an inaccessible void, causing odors and a new set of challenges. Trapping often is an effective method of getting rid of these rodents.

Birds

Problem birds - pigeons, sparrows, geese, swallows, crows, ducks, woodpeckers, starlings, and blackbirds - can cause a host of problems for maintenance managers. Birds, especially pigeons, love to roost and nest in and around rooftop equipment, and foraging birds can damage buildings, equipment, landscapes and plants.

Many facilities use devices such as strips of metal spikes around rooftop equipment, building ledges, windowsills, and gutters. These devices are designed to make it impossible for any birds to land and nest on the surface. Scented repellants also are commonly used to keep birds away from the outside surfaces of facilities. These products emit scents that cause mild changes in the physiological state of the bird, confusing the bird and causing it to avoid the area.

Often, chemicals with these scents come in easy-to-use cartridges that fit into caulk guns, which workers use to apply the gel to areas where birds land and roost.

Another type of bird repellent comes in liquid form and works well when applied to trees or anyplace birds routinely roost and nest. Workers should be aware of one caution with using these types of products - they will soak into porous materials and discolor them.

Finally, facilities have used several sound devices successfully over the years. One popular type of device emits a shrill sound that scares away birds, while another type of device uses ultrasound. This device makes no noise that is audible to people, but the series of sounds it emits distresses birds and keeps them away.

Ants

Facilities must deal with many types of ants, including small honey ants, citronella ants, carpenter ants, acrobat ants, thief ants, fire ants, house ants, odorous house ants and pharaoh ants. Each ant species requires a different strategy for control. Some ants live outside of a facility, while others more often can be found inside.

A three-step approach can help control most ant problems. This approach includes baiting key areas inside of a facility, along with spraying and baiting the outside of the facility.

No doubt the surest method of control is the bait that ants carry back to the nest. Ants find this bait and bring it back to their nests and colonies, where other members eat the bait and die. The advantage of this method over spraying is that it destroys colonies and nests. Spraying, on the other hand, usually takes care only of the ants receiving the spray and leaves those back at the colonies untouched.

Cockroaches

A new trend for controlling cockroaches is the implementation of a multi-discipline strategy that can include vacuuming, baiting and trappings. In the past, most commercial and institutional facilities have used insecticides, but this method offers limited benefits. Vacuuming for cockroaches has become the method of choice by many pest management professionals in recent years, as not even resistant cockroaches can withstand direct physical removal through vacuuming.

Flies

When it becomes necessary to get serious about fly control, managers and crews should begin their efforts by seeking out the source of the problem. Interior areas and conditions to monitor include food preparation areas, dirty trash receptacles, areas where mops and dirty rags are left on the ground, and waste containers located inside a receiving area.

Exterior areas and conditions to monitor include large waste containers, drains, excessive clutter, spills on floors and pallets, areas of high weed growth and decaying organic vegetation.

When surveying a facility, managers should determine whether existing conditions are conducive to the presence of flies. Spraying, using flypaper strips and removing or cleaning the source that draws the flies is often the best method of combat.

The challenge in pest control is to determine the best method or combination of methods that produce the best results. The successful managers will be those who can orchestrate the methods, schedules and people to meet a facilities' pest control needs - and do it safely and cost- effectively.