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Environmentally friendly efforts help prevent pests, protect your facility

by Patrick T. Copps

From fuel-efficient cars to energy-saving light bulbs, efforts to “go green” not only benefit the environment, but pay off (sometimes literally) for the consumer as well. When it comes to greening your facility’s pest control program, the same concept holds true.

Environmentally friendly pest management techniques protect the environment because they often replace chemical alternatives. They also can

Sticky traps can efficiently and effectively trap and monitor crawling pests in non-dusty areas of a facility. Photo courtesy of Orkin.

Going green

benefit your operations in an even bigger way by keeping your grain products and employees safe from pests and the potentially negative effects of chemical treatments.

Developed in recent years with the help of new technologies, the green pest management methods available today work best when incorporated as part of Integrated Pest Management (IPM) programs. IPM programs take a holistic approach to pest management and emphasize multiple methods to effectively prevent and manage unwanted pests. They also look at the root causes of pest problems – most often pests' pursuit of food, water and shelter – and seek to remedy those issues first.

An important part of an IPM program, pest monitoring helps keep track of the type, number and location of pests in your facility. By observing pest activity, you can better identify potential problems before they become full-blown infestations. These techniques also aid in the removal of unwanted pests from your facility. Green pest monitoring devices include fly lights, sticky boards and pheromone monitors.

Fly lights – A fly light uses ultraviolet light to attract flying insects to a sticky board located inside the unit. Place fly lights in appropriate places inside entrances and locations likely to attract flies, such as near the door to waste handling areas or in break rooms. Don't forget to replace the sticky boards and light bulbs on a regular schedule for maximum efficacy.

Sticky boards – A favorite in the pest management profession, sticky traps can efficiently and effectively trap and monitor for crawling pests in your facility when used in warehouses or other "non-dusty" locations. Consider using sticky boards in pest "hot spots" (those areas likely to be frequented by pests and out of the way of employees) and place them underneath or behind equipment and shelves in storage areas, employee locker rooms and break areas.

Pheromone traps – Pheromone traps use synthetically replicated versions of insect pheromones, the secreted chemicals pests use to communicate with each other. Often used as a device to combat stored-product pests like Indian Meal moths, pheromone traps can be placed in a grid format in bagged-product storages or warehouses to track the pests' movement. Probe-type pheromone traps are designed for use in bulk grain storage to monitor for other stored product pests.

In some instances, trapping might prove insufficient to effectively manage a pest population. Depending on the type of pest targeted, there are other environmentally friendly pest management techniques that might be used as alternatives to traditional chemical treatments.

Repellants – Repellant dusts contain pyrethrins, which are compounds extracted from pyrethrum flowers, as well as silica gel, an inorganic compound that damages insects' exoskeletons. Pests retreat when they come into contact with repellants and often expire when their bodies dry out through desiccation, a result of a reaction to the silica material. When placed in cracks and crevices around the exterior of a building, repellants can assist in the management of ant problems.

Insect growth regulators (IGRs) – Like pheromone monitors, insect growth regulators use pests' own biology against them. IGRs use lab-created versions of insect hormones to disrupt the pests' lifecycle, preventing the insect from reaching maturity and reproducing. As a result, IGRs stop a pest population from expanding.


Finally, don't forget two of the most effective and simplest eco-friendly ways to prevent and manage pests: sanitation and facility maintenance. Both of these methods help prevent pest infestations by eliminating potential sources of food and harborage.

Sanitation – Sanitation can help hinder a pests' access to food and water,

and in doing so eliminate two of the reasons that pests inhabit your facility. Clean up spills of grain or other products immediately, and keep the areas under equipment free of debris. Fix roof leaks promptly, remove any sources of standing water and work with a maintenance professional as needed to make repairs in a timely fashion. Keep all trash containers covered, and remove waste from your property on a regular basis.

Facility maintenance – Ongoing facility maintenance can help keep pests outside where they belong. Make sure all windows and doors shut firmly, screens are tight-fitting, and that entrances are kept closed when not in use. Install weather stripping around all windows and doors as extra protection. Monitor for cracks or small openings in the exterior of your facility, and seal any openings larger than the circumference of a pencil with weather-resistant sealant.

As with all pest management methods, green techniques will be most effective when used to combat specific pests. Work closely with a professional well-trained in pest biology and behavior. The pest management professional should be familiar with your type of facility to ensure that the best control methods are selected for your needs. Also, encourage employees to take part in your pest prevention efforts. They can play an important role by helping with your sanitation and facility maintenance programs and promptly reporting any observed pest activity.

Consider greening up your IPM program this year. Your facility and the environment will see a difference. 

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