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McCloud is the Copesan Partner Serving Illinois, Indiana, Missouri, Iowa, Kentucky, Tennessee, Kansas and Alabama. Copesan is an alliance of regional pest management companies that are united as a single entity for the sole purpose of providing quality pest solutions to businesses with locations throughout North America.

Turn the Welcome Light Off to Unwanted Pests

By Dr. Eric Smith, Director of Technical Services, Dodson Pest Control, Lynchburg, Virginia

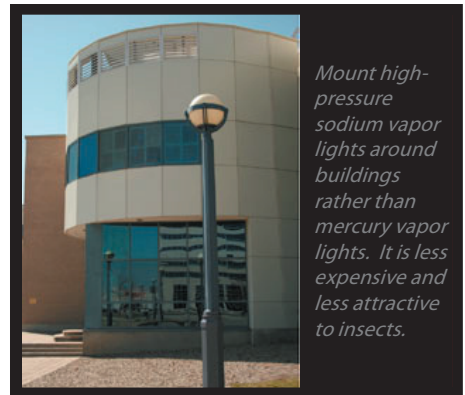
As the warm weather of summer blows throughout the entire country, it also brings with it night flying insects that are attracted to a facility's lights. To ensure your facility isn't a magnet to swarms of these pests, here are 10 light management tips you can implement around your facility to make your facility less of a nighttime attraction.

1. Find a new night light. Any kind of white light – including florescent, incandescent, mercury vapor or halogen – should not be used within 50 feet of the building. The best way to light the grounds around a facility is by mounting high-pressure sodium vapor lights, whose light is much less attractive to insects, on stand-alone poles.

If you need to use flood lights to illuminate a sign, make sure the sign isn't mounted on the building and is located as far away from the building as possible.

Many people are drawn to using mercury vapor lights because they are less expensive than sodium vapor lights, but sodium vapor lights are actually cheaper to run. So you will reach a break-even point on the cost.

2. Think safety first. For safety and security reasons, the exception to not mounting lights on buildings is in high-traffic entrances, especially ones that have steps. In these areas the best solution is to mount a sodium vapor light on the building on the hinged side of the door so that it will shine on the area where people walk.



Mount high-pressure sodium vapor lights around buildings rather than mercury vapor lights. It is less expensive and less attractive to insects.

3. Hide the white light. Keep white light from escaping from inside the building. Since all white light attracts bugs, quite often doors need to be sealed or repaired and weather seals added to stop the light from coming out. Also, the boots on dock doors should be repaired, if necessary, and any holes in the walls need to be sealed.

4. Screen callers. All windows should be properly screened if they can be opened. Vents and air intakes

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and dock doors need proper screens if they have to remain open for ventilation purposes or if light is visible through them at night.

5. Install vestibules. In high traffic areas, such as main entrances, it is best if you have a vestibule so people, and insects, don't enter directly into lighted buildings at night – or anytime.

6. Tint entrance windows. By tinting the windows on doors, much less light shines through the door so it isn't as attractive to bugs, but you can still see the people inside.

7. Turn off the white light. Since white light is like a searchlight to bugs, any area where there is an opening to the outside, whether it is screened or not, should have sodium vapor lights for the first two rows of interior lights.

8. Use an air curtain. Air curtains used on people doors and dock doors can help keep insects out by blowing the air to the outside whenever the door is opened. They should be wired to come on automatically whenever the door is opened. These will not work for buildings or areas of buildings with negative air pressure.

9. Use interior light traps. A properly designed interior insect light trap program should be used to help capture flying insects that manage to get into the facility. Placement of these light traps is critical to their effectiveness.

10. Contact Copesan. If night flying insects are attracted to your building and your feelings aren't mutual, contact Copesan to help you develop a plan to dissuade your unwanted nighttime guests from your facility's nightlife.



Phorid Flies: What do they Cost?

By Richard Berman, Technical Director, Waltham Services, Waltham, Massachusetts, and Pat Hottel, Technical Director, McCloud Services, Hoffman Estates, Illinois



Measuring only 1/8-inch or less, Phorid flies are sometimes confused with fungus gnats and fruit flies. These flies may be small, but getting rid of them

could require tearing open walls, ripping up floors and inspecting the insides of plumbing lines, leading to soaring costs and a lot of inconvenience for facilities.

Like many other flies, Phorids breed in and feed on most decaying organic matter. But Copesan Technical Committee members find that, more often than not, Phorid flies select waste plumbing

leaks as their preferred breeding sites. Phorids represent a serious health threat when they fly from putrid decaying matter onto clean sterile surfaces and foods.

As with all fly problems, the primary solution to eliminating Phorid flies is not chemically based, but relies more on house-keeping and correcting plumbing problems. Using only pesticide

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applications without fixing the underlying reason that the flies are present will result in frequent chemical applications and a revolving door of different pest management firms trying to fix the problem by only treating the symptom.

Small flies, big problems

The following case studies describe the measures that may be necessary to fix a Phorid fly problem and the associated costs. The costs could amount to tens of thousands of dollars, as well as an interruption in business, which could be as costly as the repairs, if not more.

Surgical intensive care recovery room. Waltham Services, the Copesan Partner in the Northeast, worked with a major Boston-area hospital that was forced to take a surgical intensive care recovery room out of service and seal it off because adult Phorids were spreading throughout the intensive care recovery suite. Opening a wall revealed a plumbing leak and a cloud of flies.

Hospital kitchen. In another case, tearing up a small floor section in a suburban hospital kitchen revealed leaking pipes

and a muddy organic accumulation in the soil beneath the floor slab, breeding Phorids.

Nursing home. A Connecticut-based nursing home had a Phorid fly problem so bad that the flies were leaving the basement area and spreading throughout the facility into patient rooms. Elderly patients sleeping with their mouths open were being found with flies on them.

The nursing home kitchen had to be disassembled and moved to the dining room space, and the entire floor needed to be ripped up. Opening the ground beneath the kitchen floor revealed multiple old cast iron pipes that had been leaking organic matter into the soil for years. There were hundreds of empty fly pupal cases per square inch of soil. The cost to temporarily relocate the kitchen, jackhammer the floor, fix the broken pipes, remove contaminated soil and replace the kitchen was reported in the \$25,000 to \$30,000 range.

Facility grease traps. In Illinois, McCloud Services, a Copesan Partner serving the Midwest, had two instances with clients where grease traps were responsible for the Phorid fly infes-

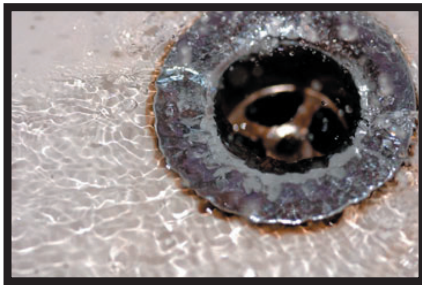
tations. In one situation, the Phorids were breeding in the soil of a crawl space. The grease trap in this facility had leaked and contaminated the soil underneath the kitchen. The contaminated crawl space soil needed to be removed for a total cost of \$10,000.

In the other situation, Phorid flies were getting into a hospital operating room, and grease traps were once again the culprit source. The hospital had a large internal grease trap in the basement. Phorid flies were breeding inside the grease trap and escaping through tiny gaps in the grease trap lid. Periodically, the trap was opened for pumping. Large numbers of flies escaped during the pumping operations and quickly spread to various areas of the facility. The solution in this facility was to reroute the plumbing to an exterior grease trap, and it cost \$500.

Contaminated soil. Another Midwestern Copesan Partner, Presto-X-Company, had a client with a contaminated soil situation that ended up costing \$75,000 in removal and repairs.

One common thread in these instances is that most of these

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facilities are 50 to 75 years old or more, and the fly problems appeared in an older part of the facility. Older facilities are especially at risk because cast iron plumbing becomes brittle with age and will often crack or break open, allowing leaks when floors, walls and buildings shift ever so slightly and exert pressure on the pipes.

Beyond a Band-Aid solution

As you can see, all types of facilities are at risk of having major Phorid fly problems. So what steps should you take if you suspect a problem at your facility?

Inspection and proper identification. All fly control begins with the inspection and proper identification of the species involved. Copesan has over 100 technical experts who are experienced in identifying Phorid flies and the source of these fly problems.

The thorough inspection process involves client feedback. Client reports of leaking drains, pipes, backed up sinks and off odors can often lead directly to the source of problem.

Fixing the problem. Leaking pipes and drains allow organic material to accumulate in the soil beneath cement slabs. The ground becomes so enriched with organic material that the ground becomes the ideal breeding medium for flies.

Finding, caulking and sealing these tiny cracks and openings

may provide temporary relief, but ultimately the damaged pipes must be repaired or replaced and the contaminated soil removed and replaced with clean material, if necessary.

Getting access to the source of the leaks many times requires tearing open walls, ripping up floors and inspecting the insides of plumbing lines with a camera. Drilling pilot holes in floors and opening small wall sections to look for leaks and odors should be done first before the more invasive steps of removing entire floors and walls for repair.

Working together. With a good inspection, a curious, questioning mind, and cooperation between your Copesan Service Specialist and facility management, Phorid fly problems can be eliminated.



Copesan Experts Speak at National IPM Symposium

Eight members of the Copesan Technical Committee (CTC) made presentations at the fifth National IPM Symposium, “Delivering on a Promise,” held in St. Louis on April 4-6.

The symposium addressed more

than 650 people from 23 countries on state-of-the-art strategies and technologies to solve pest problems in agricultural, recreational, natural and community settings.

The Copesan Technical Com-

mittee’s two-hour mini-symposium, “Urban Integrated Pest Management In and Around Structures,” educated its audience on a variety of integrated pest management (IPM) techniques used to control the structural pest management industry’s

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most common pest groups: ants, cockroaches, birds, bed bugs, filth and small flies, stinging insects and stored product pests.

Why did Copesan get involved?

Pat Hottel, Technical Director for McCloud Services in Hoffman Estates, Illinois, attended the fourth National IPM Symposium and felt the urban pest management industry was underrepresented. While the symposium highlighted many urban talks involving IPM in schools, none addressed the IPM work that is going on in food plants, restaurants, homes and various other facilities.

The symposium was also a unique opportunity to get in front of a diverse audience, including a mix of government, academia, public service, pest management, agricultural and activist groups.

“Copesan Technical Committee members represented the commercial pest management part of the world well in their

presentations,” said Jim Sargent, Copesan’s Director of Technical Support and Regulatory Compliance. “I was so pleased that people like government officials and education administrators were asking so many questions. It was as though they just discovered that we existed.”

Helping to educate the diverse groups at the symposium was the other reason that Hottel organized the Copesan Technical Committee presentation.

“At the last symposium, some of the groups that were talking about IPM in schools didn’t realize how much IPM is going on in other areas,” Hottel said. “Others had an incorrect view of our industry and weren’t aware of how much the industry was embracing IPM strategies. So we wanted to reach those groups and educate them on urban IPM programs.”

Hottel also found benefit in the wide variety of opinions that were expressed. “While I may not agree with everyone’s opinions, I feel that it is important to know

what other groups are thinking and why,” Hottel explained. “It was a broadening experience to have these various groups interacting and gaining knowledge from other points of view.”

Chris Arne, Technical Trainer at J.C. Ehrlich Co., agreed. “I appreciated the diversity and wide spectrum of people who attended the symposium because there was a lot of positive and interesting dialogue in all directions,” he said. “Most people were open minded and willing to listen to the various perspectives and concerns that were presented.”

To his surprise, Mark Sheperdigian, Vice President of Technical Services for Rose Pest Solutions in Troy, Michigan, took a nugget home from a woman in public service who he completely disagreed with about the makeup and administration of IPM.

“She quoted a profound thought: ‘The people who run the world are those who show up,’” Sheperdigian said. “In other words, if you are not bringing

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ideas to the table and are not willing to help to implement these ideas, you aren't going to be in charge of the outcome. This is an admonition to all of us in urban pest management that we better start participating or our ideas aren't going to be the ones implemented."

That is why it was so important for the Copesan Technical Committee to be involved in a symposium

like this where there can be a dialogue with and an education of varied, yet influential groups. Other Copesan Technical Committee members who presented were Dr. Anil Menon of Wil-Kil Pest Control, Keith Willingham of Western Exterminator, Jeff Weier of Sprague Pest Solutions, and Earl Hallberg of Presto-X-Company.

The evaluations at the end of

the conference showed that people wanted to hear what Copesan had to say because the greatest response from participants was that there needs to be even more information on structural and urban entomology.

To help fill this need, the Copesan Technical Committee is planning to organize another session for the sixth IPM Symposium in 2009.



Bed Bugs are Back

By Dr. Anil Menon, Technical and Training Director, Wil-Kil Pest Control, Sun Prairie, Wisconsin

Over the last four or five years, bed bugs have been making a strong comeback. Considered one of the biggest pest problems before the 1940s, bed bugs were rarely seen in the United States for nearly 50 years. But today, the cute children's adage: "Good night. Sleep tight. Don't let the bed bugs bite." is resurging once again as a reality.

There are many theories why bed bugs have reinvaded bedrooms in the United States, and the top ones include:

- Increased global travel. Increased international travel and immigration have been widely blamed for reintroduction of these parasites.
- Change in available pesticides and pesticide use pat-

terns. With integrated pest management, homes and hotels are only treated if necessary and no longer sprayed as a matter of routine, as was common in the 1950s. Effective chemicals, like DDT, also have been phased out.

- Lack of public awareness of the seriousness of the problem.

Get to know your roommates

Bed bugs are small, brown, flat, oval-shaped insects that are less than a ¼" long. They feed on the blood of humans, small animals or birds and can live for up to a year without a blood meal. These fast-moving bugs usually come out at night and hide during the day. Females can lay up to 200 to 300 eggs during their lifespan of a year.

The greatest accumulation of bed bugs will be in areas where people sleep or rest at night. While the bedroom is a hot spot for bed bugs, they have also been found in places like living rooms where people lounge or watch TV for long periods of time.

Where do they come from? As skilled hitchhikers, during travel, they'll crawl into luggage, clothes or anything that is transported and stay there until people reach their homes. They'll also cling to furniture and mattresses so care should be taken when buying these used items.

The good news is that bed bugs have not been implicated in the transmission of any diseases, and most people have no reaction

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to bed bug bites and require no treatment.

The bad news is, for some people, these bites can cause itching, redness, rashes or serious allergic reactions.

Bed bugs also cause emotional problems for people. Since bed bugs used to be associated with unsanitary conditions and low-income housing, many homeowners are embarrassed and stunned when bed bugs are found in their house. The reality is that bed bugs have been found in

the cleanest of homes, hotels, apartments, dormitories, condominiums, cruise ships and other facilities.

Showing them the door

The first step in getting rid of a bed bug infestation is positively identifying the bug. If you are in doubt, contact Copesan or your local Copesan Service Center for a positive identification. No treatment should be performed unless there is evidence that bed bugs have taken up residence.

During treatment, every crack and crevice of an existing or potential harboring site is treated. In most situations, but depending on the degree of infestation, the treatment is focused mainly on bedrooms and living spaces.

Sweet dreams

If bed bugs are found in your home or facility, contact your local Copesan Service Center to help you get rid of your unwanted nighttime guests so you can “sleep tight.”



Information in this publication was researched and prepared by highly regarded experts within the pest management industry that are part of the Copesan Partnership. Copesan has more technical expertise located throughout North America than any other pest management firm. The IPM Update is a small sampling of that knowledge and expertise we provide to our clients.

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