

Time for Fall Invaders

While the weather is gradually changing now and during the months ahead, many kinds of pests will begin looking for a more suitable place to spend the fall and winter. Don't let your home become an Airbnb for these unwanted 'guests'!



Pests enter homes and other buildings out of instinct—following cracks and crevices to look for a spot protected from rain and cold. But once pests get inside a little, they often mistake the warmth and lights further indoors for spring-time conditions. They will

gradually creep deeper into homes rather than staying near the exterior.

Then during late fall, winter, or early spring these pests start dropping into our living areas. Most will eventually dry out and die indoors, but they can

become a real problem flying and crawling about, staining curtains, stinking up the house, spoiling food, etc. Some even set off smoke alarms when they cluster inside these devices.

Common pests that work their way indoors in the fall include the new *Asian lady beetle* and the even newer *stink*

bug, cluster flies, boxelder bugs, crickets, elm leaf beetles, overwintering wasp queens, clover mites, and others. Ants sometimes move their entire colonies indoors. *Mice and rats* also are common invaders in the fall and winter.

Our continuing treatments are needed to prevent fall invasions, so call us if you are not already using our regular professional services. Of course, whenever you see a gap around a door, or crack or other opening in your home or other buildings, take steps to eliminate these openings to further thwart these invaders.

Oh Rats! Oh Mice!!



As the weather begins to cool during the fall months, rats and mice start moving indoors in larger numbers, looking for food and dry, protected shelter. We receive calls for rodent control throughout the year, but these pests cause far more problems now and during the months ahead than at any other time. Even homes and businesses that are normally rodent-free can start having problems.

Rats and mice *eat and contaminate a good deal of stored food* with their urine, numerous droppings, and their shed hairs. They also *damage property* by chewing and digging. In addition, about 25 percent of all fires of unknown cause are due to rats and mice gnawing on electrical wires. In fact, *house fires* tend to occur most frequently in autumn

when rats and mice move indoors seeking shelter.

Rats and mice also *transmit a wide variety of diseases*. More than 200 kinds of disease-causing microorganisms (including those causing salmonella food poisoning, hantavirus, murine typhus, and plague), as well as *parasitic worms* (such as those that cause trichinosis) are commonly associated with rats and mice. Rodents also can have *blood-sucking insects and mites* feeding on them, including fleas, ticks, mites, and lice. These blood-suckers are one of the ways many disease-causing organisms get transmitted from rats to people and pets.

Not all mice and rats are infected with all diseases, but every rat and mouse is infected with some of them. The fact that they can transmit these diseases to us means that if you or your neighbors or friends have them, it is important to call us to control them.

Pest Prevention Tip of the Month

Some people buy moth balls or fresh cedar wood and place them in closets, hoping it will either repel or kill fabric pests. Unfortunately, these are useless when used this way. The vapors must be very concentrated to even repel pests, so it only works in an airtight trunk or sealed box.





Zebra-Striped Clothing?

Last issue we reported new research that shows a zebra's stripes help protect it from biting flies that suck up blood and transmit diseases. Could zebra stripes possibly help protect people from biting horseflies?

To find out, a study was done with mannequins. One was painted brown, one beige, and one had zebra stripes—white stripes on a black background. Compared to the zebra-striped mannequin, the beige mannequin attracted *twice* as many horseflies, and the brown model attracted *10 times* as many horseflies. Maybe we'll soon see more zebra-striped clothing in stores?

Giant Honey Bees use "The Wave"

A honey bee in Southeast Asia, called the giant honey bee, practices "shimmering." This is similar to what we know as the Wave practiced in stadiums around the world, where people stand up, wave, yell, and sit down in a synchronized, traveling wave.



Giant honey bees are different than our honey bees in that they cluster to form a blanket around the outside of their nests. Within a split second, they all flip their abdomens upwards, creating a wave-like pattern across the outside of the bee nest. Shimmering is triggered when predatory hornets fly towards the nest. The hornets normally would eat the honey bees, but the shimmering response acts as a defense mechanism. As soon as the honey bees shimmer, the hornets seem to be confused and fly away from the nest.

Entomologist Barbie Now Available

Barbie Mattel Toys has rolled out a new line of *occupational* Barbie dolls, including a zoo doctor, an astrophysicist, and an entomologist! Each doll comes with relevant accessories useful for that occupation. The entomologist is even outfitted with a small magnifying glass that can magnify insects. Now available, just in time for the holiday season!

Back-to-School Bugs



As our children go back to school in September, be aware that they may encounter a variety of pests there, and some of them they may unknowingly bring home. The most common pests brought home are *head lice*, which are most often caught from head-to-head contact with another child who has lice. (Through hugs, selfie photo taking, etc., and less often by sharing combs, coats, etc.)

Cockroaches at school can crawl into a backpack, box or bag and be transported home. Increasingly, even *bed bugs* are being brought home from school, although they are probably more often brought home in a suitcase, from a workplace, shared car, or other place that is infested.

These kinds of bugs need to be eliminated from our own children, and in our own homes, so that our children don't unknowingly introduce the pests to other children at school.

Light Pollution Affects West Nile Virus

West Nile Virus is transmitted to people when an infected mosquito bites us. The mosquito begins carrying the virus when it bites an infected animal, such as a bird—often a house sparrow.

New research unexpectedly shows that house sparrows in "light-polluted" urban areas, such as the light used along streets and in parking lots, remain infectious for *two days longer* than house sparrows who spend their nights in natural dark conditions.

This longer period that house sparrows can pass on the virus to biting mosquitoes increases the potential for a West Nile Virus outbreak by about 41%, according to mathematical models. That is a huge increase that greatly increases the chance for West Nile Virus outbreaks.

It is still not understood why the virus remains active longer in house sparrows that live around artificial lights. A different study has shown that zebra finches that are stressed (a result of road noises, light pollution, etc.) are more likely to be bitten by mosquitoes. The researchers suggest new lighting technologies be developed that are detectable to humans and not wildlife.



Ladybug Swarm Detected by Radar



In June a giant blob moving over Southern California was detected by weather radar. The blob was at first unidentifiable, but later turned out to be an enormous swarm of *ladybugs*. This ladybug 'cloud' was an amazing 80 miles wide and 80 miles long, flying at 5,000 to 9,000 feet.

Radar has become more sophisticated in recent years. Through 'super resolution' it can detect things that never would have shown up before. Among other things, in recent years radar detected a huge cloud of *bugs* flying over southern Illinois, southern Indiana, and western Kentucky. Recently *bats* were detected emerging from their colonies at dusk by the National Weather Service in San Antonio, Texas. In Ohio, "curious expanding doughnut patterns" turned out to be thousands of *birds* (martins) taking off from their roosting sites to forage for insects.

What will we see next?