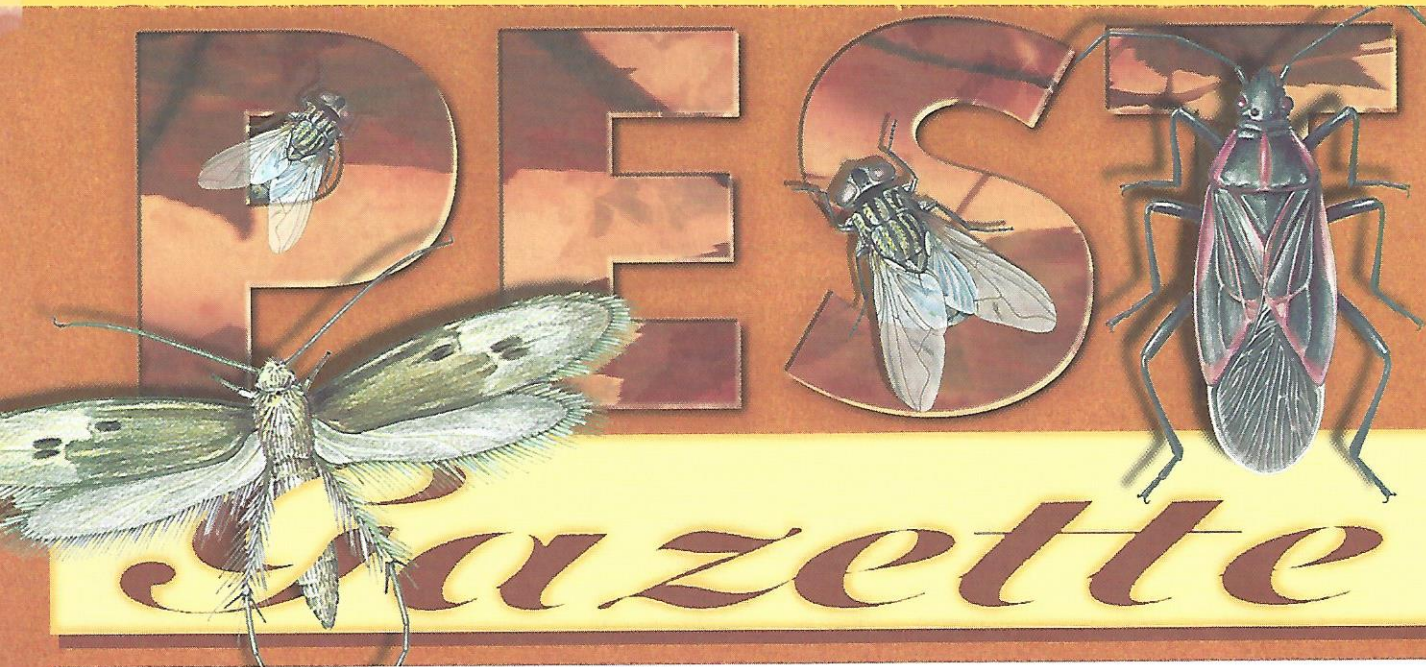


A-1 Pest Control Presents



Just like us, many pests come indoors in the Autumn.

As days grow shorter and temperatures begin to fall, a wide variety, and sometimes very large numbers, of pests start coming into our homes to settle down for the coming winter. Rodents, beetles, bugs, and flies may suddenly show up inside our houses by the tens, hundreds, or even by the "hundreds of thousands," as often occurs with cluster flies or face flies.

Many of these usually do little or no real or direct harm to us, our buildings, or our health, but they can build up to unbelievable numbers. They seem to be everywhere and in everything. They can become active during warm spells in winter, and usually become a serious nuisance again when they try to find their way back outside next spring.

Some of these pests can cause a bit of a mess but not much real damage, like boxelder bugs that leave

reddish stains on furniture, floors or walls where we mash them. These can also be present in very large numbers, and their crawling over everything can be annoying.

Rodents and other urban wildlife can pose serious health risks by harboring and spreading diseases such as rabies, plague, or hantavirus. Many of them can harbor fleas, mites, and ticks that may bite humans as well. They can often cause a lot of damage to structures by chewing or tearing holes in walls, doors, or screens, and damaging or contaminating our food and clothing. A few of these pests may even bite us or our pets.

If you start having problems with such autumn pests, we can help you identify, survey for, and control them using an Integrated Pest Management (IPM) approach. Call us for information or assistance.

Yellowjackets can be a serious nuisance and a health threat this time of year.

As the days get shorter and the weather cools down in early fall, the queens of many species of yellowjackets stop laying eggs. New queens emerge, mate and find protected sites, under bark or deep in the leaf litter, to stay in a quiet "diapause" over the winter. The old queens die, and each colony stops functioning as a unit. The remaining living yellowjacket workers stop foraging for the colony and go out more often, completely on their own, although many may return to the same old colony nest every evening. They are strongly attracted to sweets or syrups, such as that left in the bottoms of soda cans. These and other sweet things in and around garbage cans or bags can draw dozens or even hundreds of such pest wasps. Since they no longer have a colony to provide for, these yellowjacket workers tend to "hang around" any

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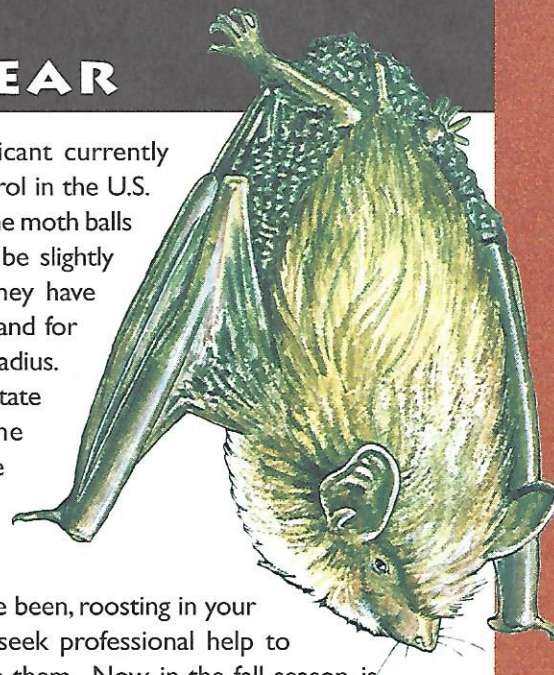
GIVE BATS THE BOOT NOW; AND KEEP THEM OUT NEXT YEAR

If you've heard scratching and fluttering in your attic this past summer, your house might have been "home" for one or more families of bats. Most species of bats are insect feeders, and are usually thought of as being "good" animals that eat lots of insects, many of which are harmful to us, our crops, or our property. Most species do no direct harm to humans, and many bat species are protected by local, state, national, or international laws or treaties. Having bats in or near your house can be a good thing. Most of the 45 species of bats that occur in the U.S. eat large numbers of night-flying insects, including many pests. Bats are also a very important part of our world's natural ecology, and they can be fun to watch as they fly around a street light catching insects.

On the down side, bats' droppings are an excellent medium for *Histoplasma capsulatum*, a fungal pathogen sometimes fatal to humans, to grow and produce lots of spores. There is also the very slight, but still real, chance of a risk of rabies if you contact saliva from one of those bats. The Rabies Section of the Centers for Disease Control and Prevention (CDC) in Atlanta, GA, has estimated that far less than 1% of any given population of bats in the U.S. is likely to be incubating rabies virus at any particular time. However, if you did contact saliva from such a bat, the risk would be both real and very significant. Current anti-rabies treatments and human diploid cell vaccines are very effective, if given in time, and are not the painful ordeal of a few decades ago. They involve only a few (five or six) shots, given over 21 to 28 days, with none greater than 0.5 mL in volume. This is a great improvement over the old 1.0 mL per shot duck embryo vaccines, that were given daily for 14 to 21 days.

There is no toxicant currently labeled for bat control in the U.S. Although naphthalene moth balls or moth flakes can be slightly repellent to bats, they have only limited effects and for a only very short radius. The fumes would irritate people living in the house long before they would build up enough to actually drive the bats out.

If bats are, or have been, roosting in your house, you should seek professional help to remove and exclude them. Now, in the fall season, is the best time to take steps to bat proof for the coming year. The young of most species of bats in temperate zones will be fully developed and able to fly by the middle of September in the northern hemisphere (or March, in the southern hemisphere). They leave their roosts each evening to accompany their parents, or on their own, in search of food. A pest management professional (PMP) trained in bat management can observe their exits, seal shut all but one, place a one-way flap or chute over that last opening for a few days, then finally close it, and seal it shut. He or she should make at least one follow-up visit, after a few days, to be sure the removal and exclusion efforts have been complete and successful. This follow-up visit would also be a great time for the PMP to go into the attic or other roost sites to disinfect, clean up, and remove all bat droppings (guano) that have built up while the bats were roosting there.



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sources of sweets they find for most of the day. Some become more aggressive than they were before. They may even try to "protect" their new food sources, just like they used to protect their colony's nest. That can lead to people being stung.

The first step in solving this problem is to clean up all spilled sweets or any decaying organic materials thoroughly, placing all soda cans and anything similar in tightly-closed heavy plastic bags. Wash and rinse all solid surfaces and food or drink serving utensils frequently. Keep all sweet foods, drinks and fruits covered until they are about to be eaten.

You need help from a professional pest management company like ours. We can survey the situation, provide immediate knock-down treatments if needed, advise on any sanitation or exclusion improvements that might help, and treat garbage areas and containers with a stronger, more persistent formulation of a properly labeled residual pesticide than you can purchase or use as a homeowner. We also have the professional expertise and specialized equipment needed to correct such problems quickly and efficiently. Control of stinging insects, especially large numbers or nests of them, should be left to properly certified and equipped professionals. Our technicians have all the necessary training, experience, tools, and if needed, the chemicals to eliminate these pests. We're waiting for your call.



When Furry Little Houseguests Scurry Inside



This is the time of year when many creatures normally found outdoors come inside for the winter. They like the warmth and often help themselves to foods stored in our pantry, such as boxes or bags of cornmeal, nuts, cereals, or dry pet food.

These furry little creatures can do a lot more harm than just being a nuisance. They often chew holes through food packages, walls, boxes, furniture and even electric wiring. Several wild rodents that come into homes in the autumn or winter spread strains of Hantavirus that sometimes kill people. The biggest source of this virus

is the very wide-spread, yet harmless-looking Deer Mouse. Wild and domestic rodents have been reported to harbor and spread as many as 200 human diseases. In many urban and suburban settings, Norway Rats may live mainly outdoors in spring and summer, but come inside in the fall and winter. In warmer coastal and tropical areas, Roof Rats may live mainly outside during wetter seasons and move inside during drier seasons.

House Mice have recently been shown to give off quite a lot of an allergen (called Mouse Urinary Protein, or MUP) in the hundreds of tiny micro-droplets of urine

they deposit every night as they travel throughout their territory. They may interrupt our internet access and even start fires by chewing electric wires. National fire protection authorities estimate that more than one-fifth of the "fires of unknown origin" in the U.S. are caused by rodents' gnawing matches or wiring.

▶ ▶ ▶ You can help prevent these problems by ▶ ▶ ▶

- 1 Cleaning up thoroughly and often any spilled food, garbage, pet food or grain that might attract rodents. Don't forget those Fall decorations hung on doors or walls, and don't leave food or water out in a pet's dish overnight.
- 2 Keep all garbage in tightly-closed, metal cans and keep the cans and area around them clean as well.
- 3 Clean up and remove all trash and rubbish especially near your buildings.
- 4 Be sure all outside doors, windows and vents fit snugly, with no gaps, and are kept closed, especially at night. A mouse needs only a 3/8-inch crack or hole to get inside.
- 5 Seal up any hole or crack in the outside of any building that is big enough for a rodent to enter. Pay special attention to places where wires, pipes, or other utility lines enter a building.
- 6 Keep plants and shrubs trimmed back at least 12 inches from the outer surface of any building. These can provide rodents food, shelter, and an easy way up to higher entry points. Rodents climb very well.
- 7 In urban settings, trim back or remove any extensive plantings of low-growing shrubs, especially Taxus or Junipers. Norway rats have a strong tendency to establish extensive outdoor burrows under these two types of shrubs.

Call us today so we can help you detect, survey for and eliminate rodents from your home.

BUGS THAT COME IN FROM THE COLD

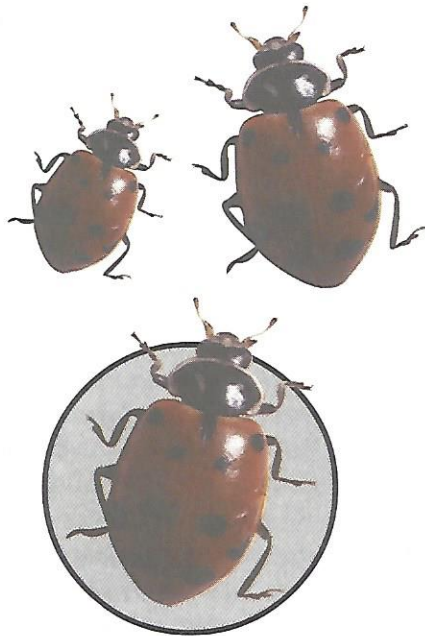


CLUSTER FLIES

One crisp fall morning, you open a window to let some fresh air into your room. Suddenly, you see several hundred “dead” flies between the window and screen. While you’re staring at them, a few flies begin to move around. They’re not dead! You slam the window shut, hoping none of them get into your house! What kind of flies are these and why are there so many of them? Why are they coming back to life?

Those flies are probably Cluster flies and every autumn, they become pests of homes, schools, hospitals, and commercial buildings throughout much of the United States. Cluster fly larvae feed on a common species of earthworms during the summer. Near fall, the last summer generations of adults emerge from the soil and look for a nice, warm place to hibernate, i.e. your attic, wall voids, or window sills. These hardy little insects can travel more than a mile for a suitable overwintering site.

Cluster flies overwinter and emerge in the spring to breed and lay eggs on the soil surface near the earthworms that the larvae then infest. Overwintering cluster flies are the most troublesome because of their sheer numbers. They can become active again during any warm spells in winter, and again in early spring, and try to find openings to go back outside.



LADYBUGS

About the time of the first frost, Ladybugs (Ladybird Beetles) may also come into your home through any crack, crevice, open window, or hole. They come in and remain inactive until spring, and do not cause any big problem except for their presence, sometimes in great numbers. They will become active when it gets warm again and try to find their way back outside, where they continue their very helpful work of eating lots of other insects, especially several kinds of major plant pests. They may also become active during any unusually warm periods during the winter. They will often fly to windows or lights. Some kinds of Ladybugs, such as the Asian Ladybug, can come into a house literally by the thousands. That can be very disturbing to people living in the house. The best thing to do when they become active in the spring is to help them get outside again, alive.

BUGS

Several plant-feeding “true” bugs sometimes come into houses in large numbers. These include the Boxelder Bug, the Western Conifer Seed Bug, and several different “stink bugs.” Infestations of these bugs are a direct result of their building up a large population on their host plants near the home they came into. Some of them will fly to outside lights at night, then come in unnoticed when a door or window is opened the next morning. Most of these are large enough to be noticed soon after they come inside.

The best control measure for each of these overwintering pests is exclusion, by sealing up all cracks or other entry points, and possibly by applying a residual chemical barrier to deny access to exterior cracks or holes that cannot be effectively closed.

If you notice lots of Cluster flies, Ladybugs, or other overwintering bugs in your home, call us and we’ll help you identify the pests, evaluate the problem, and help keep them out in the fall when they tend to look for likely spots to overwinter.

In the meantime, you can sweep or vacuum these pests from the window or attic and dispose of them. If you use a vacuum, remember to remove the bag when you are finished, seal it in a larger plastic bag, and dispose of it with your normal trash or garbage.

