



In Autumn, schools open and children bring you homework (and maybe head lice, too).

Head lice are easy to spread. One child can bring home enough to spread it to the whole family. Lice are rapidly spread by sharing hats, scarves, and combs and by direct head-to-head contact, which happens often while kids are playing. Lice can't jump, fly or run very fast. Their eggs, usually each one glued to the base of a hair shaft, are called nits, and may live for about 24 hours after they, and the hair they are on, is removed or falls from an infested person's head. Individual examination of those suspected to be infested with head lice, followed by the removal of lice and nits with a fine-toothcomb or tweezers, combined with medical treatment and shampooing are the most effective strategies to get rid of such pests. Although the treatment of head lice is an individual medical action, we can help you identify

them and other similar pests as well as provide you or school authorities with information about lice and other autumn pests. We can also help control many of them; even the unexpected ones like bed bugs.

Other pests, such as ladybird beetles, cluster flies, and box elder bugs, are not harmful to us, our structures, or our health, but they can build up to almost unbelievable numbers and become a real nuisance.

Rodents coming in for winter can carry and spread diseases, such as plague, leptospirosis or hantaviruses, and may be infested with ectoparasites like fleas, lice, or ticks. Some of them may even bite us or our pets, chew our furniture or wiring or contaminate our clothing or furniture. Mouse Urinary Protein (MUP) has

been shown in recent medical studies to cause allergies and to make some allergies you may already have worse.

(See expanded information on the above pests elsewhere in this gazette.)

If you have problems with unwelcome visitors from school or from the outdoors contact us. We are ready to help you identify, survey for and control them using an Integrated Pest Management (IPM) approach.

Bats

As you get home late one evening, you look up and see a couple of very small dark figures fall down from under your eaves and fly away with fluttery movements. Could they be bats? Could they be roosting in your house? Yes, is the answer to both questions.

The presence of bats can be a good thing. Most of the 45 species of bats which occur in the U.S. eat large numbers of night-flying insects, many of which are pests. Bats are also a very important part of our 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. 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 the 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 (5 or 6) shots, given over 21-28 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, which were given daily for 14-21 days.

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Bugs That Come In From The Cold

Ladybugs



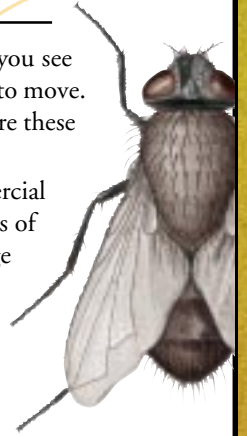
About the time of the first frost, Ladybugs (Ladybird Beetles) may also come into your home through any crack, crevice, open window or hole. They come in and hibernate until spring and do not cause any big problems except for their presence, sometimes in great numbers. They don't feed on anything and cause no structure damage. 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 towards windows or lights. Some kinds of Ladybugs, such as the Asian Ladybug, can come into a house literally by the tens of thousands. This can be very disturbing to people living in the home. Recent medical studies have proven these beetles can cause a true allergy in some people. The best thing to do when they become active in the spring is to help them get outside again, alive.

Cluster Flies

One crisp fall morning, you open a window to let fresh air into your room. As you raise the window you see several hundred "dead" flies between the window and screen. While you're looking at them, a few flies begin to move. They're not dead! You slam the window shut, hoping none of them got into your house! What kind of flies are these and why are there so many? Also, why do they seem to be coming to life?

What you see are probably Cluster flies and they become pests of homes, schools, hospitals and commercial buildings throughout much of the United States. Cluster fly larvae parasitize (feed inside) a common species of earthworms, *Allolobophora rosea*, 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 hibernation site.

Cluster flies overwinter and emerge from hibernation in the spring to breed and lay eggs on the soil surface near the earthworms which the young then infest. Overwintering cluster flies are the most troublesome because of their sheer numbers. Stimulated by warm weather, they can become active again during warm spells in winter, and again in early spring when they try to find openings to go back outside.



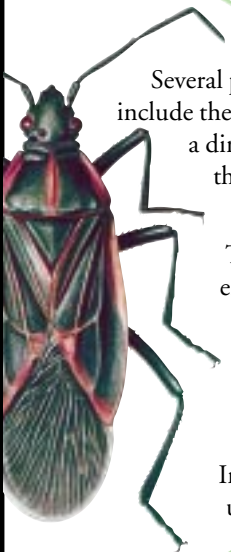
Bugs

Several plant-feeding true bugs, in the insect Order Hemiptera, 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 which 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 if it will help, apply an exterior perimeter treatment which should help keep them out in the fall when they tend to look for likely spots to hibernate.

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 plastic bag, and dispose of it with your normal trash or garbage.



“Homeless” Yellowjackets are a Serious Fall Nuisance and a Health Threat



As the days get shorter and the weather gets cooler in late summer through early fall, many species of yellowjacket queens stop laying eggs. New queens emerge, mate

and find protected sites to hibernate over winter. Worker yellowjackets stop foraging for the colony and go out more often on their own. They are attracted to sweets or syrups, such as those 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” garbage cans, soft drinks or any other source of sweets they may find. Some become even more aggressive than they were before. They may try to protect their new food sources, just like they used to protect their colony’s nest and that can lead to people being stung.

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

If this problem continues, you may need to contact a professional pest management company, like ours, for help. We can survey the situation, provide immediate knock-down treatments if needed, advise on any sanitation improvements which 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. Control of stinging insects 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.

Bats *(continued from cover page)*

There is no toxicant currently labeled for bat control in the U.S. Although naphthalene (moth balls or flakes) may be slightly repellent to bats, they have only limited effects and for only a 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 roosting inside your house, you should seek professional help to remove and exclude them. Fall is the best time to take steps to bat proof your home to prevent them from coming in again the next year. The young of most species of bats in temperate zones will have developed fully and can fly by the middle of September (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 trained in bat management can observe their exits, seal shut all but one and place a one-way flap or chute over it for a few days, then finally close it. He or she should make at least one follow-up visit to be sure the removal and exclusion efforts have been completed and are successful.

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Field Rodents Move In

This is the time of year when many creatures normally found outdoors come in to spend the winter. They like the warmth and often help themselves to food stored in our pantry, such as boxes or bags of cornmeal, nuts, cereals or dry pet food. They also may chew holes through walls, boxes and sometimes electric wiring.



These furry little creatures can be more than a nuisance. Several wild rodents that come into homes in the autumn or winter spread strains of Hantavirus which sometimes kill people. The largest carrier of this virus is the very wide-spread, yet harmless-looking Deer Mouse, *Peromyscus maniculatus*. 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, *Rattus norvegicus*, may live mainly outdoors in spring and summer, but come inside in the fall and winter. In warmer coastal and tropical areas, Roof Rats, *Rattus rattus*, may live mainly outside during wetter seasons and move inside during drier seasons.

Rodents eat and contaminate our food as well as chew and mess up our homes. They may interrupt our Internet access and even start fires by chewing electric wires. Rodents gnawing matches or wiring probably cause more than 1/5 of the "fires of unknown origin" in the U.S.

You can help prevent these problems by:

1. Cleaning up thoroughly and often any spilled food, garbage, pet food or grain which 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 on 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.