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The Cluster Fly.



Are house flies driving you buggy? They may not be house flies at all, instead, your home may be infested with cluster flies.

The **Cluster Fly** or *Pollenia rudis* closely resembles the house fly, but is usually larger and has a yellowish sheen on the thorax (the middle part of the body between the head and abdomen). The Cluster Fly averages between 1/4 to 3/8 inches long and is dark gray, never metallic blue or green in color. When crushed, they give off an odor like buckwheat honey.

Cluster Flies are parasites of earthworms and breed outdoors in lawns and fields during the spring and summer. You can find them almost everywhere in the United States and Canada, except for the Southern states bordering the Gulf of Mexico.

Females lay their eggs in cracks in the soil, which hatch in three days. The larvae use earthworms as a food source. The larvae feed for about 22 days. After that, they go into the pupae stage, which lasts 11-14 days before emerging as adults. Adult flies feed on flowers. There are about four generations hatched per summer.

When fall approaches, Cluster Flies begin to enter structures in large numbers. Problems with Cluster Flies begin in late August as they move to winter quarters to overwinter. They are seeking warm sites with protective cracks for shelter, crawling back as far as they can get. It is important to consider treatment before this happens.

They have been known to squeeze around the edges of windows that are weather-proofed,

behind clapboards and shingles and through gaps in trim. As the number of flies attracted to the building increases, large clusters of flies huddle inside wall voids, attics, and false ceilings. Most infestations occur in the upper regions of a building, such as the attics of homes. In multi-story buildings, they can be found in the upper two or three floors, and almost always of the south and west sides of the buildings.

If you have unseasonably warm weather in the late fall or winter, they may emerge thinking it is spring, going for the warmer air outside. They fly very slowly when they just wake up. They are strongly attracted to light, so they are usually found around windows. At night they are attracted to lamps.

If you suspect a Cluster Fly infestation in your home, call ProTech Pest Control to develop a treatment and prevention plan.



Spring is in the air.

Spring is around the corner and we'll soon be coming by for your semi-annual exterior service.

Why semi-annual service? Because it's easier to keep pests from getting in than it is to get them out once they've gotten in. Our semi-annual service lays down a barrier against infestation and includes foundation treatment as well as eave and overhang residual treatments to repel bees and wasps. While usually unnecessary, we also offer inside treatment for our semi-annual customers, upon request, at no additional cost. Treatment of

nearby trees and shrubs, sheds, pools and pool houses at a discounted fee are optional with semi-annual service.

If you pay your bill within seven days of receiving service, you can deduct three dollars from the cost and rent a movie or buy an extra gallon of gas on us.;

The semi-annual service begins in late March or early April and is dependant upon the weather; it is followed by a second service in late July or early August.





Helpful Hints:

Pest infestations occur because of favorable habitats existing in and close to your home. Eliminating these favorable habitats can prevent most common infestations and save you a lot of trouble and money. Here are a few helpful hints to make your home less attractive to pests.

- 1 Store firewood off the ground and away from the structure. Firewood is a frequent home for carpenter ants, termites, mice, spiders and snakes. Carpenter ants will forage up to 100 yards away from their nests for food, so further is always better.
- 2 Trim all trees and bushes away from the house to prevent contact with the structure. This prevents insects from bypassing the foundation treatment by using the vegetation as a bridge.
- 3 Avoid organic mulches around the foundation of the home and remove dead stumps and other rotting matter from within 50 feet of the home.
- 4 Correct any moisture problems in the house such as leaky roofs, chimney flashing, plumbing leaks, blocked gutters and poorly ventilated attics. Insects love moist wood.
- 5 Spiders are drawn to locations that offer good hunting for other insects, by switching to yellow insect lights and discouraging insects in and around your house, it becomes a less inviting environment for spiders.
- 6 By regularly removing spider webs from your house, basement and attic, you make it difficult for spiders to feed themselves and prevent reproduction.
- 7 Drill holes in the bottom of recycling containers that are left out of doors. Drainage holes that are located on the sides collect enough water for mosquitoes to breed in.
- 8 Use landscaping to eliminate standing water that collects on your property. Mosquitoes will develop in any puddle that lasts more than 4 days.



Grubs and beetles in your lawn and garden

The Japanese beetle (*Popillia japonica*) is a beetle about 1.5 cm (0.6 inches) long and 1 cm (0.4 inches) wide (smaller in Canada), with shiny copper-colored elytra and a shiny green top of the thorax and head.

It is another exotic invader to North America, originating in Asia, but found in the U.S. since 1916. The adult beetles are easily identified by the reddish-copper color of their wings, the shiny dark green of their thorax, and the presence of white tufts of hairs along the sides of their abdomen. The adult beetles can cause terrible damage to flowers, fruits, and vegetables, feeding in masses of many beetles on the same flower or fruit.

The larvae (the white grubs under your lawn), of the Japanese Beetle feed on the roots of many kinds of plants, grasses included, and there have been infestations in lawns where as many as 122 larvae were present in each square foot of the turf, sawing off the roots of the grass and killing the lawn. The late-stage larvae live through the winter buried deep in the soil, and they move back to the surface in very early spring to begin their feeding, continuing well into the fall to cause maximum damage to turf.

Texas A&M Doctoral Student Builds a Better Fly Trap

COLLEGE STATION, Texas – Texas A&M entomology doctoral candidate Robert Puckett has built a phorid fly trap – using ingenuity, science and everything he's learned about pizza at college.

Puckett, also a Texas Cooperative Extension assistant in the department of entomology, knew the phorid fly likes to perch on a blade of grass or whatever is handy when it is waiting for a fire ant that it can parasitize.

To catch the tiny phorid flies for his experiments, Puckett began trying to think of ways he could take advantage of the insects' perching habits. Puckett felt something with multiple prongs and a solid base

and coated with a sticky substance would do the trick.

Then, according to Puckett, "We were sitting around eating pizza," and the idea struck him.

A pizza tent, the gadget in take-out pizza boxes that keep the top from caving in, turned upside down, was exactly what he was looking for. He coated the prongs with Tanglefoot insect trap coating, something like the coating for flypaper. The trap is placed in a dish that contains midden, which is essentially the fire ants' trash heap, to attract phorid flies.

Tracking phorid flies is important because the U.S. Department of Agriculture and researchers at

University of Texas, Texas A&M and elsewhere are releasing phorids to test as part of the arsenal against red imported fire ants. The phorid flies are native to South America and appear to be important in regulating fire ant densities in their native range.

"The initial release of the flies costs about \$10,000 per site, and, if successful, the flies will reproduce and expand on their own to attack fire ants over hundreds of square miles," Puckett said. "Releases are not always successful, and we want to know what factors are affecting outcomes."

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Pest Spotlight – Bed Bugs

Cimex lectularius (Hemiptera: Cimicidae)

Adult bed bugs measure 3/16-inch (5-6 mm) long, are broadly oval and flat, and have vestigial wings (tiny wing pads) on the thorax. Bed bugs are amber brown to reddish black, depending on when they last fed. When present in sufficient numbers, bed bugs emit either an obnoxiously sweet (somewhat like raspberries) or nasty (body odor-like) smell. Other evidence of bed bugs includes the fecal stains (clustered tiny black dots) in and near daytime harborages and the appearance of sometimes-itchy welts on those allergic to this insect's saliva.

Throughout recorded history, the bed bug has been a notorious ectoparasite of humans primarily, but it will accept poultry, canaries,

sparrows, mice, rats, rabbits, guinea pigs, hamsters and bats as secondary hosts. It was introduced to the New World with the early European colonists and has worldwide distribution.

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Each female bed bug cements three to 12 eggs per day in cracks, creases, seams and corners associated with fabric, wood, gypsum board and other textured materials. Each female can lay 200 to 500-plus eggs during its lifetime. The pearly-white eggs measure 1/32-inch (1 mm) long and hatch in six to 17 days in warm, humid settings. The hemimetabolous development (incomplete metamorphosis) normally requires 35 to 48 days. There are five nymphal instars, with a blood meal required for each

molt. Three to 10 minutes are required for each blood meal, during which saliva containing an anticoagulant is injected. Bed bugs have not been found to transmit disease organisms from host to host. Once-fed nymphs can survive 51 ±23 days. Adults can survive up to a year on one blood meal. Being poorly fed can greatly prolong the life cycle (up to several years in some studies). Not all bed bugs in an infestation feed concurrently. They remain concealed until hungry. Although bed bugs are nocturnal, they may feed on resting people in a darkened room during daytime hours. The activity threshold is 57±2°F. Below 61°F adults enter semi-hibernation. Their lethal heat stress point is 112±1°K

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Control of any pest problem begins with determining that you actually have the pest you think you do, and this means finding a way to collect them. It helps, also, to understand the habits of white grubs so that you can inspect for them or attempt to control them at a time when you will be most successful. The larvae move up and down in the soil in response to moisture and temperature, and may end up as deep as 2 or 3 feet down, particularly in the northern states where the soil freezes well below the surface. So, if you are trying to sample for the larvae you

need to either pick a time of year when the temperature is mild and the soil is moist, at which time the larvae would be most likely to be in the root-zone of the turf, or water the lawn to encourage the larvae to make the trip upward. For white grubs you then can use a sharp tool to cut out a section of the lawn and peel it back to expose the roots. If the conditions are correct for the larvae to be feeding you should be able to see these white grubs very easily. The turf can then be rolled back into place without harming it from the cutting.

These insects damage plants by eating the surface material, leaving the veins in place, producing a curious, but alarming, "transparent leaf" effect on its victims. However, without sufficient green leaf surface, the plant cannot properly carry out photosynthesis. Flowering and fruiting can be seriously inhibited.

ProTech Pest Control can help you to control or even eliminate these pests from your property helping you to keep your lawn and gardens healthy and looking their best.

