THE INSECT WHO CAME IN FROM THE COLD

Phil Pellitteri^{1/}

Few people are happy when large numbers of insects come crawling into their home. Older structures in rural areas are particularly prone to insect invasions. Insect pressures can vary from season-to-season and will be affected by weather patterns and land use around the site. As with any pest problem, the solution depends on proper identification of the pest and an understanding of the effective remedies and proper timing of chemical treatments.

There are two main invasion seasons . The summer season runs from June to early August. The two major causes of summer problems are insects attracted to lights and migrating insects seeking shelter from the heat of summer. The fall season runs from September to mid-October and most of the insect problems are cause be insects seeking shelter for the winter.

Summer Invaders

A common source of insect outbreaks around the home comes from insects that are attracted to night lights. Large numbers of cutworm moths, armyworms, ground beetles, click beetles, mayflies, caddis flies, and water beetles can seem to show up suddenly, often after warm humid nights. These mass flights are very difficult to predict. As for control, consider moving security lights off of buildingsCWhy attract insects directly on to the home? Use sodium vapor lamps or dichrom Ayellow A lights placed on a pole to shine onto doorways that attract insects away from the building. It may be worthwhile to keep lights off for 3 to 4 days during peak activity times.

The types of plant material around at the foundation of a home and the land use in areas around the home will have the biggest influence on the problems during the summer. Keep in mind, the creatures that invade do not bite and are harmless to the structure:

Nuisance weevils migrate in from surrounding areas. We have seen some problems with alfalfa weevil, clover weevils and a number of species that come from wooded sites.

Imported long-horned weevils are associated with long grass fields and prairies. They are small grey weevils, with grubs found on roots of grasses. Adults are slow moving and migrate indoors in late June and July. The can also feed on flowers and vegetables.

Strawberry root weevils breed on the roots of conifers and other plants. The adults are slow-moving, small, dark brown weevils that cannot fly.

Clover mites cause problems in very early spring and November. These small, dark mites are harmless; the main problem is they will stain surfaces if crushed. Use a vacuum indoors. Treat with a barrier treatment along the foundation for control.

 $^{1/2}$ Distinguished Faculty Associate, Entomology Insect Diagnostic Lab, Univ. of Wisconsin,

Madison, WI.

Springtails are often a problem after construction. These are very small jumping insects that need organic matter and moisture to survive. They are harmless and easily vacuumed. A barrier should be placed outside, along foundation.

Fall-Invading Insects

Fall problems are caused by creatures that are migrating through an area or are seeking shelter for the winter. Trees such as conifers, birches, hackberry, and box elders can breed insects that will move into structures as the leaves fall. Cluster flies and Asian lady beetles are attracted to south- and west-facing vertical surfaces and will work up under siding and overhangs.

Cluster flies look like houseflies bug have fine golden hairs on body. Congregate on sidling and crawl upward into overhangs and roof vents. Need to treat during mid-September.

Box elder bugs are black-and-red insects that are a problem in dry years. They will group in clusters on sunny locations. Removing all box elder trees from the area will eliminate the problem in the long run.

Multicolored Asian lady beetles have been a problem since 1995. If you are using chemicals, you need to treat during last week of September and early October. Congregations of this insect are seen after a cold spell followed by sunny days above 60 degrees.

Western conifer seed bugs are brown, and up to 1 inch long; they feed on pine and spruce cones. They are harmless but look like blood feeding true bug.

Millipedes migrate in the evenings during September. When the sun comes up, they will look for cool, damp, dark areas (including cement slabs). These insects

migrate in from a good source of organic matter, such as old fields. It is best to set up a 5- to 20-foot barrier along the outside perimeter of they property where mowed area meets the long grass.

Hackberry psyllids are small gnat-like insect that will migrate through screens and come from bumps on the leaves of hackberry trees. Hackberry trees should not be planted within 50 yards of a home.

Birch catkin bugs are brownish yellow insects about 1/5 inch long and have a distinct odor.

Indoor yellow jacket nests can be treated with insecticide dusts in evening. Never plug the hole before treatment. If left untreated, the insects will die out by November 1; they do not reuse the nest.

ProofingB Building a Pest Out

One of the best ways to limit unwanted intrusions by insect pests is to deny them entry Ca procedure known as pest proofing. If you solve the riddle as to how the insects are gaining entry, you have a permanent solution to the problem. Many pests seek refuge in homes and other buildings in response to changes in weather, such as extended periods of rain or drought or the onset of cooler temperatures in autumn. Taking steps to block their entry before they end up inside can greatly reduce the chances of future sightings. Equipment and materials mentioned can be purchased at most home improvement or hardware stores.

- (1) Install door sweeps or thresholds at the base of all exterior entry doors. While lying on the floor, check for light filtering under doors. Gaps of 1/16 inch or less will permit entry of insects and spiders. Apply caulk (see #3 below) along bottom outside edge and sides of door thresholds to exclude ants and other small insects. Gaps under sliding-glass doors can be sealed by lining the bottom track with 2 to 3/4 inch-wide foam weather stripping.
- (2) Seal utility openings where pipes and wires enter the foundation and siding (e.g., around outdoor faucets, receptacles, gas meters, clothes dryer vents, and telephone/cable TV wires). These are common entry points for such pests as rodents, ants, spiders, and yellow jackets. Holes can be plugged with caulk, cement, urethane expandable foam, steel wool, copper mesh (Stuffit^R),or other suitable sealant.
- (3) Caulk cracks around windows, doors, fascia boards, etc. Use a good quality silicone or acrylic latex caulk. Although somewhat less flexible than pure silicone, latex- type caulks clean up easily with water and are paint-able. Caulks that dry clear are often easier to use than pigmented caulks since they do not show mistakes.
- (4) Repair gaps and tears in window and door screens. Doing so will help reduce entry of flies, gnats, mosquitoes, and midges during summer, and cluster flies, lady beetles, and other overwintering pests in early fall. Make sure roof vents are screened with a small enough mess screening to prevent insect entry.

Clients who choose not to tackle these activities may wish to hire a professional pest control firm. Some firms are beginning to offer pest proofing as an adjunct to other services. If you solve the riddle and block the insects out, you do not have to worry about chemical treatments and will have a long-term solution to the insect invasion.

Chemical Control

If the insects cannot be built out, there are a number of sprays that can be applied to the outside of the structure. For cluster flies and Asian lady beetles, treat during late September or early October to kill and repel the insects before they migrate in. Once insects are in the wall or attic they cannot be controlled. The most effective sprays are various synthetic pyrethroids such as permethrin, cypermethrin, cyfluthrin, bifenthrin, deltamethrin, and lamda-cyhalothrin. The product must be labeled AFor Home Use. © Concentrate along doors, windows, and overhangs on the south, west, and east sides of the structure. It may take 2 or more gallons of spray to get thorough coverage. A compressed air or power sprayer works best. You may wish to hire a professional pest control company for application.

When all else fails, a vacuum cleaner or broom is often the best response once the insects have come indoors. Indoor bombs only kill what is in the living space at the time and are not very effective. Lady beetles defend themselves by bleeding from their joints. If handled too roughly, they can stain carpets, walls, or curtains so a shop-type vacuum is best. They can also be collected by hand and released outside.

For insects that are invading from the surrounding area, the approach is to use a perimeter or barrier treatment. A 5- to 20-foot band of spray or granular insecticide is used to kill insects before they invade the home. Timing is very important to catch insects as they move through. Treatments are far less effective when large numbers of insects have already moved indoors. If the problems have been during early September, you should consider applying the control a week before the Aseason@ next year. Granular materials can be applied with a drop spreader. Liquids can be sprayed along the outside foundation both away from and up the bottom 2 feet of the structure. If you know where the insects are migrating from, you should apply the barrier away from the home and as close to the source as possible.

Further information on the biology and control of cluster flies, multicolored Asian lady beetles, millipedes, sowbugs, nuisance weevils, and other pest can be found at the Diagnostic Lab web site at http://www.entomology.wisc.edu/entobltn.html.