

# HOUSEHOLD PEST CONTROL

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This program topic is designed to acquaint participants with:

- the biology and habits of some common household pests,
- some nonchemical tactics to prevent infestations of the pests, and
- correct methods for controlling the pests with insecticides.

- a. What pests have you had problems with in your home?
- b. What did you do to control those pests?
- c. Was control successful or are the pests still a problem?

4. Show the 17-minute slide/tape set on pantry pests "Stored Product Pests in the Home," available from Dorsey Resource Center.

## Introduction

Insect pests enter houses seeking food, shelter or surroundings having the right temperature and humidity. The key to successful household pest control is eliminating one or more of these factors. Sanitation is an important part of control. Successful household pest control should begin with good housekeeping. Even the cleanest of homes, however, can have pests. It is important then to know something about the habits of the pests in order to take proper preventative steps and to select and apply pest control products correctly. Using the wrong control product or using the right product in the wrong manner may result in unsatisfactory control. Keep in mind that different pests may be found in different parts of West Virginia, in different seasons or in different years.

## Suggestions for Teaching This Topic:

1. Ask participants to bring in pests they have found in their homes. Try to identify the pests or take them to the county agent for identification.
2. Use the quiz in WL 254 to test participants before and after the session (pre- and post-quiz).
3. Use the following questions to stimulate discussion:

## Ants

The many different species of house-infesting ants range in size from the tiny 1/16-inch Pharaoh's ant to the large 3/4-inch queen carpenter ant. Ants can be black, red, brown or yellow in color, have a pinched waist and, elbowed antennae and be either wingless or winged. Most house-infesting ants are found in such areas as kitchens and bathrooms where there is food and water.

Sanitation is important in preventing ant infestations. Clean up food and beverage spills from floors and countertops immediately. Baits may be the best method of control for some species of ants. Since ants are social insects, ant workers carry bait back to the nest where it kills other colony members. Baiting often results in longer lasting control than an insecticide applied to the workers. Pavement ants and little black ants can be effectively controlled with baits. Plastic or metal bait stations ("ant traps") are easy to use and are desirable where pets or children are present. Baits should be placed in areas where the most ants have been seen. Don't place baits on sprayed surfaces or spray near bait stations.

Baits have not proven effective in controlling carpenter ants. Carpenter ants nest in structural

wood but do not actually eat wood. The key to control of carpenter ants is to locate the nest and treat it. Look first in areas where wood may have gotten wet. Other nest spots may be inside hollow core doors and under insulation in an attic. After you have located the nest, treat it with an insecticide labeled for ant control. You can discourage carpenter ants by keeping tree branches trimmed away from the house and by replacing bark mulch with a nonorganic type, such as decorative stone chips. Store firewood off the ground and away from the house.

## **Fleas**

Although fleas may be present on pets year-round, they are most abundant during warm weather. Adult fleas live, mate and lay eggs on the pet. The flea eggs drop off the pet and end up in carpet or in the pet's bedding. Flea larvae feed on excess pet blood excreted by adult fleas. Development from egg to adult requires about three weeks.

Frequent vacuuming and washing are essential to removing flea eggs and droppings from carpet and pet bedding. Dispose of the vacuum bag after vacuuming. The chemical flea control arsenal includes products to apply to your pet, products to apply to carpet and furniture, and products to apply outdoors to your yard. Some of the new flea control products contain a compound known as an "insect growth regulator." This ingredient interferes with the flea's life cycle and also kills flea eggs.

When applying flea control insecticides indoors, concentrate on areas where pets sleep and on spots where pets land as they jump down from resting places. These areas are often overlooked but can contain large numbers of flea eggs. Vacuum before applying a flea control product to raise carpet pile and allow the spray to penetrate. Your veterinarian can recommend insecticides to apply to or give orally to your pet. One nonchemical way to remove fleas from your pet is by combing the pet with a flea comb. Use a pan of warm, soapy water to drown fleas as they are removed.

The trick to flea control outdoors is knowing where to apply the products. Fleas are

concentrated in pet sleeping areas and pathways. Insecticide treatments should be aimed at these spots. If pet areas include crawl spaces, these should be treated or screened to prevent entry. Wild animals can be a source of fleas even when no dogs or cats are present. The same species of flea that gets on cats and dogs also lives on opossums, skunks and rodents. Screen crawl spaces to keep out wild animals if fleas are a problem.

## **Spiders**

Although they are among the most feared creatures on earth, spiders do not deserve their bad reputation. Only a few species of spiders in the United States are harmful to humans. The notorious black widow spider is 1/2-inch long and glossy black with two red spots in an hourglass shape on her abdomen. She is usually found in her web, close to the ground under porches or piles of rubbish. The brown recluse spider is a 1/2-inch long, light brown spider with a dark brown, violin-shaped mark on its back. The brown recluse is found in closets, boxes, attics, and outdoors in garages and sheds. The presence of the brown recluse spider in West Virginia has never been officially confirmed.

Spider control should begin with regular dusting and vacuuming to remove webs and egg sacs. You can control spiders indoors by keeping out the insects they feed on. Use screens to cover vents in walls and under eaves. Caulk around window casings and around openings where pipes and wires enter walls. Insecticide sprays are not always effective unless they are sprayed directly on the spider. Spiders normally rest in their webs and do not contact sprayed surfaces. Some web-building spiders eat their old webs before constructing new ones. A dust formulation of insecticide applied lightly to the web can be an effective control method.

## **Waterbugs**

Waterbugs, or oriental cockroaches, are about 1 to 1-1/4 inches long as adults, dark brown to black in color. Males have wings about three-fourths as long as the body. Females have only

very short wing stubs. They lay their eggs in brown, bean-sized egg cases. Compared to other cockroaches, waterbugs reproduce slowly, requiring up to a year to complete their life cycle. They are found at or below ground level in cool, damp areas, such as basements and sewers, and outdoors in summer. Their mere presence, not to mention their bad odor, is enough to make anyone want to get rid of them. In addition, they contaminate food with their excrement and carry bacteria that can cause food poisoning.

Sanitation is the key to prevention and control. Eliminate sources of food and water by cleaning up crumbs and spills, putting away pet food after pets eat, and not leaving dirty dishes in the sink. Don't let too much refuse accumulate around the house. Piles of empty paper grocery bags or corrugated boxes provide excellent hiding places for waterbugs. Waterbugs may come in through floor drains. Cut a piece of wire screen to fit under the drain's sieve plate to keep them out.

If these nonchemical tactics are not sufficient, you may need to apply a household insecticide labeled for cockroaches. Apply the spray to door sills and other entry points, as well as cracks and crevices in areas where you have seen waterbugs. You can also use cockroach bait stations. Be certain to purchase the type for large cockroach species and to place them in corners and along edges according to package directions. Don't place the baits on sprayed surfaces or spray near bait stations.

### **House Flies**

The house fly is 1/4-inch long, light gray with four dark lengthwise stripes, two wings and reddish-brown eyes. House fly larvae or maggots are about 3/8-inch long, creamy white and spindle-shaped. Female house flies lay their eggs in moist materials like garbage or manure. The house fly can go through its complete life cycle from egg to adult in about a week. Besides being a pesky nuisance indoors, the house fly carries and contaminates food with harmful bacteria.

Prevention of adult house fly infestations begins with control of the maggot stage by eliminating

breeding places. Be sure your garbage cans have tight-fitting lids. Rinse food containers and meat wrappers before placing them in the trash. Scoop up and dispose of dog droppings. Manure management on farms will limit breeding areas around livestock barns.

Aerosol sprays and foggers are available for house fly control. If you have only a few flies to kill, control can be as simple as an old-fashioned fly swatter. Your house should have window and door screens. Sticky fly paper strips are still available, but these are not always effective. Beware of insecticide-impregnated pest strips. The insecticide they contain can be very poisonous.

### **Silverfish**

Silverfish are 1/2-inch long, silver-colored, wingless and flattened. They are carrot-shaped: broad at front and tapering toward the rear with three long tails. They damage books and fabrics and are particularly fond of the starches used on wallpaper and stamps. Silverfish require three to four months to develop from egg to adult. Adults live for two or three years.

Prevention should begin with tidiness and control of the environment. Keep bookcases clean by vacuuming and shaking out books. Don't allow piles of old papers and magazines to accumulate. Check old books before bringing them into the house. Examine the folds of lined draperies for silverfish. Reduce humidity with an air-conditioner or a dehumidifier.

To control silverfish, apply a household insecticide to cracks and crevices, door and window frames, and edges of bookshelves. If you don't want to spray, puff pesticide-grade boric acid dust into cracks and crevices with a bulb duster or use silverfish bait packs.

### **Pantry Pests**

You can find pantry pests in your kitchen or pantry in flour, cereal, dry pet food, paprika, and red pepper. You can even find pantry pests in other parts of the house in dried flowers or

potpourri. One of the most common pantry pests is the Indian meal moth, referred to by some people as a "miller." This tiny 3/8-inch long moth is easy to identify by its copper-colored wings with a gray band. There are also many species of small brown beetles that infest stored foods. These 1/8-inch long beetles are can be tricky to identify. You may see the white caterpillar or grub stage of these insects rather than the adult moth or beetle.

Prevention begins in the grocery store. Purchase only what your family can use in two to four months and only packages that are sealed and show no signs of damage. Check the "sell-by" date to be certain of freshness. When you get home, store the foods in glass or plastic containers with tight-fitting lids. Use older packages before new ones, opened packages before unopened ones. Keep your pantry and cabinet areas clean. Vacuum up crumbs and spilled food. Do not clean cabinets with water. This leaves a pasty residue attractive to the pests.

Control begins with locating and eliminating infested food. Begin by inspecting open packages of food. Then check new food packages. An unopened container may be infested inside and may contain tiny cracks large enough for insects to escape. After you've found the source of the infestation, discard the infested food. Do not eat anything that has been infested. Many of these pests give off chemicals that can be poisonous.

After disposing of the infested foods, vacuum shelves before installing clean shelf paper and replacing food. It is not a good idea to use insecticides around food. Use them only as a last resort. If you decide you must spray, choose a household insecticide labeled for pantry pests. Remove all food from the cabinet, apply the insecticide and allow it to dry. Cover the shelves with clean shelf paper to prevent the insecticide from contacting food packages and put food back on the shelves.

## **Fabric Pests**

Carpet beetles are common fabric pests in West Virginia. They are 1/8-inch long and solid black or covered with yellow or white scales. Carpet beetle larvae are brown and carrot- or wedge-shaped with tufts of hair. Clothes moths are more common farther south in warmer climates. Clothes moths are 1/4-inch long and tan or golden colored. Their larvae either spin webbing on fabric or construct tiny silken cases. If you see tiny moths flying to lights in your home, they are not clothes moths. Clothes moths are not attracted to lights.

Wool is the fabric that is most often damaged by insect pests. Perspiration, urine, grease, and food stains make wool more attractive to insects. To prevent damage to your clothes, wash or dry clean wool clothes before you put them in storage. Vacuum often, especially under and behind furniture, so that lint and hair are not allowed to accumulate. Commercial aerosol sprays are available. Cedar closet liners may be of some value, but they lose their insect-repelling qualities as they age and the aromatic oils dry out.

Mothballs and moth crystals can be used in closed containers with stored woolens. Place them where people are not constantly breathing their vapors. Because mothballs can be fatal if swallowed, be certain to store them out of children's reach. Beware of exposing babies to blankets or clothing that have been stored with mothballs. Items containing mothball vapors can cause death in infants.

## **References**

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