

# VIRGINIA COOPERATIVE EXTENSION SERVICE

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## CARPET BEETLES

Carpet beetles are the most common household insect pest submitted to the Insect Identification Laboratory. This attests to how common they are in homes and how concerned homemakers can be when these insects are found. The larval stage is most often found and brought to the Extension Agent for identification. These insects are usually encountered associated with clothes and food--and they can cause damage to both! The recent emphasis on natural and animal fibers in clothes has increased the need for concern and control of these insects.

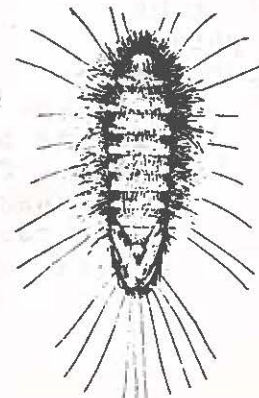
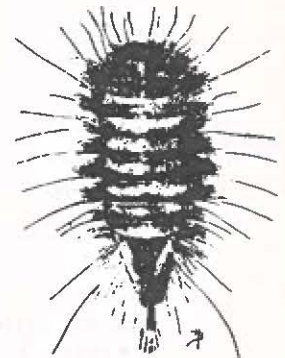
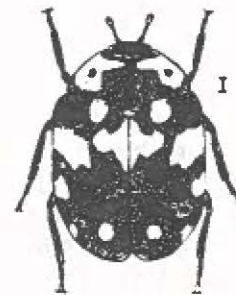
Control of this group of insect pests is difficult because they are a small and elusive target for household aerosol sprays, and general clean up programs may not eliminate all the potential food for the larvae and adults. Certainly, there is no one, easy method of control. A combination of aerosol or professional spray, clean up and removal of infested material, and frequent checking of potentially infested areas or material can bring elimination or at least control.

To refresh your memory of carpet beetles, let's review the biology and habits of some of the most common species, and make some specific recommendations on control.

Species and Habits. The four most important and most common species are the black carpet beetle (Attagenus mezatoma), the varied carpet beetle (Anthrenus verbasci), the common carpet beetle (Anthrenus scrophulariae), and the furniture beetle (Anthrenus flavipes). The adults feed primarily on pollen and nectar and can be found on plants outdoors during the summer. The larval stages cause damage to a variety of material. Their preferred food varies



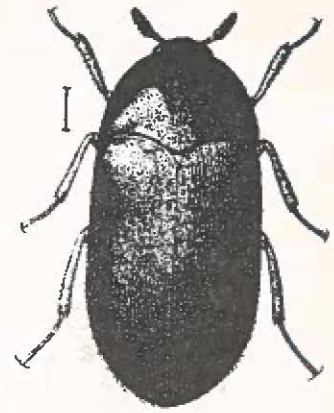
## INSECT NOTES



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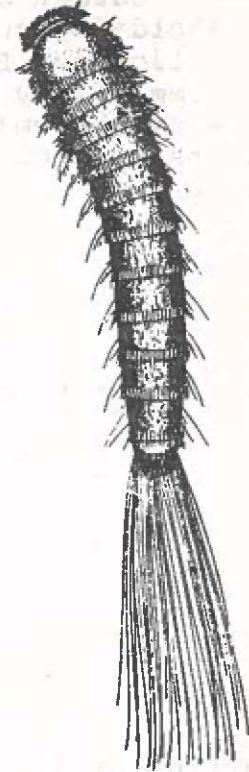
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with the species, but all carpet beetles larvae can feed on wool carpets and other wool products, furs, hides, horns, feathers, hair, and silk. They will also feed on linen, cotton, and rayon if these fabrics are soiled with juice, food, or animal excreta. They can be pests in cereals, stored grains, nuts, meal, Indian corn, red pepper, and similar products. Carpet beetle larvae are frequently pests of insect collections and other museum specimens.



All of these beetle species have a complete life cycle--egg, larva, pupa, and adult. Adult carpet beetles are commonly found outdoors on flower heads, and indoors at windows. They are small, oval insects, usually less than 1/4 in long. Adults can mate and reproduce without feeding. Females can lay from 30 to 100 eggs, depending on the species. Eggs are laid in lint, behind and under baseboards, in floor cracks, or other dark and protected locations. Eggs hatch in 1 to 3 weeks.

Larvae develop over a 3 to 36 month period, and can molt (shed their skin) from 5 to 12 times. The old skins are often mistaken for live larvae, and can give the impression of a larger infestation than really exists. Carpet beetle larvae are usually about the size of the adult beetle, 1/4 inch or less in length. They have dense tufts of long setae (bristles) on their bodies. Carpet beetle larvae often wander about the infested location--from room to room in a house. This behavior results in spreading the infestation throughout the house. The pupal stage lasts 6 to 24 days, but the adult may take up to 3 weeks before it emerges.





**Control.** The best way to attack a carpet beetle problem is prevention! Vacuum regularly, do not store soiled fabrics (that is fabric that has been exposed to food spills), and use moth crystals or flakes when storing wool or other potential food of carpet beetles. When an infestation has become established it is necessary to locate--as best possible--the source of the infestation in the house. Check all potential food materials inside the house. Consider the possibility that an abandoned bird nest or bee/wasp nest within the attic or walls of the house may be harboring carpet beetles, a dead mouse or squirrel behind a wall can contribute carpet beetles inside the house. Discard all infested material. Household aerosol sprays should be directed at suspected areas. A professional pest control operator can be contacted. If so, insecticides such as Ficam

(odorless), diazinon, Dursban L.O. (low odor), Safrothin (low odor), or Baygon can be used. --Robinson

**WOOD-INFESTING INSECTS**

March and April are the months that some of the most important wood-infesting beetles become active. Larvae of the old house borer resume their feeding activity as the structural wood in houses increases in wood moisture content. The larvae of this beetle can be heard feeding in wood behind walls, in floor joists, or ceiling timbers. The larvae produce a scraping or chewing when they feed; larvae capable of making this sound are usually about 4 years old. Larvae will feed in wood for several years before becoming full-grown and producing an adult. The adults emerge in June and July. The holes in the wood through which the adult beetles exit are large (1/4 inch) and oval.

Powderpost beetle adults emerge from infested wood in early spring. The holes produced by the exiting adult beetles are small and round--about the size of the lead in a pencil. The holes in the wood is the best evidence of an infestation, as the larvae of these small beetles can not be heard feeding in the wood. --Robinson

| Shape and size of exit holes  | Type of wood          | Age of wood | Wood-infesting insect |
|---|-----------------------|-------------|-----------------------|
| round 1/16-1/8<br> | softwood and hardwood | old and new | powderpost beetles    |
| oval 1/4-3/8<br>   | seasoned softwoods    | old and new | old house borer       |

**BOXELDER BUGS**

Apparently this has been an excellent year for boxelder bugs! Several Agents have called to report large numbers of overwintering boxelder bugs causing problems in houses, apartments, and hospitals. What to do!? First, boxelder bugs overwinter as adults--they don't feed, just spend the winter in large groups. They usually overwinter in protected places, such as under porches and in crawl spaces. Boxelder bugs become active in late winter/early spring or when the environment warms (and we've had some warm weather the last few weeks!). When active, the bugs crawl around houses causing great alarm and concern to homeowners! Control of the few insects that enter houses is not difficult. A vacuum cleaner or common household aerosol sprays will be effective. If a professional pest control

operator is called, suggest that he/she apply Ficam, Dursban L.O., or Safrotin--all of these are no- or low-odor insecticides. Long term control should be considered next fall, when the next batch of boxelder bugs is looking for a good spot to spend the winter. Homeowners or professional pest control operators should treat suspected overwintering sites with Dursban, diazinon, or sevin. The adults live and feed on the seed pods of female boxelder trees. If severe infestations are common in an area--consider spraying the boxelder trees close by. Whatever you do--don't cut any trees down just to control boxelder bugs! These insect do not bite or sting humans. They may stain carpeting if crushed--but the stain is not permanent. --Robinson

### BLOW FLY LARVAE AND PUPAE

Homeowners frequently report finding fly maggots and/or pupae on the floor or carpeting around an unused fireplace. Large numbers of maggots may be encountered crawling across the floor, or numerous small, oval-shaped pupae may be found under a rug close to a fireplace. The insects are usually blow flies, and the reason is usually a dead animal in the fireplace or flue. Abandoned stoves and fireplaces may be used by birds for nesting, or a mouse, squirrel, or other animal may become trapped in the flue stack. Once the animal dies, and the body begins to decay--blow flies are attracted for egg laying. The maggots complete development in the decaying flesh, then seek a drier place to pupate. Fly maggots have the habit of wandering a distance before selecting a place to pupate. They may wander out into the living area of a house and cause concern to homeowners. There is really no need for alarm or extensive control of these insects. The pupae and larvae can be picked up and discarded. The real concern should be for the cause of the problem--get the flue checked, especially if there are ever plans for another fire. A blocked fireplace flue can cause more damage than a few fly maggots or pupae on the floor. --Robinson



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