Carpet Beetles

**Damage**
Furnishings and clothing made of wool, fur, feathers or hair are subject to damage by insects. Some of the most serious insect pests of these articles are known collectively as carpet beetles. Damage may range from the clipping of an occasional fiber, which only slightly weakens the fabric and may go entirely unnoticed, to the total destruction of articles left undisturbed for many months or years. Fabrics made of a combination of wool and synthetic fibers may also be damaged.

Feeding damage is done only by immature carpet beetles (larvae), which look like hairy caterpillars. The presence of the adult beetle is simply an indication of an infestation and that susceptible materials should be inspected. Adult beetles usually feed outdoors on flower pollen. Carpet beetle injury can be differentiated from clothes moths damage by the absence of silken webs on the material.

**Description**
The most common carpet beetles in Rockland County are the black carpet beetle (*Attagenus megatoma*) and the varied carpet beetle (*Anthrenus verbasci*).

The adult black carpet beetle is dull black in color, elliptical in outline, and usually about one-fourth inch long. The carpet beetle's antennae and legs are brown. The larva, on the other hand, may grow to a length of one-half inch before entering its pupal stage and transforming into an adult. The larva is somewhat carrot-shaped and bears a tail of long brown hairs. Its body is covered with brown hair.

The varied carpet beetle is similar in appearance and habits to other species of carpet beetles commonly found in Rockland. These are the common carpet beetle (*Anthrenus scrophulariae*) and the furniture carpet beetle (*Anthrenus flavipes*). These species are very difficult to tell apart.

Both larvae and adults of these species are somewhat shorter and more robust in general appearance than the black carpet beetle. The larvae may be no more than ¼ inch long when full grown, and they are covered with rather long dark brown hairs. These larval features gave rise to the name “buffalo moth”. Adults are less than ¼ inch in length, with a mottled appearance of dull white, yellow, tan, dark gray and reddish-brown color on their wing covers.

**Life Cycle**
Where temperatures are comfortably warm throughout the year, carpet beetles develop in an uninterrupted cycle. When the materials they infest are stored in an unheated portion of the house, development slows or stops during the winter months. In spring, as temperatures rise, the insects enter the pupal stage where they are inactive during the period of transformation from larvae to adults. This stage may last for one to four weeks. Adult beetles emerge, lay eggs on an appropriate material, and try to reach the outdoors to feed on nectar and pollen.

A single female may deposit fifty eggs or more. In seven to fourteen days the eggs hatch and the larvae begin their destructive feeding. Larvae avoid light during this period of growth, pausing on occasion to shed their skins as they grow. Sixty days to nearly a year may be spent in this immature form, depending upon the conditions of food and temperature. As many as four generations or as few as one may occur in a year.
Management
The list of materials that may support a carpet beetle infestation is extensive. It includes diverse substances such as meal and flour, peas and beans, animal dander, dead insects, leather, dried meats, silk, powdered milk and dog food, in addition to the wool, fur, hair and feathers mentioned previously. Eggs, larvae, pupae and adults may be brought into the home in any of these materials. Larvae and adults may live in lint collected behind furniture, air ducts, furniture stuffing, bristles of old paint brushes and rodent nests. From these unsuspected locations and others, carpet beetles may re-infest a home for long periods of time.

The first step to reducing carpet beetle damage is careful examination of all susceptible materials. Remove any beetles or larvae with a vacuum cleaner. Regular vacuum cleaning of carpets, with careful attention to areas beneath low and heavy furniture is important. Bare floors, or any cracks or crevices where lint may accumulate should be vacuumed regularly, and air ducts should be kept as lint and dust free as possible. Discard the vacuum bag or seal it so insects cannot crawl back out.

The relatively long life cycle of carpet beetles may be used to advantage in damage prevention; regular brushings and frequent use of susceptible clothing tends to expose and kill eggs, larvae and pupae before damaging numbers accumulate. Discarding an infested item may be the best way to eliminate an infestation, especially if it cannot be cleaned.

Infested clothes should be washed if possible, or professionally dry cleaned. Local dry cleaners may offer cold storage for valuable furs and other garments or items of animal origin. Woolen products manufactured with mothproofing may last considerably longer than untreated materials.

Products cleaned for storage should be placed in air tight containers. Small larvae can enter through very small openings. Most closets and trunks are not adequate to protect woolens for long periods of time.

Occasionally, in heavy infestations, insecticide treatment may be necessary. However, before any treatment is applied, it is important that the area be thoroughly vacuumed. An insecticidal dust may be used for crack and crevice treatment. Diatomaceous earth or silica aerogel are possible choices. Spot treatment of carpets may be made with residual sprays. Emulsifiable concentrates work best on rugs and carpets. Be sure to read the label thoroughly before applying any insecticide to be sure it can be used inside the home, and on the items you want to treat. Pesticides labeled for use on carpet beetles include deltamethrin, cyfluthrin, diatomaceous earth, lambda-cyhalothrin, or permethrin. Some sprays may discolor carpeting. To avoid fabric damage, be sure to test a small area first. If the infestation is large, or often recurs, consider hiring a professional pest management company.

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