

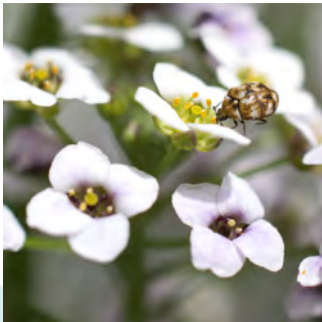
# Managing Carpet Beetles



Carpet beetles are found throughout Britain. They are small beetles of the *Anthrenus* and *Attagenus* genus groups. Many species, such as the Varied Carpet Beetle (*Anthrenus verbasci*), Guernsey Carpet Beetle (*Anthrenus sarnicus*) and the Small Carpet Beetle (*Anthrenus fuscus*) are found in buildings.

During the summer months, the adult beetles are often found outside, feeding on pollen and nectar of plants – particularly of the *Umbellifera* (cow parsley, dill etc.) and *Liliacae* (lily of the valley etc.). After mating, the females can fly through open windows into buildings to lay eggs. Common egg laying sites are on material of animal origins such as wool carpets and clothing, animal furs etc. Damage is caused by the larvae (woolly bears) hatching from the eggs and feeding on the materials until fully grown when they pupate. The adults emerge from the pupal case in late spring or early summer and fly towards the outside to feed and mate. They are commonly found on windowsills in the summer as a result. The whole life cycle is normally completed in a year.

Birds' nests are a very common egg laying site and a frequent source of infestations in buildings.



Adult Varied Carpet Beetle (*Anthrenus verbasci*)



Carpet Beetle larvae (Woolly Bear)

The Varied Carpet Beetle is the most common carpet beetle in the UK. The adults are small (3-4mm long) oval shaped beetles with very short stubby antennae. The thorax and wing cases are covered with tiny overlapping scales of different colours (brown, orange, black, white etc.) giving a patchy variegated effect, sometimes in a horizontal wavy pattern. The larvae (woolly bears) are small, 0.5mm when first hatched and up to 5mm long when fully grown. They are buff coloured with bands of hairs on the body and a tuft of longer, darker hairs at the rear end. They can move long distances from their source in search of food. The larvae will moult several times when growing and the cast skins, or moults, will frequently be found on the surfaces of materials being eaten.

Other species can often be difficult to distinguish, however the Small Carpet Beetle (*Anthrenus fuscus*) is often smaller and darker than the other species, and Guernsey Carpet Beetle (*Anthrenus sarnicus*) is greyish with triangular-shaped scales rather than the shield-shaped ones of *A. verbasci*. The Fur Beetle *Attagenus pelli* (also known as the Two-spot Carpet Beetle) though looking very different from the *Anthrenus* Carpet Beetles, has a similar life cycle and feeding habits. The Vodka Beetle, *Attagenus smirnovi* (also known as Brown carpet beetle) generally feed on organic detritus containing both animal protein and starch. They will occasionally attack textiles.

Both Carpet and Fur Beetles are common inhabitants of birds' nests and where birds are nesting in unused chimneys, attic spaces, roof voids, climbing plants against building walls etc., infestation can spread into the building. Larvae will also feed on hair of dead rodents. Animal-based material (wool, fur, feather, dead insects, leather etc) is readily attacked and damaged, particularly if it is soiled.

# Managing Carpet Beetles



Signs of carpet beetle infestations are:

- adult beetles on windowsills indoors and on some flowers during the summer
- larvae and cast skins on vulnerable material
- fresh damage; typically small neat holes in woollen garments with no silk webbing and little or no frass (droppings)

## Managing and Monitoring

The Historyonics Museum or blunder trap will catch adults and 'woolly bears', and can give an indication of the severity of an infestation, and the species involved. Adding a dispenser with the sex attractant pheromone of the female can be very effective in attracting adult males or the Dermestid Attractant tablet is designed to detect the presence of both adults and larvae.



Two specific pheromone dispensers are available:

1. Lure for Varied Carpet and Guernsey Beetle
2. Lure for Anthrenus and Attagenus species (AA lure).

The Dermestid Beetle Attractant tablet is very attractive to Carpet Beetle larvae and adults. The tablet is available in packs of 10 for use on blunder traps.



## Control strategies

Control of carpet beetles usually involves three phases:

- Removal of birds' nests from lofts, chimneys, eaves etc. and check for dead rodents
- Rigorously clean vulnerable areas - vacuuming edges of fitted carpets and under furniture.
- Carry out complimentary treatments. This can include deep freezing of affected materials and the use of residual insecticides such as Constrain or diatomaceous earth around skirtings, inside wardrobes, drawer linings etc.

## Trapping beetles using the Museum Trap



Pheromone lures are packaged individually and should be kept in a refrigerator to guarantee long life of up to two years. Once in use they will release pheromone for 3 months. To capture adult beetles, lures should be placed into a blunder or museum trap. Dermestid Attractant tablets can remain effective for up to 12 months.



Change pheromone lures and trap every 3 months or sooner if the glue surface has become inactive due to dust. Store unused traps and lures in a cool dark place until needed. Dispose in normal household waste. Use the floor trap in areas where rodents, bats or other small animals are present and may be caught.