

## THE BOOTH MUSEUM OF NATURAL HISTORY

### Carpet Beetles

The Museum and Environmental Health Department receive frequent enquires from householders who have discovered either the adult beetle or the more destructive larvae on their premises. The Council have no statutory obligation to treat these insects which are not public health pests, but these notes give information and advice which can enable minor infestations to be dealt with by householders themselves.

The adult beetle is about 2.5 mm (1/8th") long, broadly oval in shape and dark brown or black in colour with mottled white or yellow patches. Their shape is rather like ladybird beetles and they are often seen during April to June. Female beetles lay their eggs on suitable food. The eggs are laid in materials suitable as food for the larvae such as wool, silk, fur or feathers. Silken clothes are eaten too, especially if they are stored in a soiled state. Larvae will also eat cereals - but only rarely. Dead birds or disused nests in roof spaces and chimneys are a common source of beetles which appear at windows since they are attracted to light and may even lay their eggs on dried-up flies that have died there! Other places that they can be found include clothes cupboards, suitcases in the loft, behind skirting boards, between and under floor boards and under furniture, i.e. places where they are seldom disturbed. If not in an enclosed space they will do relatively little damage unless there is a large population. The larvae wander about and seldom remain in one place long enough to eat holes but gnaw a little here and there which cannot easily be detected at the time but subsequently causes unravelling.

The eggs hatch in two to three weeks. In unheated buildings eggs are usually laid from April to August; in heated buildings egg laying may start in March. The larvae grow and moult six to eight times and do not pupate until about March of the following year. If the temperature is unsuitable the larvae may not pupate until three or more years time. The larvae are, known as 'woolly bears'. They are short brown hairy grubs up to 5mm (1/5th") long and have dense tufts of golden hairs on each side of the hind part of the body. The larvae alone do the damage by eating irregular shaped holes in carpets, rugs, stuffed birds or similar dried animal material, and they may even be seen crawling



up walls or on shelves in cupboards or wardrobes. Adult beetles fly out of doors where they feed on pollen and nectar. Adults can mate and lay eggs without feeding. This often happens if they emerge inside a closed container such as a trunk, suitcase or display case. Since there is a certain overlapping of the annual generations, the adult beetles are often present from April or May to September.



## SPECIES

There are eight related species in Britain.

The Varied Carpet Beetle (*Anthrenus verbasci*), usually a pest of woollen goods and occasionally stored products, found outside in old birds' and mammal nests.

The Furniture Carpet Beetle (*A. flavipes*), a pest of animal materials including wool, bones, fur, feathers and sometimes stored products and it has also been known to be a pest of paper; the commonest.

*A. pimpinellae* which is not an important pest, but can be found on dried fish, woollens, horse-hair, stored products.

The Common Carpet Beetle (*A. scrophularia*), a rare pest on animal products.

The Museum Beetle (*A. museorum*) eats dead insects (especially those near spiders' webs), but rarely a pest.

*A. olgae* is a recent introduction (1984) in a museum and house.

*A. coloratus* which is not established in Britain and has only been recorded from museums.

Finally, The Guernsey Carpet Beetle (*A. sarnicus*), a rare pest of woollens and bird, mammal and insect collections (found outside in birds' nests).

## CONTROL

Where one or two beetles or larvae only are discovered, it is unlikely that much damage will have occurred and a radical investigation of all carpets, underfelts and woollen material on the premises would not appear to be justified. Nevertheless, extra vigilance should be exercised for any evidence of damage in these materials. Additional attention should be paid to cleaning carpets or woollens especially by vacuum cleaner or stiff brush. Woollens or similar material not in regular use should be stored in polythene bags. Suspected isolated carpet infestations could be treated by spraying with aerosol or dry powder insecticide of the type purchased from chemists or general stores. Where heavier infestations are thought to occur, insecticidal powder should be liberally sprinkled over affected areas and left as long as possible undisturbed. Individual infected items like woollens, soft toys etc. can be treated by sealing the items in a polythene bag and placing them in a deep freeze for four days. Then, remove from the deep freeze and leave in the warm for three days and follow this with a further four day deep freeze treatment. In doing this adults, larvae and eggs are killed. Freezing only once could leave viable eggs which have been stimulated to hatch by the initial freezing process (they think winter has passed and spring is here). Double freezing ensures that larvae hatching from these eggs are killed.