

DETECTING INSECT INFESTATIONS IN HISTORIC TEXTILES

There are several insect pests that attack textile materials. Most leave visible evidence of their activity and collections should be regularly inspected for these signs, preferably every six months for vulnerable materials. This inspection will not only identify active infestations but will help prevent them by providing a hostile environment for insect activity in the form of air circulation, movement and light.

Carpet beetles and clothes moths are the two main textile insect pests. Both feed on textile materials when in their larval stage, and both prefer to eat wool although they will eat other materials in some circumstances.

Detection of an infestation:

The signs of a previous or an active infestation in a textile are:

- ❖ The presence of frass, or small pellets of excrement. These will often be colored the same as the host textile.
- ❖ The presence of cast larval skins of the carpet beetle and other dermestids.
- ❖ The presence of spun larval casings of the clothes moth, also often colored the same as the host textile.
- ❖ Small holes with clean edges in wool or other fabrics.

If you suspect an infestation is active:

Vacuum the textile carefully on all surfaces at low suction using a micro attachment. Enclose the textile in a plastic bag and seal it thoroughly. Monitor the bag for the signs listed above. You may also see living larvae or adult moths or beetles.

Other methods to detect active infestations:

Recently pheromone traps have become available for clothes moths and carpet beetles, and these will attract and trap adult insects and signal an active infestation. They should be used as part of an ongoing monitoring program of storage and display areas.

If you find evidence:

If you find a live insect, capture it in a small vial or bottle – don't squash it or use tape to catch it. If you find a larval skin casting, moth casing, or frass, save it in a small vial. Take this evidence to an entomologist or other person knowledgeable about textile pests for identification. University Extension Agents are often a good source of information about insect pests.

For more information, see:

Mary-Lou Florian, Heritage Eaters: Insects and Fungi in Heritage Collections, James & James Ltd., London, 1997.

R. E. Child, Monitoring Insect Pests with Sticky Traps, The National Park Service Conserve-o-Gram 3/7, Washington D. C., 1998.

<http://www.cr.nps.gov/museum/publications/consveogram/03-07.pdf>

Source for pheromone traps:

Insects Limited, Inc.
16950 Westfield Park Road
Westfield IN 46074
(317) 896-9300
www.insectslimited.com