

## **SOP for Integrated Pest Management (IPM)**

For AHEC staff Version 4, April 2008

# **Concepts:**

**IPM:** Integrated Pest Management (IPM) utilizes a holistic approach to pest management decision making to take advantage of all low risk management options that emphasize methods having the least possible hazards to people, the environment, and museum and archival material collections.

**Biological infestation, biodeterioration, and mold**: See SOP on Controlling Agents of Biological Deterioration

# Roles and Responsibilities

The responsibility of IPM at the AHEC is a shared responsibility between Conservation, Facilities, Post, Federal Contractors, and ultimately all AHEC staff. The Federal contract for services of professional pest management contractors is managed through Carlisle Barracks as part of the Installation Integrated Pest Management Program and is managed by the Dept. of Public Works, Carlisle Barracks. The conservation portion is concerned with insects that affect collection materials and the collection storage environment, and facilities staff is essentially responsible for the building and grounds pest control.

The Objects Conservator is responsible for placing and monitoring traps in the Interim Storage Facility (building 952), the Fine Arts Storage area in building 315 on Post, and assists with the old Hessian building on Post as requested, and removes pest nests in direct contact with macro artifacts on the Heritage Trail. The Paper Conservator is responsible for placing and monitoring traps in Ridgway Hall (building 950), throughout the building and in the archives stacks.

All AHEC staff has been made aware of potential pest problems through periodic e-mail alerts and discussion with the conservators. E-mail alerts with identification keys of what the pests look like are sent out when problems occur or during seasonal influx of insects. Staff contacts conservation and facilities whenever there are pests found in the buildings. Quarterly reports are sent to AHEC Directors and when special problems occur.

Responsibility of pest control for the future Visitor and Education Center (VEC), Army Heritage Museum (AHM), the Museum Support Facility (MSF), and other buildings in the planning phases will be reviewed in the future as necessary so that collections and staff are protected from pests.

### **Identification of insects and pests:**

Identification of pests will be performed primarily by professional pest management contractors who perform inspections with the conservators. Auxiliary free assistance is available through the local Penn State College of Agricultural Sciences Extension, 1100 Claremont Road, Carlisle, PA 17013.

A pest database is maintained by conservation staff and shared with Directors and staff as needed. The database identifies the pest, it's latin name, the size and appearance characteristics, the larvae cycle, collection materials potentially at risk, seasonal habits of the pests, the location and dates found of the pests, the quantity found, typical IPM eradication methods, and bibliographical resources. Numbered trap locations are mapped on a worksheet for each building and collection space to document trap findings which are logged into an Excel database for review.

In an effort to maintain and develop Best Practices for IPM in all museums, the Objects Conservator is currently a member of the IPM Working Group which produces MusemPests.net. The aim is to identify, develop, and provide products to assist museum personnel throughout the international museum community with pest management practices, policies, and resources.

### **Establish the scope of the infestation:**

The goal of inspections is to identify and isolate the affected areas and to determine if collections have been damaged. Basic Housekeeping of archival collections storage areas is conducted on a rotating basis in accordance with the MHI Preservation Plan as a task of Holdings Maintenance. Collection cleaning, anoxia, and remediation methods are the responsibility of the conservators; facility cleaning and remediation is the responsibility of the Facilities manager. Housekeeping of collection areas in the ISF and 315 is performed by museum staff and summer hires under supervision. The current housekeeping contract is generally for office and rest room areas, so the shelves, floors, and storage area are maintained by AHEC staff.

#### **IPM strategy:**

Sticky insect traps are laid throughout the perimeters and collections areas and points of entry to the buildings. Traps are reviewed by the contractor and conservator bi-weekly. When insects pose a risk to the collection or have increasing population, the locations of the traps are modified and the professional pest management contractors determine if the insects are to be baited with pheromone traps or other specialty traps, in accordance to the contract and Federal, State, and local regulations. Identification of insect entry is identified and remedied through work orders submitted to facilities if the point of entry is a building structure issue.

Strategy and methods are conducive to non-chemical control of pests indoors. Professional eradication methods must meet minimum conservation standards to protect the collection materials and staff from exposure to gaseous pollutants and residues. Chemical methods are acceptable only outdoors away from artifacts on the Heritage Trail.

### **IPM supply acquisition:**

All traps and supplies are the responsibility of the professional pest management contractors as per contract guidelines.