

PEST CONTROL POLICY

The Peabody Museum of Natural History strives to provide a good preservation environment for collections while ensuring a healthy environment for staff, volunteers and the public. Recognizing that no single method of controlling pests in museums can be fully effective, the Museum pursues a policy of integrated pest management, employing a range of preventive techniques to achieve a better level of control than can be achieved through strictly chemical approaches. This method seeks to exclude pests from entering the buildings and collections areas, to monitor for early signs of pest activities, and whenever possible to employ non-chemical control methods such as freezing or anoxic techniques to eliminate active infestations; pesticides will be used only after all other less toxic approaches have been exhausted.

Pest management is considered to be a regular collection management activity. All Museum staff must clearly understand their roles in pest management and the effects of their activities on preventing or permitting pest survival. A Pest Control Committee (PCC) named by the Director will implement and oversee the Museum's pest control program. Each area of the Museum will be governed by a zone designation that describes the level of pest management appropriate to that space. Specific zone designations are established by the Director according to the principles outlined below and in consultation with the PCC, the curators, and the occupants of each area. The PCC provides training for Museum staff in pest detection and identification, supplies trapping devices and other necessary materials, and advises on the placement of monitoring devices and the implementation of other pest control measures throughout the Museum.

Pesticides may be employed for pest eradication only when other methods will not be effective, and only after consultation, and with the prior approval, of the PCC. Prophylactic use of pesticides is not permitted in Museum buildings except under extraordinary circumstances, and only when the health of the Museum staff and visitors will not be compromised. The use of pesticides must conform with state and federal regulations. A permanent record of all pesticide use must be maintained by the division; copies must be filed with the PCC.

This approach to pest management -- discouraging pest access, monitoring pest occurrences, and following appropriate eradication procedures -- will better protect collections and will reduce the need to expose Museum staff, collections users, and collections to toxic control substances.

PEST CONTROL PROCEDURES

GENERAL GUIDELINES

All Museum buildings will be inspected annually by the Operations Manager for settlement cracks, holes, faulty gaskets, missing screens, gaps around doors, and other potential points of pest entry. Plumbing fixtures and seals around pipes and conduits will be inspected periodically by the Operations Manager to be sure pests are denied a water source and entry points. Appropriate repairs must be initiated promptly. Bird or wasp nests on the exterior of the structure will be removed. Vegetation such as ivy and tree branches will be kept clear of building walls. Exterior doors, including the loading dock door, will be kept closed when not in use; doors must never be propped open. Refuse must be securely bagged and removed from the loading dock area frequently to avoid attracting pests. Modifications to the exterior or interior of Museum buildings, and choice of new furniture, fittings and storage equipment are best guided by considerations of improved pest control. Exhibit design should also be guided by integrated pest management criteria, as should arrangements for Museum events.

All Museum staff should remain alert for signs of pest activity. In the event that activity is discerned, staff members must fill out a Pest Incident Report Form and submit it to the head of the PCC. This includes observations of pests known to be hazardous to collections anywhere in the Museum complex or of any conditions in the building favorable to pest development. A list of pests potentially harmful to collections is found in Appendix A of this document.

The Museum buildings must be kept as clean as possible. Objects that rest on the floor must be arranged so that it is possible to clean under and behind them. All floors, both carpeted and uncarpeted, will be vacuumed regularly with special attention to corners, edges, and closets to clean up debris that provides a food source for pests. Uncarpeted floors in non-collections areas should be wet-mopped only as needed, followed by dry mopping to keep moisture to a minimum.

All food and food remains must be kept in well-sealed containers. Any area where human food is stored or prepared, such as kitchen facilities, must be kept immaculate. When food is consumed in the Museum buildings, the area must be cleaned up immediately; food remains and wrappers must be deposited in a designated sealed bin.

In keeping with University policy, no pets, including fish, birds, dogs, and insects, may be kept in Museum buildings or brought in on a habitual basis by Museum staff or students.¹ Vertebrate animals used for research are regulated under Yale University's Protocol on Animal Care and Use, and are not allowed in Museum buildings. Invertebrate animals used in research, as well as arrangements for storing

¹"Health, safety and courtesy reasons preclude the presence of pets in the workplace." Yale University Personnel Policies and Practices Manual, 1993, p. 61.

their food and cleaning their cages, must be approved by the PCC before being brought to the Museum. Live animals may be brought into the auditorium for programs after consultation with the PCC. Animals used in the Discovery Room must be approved by the PCC.

All collections areas are subject to zone protocol. Pest control protocols must be conscientiously followed in all areas where collections are housed, studied, or processed. Even when specimens are themselves inorganic, specimen labels are vulnerable to pest damage. Furthermore, adjacencies and shared environmental systems require that all divisions adhere to the same standards delineated in the zone descriptions, and all divisions must continuously monitor for pests. The PCC will advise collections staff on the choice and placement of pest traps in collections storage and work areas, and in adjacent administrative space. Traps will be inspected according to a schedule established by the PCC, in consultation with the division, to meet individual requirements. Pest Report Forms will be supplied to document trap inspections as well as incidental pest sightings; the PCC is available to assist with identification where necessary. These forms, which will be filed in the division, are reviewed by the PCC in order to monitor outbreaks from a broad Museum perspective. Immediate reporting of certain pest species is required to safeguard against their spread throughout the Museum (see appendix A).

Specimens and packing materials coming from other institutions, as well as unprepared or freshly-prepared specimens from any source, are potential carriers of pests. The curatorial staff of each division can determine whether freezing, cleaning, or other treatment is required before specimens are brought into collections areas.

ZONE DESCRIPTIONS

Each Museum space has been given a zone designation (red, orange, yellow, or green) according to the level of pest management required. Zone designation is based on the proximity of a space to vulnerable Museum specimens and on activities occurring in that space. In addition to these restrictions additional, more stringent conditions may be imposed by the appropriate curator. Zone definitions are as follows:

Red Zone: Spaces designated red zone are used solely for collections storage, and are the most tightly controlled areas in the Museum. Red zones are effectively sealed against pests.

- * All incoming specimens must be immediately unpacked and treated or inspected carefully to ensure that they are pest-free before being brought into a red zone.

- * No unopened boxes, packing materials or other non-collections items may be stored in a red zone.

* Items such as briefcases, knapsacks and coats may not be brought into a red zone. Live plants or animals are not permitted under any circumstances.

* No food or drink may be brought into a red zone.

* Special attention should be paid to maintaining seals around doors, pipes and conduits located in red zones. Doors must be kept closed except for access.

* Red zone monitoring programs are designed specifically to the needs of the collection.

Orange Zone: Orange zones are usually collections rooms which cannot be effectively sealed against pests, or which are used also as offices and collections management areas. This designation also applies to collections management areas that are located adjacent to red zone collections storage areas.

* All incoming packages must be immediately unpacked and treated or inspected carefully to ensure that they are pest-free before or immediately after being brought into an orange zone.

* Packing materials and other non-collections items stored in an orange zone must be clean and stored in an orderly fashion. Objects that rest on the floor must be arranged in such a way that it is possible to clean around and beneath them.

* Live plants and animals are not permitted under any circumstances in orange zones, nor are decorative items that could harbor or attract pests.

* Food and drink may be allowed in orange zones with the approval of the appropriate curator. Food should be stored in well-sealed containers. The area must be cleaned up and food wrappers and food remains must be deposited in a designated sealed bin immediately after a meal.

* Special attention should be paid to preventing pest access around doors, windows, pipes and conduits located in orange zones.

* Orange zones, like red zones, are monitored for targeted pests.

Yellow Zone: Yellow zone spaces include non-collections administrative offices, faculty offices, research specimen rearing facilities, the construction shop, and some collections rooms.

* All incoming packages must be immediately unpacked and treated or inspected carefully to ensure that they are pest-free.

* Packing materials and other non-collections items stored in a yellow zone must be clean and stored in as orderly a fashion as possible. Objects that rest on the floor must be arranged in such a way that it is possible to clean around and beneath them.

* Because potted plants, flowers, wool rugs, etc. often carry unseen pests, they should be inspected by the PCC when they are brought to the Museum, and monitored thereafter by the owner. Standing water under plants must be avoided because it is a pest attractant.

* Food and drink are allowed in yellow zones. Food should be stored in well-sealed containers. The area must be cleaned up and food wrappers and food remains must be deposited in a designated sealed bin immediately after a meal.

* Special attention should be paid to preventing pest access around doors, windows, pipes and conduits located in yellow zones.

* Most yellow zone spaces will depend on visual monitoring for pests. Personnel in yellow zone rooms should be alert to, and report, the presence of pests.

Additional guidelines for special yellow zone areas:

Administrative Areas: Administrative areas of the Museum must be regularly cleaned. Routine custodial cleaning includes daily trash pickup and weekly vacuuming of floors, with wet mopping as needed. Office decorations are subject to inspection by a member of the PCC.

Green Zone: Most public areas of the Museum including the exhibit halls, the auditorium, classrooms, the Museum Gift Shop, the Discovery Room, kitchens, and most corridors are designated green zone.

* All green zone areas are covered by the General Guidelines outlined above.

Additional guidelines for special green zone areas:

Exhibit Halls: No food or drink is allowed in exhibit or other public areas of the Museum except at scheduled receptions. Food refuse must be cleaned up and removed from the building immediately after an event, and floors must be vacuumed as soon as possible. No potted plants may be used as decoration in the Museum's public areas. Cut flowers may be used for special events, but must be removed from the building immediately after the event.

Whenever possible, organic specimens on exhibit will be enclosed in sealed cases. Exhibits that include organic specimens will be visually

inspected monthly by the conservator and/or preparator. Sticky traps included in these exhibits should be inspected every three months by divisional, conservation, or preparation staff. Exhibit cases with organic specimens should be vacuumed with a HEPA vacuum as needed. Dioramas require regular visual monitoring by a member of the PCC as well as monitoring with sticky traps. When organic specimens are removed from exhibit, they must be inspected and/or treated by the appropriate division before being returned to collections processing or storage areas.

Kitchens: The sink and counters must be cleaned after use. Dishes and utensils must be washed immediately after use and put away, leaving counters clear. The staff member who is in charge of any event that includes food is responsible for seeing that kitchen use follows these guidelines, and that food is disposed of and dishes cleaned by the end of the day.

The Museum Gift Shop: Because the Museum Gift Shop handles materials vulnerable to pest activity, including wool, feathers, fur, and wooden artifacts, it is essential that the staff be alert for pests and follow rigorous pest control procedures. Organic materials brought to the Museum for sale in the Gift Shop must be inspected for pests by Gift Shop staff immediately upon arrival. In case of any uncertainty, the object in question will be immediately isolated in a sealed plastic bag, and the PCC consulted.

Discovery Room: Because of the nature of the materials in the Museum's public education programs and the variety of ways in which they are used, the potential for pest activity in these spaces is high. For these reasons, the Public Education Department must adhere closely to the Museum's pest control protocols.

No live material, plant or animal, will be brought into the Discovery Room without prior clearance and possible inspection by the PCC. Non-living organic materials from outside the Museum that are vulnerable to pest infestation--teaching specimens, animal food, craft materials--must be frozen before being brought to the Discovery Room (see guidelines on freezing). Such materials will be stored in pest-proof containers when not in use, and inspected regularly for signs of pest activity. Education staff must be continuously alert for signs of pests associated with animal colonies and potted plants. Animal enclosures will be kept clean and secure so that potential pests can neither enter nor escape.

The Discovery Room will be vacuumed at least once a week with special attention to corners, edges, and beneath and behind furniture. Pest-monitoring will also be carried out as needed using sticky traps. Traps will be inspected by Discovery Room staff, and results reported to the PCC.

The Public Education Collection is to be treated as much as possible in the

same manner as the Museum's permanent collections. Incoming material should be carefully inspected and/or frozen to insure that it is pest-free before being stored with other material in the collection.

PROCEDURES

The PCC will consist of a representative from the Entomology Division, the Conservator, the Operations Manager, the area manager for custodial services, a representative from the Public Education Department, a representative from the collections divisions, and a permanent guard. The PCC will meet quarterly to review the implementation of the Pest Control Policy and to address the concerns of all parts of the Museum.

Zone designations will be assigned after discussion between members of the PCC and room occupants. A monitoring and reporting program appropriate to the needs of each will be established.

Approved, Board of Curators, April 7, 1997