

# Gutiérrez Hubbell House

## Integrated Pest Management

20 February 2020

### Why IPM?

A comprehensive and closely followed Integrated Pest Management (IPM) strategy is the best way to protect historic structures, artifacts, and people. Over half of historic collections have incurred damage from pests at some time, so we know that pests are a common issue. By complying with these IPM best practices, we are able to eliminate the vast majority of pest-based threats to our historic structure and collections, without the need for toxic chemicals and other sprays. Studies reflect 60–90% decline in pests with the implementation of these simple measures.

A good IPM covers a few basic areas:

- Identifying and understanding risk
- Deterrence to pest entry or taking up residence
- Monitoring
- Remediation after infestation or damage

Deterrence and monitoring require the help of all site staff, volunteers, and visitors. Risk assessment and remediation will be done primarily by the Site Manager and Open Space staff, with the assistance of relevant experts.

This document outlines the basic best practices for IPM at GHH, including roles, tasks, and schedules for creating a space that is less inviting to the critters who share our beautiful Open Space and is safer for our collections, structure, and people.

*Thanks for joining us in protecting our Museum!*

## Roles

We all contribute to the success of IPM at GHH. Most duties involve vigilance in housekeeping and informal monitoring for pests and damage,

Site Manager or Manager on Duty:

- Oversee IPM implementation, revision, and compliance.
- Lead on daily housekeeping
- End of day IPM check
- Provide training, information, and guidance on IPM compliance to staff, contractors, volunteers, and renters
- Work with caterers to ensure food is served and cleaned up in ways that meet both our IPM and visitor service goals
- Plan special events with attention to IPM needs
- Monitor pest traps, pest presence, and collections & structural impact

Open Space Staff and Contractors

- Understand and follow daily IPM housekeeping and other practices
- Help visitors understand and follow IPM best practices
- Monitor for pests and damage
- Share information, and guidance on IPM compliance to staff, contractors, volunteers, and renters
- Assist with risk assessment, remediation, and deep cleaning as appropriate

GHH Guides and Greeters:

- Understand and follow daily IPM housekeeping and other practices
- Help visitors understand and follow IPM best practices
- Monitor for pests and damage and report all pests to the Site Manager

HHA BOD

- Understand and follow daily IPM housekeeping and other practices
- Help visitors understand and follow IPM best practices
- Monitor for pests and damage
- Participate in semi-annual cleaning

Groups, Other GHH and Open Space Volunteers & Renters

- Understand and follow daily IPM housekeeping and other practices
- Attend site walk-through before using the site for any purposes that involve food, beverages, or other perishables
- Inform caterers of basic IPM best practices and help coordinate caterer connections with Site Manager or other Open Space staff
- Inform Site Manager or Manager on Duty of any IPM concerns or question

## **Risk Assessment**

Risk assessment for GHH takes into account our collections, the historic structure, and the impact of our context on an organic farm.

### *Location & Context*

Our location on a farm in the South Valley brings with it specific pest risks, due to the abundant water, food, and shelter for rodents, birds, insects, and other critters. We value all these aspects of our outdoor beauty and richness, but they constitute collections risks.

### *Structural Conditions*

GHH's lack of humidity or temperature control contributes to overall impact to objects and structural elements, which increase susceptibility to infestation by creating microfissures and spalling of surfaces. The structure is also highly permeable, lacking sealed windows and doors in a variety of locations and including direct access from the ground via the subfloor in the boiler room. We open windows and doors to decrease heat in the summer and experience humidity and moisture through the walls and windows during and after precipitation.

### *Collections*

Our collections are heavily organic, both artifacts and replicas. GHH has significant cellulosic materials, proteinaceous materials, as well as historic structure elements, all of which have specific vulnerabilities. Basic guidelines on vulnerabilities by material type can be found at:

<https://museumpests.net/prevention-introduction/prevention-understanding-the-nature-and-vulnerability-of-your-collection/>

## **2020 Risk Assessment**

We do not currently have a complete IPM risk assessment or an collections-based emergency plan. As we move forward with implementing cleaning and pest reduction strategies, we will also move forward with a comprehensive IPM risk assessment as part of an overall collections and exhibitions assessment.

### *Priority tasks*

- Conduct building envelope review using MuseumPests checklist.
- Conduct complete collections condition review
- Create schedule for collections condition reports
- Use 2020 monitoring results to identify areas and collections of high risk

## **Deterrence: Eliminating pest attractors**

Creating an environment that is uninviting to rodents, cockroaches, silverfish, beetles, and other common museum pests is the number one way we can protect our museum. This means limiting food for pests and cleaning up quickly. Mice love a buffet as much as we do -- don't invite pests to move into the building. The biggest change will be limiting where food is stored and consumed in the museum.

### ***Food in the Museum***

- Food allowed only in the coffee kitchen and main kitchen
- Beverages with a lid allowed in the volunteer office, archive, tiendita
- Water with a lid allowed in the parlor
- Staff and volunteers should store all food left in the museum overnight, open or not, in the refrigerator. Because this is a change, please ask before snacking on food you did not bring.

### ***Food in the coffee kitchen***

The coffee, tea, and occasional snacks are here for you to enjoy! Please help yourself to refreshments and clean up before you leave.

Clean up includes:

- Empty and clean coffee pot, cups, spoons, etc
- Wipe off counters
- Ensure all wrappers from food, sugar, etc, are in the trash

Additionally, either complete the following or check in with the Site Manager or other volunteers and staff to ensure someone will do these tasks before the Museum is closed for the night:

- Spray mop the floor if food has been consumed
- Take any trash with food or perishables to the outside trash bins

### ***Perishables***

Human food is not the only potential snack for common pests. Books, textiles, wood, leathers, and furs are highly susceptible to pest damage. Our best tools for reducing impact are removing pest attractors already present, treating objects before they enter the museum, and keeping potential pests out of the building.

Common sources for pests that might find their way to GHH are:

- Potted plants and floral arrangements
- Food and plant items used in interpretive spaces or kits
- Dirt and soil
- Reclaimed objects and materials used in art or interpretation
- Untreated historic objects

Such perishables should be treated in the same way as food: surfaces should be cleaned and materials removed from the building before closing or stored in the refrigerator.

Potted plants should always be repotted with sterile, store-purchased soil rather than soil or compost from the farm or home environment. We may consider eliminating potted plants inside the building.

### *Temporary Exhibits*

Many artists, scientists, agriculturalists, and artisans employ natural and found objects in their work. Because of the nature of the temporary gallery's community-based, changing collections, IPM best practices for artifact review and treatment must be implemented with the new exhibit cycle (2021).

## **Deterrence: Cleaning**

Scheduled cleaning is an important part of IPM. We have three levels of cleaning:

- Daily: housekeeping to eliminate pest attractants from the building overnight. This is done by the volunteers and staff on-site at the end of each day.
- Weekly: paid cleaning service that keeps our floors, equipment, bathrooms, and office areas clean and dust-free.
- Semi-annual: instituting a semi-annual deep clean schedule has a number of demonstrated impacts, including dramatic decreases in pests documented in several museums with detailed pest counts. It also helps eliminate clutter and gives us a good opportunity to assess building and furniture maintenance issues. These events will be scheduled and help from volunteers, HHA, and other staff recruited.

### *Daily tasks*

- Clean coffee kitchen: check coffee pot, wipe off counter, check mice traps, spray mop.
- Clean horizontal surfaces and sweep and spray-mop with water all areas of the Museum where food, beverages other than water, or perishables have been used during the day.
- Check all interior trash cans for perishables; remove such trash to external trash bins.

*Weekly tasks:* see Sparkle maintenance contract and schedules. Cleaning generally takes place on Mondays and Fridays. Additional cleaning after events can be requested on a case by case basis.

### *Semi-annual*

Deep cleaning twice a year should be expected to take several days and require staff and volunteer assistance and may be followed by work by those with expertise in pest management, conservation, or building maintenance.

- Galleries
  - Check all artifacts for signs of insect damage
  - As possible, move artifacts, vacuum cases, mop floor
  - Check all windows and doors for excessive permeability

- Clean windows, sills, and corners
- Dust all surfaces that are accessible
- Vacuum/clean floorboards and corners
- Replace monitoring traps
- Offices
  - Remove all books, boxes, and objects from each shelf, drawer, and cabinet. Clean cabinets and contents and return
  - Clean all office equipment
  - Dust all surfaces that are accessible
  - Vacuum/clean floorboards and corners
  - Remove floor mats and clean below
  - Check all windows and doors for excessive permeability
  - Clean windows, sills, and corners
  - Replace monitoring traps
- Kitchen
  - Examine all perishables on exhibit (ristras, herbs) for insect presence. Replace at least every 3 years
  - Remove all storage from closet and clean surfaces
  - Dust all surfaces that are accessible
  - Vacuum/clean floorboards and corners
  - Check all windows and doors for excessive permeability
  - Clean windows, sills, and corners
  - Replace monitoring traps
- Coffee Kitchen
  - Remove all books, boxes, and objects from each shelf, drawer, and cabinet. Clean cabinets and contents and return
  - Remove mats from cabinets. Clean mats and cabinets before returning mats
  - Clean all surfaces that are accessible
  - Vacuum/clean floorboards and corners
  - Remove floor mats and clean below
  - Check all windows and doors for excessive permeability
  - Clean windows, sills, and corners
  - Replace monitoring traps
- Exterior spaces
  - Remove floor mats and clean below
  - Check all windows and doors for excessive permeability
  - Clean windows, sills, and corners
  - Examine ristras and other perishables for insect damage. Replace at least every 3 years
  - Examine all light fixtures, lintels, and other nooks for insects. Clean light fixtures and other areas attractive to insect webs, eggs, or nests.

## Monitoring

Consistent monitoring allows us to determine insect and rodent presence, seasonal variation in pests, and helps identify upticks in pests, suggesting we may need to do extra artifact review and/or remediation.

### *Visual inspection*

The best way to identify pests is regular visual inspection for pests themselves, as well as frass, feces, artifact and structural damage, webs, nests, and other evidence that pests have been living in, munching on, or dismantling objects, books, or the structure. It's a great practice to review cases, shelves, corners, and dark nooks for pest indications as you start the day.

### *What do I do if I see a bug?*

- Common insects on the floor, dead: clean it up or ask that the Site Manager do so. Document it on the IPM monitoring chart found in the volunteer office
- Common insects on the floor, alive: try to remove it or ask that the Site Manager do so. Document it on the IPM monitoring chart found in the volunteer office
- Insects in cases or on artifacts: take a picture, if you can. Notify the Site Manager. Artifacts will receive a thorough examination and may be subject to remediation
- Damage or evidence of pest presence; take a picture, if possible. Notify the Site Manager who will determine if remediation is needed after a visual inspection.

### *Sticky traps*

Sticky traps are located throughout the Museum. They are collected by a pest management firm who return a count of the pests caught. While they do trap bugs, they are used for monitoring rather than as our primary way of preventing pests.

### *Quarterly artifact review*

A thorough review of artifacts and structural elements will be done prior to the deep cleaning of each room. This visual inspection will include artifact interiors, bases, and case corners, edges, etc.

## Remediation

Whenever possible, remediation should be done immediately. Remediation includes documenting damage and the pests that caused it, isolating potential pest infestations, removing pests, halting damage, cleaning, and repair or removal from exhibition as appropriate. Remediation may require external expertise.