

Vacuumping Objects

Ford Conservation Center

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Cleaning as Preventive Conservation



The practice of good housekeeping is probably the most simple and inexpensive method of preventive conservation for a collection and for special heirlooms. Good housekeeping will keep dust, dirt, and debris from gathering on and around objects. By keeping valued objects clean, housekeeping reduces the risk of damages from dirt and dust, reduces the risk of pest infestation, and greatly reduces the risk of serious mold activity in the collection. Housekeeping is an excellent method to ensure the safe, long-term preservation of your collection objects and heirlooms.

Preventing Problems in Advance: A Plan

Inside this issue:

Preventing Problems	1
Vacuumping Interior Spaces	2
Tools of the Trade	3
Vacuumping Artifacts	4
Consulting a Conservator	6
Additional Resources	6

Housekeeping for a museum collection in storage or on exhibit should be discussed and defined in a housekeeping plan. The plan should carefully delineate who will do the work; in what order and how often the work should be done; with what tools and methods it will be completed; and exactly how the work will be performed. A housekeeping plan can be invaluable to preservation of the collection.

The practice of good housekeeping forms the “front line” in defense of the collection. The person doing the housekeeping works around

and with each object in the collection on a regular schedule. This allows this person to observe and examine collection objects more often and regularly than anyone else, especially in collection storage and exhibit spaces.

It is always wise to begin the housekeeping process at the highest point in a room and to work to the floor. This way dust and debris from areas currently undergoing cleaning will not fall onto areas that have already been cleaned.

Housekeeping tasks should be

regularly scheduled based on need and the circumstances at hand. For example, spaces are usually very dusty during the first few weeks after the heating system has been turned on in the fall. The heated air dries out dust that has accumulated in the ductwork, which is then picked up and deposited throughout the building. In

early fall, dusting and vacuuming will be required more frequently than during other seasons. However, keep in mind that cleaning should only be performed when necessary. Excessive dusting and over-cleaning will unnecessarily increase wear and increase the risk for damages due to handling.

Vacuuming Interior Spaces

The following are some general tips that can make housekeeping easier and more successful in protecting your objects.

Thorough vacuuming and dusting should be performed regularly in **all** spaces, even those not often visited or used, such as mechanical rooms, basements, and storerooms.

All extraneous materials such as trash, recycling bins, stored paper

products, excess storage materials, cardboard boxes, and unused equipment should be removed from object storage locations and unused spaces. These extraneous items provide attractive living and hiding places for pests and are often contaminated before they are brought into the building. They become locations for dust and dirt build up and prevent careful and thorough cleaning of floors and shelves. Extraneous materials make it difficult to keep spaces neat and orderly. These materials should be stored in buildings or locations where collections or valued objects are not present.

Trash cans used to dispose of food products in museums should be clearly labeled and supplied with tight fitting covers. These trashcans should be emptied daily and the covers should be kept in place at all times. Housekeeping activities should be scheduled immediately following any food-related events near collection areas.

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A clear description of the duties of the cleaning staff, including any activities that relate to the collections, should be prepared in writing. All cleaning activities in collection storage areas and in exhibits should be specifically discussed in advance to avoid accidental damages to collection artifacts.

Training should be provided for the staff performing the cleaning and include topics relevant to collection care issues such as handling and emergency response. A conservator and a curator, archivist, or librarian should work together to develop staff training.

Include regular supervision by professional collections and/or conservation staff as a part of housekeeping operations.

A crucial part of any housekeeping plan is a formal reporting system for use by the cleaning staff. In this system, any observations or concerns about the collections or their environment are reported back to the supervisor and/or conservator. A simple system for cleaning staff to leave notes or messages for the supervisory staff is important. Dates and locations of problems should be recorded and any follow up or corrective measures should be noted.

Tools of the Trade

Appropriate tools and materials make housekeeping activities around collection objects safer and more efficient. Clean latex or nitrile gloves, soft natural bristle brushes, vacuum screens, and a variable speed vacuum cleaner with a HEPA filter are essential.

Vacuuming is the method of choice for removing dust and dirt from the collection environment. Vacuuming makes it possible to actually remove unwanted dust and dirt from the immediate environment. Sweeping and dusting with a cloth just disperses and redistributes dust and dirt. Additionally, dust cloths cannot get into depressions and their fibers may snag on loose pieces or open joints.

In order for the vacuum to remove even the finest dust, the vacuum must have a suitable filtration system, otherwise the dust sucked up

by the vacuum will simply be blown right back into the room via the vacuum system exhaust.

High **E**fficiency **P**articulate **A**ir (HEPA) filters are required for museum, library, and collection applications and are used in many homes. These are readily available from many sources today. An essential feature on a vacuum for continued collection use is a variable speed motor that can be used to dial the suction power from low power suction to full power for different applications. This will make it possible to use the vacuum to clean fragile collection objects.

Another important feature of a good vacuum cleaner is the availability of a micro tool set of attachments for the nozzle. Micro tool attachment kits can be purchased separately and will fit most standard size nozzles. (See the supplier list.)





Note the location and power of the exhaust port on the vacuum. It is important to be aware of this port, as air blown out of the vacuum can knock small or light objects off tables or blow them over.

Remember to change vacuum cleaner bags frequently. Never let any part of the vacuum nozzle or hose contact artifacts. It is often advisable to work in teams when cleaning around and in collection storage locations. One person can move objects and act as a spotter while the other can focus on the cleaning activity. Always have two people present when a ladder is in use.



Before vacuuming an object, cover the nozzle with a square of nylon screen or a few layers of cheesecloth secured by a rubber band. The screen will protect loose elements from being sucked up into the vacuum, where it will be difficult, if not impossible, to retrieve them intact. The presence of a screen also allows you to see what the vacuum suction

is removing from the surface of the object.

When working with a vacuum cleaner, use a brush to sweep the dust into the vacuum nozzle. Brushes used for cleaning in and around collections should have natural bristles. Using brushes with light colored bristles makes it easier to see when they have become soiled and need to be washed.

The brushes should have soft plastic or tape covered ferrules. Metal ferrules will scratch and snag materials and objects and can be very dangerous. Cloth or plastic adhesive tape can be used to cover metal ferrules.



Vacuuming Artifacts

There are many factors to consider prior to cleaning artifacts in a collection. Consult a conservator if you feel uncertain about the issues relating to the care of the objects in question. These procedures should **not** be used on any objects that have:

- delicate or fragile materials,
- loose or friable media or sup-

ports,

- the potential of having been treated with a toxic pest control chemical (arsenic),
- the possibility of indigenous or historic deposits that should be protected,
- extensive repairs.

Objects exhibiting any of the above

conditions should only be cleaned by a conservator.

If the following cleaning methods have been determined to be appropriate for a specific object, carefully follow the procedures outlined below. Care and attention to detail are needed to avoid doing more harm than good. The materials and techniques listed below have been tested and found to be safe and ef-



Procedure

Prepare a clean, well-ventilated work area with adequate light. Create a padded work surface by laying down a towel, followed by a clean, white sheet. Place sheets of acid-free tissue paper down if your object is very dirty. It is recommended that gloves are used, to avoid contaminating yourself or the object.

Place the object on the work surface. If the object is a three-dimensional object that opens and closes like a box or a book, leave it **closed** until the exterior surfaces can be cleaned.

Before vacuuming your object, cover the nozzle with a square of nylon screen or a few layers of cheesecloth secured by a rubber band. Set the vacuum to the lowest effective power. Begin cleaning by **slowly and gently** using the soft brush to remove loose surface dust and debris. Position the vacuum nozzle near, but not on, the object's surface, so it can receive the loosened dust and debris from the work area as you brush. Strokes of the brush should

begin at the top of the object and move towards the edges and the bottom of the object. A very light touch is most effective. If there are any signs of loose media or support, stop the cleaning immediately and contact a conservator for further instructions.

If the dust, dirt, or debris on the object is too tenacious to be easily vacuumed off, try to release it by testing a small area with a slightly stiffer natural bristle brush. **Do not be tempted to use any liquid cleaning solutions.** These may cause permanent staining and may remove or dissolve part of the material of the object.

Some materials, such as some ceramics and glass items, can be cleaned with liquid cleaning solutions, but only after they have been carefully examined. See additional information on this website for more specific instructions based on type of material.

Materials Needed:

- A clean towel and a clean, white sheet for creating a padded surface
- Sheets of acid-free tissue paper (to use under your object if it is very dirty)
- A clean, soft, natural bristle brushes (such as a Chinese or Japanese Haké brush)
- A vacuum with a HEPA filter and a variable speed motor for control of suction and micro tool attachments
- A screen for your vacuum nozzle (either nylon screen or layers of cheesecloth, secured using a rubber band)
- Gloves (cotton, latex, or nitrile)

Consulting a Conservator

If you have any concerns about the care of your object, consult a conservator in your area for further guidance. A conservator will be able to assess all the issues relating to its condition and long-term care. Conservators can also provide structural repairs, aesthetic compensation, and protective coatings for a range of materials.

Conservation Suppliers

Most materials listed for cleaning, waxing, and proper storage can be found at hardware stores, art supply stores, or online. The following are recommended resources that carry more specialized supplies needed for the care and long term preservation of objects.

Conservation Resources International

7350-A Lockport Place
Lorton, Virginia 22079
Toll free: (800) 634-6932

www.conservationresources.com

Archival housing/storage supplies, photographic supplies, general

Gaylord Archival

P. O. Box 4901
Syracuse, NY 13221-4901
Toll Free: (800) 448-6160

www.gaylord.com

General conservation supplies, housing supplies

Hollinger Metal Edge, Inc.

9401 Northeast Drive
Fredericksburg, VA 22408
Toll Free: (800) 634-0491

www.hollingermetaledge.com

Archival housing/storage supplies

Light Impressions

100 Carlson Road
Rochester, NY 14610
Toll Free: (888) 222-2054

www.lightimpressionsdirect.com

Photographic supplies, housing, matting and framing supplies

University Products

517 Main Street
P. O. Box 101
Holyoke, MA 01041
Toll Free: (800) 628-1912

www.universityproducts.com

General conservation supplies, housing and matting supplies

Talas

330 Morgan Ave
Brooklyn, NY 11211
Telephone: (212) 219-0770

www.talasonline.com

Conservation supplies, photographic supplies, general



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Ford Conservation Center
1326 S 32 Street Omaha, NE 68105 402-595-1180
hn.fordcenter@nebraska.gov history.nebraska.gov/conservation-center