Preserving and Conserving Your Collection

PRESERVATION PRIMER FOR COLLECTORS

Series of Articles written by Linda Edquist, Conservation Specialist

Environmental Conditions

The goal of caring for your treasures does not have to be an overwhelming or all consuming task, particularly if you approach the project in phases. The most important thing you can do is to improve the overall "environmental conditions."

This can mean something as simple as moving boxes from a hot attic or damp basement to an area less prone to extreme temperature and humidity fluctuations. Many materials, especially paper and textiles, are hygroscopic, which means they are physically responsive to moisture and temperature changes.

Inappropriate environmental conditions promote harmful chemical reactions and encourage mold growth and insect activity. The accelerated deterioration manifests itself in visible signs of damage:

- cockling (distortions and rippling of paper)
- warping (of book covers, for example)
- foxing (reddish-brown spots on paper and textiles)

This is why it's imperative to move your treasures to an environment that will prevent further damage. Of course, most people store things in the basement or attic to get them out of the way. Fortunately, you don't always have to sacrifice prime living space to safeguard your collectibles.

You can safely store objects

- under a bed—as long as they are kept in a covered box
- in a closet—especially a closet set along an interior wall
- at the back of a bookshelf—if they are in small boxes
- on a high shelf in a finished basement—but avoid using shelving along exterior concrete walls or near the floor
Wherever you feel comfortable year round, so will your precious collections and heirlooms. Just remember—avoid displaying or storing your objects in well lighted areas; in hot, humid or excessively dry areas; or near exterior doors.

Once objects have been damaged, they are altered forever. A conservator can stabilize and repair the piece, but its visual appearance will suffer...as will the owner's purse when the conservator's fee is paid.

Agents of Deterioration

Since the National Postal Museum (NPM) has such a diverse collection we have long been aware that different preservation techniques are needed for different types of artifacts. However, one of the few standards that does remain constant for us are the 10 Agents of Deterioration. We use these “agents” to create a plan that allows us to detect and prevent any damage to our collection no matter its material, age, or history. Knowing the Agents of Deterioration and preventing them is important for private collectors as well so they might preserve family treasures for future generations. Below is a basic summary of the 10 Agents of Deterioration in no particular order:

Physical Force can damage artifacts directly by causing rotation, deformation, stress, breakage and pressure. Examples of force: impact; shock; vibration; pressure; and abrasion. Most physical force is caused by general use but also by accident. The museum prevents physical force damage by displaying artifacts in cases or behind barriers and storing artifacts in cabinets. At home, artifacts can be placed in cabinets or out of reach.

Theft and Vandalism is willful damage to artifacts that is either premeditated or a “crimes of opportunity”. Museums take precautions against theft and vandalism by putting artifacts in cases and having high-tech security features. At home, similar precautions can be made based on the value of your collection, but locking high value artifacts away is an easy step to prevent theft or vandalism.

Neglect is the loss of the artifact or the information associated with the artifact, such as names, dates or locations. Also, not providing proper preservation is another form of neglect since the collections will continue to deteriorate. NPM keeps thorough paper and electronic records pertaining to every artifact in its collection relating to its history and provenance. This is equally important for individuals trying to preserve and track family heirlooms.
Fire can cause smoke damage, partial or total loss of the artifacts. As a result, it is important that fire prevention be given the highest priority possible. Fire suppression systems are used at the museum to control any fire that may break out, but at home it is important to have a fire extinguisher accessible. If some artifacts are of very high value it would be worth looking into acquiring a fire-proof safe.

Water damage can result from natural occurrences, technological hazards, or mechanical failures. Water leaks and floods are the most common causes of water damage, but can also simply be caused by spilling a beverage. Water damage causes warping and tidelines to your artifacts. The museum stores its collection at least six (6) inches off the floor and inside cabinets in anticipation of a leak or flood. Storing artifacts off the floor and not placing drinks near your most treasured artifacts will drastically cut down on the danger of water damage at home.

Pests, such as microorganisms, insects, and rodents, can make a feast out of artifacts. They are attracted to artifacts made from plants and animals, such as paper and fabrics. They especially enjoy cardboard boxes, so best not to store any family treasures in them. Having a regular pest inspection to check for infestation is vital to preventing any damage. NPM only uses environmentally friendly pest control products and we never use aerosols due to chemical hazards (see next agent).

Chemical Deterioration can be natural or man-made gases, aerosols, liquids, dust or dirt that are known to accelerate decay of artifacts. Aerosols and liquids that are commonly seen around artifacts are household cleaners, bug sprays, and detergents. The chemicals within these sprays can attach to the artifact and will slowly cause it to decay. When cleaning near an artifact, spray directly onto the cloth, away for the object and then wipe down the surface.

Light damage is caused by overexposure to natural or artificial light. A loss of historical and monetary value can occur when artifacts fade from exposure to excessive light. The best method to prevent light damage is to store artifacts away from direct light. NPM tries to minimize the amount of times artifacts are exposed to light by rotating out objects on exhibition and when they are in storage, they are kept in dark cabinets.

Incorrect Temperatures that are too low or too high can damage artifacts adversely based on the material of the artifact, often accelerating deterioration. Attempt to keep temperatures between 65°F and 72°F. It is important to keep artifacts out of basements and attics where the biggest shifts in temperature can occur.
Incorrect Humidity can cause more damage than temperature. Large fluctuations in humidity can cause the artifacts to warp or grow mold. Attempt to keep humidity between 35% and 55%. It is important to keep artifacts out of basements and attics where the biggest shifts in humidity can occur.

For more information, please visit the Canadian Conservation Institute’s: Agents of Deterioration

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PRESERVATION VIDEO

Preserving Your Family Treasures

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Conservation Resources and References