



# Eiteljorg



# On Guard!

Protecting Collections from Deterioration

# How do we **PRESERVE** museum collections?

Museum objects are fragile pieces of history that are meant to inspire, enrich and educate people for generations. When an object becomes part of a museum's collection, the museum makes a long term commitment to care for it so that it may be enjoyed by generations to come. The museum must strike a balance between providing public access to objects by exhibiting them, and keeping objects safe from potential harm caused by temperature and humidity variations, human touch, light levels, pests and air pollutants. Museum personnel take their roles as stewards of cultural history very seriously. They go to great lengths to safeguard collections to ensure that they are displayed in the best possible condition for as long as they can be maintained. This is why the museum displays many objects in protective Plexiglas cases and why "Please do not touch" signs are posted, reminding visitors of the fragile nature of museum collections.

This contemporary Acoma pot from the museum's education collection was inadvertently broken. Most damage to art is accidental and unforeseen, but many problems can be avoided with proper care and handling.



# Why is it so **COLD** in here?

Proper and stable environmental controls are essential for the care of art objects because an improper, changeable climate can cause objects to mold, mildew, tarnish or crack. Poor climate also can be an invitation for certain types of pests. The preferred temperature for most works of art is 65° to 75° Fahrenheit, and the average relative humidity should be 45% to 55%. Ideally, objects should be stored in a stable environment with little or no variation in temperature and humidity, even as the seasons change. The museum uses specialized equipment to continuously monitor temperature and relative humidity levels in storage and exhibition areas.

**Home tip:** Collections in the home are best stored in places that are cool and dry with a stable climate and good air circulation (not in attics or basements).

Basket made by unknown Maidu artist, ca. 1900, Eiteljorg Museum Collection, formerly in the collection of the Museum of Indian Heritage; The dark green staining on the bottom of the basket indicates it was most likely stored in a humid environment. Moisture built up where the basket was touching the surface of a tabletop or shelf, causing mold to develop.

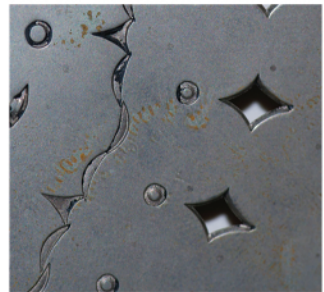


# Why we ask you not to **TOUCH!**

Oils from your hands and small particles of dust in the oils can cause permanent damage to many types of objects. Although they may not be noticed immediately, marks from fingerprints can be difficult to remove and can even cause irreversible damage over time. Museum personnel wear gloves to prevent the natural oils on their hands from coming into contact with the objects. Have you ever looked at a silver goblet or teapot and discovered your fingerprints marked in the finish? The moisture and oils on our hands combine with hydrogen sulphide compounds in the air causing the silver to tarnish. This is the dark or black material that appears on the surface. Not all objects are as visibly sensitive to touch as silver, but the dirt, dust and oil from our hands can affect all types of art.

**Home tip:** It is best to wear nitrile or clean cotton gloves when handling objects that are most vulnerable to damage. To avoid causing long-term damage never use harsh or abrasive chemicals to clean your objects. For valuable objects, it is always best to rely on the expertise of a professional conservator.

Morenci turquoise squash blossom necklace made by an unknown Navajo artist, 1970s, Eiteljorg Museum Collection, Gift of Helen Cox Kersting in Memory of Dr. Hans Joachim Kersting; before and after photographs showing normal tarnish from environmental condition. Prior to exhibition, the tarnish was carefully removed. When in storage, the jewelry is housed in a custom-made tray in a silvercloth-lined drawer to reduce the chances of tarnish redeveloping.



Don Secondine (Delaware) made this German silver brooch for the education collection. While handling is a good option for studying an object, oils from our hands have left permanent marks on the silver.

# DIM the Lights!

All light, particularly ultraviolet light, can be harmful to museum objects. Improper light levels can discolor and fade light sensitive art such as works on paper (any medium), photographs, textiles and Native American objects that use quillwork, hide, feathers and fabric. It also can cause paper and textile fibers to become brittle. The museum constantly monitors and maintains optimum light levels using light meters that read both visible and ultraviolet (UV) light. In addition, the museum limits the amount of time that light-sensitive works can be on display. Extremely sensitive works are rotated out of exhibitions after six months on display and given at least double that amount of time in dark storage. The museum also controls light by using UV-protective glazing on framed drawings, prints and photographs and by covering windows with blinds or screens and film that eliminates 99% of the UV light and a significant percentage of visible light.

**Home tip:** To protect sensitive objects, such as works on paper, objects painted with natural pigments, photographs and textiles in your home, avoid placing them in sunny areas and invest in UV-filtered glazing for framed works.

Doll made by an unknown Crow artist, 1925-1950, Eiteljorg Museum Collection, Gift of Harrison Eiteljorg; At some point in its history, this doll was exposed to excessive light which caused severe fading to the green trade cloth. The doll has been conserved to address problems caused by a past insect infestation, but conservators have few options to address the effects of light damage.



**Home tip:** When cleaning the glass or acrylic glazing of any framed two dimensional piece of art, spray the rag or paper towel with glass cleaner rather than spraying the glass. If you spray the glass it is possible for the cleaner to drip down between the frame and glass and damage the art work.

# What a PEST!

An important part of proper object care is to regularly examine storage and gallery spaces for evidence of pests. All objects, particularly those made of materials such as wood, fabric and paper, are vulnerable to a variety of insects and other pests. Pests may attack adhesives, binding materials and other substances. The tight, dark spaces found in collection areas are often a magnet for pests. Because some objects are not moved or handled on a regular basis, evidence of pests can go unnoticed without regular checks. A regular pest management program ensures that the museum quickly discovers pests and insects that can be extremely destructive to museum objects. Other pest-preventive techniques include maintaining clean storage spaces, inspecting new objects brought into the museum, not allowing food into storage and exhibition spaces, using insect traps and ensuring proper environmental conditions. If evidence of pests is discovered in the museum or on objects, the museum immediately takes corrective action.

**Home tip:** To deter pests from invading art objects in the home, keep the storage area clean and away from food. It is also a good safeguard to keep objects in a cool, dry environment with good air circulation.

Truman Lowe (Ho-chunk, born 1944), *Feather Canoe*, 1993, Eiteljorg Museum Collection, Gift to the memory of Martin and Mabel Lowe, Milton and Carolyn Knabe; made of willow, feathers and copper wire, this artwork is particularly susceptible to insect damage (detail). After it became infested, causing some damage to the feathers, the work was frozen to kill the pests, then carefully cleaned prior to exhibiting it.



# AIR POLLUTION? In a museum?

Air pollution, including tiny particles of dust, fibers, skin, salt, molds and other microorganisms carried in the air, contains contaminants that may degrade and damage objects. Pollutants that can damage objects include cigarette smoke, cleaners, paints and preservatives. Tiny particles, such as dust, can enter the museum through open doors and windows and on peoples' clothing, shoes and bodies. These particulates can harm objects by scratching them. Many gasses are dangerous to objects because they produce a chemical reaction that can cause materials to break down over time. This is known as off-gassing. To protect objects, the museum regulates its environment using air filtration in the climate-control system. All materials used to store objects (boxes, tissues and papers) are chemically inert. All cleaning products, varnish, paints and adhesives are evaluated to determine if they are safe before using them in areas where collections are stored and exhibited.

**Home tip:** To reduce air pollution damage to objects in the home, keep objects away from chemicals and cigarette smoke, and store them in inert materials in a climate-controlled space. Cover valuable works of art when having your carpets cleaned; the chemicals in the cleaner may discolor many objects.

Joseph Henry Sharp, American, 1859 – 1953, (detail) *Wild Plum Blossoms*, oil on canvas, undated, Eiteljorg Museum Collection, Gift of Harrison Eiteljorg; this image, taken in 2005 during a conservation treatment, clearly demonstrates how cigarette smoke and other contaminants can accumulate on art from normal exhibition in a home environment.

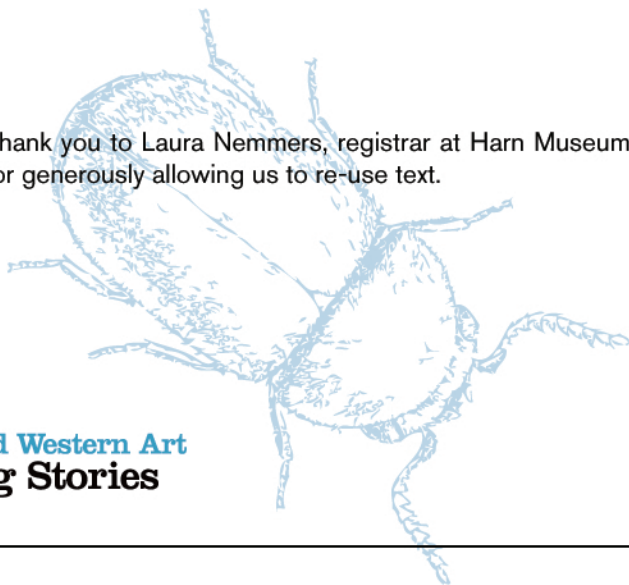


# How can **YOU** help?

Most people have objects in their lives that that they want to preserve because the objects have special meaning—collectibles, family heirlooms or mementos of people, places or things that are important to them. What many people don't realize is that everyday activities may have harmful effects on these precious objects. Simply brushing your hand across a painting, hanging a framed print next to a bright window or storing photos in an acidic cardboard box in the attic can have devastating effects on the items you love.

When taking care of works of art, prevention is the key to making them last for future generations. It is less expensive to store objects properly today than it is to repair them in the future. Take a tip from the museum, and keep your home interior temperature stable, monitor regularly for pests and store your mementos in acid-free tissues and boxes. There is little we can do to truly make objects last forever, but simple preventive measures will help them last for generations to come.

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**Eiteljorg Museum of  
American Indians and Western Art**  
**Telling Amazing Stories**