



SAVING YOUR Treasures

A program about what you can do to protect and preserve the things of importance in your life



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CARING FOR OUTDOOR SCULPTURE

Many diverse factors go into the long term preservation of outdoor sculpture. It is important to understand these factors and the roles they play in the care of cultural materials.

Document

It is important to collect and maintain written records relating to the reason the sculpture was created, the materials used to produce it, the foundry or manufacturer (if the sculpture was not created solely by the artist), information about surface coatings and their intended appearance, and any other pertinent information that might be useful in the future care of the piece.

The artist's intentions for his/her work may differ from those of other artists, the owner, or from the general public. Without evidence and documentation, knowing what the artist intended can be difficult to guess. What aspect of their work does the artist value as the essence of the work? Are the sculptures location-specific? What level of visual change is acceptable to the artist? Can a sculpture be repainted? When repainting a sculpture, do the color, gloss, and application method of paint need to be the same, or can an updated version or a similar paint be used? Did the artist intend for the sculpture to deteriorate over time? Did the artist know that the materials he chose could not withstand the stress of being outdoors?

Gathering this type of information from the artist directly can often provide the fullest amount of knowledge and the most accurate information. The best time to do this is when the work is first created. By gathering information on materials and manufacture specifications, on fabrication techniques, on site specificity, on artist's intent, and more, future owners will be well prepared to take care of, repair, and appreciate their artistic holdings.

Secure Installation

It is always helpful, and often imperative to have an experienced engineer examine the sculpture prior to installation to recommend moving methods and base/platform/support materials, sizes, and thicknesses. A secure base provides a sturdy, solid surface upon which the sculpture may rest or to which it may be attached. The site may also include a plaza or park. Thoughtful design and attention to detail will help reduce the chances for structural problems in the future.

Regular Inspection

Once a sculpture has been installed, it should be periodically inspected. It is helpful to keep a written record of the inspection, and if possible, to create photographic records so that subtle changes can be documented. Divide the inspection report into separate sections for the base/site and the sculpture and provide enough detail to fully explain the physical needs that you find. For example, note spalling concrete, overgrown plants around the base, or settlement cracks. If you observe damage to the sculpture, be sure to note its location and extent. If the damage is minor, you may want to do nothing more than keep an eye on it to see if it becomes worse.

Your inspection should provide you with the information you need to make some initial decisions about the type of care the sculpture requires. Some care activities are obvious, such as the removal of vines, overhanging branches, or overgrown plants. Other problems are not so easily overcome. Watch for unusual situations and don't hesitate to seek advice from conservators.

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1. Use common sense – if it doesn't seem right, don't do it
2. Proceed gradually – perform initial tests, be cautious

Regular Maintenance

Regular maintenance does not require extensive investment of time, training, or finances, but will be of great benefit for outdoor sculpture. Annual care can mitigate the dangers of outdoor display and can help detect damage in its early stages. This allows for early action that can prevent catastrophic deterioration and the need for extensive and expensive conservation treatment.

One of the simplest maintenance activities is cleaning. Cleaning can often be done with nothing more than tap water and a hose. Although this may seem too simplistic, rinsing a sculpture with water removes soil, industrial particulates, bird droppings, and other pollutants. It is recommended that a conservator train the group that will be performing the annual cleaning.

Bronze

The first step in the care of bronze sculptures will involve cleaning by washing with a mild, non-ionic detergent. The detergent must be carefully and completely rinsed away with water to avoid spotting. Cleaning will also include the removal or reduction of biological materials, graffiti, staining, efflorescence, and the clearing of weep holes. Weep holes are placed at various places on many outdoor sculptures to allow small pools of water to drain away. They often become clogged with leaves and dirt and need to be reopened so the water can drain again. Paste wax can be applied to clean dry bronze sculptures and buffed out to protect the sculpture. The wax coating should be renewed on an annual basis as part of the regular maintenance schedule.

Iron and Steel

Iron and iron-alloy sculptures should be regularly rinsed off with tap water from a garden hose and kept free of organic materials. If you live in an area with hard water, a final misting rinse with distilled or deionized water delivered through a clean garden sprayer will help prevent mineral deposits and water spots.

Stainless steel does not usually require further treatment. When it is scratched, however, the abraded surface can become electrically active and susceptible to rusting. If this type of damage is discovered early, the rust can be removed, and the surface sanded back to its original appearance and surface. If local sanding is necessary, it is important to match the texture and finish of the reworked area to the rest of the sculpture. Knowing the manufacturing specifications from the initial fabrication is invaluable in this instance. This type of information should be kept on file or collected if not already known.

Other types of steel, such as *core-ten steel*, are designed to develop a patina-like rust film on the surface. Sculptures constructed of core-ten steel will continue to oxidize over time, and should be allowed to do so. They should not be painted, sealed, scrubbed with brushes, or otherwise manipulated. It is important to keep these sculptures clean so that oxidation develops evenly across the surface. Bird droppings, animal activity, and plant materials can aggravate the surface to react more quickly to the environment causing splotchy surfaces.

Painted steel will need periodic refreshing when the paint becomes compromised. Failing paint can be removed by abrasive grit blasting the surface. The steel then needs to be cleaned and primed before

repainting. Tannic acid primers and zinc-chromate primers can both be viable options depending on the specific needs of the sculpture, but epoxy primers should be avoided. The subsequent paint layers should be compatible with the primer used. Polyurethane based paints are common for outdoor applications. If repainting is required, the owner should contract a professional specializing in painting outdoor iron and iron-alloys to carry out the work. A conservator should be consulted before any such work is carried out to discuss the specific needs of the sculpture and appropriate materials and methods that will be compatible with the sculpture. Ideally, there should be a meeting between the contractor, the conservator, and the owner before beginning the project. A final protective layer of cold wax will help to both preserve the longevity of the painted coatings and reduce the difficulty of graffiti removal.

Sculptures made of *galvanized steel* surfaces will deteriorate over time. Unfortunately, re-galvanizing is difficult and impractical. While painting the sculpture will protect the zinc galvanizing coating, it will considerably alter the appearance of the surface. For galvanized steel sculptures, it is important to learn what the artist's intended appearance for the work is over time, and what aspects of the work are integral to its interpretation.

Stone, Concrete, Masonry

These materials, while relatively stable in an outdoor environment, are primarily subject to damage through freeze/thaw cycles, impact, vandalism, and efflorescence of soluble salts. Keep them clean by regularly rinsing with tap water from a garden hose. Stubborn soil and algae films can be reduced with a soft brush and a weak solution of non-ionic detergent rinsed thoroughly with tap water. In order to avoid damage from roots, biofilms, and suckering growth, keep nearby plant materials clipped back.

Sometime, sculptures cast in concrete are sealed by the artists during the initial installation to protect them from both water penetration and vandalism. In order to remain protective, these sealants will need to be monitored and periodically replaced/refreshed. It is important to know the types, brand names, and application methods of sealants applied by the artists. Continue to use the same or compatible products to reseal surfaces, following the manufacturers recommendations as to number of coats, removal of old coats, safety precautions, etc. Sealants not only protect surfaces, they also protect any steel reinforcement elements from corrosion and its attendant expansion; thus protecting the sculptures from serious structural failure over the long term. Failure or damage to these materials may require very intrusive repair methods. It may be prudent to consult a conservator in the event that replacements or repairs need to be made, even when repairs are to be made by the original artist or a specialist contractor.

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