WINTERTHUR RECEIVES $110,759 GRANT FOR PREVENTIVE CARE, RESEARCH ON METALS

Results of Grant from Institute of Museum and Library Services Expected to Influence Museums Nationally

WINTERTHUR, DELAWARE—Winterthur Museum, Garden & Library has received a $110,759 grant from the Institute of Museum and Library Services (IMLS) for a project on preventive care for metal objects, which Winterthur deems its highest conservation treatment priority.

“Winterthur has a reputation for thorough research into conservation methods that influence international standards,” said Winterthur Senior Objects Conservator Bruno Pouliot. “We hope that our continued work on methods to prevent silver and copper alloys from tarnishing will continue that tradition.”

“Winterthur is very excited and honored to be awarded an IMLS grant for our conservation and curatorial team to continue investigating and conserving the metals collection at Winterthur,” said Gregory J. Landrey, Dwight and Lori Lanmon Director of Academic Affairs. “Winterthur houses a premier collection of American metalwork made between 1650 and 1900, a true national treasure. Thanks to this generous IMLS award, Winterthur can continue to provide a high level of care to this collection and serve as a leader in the field for collection stewardship.”

To help the general public care for heirlooms, Winterthur conservators will share the best practices that result from this research through public programs. Related grant activities include the creation of a web video demonstrating silver care that will be available on Winterthur’s website and a two-hour class on silver maintenance as part of Winterthur’s Caring for Family Treasures series.

Two technicians will be hired to treat approximately 500 silver objects in the two-year project, which starts later this fall. They will remove failing lacquer coatings and apply new ones on silver objects, while Winterthur conservators and scientists study where a more aggressive corrosion was found, as well as different options to protect from tarnishing objects made of copper alloys.

Many of Winterthur’s silver and copper alloy objects are displayed out in the open as part of the interpretation of Henry Francis du Pont’s home. As a result, natural low-level sulfur pollutants in the air, alongside ambient moisture, cause tarnishing. Lacquer coatings remain for now a proven method to inhibit tarnish for up to thirty years within the museum environment.

Regular polishing, even with the gentlest methods, removes some metal, eventually erasing shallow elements of the design or, for silver-plated items, exposing the base metal underneath. Winterthur implemented a comprehensive metal coating campaign in 1982, and this program has continued uninterrupted, although with some modifications. Since the 1980s, a lacquer based on cellulose nitrate has been used on most silver and copper alloy objects, as it provides the best balance of minimal visual intrusion, stability, and tarnish protection.

Following extensive condition surveys in 2009 and 2015, Winterthur assessed the performance of these coatings and made essential recommendations about their application and long-term performance. This information was shared through the conservation profession, influencing the decisions made by many institutions internationally regarding their own metal coating programs.

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The collection at Winterthur includes approximately 2,900 silver and silver-plated objects and slightly over 2,050 copper, brass, and bronze objects. The metal on most is preserved in polished condition, reflecting the historically accurate appearance from centuries past. The 2009 survey of the silver collection revealed widespread lacquer failure, caused either by aging coating, application defects, the presence of moving parts such as hinged lids, or the complexity of surface topography. The copper alloy survey in 2015 confirmed similar issues, but also a possible interaction between some coatings and the metals, requiring research before a new coating can be chosen.

Because of its uninterrupted history of protective lacquer coatings on silver and copper alloys and access to sophisticated instrumental analysis, Winterthur is uniquely positioned to conduct and disseminate this research. Resources will include Winterthur’s labs and scientists, as well as other scientific and analytical resources at the University of Delaware.

Related adult programs tentatively include a silver-themed selection for the History Through Fiction Book Club and silver jewelry classes. Family programs include a silver-themed Terrific Tuesday event and a silver feature for the daily Conservation Corner. School programs include a silver component to the Science Behind Art Conservation series and a teacher workshop on applying chemistry concepts related to silver and metal objects.

Senior Objects Conservator Bruno Pouliot, Curator of Decorative Arts Ann Wagner, and others are expected to present project progress and results in blogs, publications, and events.

A first phase of this project involved similar treatment and research on 500 silver objects that had been coated before 1985. A tentative third phase would involve further research and lacquer reapplication for Winterthur’s copper alloy collection.

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