



# Art Conservation *and damaged collections*

When the historic Woodford Mansion in Philadelphia's Fairmount Park experienced a serious fire in 2003, quick response by firefighters saved most of the house and all of its Naomi Wood Antique Collection of Colonial-era artifacts. Smoke and water damage was extensive, however, and some of the objects were deemed unsalvageable and donated to the study collection of the Winterthur/University of Delaware Program in Art Conservation. Among those objects was a delicate feathered fan covered with a heavy layer of soot that this year became a treatment project for second-year WUDPAC Fellow Kelly McCauley.

The fan, a graceful relic of life before air conditioning, measures about 9x16 inches and probably dates from the early 19th century. It is made of white ostrich feathers, some tipped in a red dye, that are set in a chenille-trimmed wooden ferrule atop a turned wooden handle. The fan's provenance is unclear, but the sycamore maple used for the ferrule and handle is common in England, and it is thought that the fan was made there.

Kelly's treatment goal is to restore the fan so that it can in fact be returned to the Woodford Mansion for eventual display. To remove as much soot as possible, she vacuumed the feathers at a very low suction, and used eraser crumbs and sponges to clean the fan's wooden parts. To clean the feathers, she will use a solvent method that allows the soot to be removed with minimal disruption to the already damaged and brittle feather barbs. Once the feathers are clean, Kelly will apply gentle steam to reshape any that have become misaligned or misshapen. She will also delicately reattach a small, broken section of a feather, and ensure that all are adequately secured in place. With the feathers cleaned and secured, Kelly will repair the few areas of loss on the ferrule and handle.

Before returning the fan to Woodford, Kelly will work with the Winterthur Scientific Research and Analysis Laboratory to determine which historical recipe was used to dye the tip of some feathers red; whether a second, now almost completely faded dye was present originally, and whether the cleaning solution was successful in not removing any of the natural oils in the feathers. This is a perfect project for Kelly, blending her passion for historical objects, science, and the development of skills needed to become an objects conservator.



## ARTC Spotlight—January 2014

The University of Delaware's Art Conservation Department educates and trains professional conservators in the treatment, analysis, documentation, and preventive conservation of individual artifacts and entire collections. Visit [www.artcons.udel.edu](http://www.artcons.udel.edu) for more about our students and department activities.

Top: WUDPAC Fellow Kelly McCauley examining the feather fan using X-ray fluorescence at Winterthur's Scientific Research and Analysis Laboratory to assist in dye identification and confirm that no pesticides were applied to preserve the feathers. Above: The feather fan before treatment, darkened from soot. Inset: The fan during treatment, using blotter paper to absorb solvents after application. Left: The Practical Ostrich Feather Dyer by Alexander Paul (1888) at the Winterthur Library. The feathers may have been dyed using the "cardinal" recipe shown on the sample feather at the bottom left.

