



Art Conservation *and plotting a treatment*

Along with boaters, parasols, and comfortable traveling clothes, 19th-century sightseers traveling by steamer on the 150-mile stretch of the Hudson River between New York City and Albany often carried a guidebook containing an accordion-style, fold-out map. The map helped interested travelers identify streams, islands, heights, prominent residences, architecturally interesting landmarks, and native place names along the way.

One such map, titled *Hudson by daylight: map, showing the prominent residences, historic landmarks, old reaches of the Hudson, Indian names, &c*, is now part of the Winterthur collection. The hand-painted, 8'6"-by-4" map was published in 1878 by the New York & Albany Day Line Steamers company on machine-made, wove paper. The map's outline was created via a lithographic process using black printer's ink; features such as land and water were hand-colored with green, blue, purple, pink, and yellow watercolors.

Although the map is still colorful, WUDPAC Fellow Verónica Ivette Mercado Oliveras treated it recently because condition issues made it unsafe to handle. Verónica, a library and archives major with a paper minor, found the most serious problems were caused by two types of pressure-sensitive tape applied in previous restoration campaigns to mend breaks between some of its 24 accordion-style sections. In some places the tape, now yellowed and deteriorating, had been applied on both sides of the paper. This created a thickness that made the map difficult to fold.

Verónica first cleaned the map manually, using small brushes and eraser crumbs, because some of the watercolors could not be safely immersed in a water bath. She then attempted to remove the tape manually, working carefully with small tools under a microscope. However, bits of paper embedded in the adhesive would come up with the tape and could not be reattached. Verónica solved this challenge by placing an acetone vapor dome over the tape, allowing its vapors to activate the tape's adhesive film. This softened the adhesive so that the carrier came up easily. Verónica removed the sticky adhesive residue by brushing it with cellulose powder before gently removing it with an eraser. She finished by aligning the map's sections and then reattaching them using a lightweight, long-fibered mulberry tissue coated with ethanol-reactivated adhesive.

After successfully completing her treatment, Verónica reflected that although the project took time, researchers could now explore the map as it was originally intended: as a tourist's treasure meant to be enjoyed and studied while steaming along on the Hudson River.



ARTC Spotlight—June 2022

The University of Delaware's Art Conservation Department educates and trains professional conservators who are well versed in the treatment, analysis, documentation, and preventive conservation of individual artifact and archive collections. For more news about our students and other department activities visit our web site at www.artcons.udel.edu.

Top: Careful alignment of losses during treatment. Above: WUDPAC Fellow Verónica Mercado uses a soft-bristled brush to set accordion sections down with ethanol activated adhesive pre-coated tissue. Left: After using the acetone vapor dome, Verónica lifts the softened adhesive carrier with a microspatula. Bottom: Verónica carefully weights down three sections to align with pre-coated tissue. (Images: E. Krape, M. Tedone, and V. Mercado.)