

encountered when she began treating a piece of early 19th-century painted embroidery on silk.

Indeed, Bellie, who is majoring in textiles with a minor in organic objects, had welcomed the treatment project for the experience it offered for working with silk and adhesive mending techniques. Bellie soon found the experience would be even more than anticipated.

Now part of the Winterthur collection, the silkwork once belonged to Betty Ring (1923-2014), a well-known collector and scholar of girlhood embroideries. It is signed with the embroidered initials "E.J.," on the lower right and dated "Natchez 1811" on the opposite side with an embroidered, and still unidentified, quote about innocence and love across the bottom center. An unusual aspect of this piece is that it is covered almost entirely by paint, including the painted sky, while similar contemporary pieces typically have paint applied to enhance small details. Ink and graphite also were used to outline a large house in the background and features on the woman's face. Through scientific testing, Bellie confirmed her hunch that the paint, likely watercolor, included an arsenical pigment, which is sensitive to light, as well as vermillion, which

contains mercury, and lead white. This discovery has health and safety ramifications for the silkwork's treatment and preservation. Yet another challenging feature of the silkwork is that the embroidery threads were stitched through both the silk and a piece of cotton backing at the time it was made, making it much more difficult to access the reverse of the silk piece.

Bellie's treatment began with a careful cleaning using a microduster that removed much of the dirt and grime. She used a chelator solution to reduce iron staining from the silk where it had once been nailed to a board, and again to remove staining on the cotton backing and extensive stains along the bottom edge and in the sky caused by a water event. Bellie's treatment plans also include stabi-



lizing the support backing, mending tears and, following a discussion with the curator to determine the desired extent of restoration, filling areas of loss in the unpainted areas. When Bellie's treatment is complete, the silkwork will be returned to its place as an important early example of schoolgirl embroidery in the Winterthur collection.

ARTC Spotlight—November 2020

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 and above: WUDPAC Fellow Annabelle Camp used a microduster to safely remove particulates from the fragile surface. Above: Bellie working on a suction table to reduce the staining on the edges of the cotton support and bottom edge of the silk; the surface of this piece is highly complex, with painted and embroidered elements. Images: A. Camp and K. Sahmel.