



Contributed photos / Meghan Duda / Special to The Forum
 Photographer Meghan Duda's carbon printing process results in 3D images of plant life that explore the vibrancy that can be found in negative space. From left: "Quaking Aspen," "Silver Maple" and "Virginia Creeper."

EXPLORING NATURE'S ARTIFACTS

Fargo photographer uses 19th century technique

By Lonna Whiting
 The Arts Partnership

Fargo Photographer and North Dakota State University assistant professor Meghan Duda considers her camera the ultimate icebreaker when introducing herself to objects and artifacts she intends to capture with her lens.

"I pick a place I want to get to know and use the camera to better understand it," she says. "My camera is just a way for me to get to know a piece of architecture or a landscape."

But for two weeks this summer, Duda put her camera down and exchanged her typical photography process for a lens-free conversation with nature during an artist-in-residency at McCanna House in McCanna, N.D.

Funded in part by support from The Arts Partnership and the North Dakota Museum of Art, Duda used her residency to experiment with a 19th century image processing technique called carbon printing, a "completely home-cooked process that I just had to do in a rural farmhouse," she says.

Discovered in 1864 by Sir Joseph Swan, carbon printing is a process that typically uses photographic negatives to create highly detailed, almost 3D contact prints.

The process uses high-grade Sumi ink mixed with gelatin and water that's then poured onto a sheet of paper and set out to dry. This pigmented gelatin tissue is then made light sensitive with potassium dichromate.

The sensitized tissue is placed in contact with a film negative, and placed out in the sun. The gelatin hardens where it is touched by the light, and remains soft where the light is blocked. The soft gelatin is rinsed away with water, and what's



Viewing the finished prints on the wall.

left behind is an intricate, tissue-thin inverted impression of the original negative.

Duda collected her own found objects in nature and used them in place of photo negatives.

"Rather than using negatives, I wanted to use the time at McCanna to explore making cameraless, photogenic recordings of botanical specimens from around the property," Duda says.

First, she observed and collected plant materials from around the McCanna House, then experimented with the carbon printing process.

"I basically needed water, sunlight and a hotpot to make the ink and gelatin solution," she says. "Carbon printing doesn't require a darkroom, so I was able to make the tissues and process each image from the farmhouse."

Though camera-free, the process of collecting, setting, inking, layering and drying the images is not for the impatient. However, the results are unlike any other



The complete collection of prints.

imagemaking process, and one that celebrates the art of negative space.

"When we see a negative, it's sometimes challenging to make sense of what the reality is, but I like the play of what is real and what our perception of reality is," Duda says.

The photographer is currently in the process of finalizing her images and plans to begin framing soon. She hopes to announce a

date and location for her exhibition soon and is looking for a nontraditional space that can uphold the nonlinear aspects of the images.

"I really want a big white wall to hang the images from. I don't want to display it in a linear fashion like you'd see in a traditional museum or gallery setting. I think these pieces need to be displayed in a way that represents the landscape."



The paper is pressed below the botanical specimen. In the spaces where sunlight reaches the tissue, the carbon-filled gelatin tissue is hardened and remains fixed on the paper. Where the specimen blocks the light, the gelatin remains water-soluble and is washed away from the paper, leaving a white space.

Learn more about Duda on her website at <https://meghanduda.com/>.

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