



Fronds and Folioles

News from the Conservatory & Botanical Collection at the College of Biological Sciences



The College of Biological Sciences Conservatory and Botanical Collection launched its artist-in-residence program in 2016. Since then, a half dozen artists have drawn inspiration from the collections to create art that speaks to the role of plants in our lives. Participating artists have created works on paper and in metal, ceramics and even an original musical composition. Conservatory Curator Lisa Philander has also sought out opportunities to collaborate with community partners on local arts events including the Northern Spark Festival and Art in Bloom at the Minneapolis Institute of Art. She shares her thoughts on the value of bringing artists into the Conservatory and how art can help people connect to science and nature.

WHY CONNECT ARTISTS WITH PLANTS?

Many artists are drawn to the Conservatory because of a particular love for plants, a way of looking at plants as beautiful beings, a way of incorporating plants into their work that allows others to see them from a new perspective. The mission of the Conservatory is to help people see and appreciate plant life in a way that hopefully compels them to conserve nature. Art creates yet another opportunity to uphold this mission.

IS THERE A PARTICULAR PIECE OF ART THAT RESONATES WITH YOU?

The piece of art that I have spent the most time with is the life-size corpse flower portrait. Five artists from the Minnesota School of Botanical Art painted in real time during the blooming of our corpse flower "Chauncey" in March 2019. I even got to hold a brush and paint a bit. This collaboration taught me that these artists spend just as much time studying the plant as botanists do. They see the plant perhaps in ways that scientists cannot. This five-foot-tall likeness will be displayed at the Conservatory and is available for purchase.

CONTINUED ON P. 6



CURATOR'S NOTE

See you soon!

I am writing to you on our favorite day of the year here at the Conservatory, Fascination of Plants Day! It's an annual international event that showcases how plants are essential to the food, pharma, fuels, and fibers integral to our daily lives. It sums up what we do here at the Conservatory and Botanical Collection. We are always searching for new plants to fascinate and promote learning about their unique contributions to our planet.

During the pandemic, things changed inside the Conservatory. The plants grew and filled in the space. Things changed outside the building, too. We expanded our footprint to include two outdoor gardens – a wetland biome garden and a cold hardy cacti garden – on either side of our entrance, courtesy of the St. Paul Garden Club. A public art piece titled *Synthesis*, created by artist Jodi Reeb, was installed just above the cacti garden. The aluminum sculpture depicts the four plant regions of the Southern Hemisphere represented in the Conservatory.

The pandemic interrupted our plans to open the facility to the public. I'm happy to report that plans are in the works for our long-delayed grand opening. On Saturday, October 9 from noon-4 p.m. you are invited to explore the new space. For those interested in supporting the Conservatory, we're also hosting a fundraiser Wednesday, September 22. Four well-known Twin Cities chefs prepare food that reflect the flavors found in our four biome regions. I hope to see you there!

Lisa Philander, Curator

CBS Conservatory & Botanical Collection

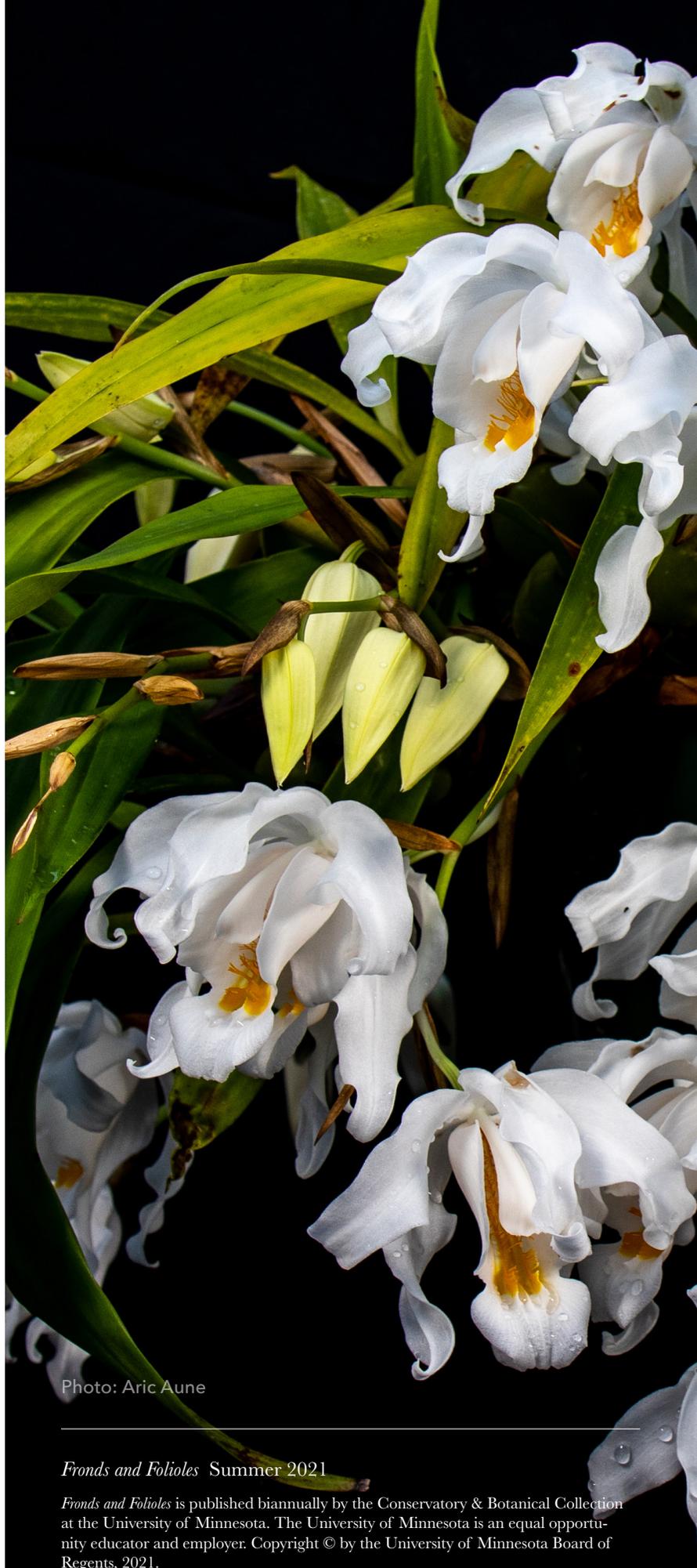
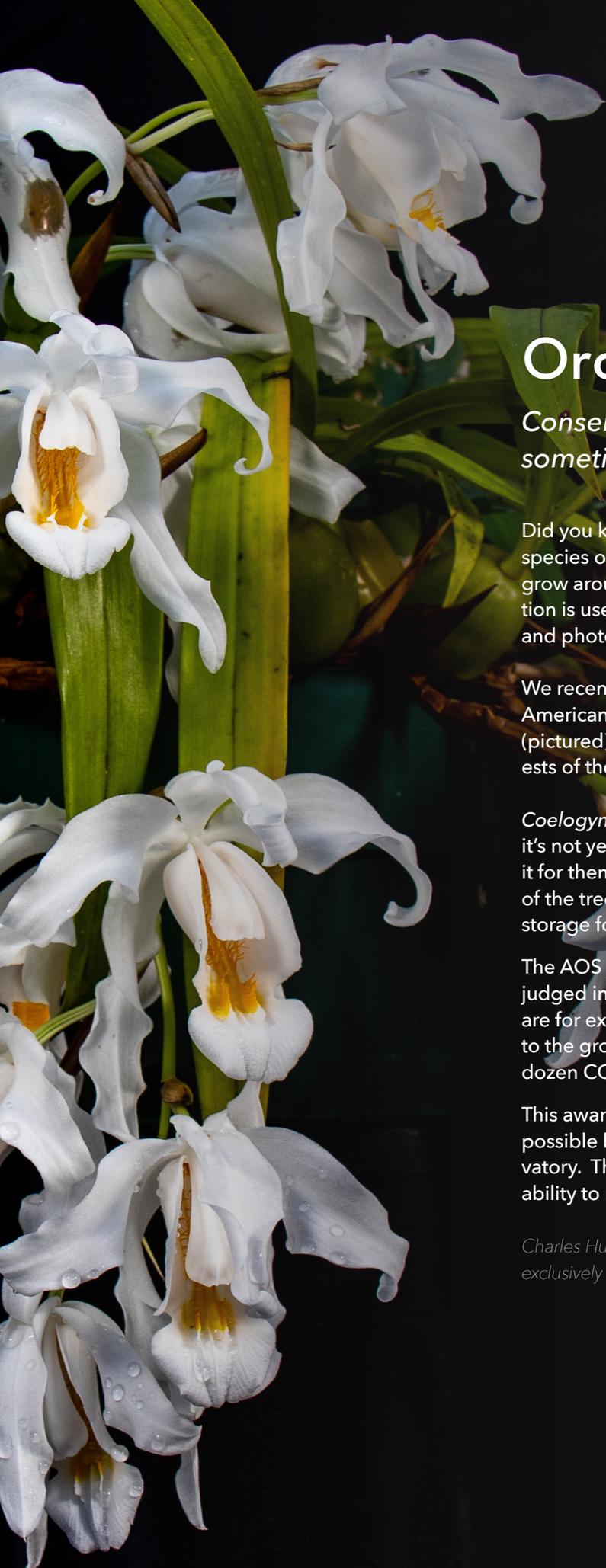


Photo: Aric Aune

Frons and Foliotes Summer 2021

Frons and Foliotes is published biannually by the Conservatory & Botanical Collection at the University of Minnesota. The University of Minnesota is an equal opportunity educator and employer. Copyright © by the University of Minnesota Board of Regents, 2021.



Orchid accolades

Conservation is at the heart of our mission and sometimes happens a few plants at a time.

Did you know the Conservatory & Botanical Collection houses 80+ species of orchid including some that are exceedingly rare? Orchids grow around the world and take some surprising shapes. Our collection is used for teaching, research, public education, as subjects for art and photography, and, importantly, conservation.

We recently received a Certificate of Cultural Excellence from the American Orchid Society (AOS) for our specimen of *Coelogyne nitida* (pictured). This stunning, intensely fragrant orchid grows in cloud forests of the Himalayas at 5,000 to 8,000 feet.

Coelogyne nitida is pollinated by Indian honey bees, *Apis cerana*, but it's not yet clear why the bees bother since there is no known reward in it for them. Rather, this orchid provides nectar for ants that nest in some of the trees it lives on. It has specialized roots, stems, leaves for water storage for the dry season.

The AOS judges train for six years. Tens of thousands of orchids are judged in shows and monthly at judging Centers. Most of the awards are for exceptionally beautiful flowers. The Cultural Awards are given to the grower of outstanding specimen plants, and only about two dozen CCEs are given each year. We have received four in six years.

This award recognizes years of cultivating this rare plant, something possible because of the carefully controlled conditions at the Conservatory. This recognition is important because it instill confidence in our ability to raise plants that are challenging to grow. – CHARLES HUSTON

Charles Huston is a longtime volunteer who volunteer at the Conservatory who exclusively cares for the orchids and gesneriads in our collection.

New gardens animate the outside

Outdoor Minnesota biome gardens featuring wetland plants and cold hardy cacti welcome visitors to the new CBS Conservatory & Botanical Collection.

Just in time to celebrate the Grand Opening of the College of Biological Sciences Conservatory & Botanical Collection, the Minnesota Biome Gardens showcase plant diversity and create a floral entrance to our new facility. Located on the southern front half of the Plant Growth Facilities building on the East side of Gortner Avenue, one biome is currently featured along with a specialty garden. These plantings will provide hands-on learning opportunities for Minnesota's future plant scientists and the public.

Supported by the St. Paul Garden Club, the wetland garden has Minnesota native plants, including perennials, shrubs and trees, which are not found inside the Conservatory. Specific plants in this display will be used as living examples in a series of both credit- and non-credit-based courses focused on plant ecology, biology, conservation and horticulture. Minnesota Native Plants, taught

by George Weiblen, is one significant example of a course that will benefit from our new plantings.

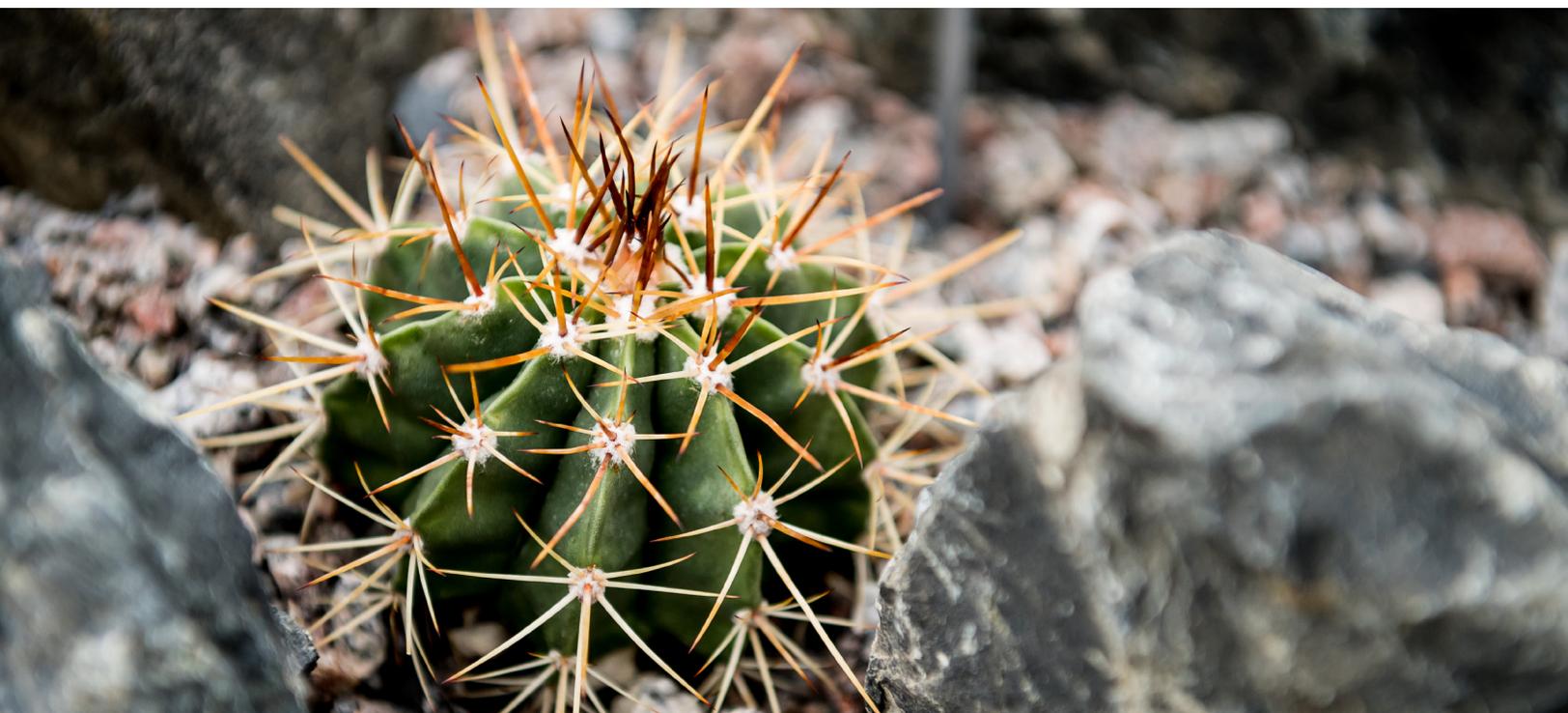
The second display garden features the rare and unusual cacti that are cold hardy. Yes, we are hoping that these thrive in our cold Minnesota winters and are willing to use our expertise to try it out before you do! The most important requirement for these prickly plants is drainage, so we built an impressive retaining wall to ensure just that. Cacti enthusiasts will be delighted to see some familiar genera featured: *Opuntia*, *Echinocereus*, *Agave*, *Coryphantha*, *Pediocactus* and *Austrocactus*.

We are most pleased to include an endangered Minnesota ball cactus, *Escobaria vivipara*. We will use this dwindling species to teach visitors about Minnesota endangered plants. We also continue to work with the Arboretum, DNR, Fish and Wildlife Service and Botanic Garden Conser-

vation International to advance vital conservation work.

The Conservatory and Botanical Collections also aims to play a role in advancing the overall conceptual landscape planning for the University's campus in St. Paul. The Minnesota Biome Gardens reveal biological, ecological and cultural diversity highlighting the importance of both native and global plant life that can be utilized by instructors and enjoyed by the public. Our future plans are to expand these plantings to include all of Minnesota's biomes including: prairie, bog, oak savannah, mixed and coniferous forests. If you are interested in learning more about these biomes or supporting these gardens, please do let us know. – ANGIE KOEBLER

Angie Koebler is the Conservatory's botanical horticulturalist. She propagates plants for classes, researchers and more.



Nature and nurture

The new Conservatory promises to inspire future generations of plant lovers.

My love of plants began the day I planted snapdragon seeds along the brick wall in Mother's garden border in Northampton, Mass. I was four years old – the perfect age to be enchanted by snapping open the “jaws” of those bright yellow flowers. Other plants among my earliest memories are Jack-in-the-Pulpit, Johnny jump ups and the exotic orange Chinese lanterns that somehow had seeded in the empty lot beyond our wall. Nature walks with Mother in the Western Massachusetts woodlands and fields nurtured my growing interest in plants. What child could resist Dutchman's breeches, Indian paintbrush and skunk cabbage?

These many years later, it was this fascination with plants that led me to the University of Minnesota's huge new College of Biological Sciences Conservatory & Botanical Collection on the Saint Paul campus. Within lies a whole new world of plants, including many from the Southern Hemisphere. The 10,000-foot conservatory will open to the public this fall, so both students and other Minnesotans can expand and nurture their interest in and knowledge of plants.

Although I indulged in some wonderful horticulture courses at the University during the 1990s, my classes didn't take me far enough east of Gortner Avenue to visit the collection of glass houses that comprised the old CBS Conservatory. That discovery came in April 2017 when, as president of the Saint Paul Garden Club, I received an invitation for our members to tour the conservatory.

Following a delightful tour, we realized that a continuing conservatory-garden club relationship could benefit both organizations. We began by inviting conservatory Curator Lisa Philander and Botanical Horticulturist Angie Koebler to join the garden club. Lisa then invited several members of the garden club to serve on a new Conservatory Advisory Board. Catherine Nicholson serves as president of the board, and Angel Crandall, Amy Fistler, and I are members.

The relationship continues. Lisa and Angie treated our members to Conservatory workshops on collecting native plant seeds and plant propagation. After the university began construction of the new CBS Conservatory on Gortner Avenue, our garden club donated funds to create two public Minnesota biome gardens at the entryway – a wetland garden and a hardy cacti and succulent



garden. Many of our members attended a gala preview party in February 2020 just before the coronavirus pandemic nixed the planned public opening.

Now, as the University prepares for the October 9 public opening of the CBS Conservatory and Botanical Collection, the advisory board is working with Lisa to raise awareness of this new botanical treasure. Lisa has resumed outreach to Minnesota garden clubs and other interested groups that was halted last year. I wrote an article about the conservatory for the December 2020 issue of *Northern Gardener*, the Minnesota State Horticultural Society magazine. This spring, the Advisory Board began recruiting Conservatory Ambassadors from nursery and landscape businesses to help us spread the word about the Conservatory within their horticultural networks.

Even though I identify as a “plant geek,” I don't expect to master the names of anywhere near all 1,800 species of plants from around the world housed in the conservatory, let alone their unique stories. But I'm reveling in the opportunity to learn about many of them and to help share them with others. Perhaps a four-year-old visitor will become enchanted with the fuzzy red flowers of kangaroo paws or an insect-eating pitcher plant and the cycle will begin anew. – MARGE HOLS

Marge Hols is a Master Gardener Emerita and former garden columnist for the St. Paul Pioneer Press.

YOU'VE PARTICIPATED IN A NUMBER OF ARTS EVENTS. CAN YOU TALK ABOUT THAT?

Participating in arts events helps us build relationships with peer institutions and introduce plants to audiences that may not expect or have had experiences with their incredible biological diversity. For instance, we partnered with the American Swedish Institute for their exhibit of Kim Simonsson's "Moss People." At this opening, we set up a table displaying the diversity of moss in the world and showcased Spanish moss, sphagnum moss, and moss-like plants to allow people to touch and see this diversity for themselves. At the Art-In-Bloom event at the Minneapolis Institute of Art, we recreated a sculpture out of plants that most people had never seen before. While most of the florists who participate use flowers

regularly found in the floral industry, we were able to use rare plants from the Conservatory to engage visitors and educate them about lesser known plants found around the world and on the University of Minnesota campus in St. Paul.

WHAT'S NEXT FOR THE CONSERVATORY'S ARTISTS-IN-RESIDENCE PROGRAM?

There are always artists inquiring about working with the Conservatory. We've worked with several artists to for Minnesota State Arts Boards grants and hopt to secure more sources of funding for this flourishing program. Our current artist-in-residence Jodi Reeb has already agreed to stay on. Jodi created the public art pieces hanging just outside the outside entrance to the Conservatory!



Photo: Jonathan Pavlica

Ceramicist Juliane Shibata works in the Mediterranean room.

Members of the Minnesota School of Botanical Arts celebrate the completion of a life-size drawing of the Conservatory's "corpse flower."



FOLLOW US ON SOCIAL MEDIA!   

CBS Conservatory & Botanical Collection

GRAND OPENING

October 9, 2021

z.umn.edu/newconservatory

