

PROJECT FEATURE

MSU HORTICULTURE GARDENS

MICHIGAN STATE UNIVERSITY

CURATOR: MASON MCNAIR, ASSISTANT PROFESSOR OF HORTICULTURE





MANGROVE PRODUCTS FEATURED IN THIS INSTALLATION



Chair No. One



Oberhauser Balloon



Roots Collection - Table



Roots Collection - Bench

DESIGN

Mangrove and MSU Horticulture Gardens brought two printing processes into one landscape. The Gardens' outdoor atrium by the Molecular Plant Sciences building has a modern aesthetic rooted in flowing, natural forms. Chair No One, the Oberhauser Balloon, and the Root Collection were chosen to fit that language without overtaking it. The material and color ground the pieces in the same palette as the surrounding plantings.



TWO SCALES, ONE PROCESS

MSU's horticulture lab has used 3D printing since graduate school, starting with a broken lab centrifuge and a magnetic tube rack. It has since grown into educational models, plant science robotics, and outreach tools. Mangrove builds concrete layer by layer. MSU builds parts point by point. Different scale, same logic: form a hypothesis, print, test, revise. A wilted flower and a failed print both just refine the next iteration.



A FIXED POINT IN CHANGING LAND

Gardens are built to change. Plants grow, decline, and get replaced every season. Permanent installations hold steady through those cycles. The Water Garden bridge has stood for 35 years, and visitors remember it long after the plantings around it have turned over many times. Mangrove's pieces now serve the same role: a fixed point that helps people navigate and remember a space that never stops changing.



A TEACHING MOMENT

Most people picture 3D printing as fidget toys and desk trinkets. These pieces argue otherwise. They give students and visitors a reason to think past the hobbyist use case and into materials science, design, and manufacturing at scale. Mason and his students saw that potential the moment they stood in front of the Mangrove booth at a trade show. The layer lines were the draw. The collaboration followed almost immediately.



THE RESULT

Before installation, the atrium functioned as a pass-through. After, it became a destination. Visitors now work on laptops, meet for coffee, and take breaks in the space. The pieces signal that the area is meant to be inhabited, not just crossed. What was once an underused patch of landscape is now proof that plants, people, and technology can share the same story.

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