Water Clock, 2023. Steel, vessels, found materials, East River water, and salt-tolerant, edible plants, installation view.

1011

Repetition & Frank Strain Stra

by Jan Garden Castro

mary mattingly

For Mary Mattingly, art is about life and survival. Her interlinked earth-, water-, food-, and communitycentered projects attune us to the planet's basic rhythms and needs (as well as our own), helping us to understand the complex ecosystems that sustain us. In addition to photography, performance, wearable art, and portable architecture focused on behavioral and adaptive strategies in the face of climate change, she creates self-sufficient sculptural systems that poetically interpret and functionally re-create natural ecosystems. "Ebb of a Spring Tide," Mattingly's recent exhibition at Socrates Sculpture Park in Long Island City, New York, featured one such system—a living *Water Clock* rising from the "ruins" of a leaking, overgrown building. Through the flow of saltwater around and through its maze-like infrastructure, this alternative clock marked time in natural cycles while nourishing a foraging garden of edible plants.

With the support of a 2023 Guggenheim Fellowship, Mattingly is currently working on the latest "proposal" in her series of large-scale, nomadic, collaborative ecosystems, which began with *Waterpod* (2009), a self-sufficient "eco-habitat" and experiment in urban sustainability. The new work, *Shoal*, will be an expanded version of *Swale*, a floating public commons and edible landscape on a reclaimed barge that first appeared in New York City's public waterways in 2016. *Shoal* is planned as a "permanent and accessible food forest" that will begin serving Brooklyn and Queens in the summer of 2024.

Jan Garden Castro: How did you learn to do what you do?

Mary Mattingly: I've always considered water, food, and home to be my crucial investigations. I grew up outside of New York City and had a mixed relationship with water—between caution/concern and appreciation. The water there was contaminated with agricultural runoff, which made me aware of the negative impact that farming practices could have on drinking water and human health. Water was my first subject, and having an ecological focus that responded to a place and encompassed home wasn't a choice, but probably more of a fundamental part of how I perceive living in the world.

So, I developed a particular methodology—I began making sculptures that were wearable and cleaned water, and I would bring them to the desert near where I lived in Oregon and test them as habitats. They got better over time. I photographed the sculptures and then started to combine them with performance. Following that, the sculptures became larger. Sometimes I prioritize interaction between people, and the sculpture becomes a platform for interaction, but it always begins from materials specific to the place and the materials' past life. Sometimes the opposite is true: the sculpture is prioritized, and the interactions that people may have can enliven it.

THIS PAGE AND OPPOSITE: **Water Clock,** 2023. Steel, vessels, found materials, East River water, and salt-tolerant, edible plants, installation view.





I call everything I build a "proposal"—often sculptures are proposals for a type of ecosystem that is large enough to feel human in scale but small enough to comprehend. The larger scale evokes imagination, and the more detailed workings of a human-assembled ecosystem compel a more practical understanding of what is working, what isn't, and why. Proposals for sculptural ecosystems evoke wonder, which I believe is key to co-creating alternative futures.

JGC: What kinds of research did you do for "Ebb of a Spring Tide?"

MM: It started from a dream that I had while I was in my last apartment, which leaked from the ground level when high tide aligned with a storm event; when I moved to a new unit (on the top floor), I learned that it also leaked, from the roof. When I was working on the proposal for Socrates, I started with tidal research and included personal questions, such as what the spring tide meant for my Irish ancestors who fished at sea. It was the time to get out of the water, because as the spring tide recedes, it seems calm, but it can pull you out to sea, to the cosmic. If you had looked at "Ebb of a Spring Tide" from above, you'd have seen a large circular form with wetland plants representing the earth and two smaller spheres representing the positions of the full moon (spring tide's lunar positions), and then you'd have seen *Flock House*, which represented the (slightly off-center) sun.

In the studio, the research involved taking East River water and making baths for thin steel disks, which erode from the salt and represent ideal full moons. This has become a photographic series that I'm obsessed with. The metaphors in "Ebb of a Spring Tide" were so rich, from the ouroboros of the water clock cycle to the plants that opened at night under the stars in the moon gardens.

JGC: What are some of the ways that the project engaged and educated visitors?

MM: I hope that the experience was contemplative. People could listen to the drips of the *Water Clock* and

66 I started to think through the ways that water could teach

people about time and different times. There is an urgency yet a slowness to time. **22**



be engulfed in the powerful scents of the herbs and flowers in the wildflower garden—including goldenrod, bee balm, mint, and chives—on the way to the *Flock House*. Socrates launched an online guide detailing each plant's edible and medicinal properties.

JGC: You've made various iterations of the *Flock House*, including an airborne habitat raised on stilts that hosted artist residencies. The Socrates *Flock House* took the form of a small geodesic dome. What was its purpose?

MM: The *Flock House* is a modular living unit that can easily be moved around. This one served as a studio and a living space. There was programming throughout the summer, and, by August, many of the dye plants were ready to harvest. The *Flock House* work-

THIS PAGE: *Flock House*, 2023. Steel, found materials, photographic garden, and dye garden, installation view.

OPPOSITE: Limnal Lacrimosa, 2021. Glacial water, glacial stone, ceramic pots, wood, LED lighting, stained glass, water pump, and landscape tubing, 22 x 24 x 80 ft.

shops included making paper from mushrooms (taught by Roberta Trentin), sewing panels to shade the structure, and developing black and white photographs with the help of plants harvested from the surrounding garden. Plants with phenols and vitamin C, like aquatic pickerel weed, can be used to make black and white prints—but you need a lot of them. Much changed over the course of the summer, and the gardens were open for foraging.

JGC: Is there any connection to Andrea Zittel's pods for living?

MM: Not much. This was more about reclaiming what was there, and we used found construction materials. This probably started from thinking through what environmental migration might look like in a future



city. There would have to be more resource sharing.

JGC: The *Water Clock* at Socrates was the first work of this kind that you've made. How did you get interested in this idea, and how did you figure out the system that governed it?

MM: The water clock function is a guide, a place to start. In 2020–21, I was able to work in Glacier National Park, in an old brewery with a leaking roof. I placed large tanks beneath the leaks and collected snow melt off the roof, then ran the water through a landscape hose down to the first floor and let it drip into ceramic and metal containers. The water would overflow, flood the floor, and go into a drain, which held the pump that would send everything back up to the water tanks. That system, which became *Limnal Lacrimosa* (2021), ran for a year. It froze in the winter, and sometimes it ran really fast, making a percussive sound in the metal containers. People would come and meditate. Though it began as an experiential work, I began to think of it as a water clock—recording

time and the changes of weather in Glacier National Park. So, organically, it took on another meaning and became a machine.

I started to think through the ways that water could teach people about time and different times. There is an urgency yet a slowness to time. I was playing with these metaphors, and then, at some point, I assembled a scaffolding system, which was there in the building, and I was able to run it on a timer and play with the information that was shared on the website about glacial melt in the park. I expanded on the idea at Socrates, where we built it mostly from scrap.

JGC: The structure mirrored the high-rises across the river and the buildings that have risen in recent years across the street, creating an interesting grid. How much did you finesse the form? MM: A lot. I worked with Chris Zirbes from Socrates on every part of the design process. The doors to "nowhere" and the ladders to "nowhere" were important parts, something I'd been thinking about in previous





THIS PAGE: Watershed Core,

2021. Metal conduit, stainless mesh, reclaimed restaurant trays, landscape tubing, reclaimed water containers, gravels, soil, and wetland plants from New York City's drinking watershed, 12 x 10 x 10 ft.

OPPOSITE:

Along the Lines of Displacement, 2018. Coconut, ponytail, and paurotis palm trees, 20 x 34 x 50 ft. View of installation at Storm King, New Windsor, New York. works. They were also specific to what I was going through at the time with my flooding space and my dreams of that disassembled, leaking apartment. I wanted it to reference a living space but be absurd. The sandbags around the installation may have reminded neighborhood residents of Hurricane Sandy and how to prepare for rising sea levels.

JGC: Does Water Clock have any added meanings?

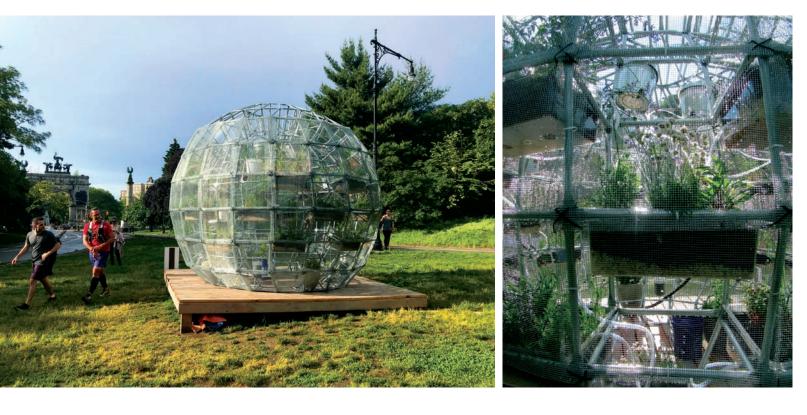
MM: From the sky, it looked like a map of the tides in the East River—the rise and fall in a 24-hour cycle. In a way, it's a cityscape: imagine a future New York City where plants have taken over buildings, where saltwater inundation has affected what is being planted and how we care for ourselves with plants. I did a project in Prospect Park recently called *Watershed Core* (2021) that looked at how New York City's watershed cleans the water we drink. The mechanisms in these sculptural ecosystems for water falling into plants—through gravel, carbon, carbonated charcoal, and everything else that's in those containers—work in a similar way. I became fascinated with what could grow in salt inundation. I've been studying that for a long time.

JGC: Did *Water Clock* have a direct relation to tidal flow?

MM: Yes. It sped up at high tide and slowed down at lower tide. When it was at its slowest, you could hear the sounds of the drips. That made it come alive. A container at the base measured the water cycle—how long it took to go through the whole system. It was a symbolic water clock, accuracy was not as important.

JGC: Do you think that your projects and exhibitions have made viewers more mindful of water issues?

MM: It's about conversations, and although many people weren't comfortable talking about climate change directly, they would talk about water issues on a farm—how water levels are changing, how there's less of it, and how there is greater concern about flooding. Art can do many things. What's really important is that it can shift your perceptions, so you can start questioning everything. One of my rules is to imagine and to ask people to imagine, too.





JGC: Who inspires you in the worlds of art and environmental research?

MM: The best answer may be that I am non-discriminatory in my inspiration. Installing *Limnal Lacrimosa* at Glacier National Park, I was thinking of Kōbō Abe's novel *The Woman in the Dunes*, a story about two people who must spend their lives emptying sand from a building, or else it will bury them. It's a story about repetition and endurance, destiny and environmental change. In "Ebb of a Spring Tide," the sketch was based on a dream and recorded performances of Samuel Beckett's *Act Without Words*.

Before reading the news, I read a Barry Lopez, Borges, or Calvino short story each morning in order to start the day. I'm sure they all inspired "Ebb of a Spring Tide." I've followed Buckminster Fuller's writing since high school and know it has been relevant to my fascination with structures that are strong and possible to deploy for a group of people without professionallevel building skills, which is empowering.

I also draw on Vandana Shiva and Ursula K. Le Guin, specifically *The Carrier Bag Theory of Fiction*. For more technical writings, I can get engulfed in Donella Meadows, Maude Barlow, Merlin Sheldrake, Robin Wall Kimmerer, and Elinor Ostrom. The commons, even as an imaginary in New York City, can be a powerful way to reconceptualize economics, governance, and policy, and even to revitalize democratic practices. Dilip da Cunha, who writes about rivers, points out that a river is not a line but a water cycle that expands and contracts.

JGC: Your current project, *Shoal*, builds on *Swale* (2016–ongoing), a floating landscape ecosystem on

Swale, 2016-ongoing. Steel deck barge, edible vegetation, soil, gravel, aluminum, wood, fabric, and landfill liner, 22 x 40 x 130 ft. View in East River, 2017.

П

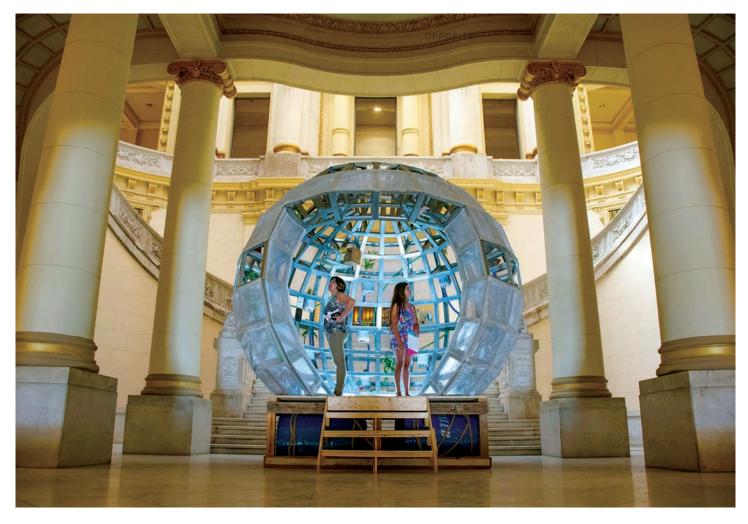
ICULUAN PP

1

and to bar

MUR.

mary mattingly



a reclaimed barge that travels waterways around New York. There was a kind of provocation in the fact that *Swale* invoked maritime common law and invited foraging in defiance of local land laws. What has changed between the two iterations of this idea?

MM: *Shoal* will be a more permanent version of *Swale*, rooted in local research. As part of *Swale*, we asked people what foods they would be interested in planting and foraging for. We received close to 130,000 responses, which we sent to the Parks Departments; and in 2017, they finally opened their first "foodway" in Concrete Plant Park in the Bronx to redress the food desert in the area. They've said that they would do more, particularly if neighborhoods want to steward

one. *Shoal* also more directly addresses the impact of rising sea levels and storm surges on New York City by focusing on salt-tolerant plants. So, it aligns with the resilience plan and prioritizes public food.

Saline farming is integral, and it begins with identifying which strains of fruits and vegetables are grown best with salt water and integrating them into an agroforestry plan with salt-tolerant perennials. Surprisingly, there are four strains of potatoes that grow very well with salt water. Onions, carrots, tomatoes, and cabbage also do well in saline soil, not to mention halophyte plants, which already grow at a riparian edge.

JGC: How are Pratt Institute Graduate Architecture

Pull,

2015. Reclaimed aluminum drywall stud, U.S. military parachute fabric, fish, fruiting plants, soils, reclaimed juice containers, 55-gallon drums, and lumber, LED lights, and plumbing tube, 14 x 10 x 10 ft.



mary mattingly

Vanishing Point, 2021.

Sectional barges, Cor-ten steel nipa palm renderings, and steel scaffolding, 14 x 12 x 18 ft. Installation view on the Thames River, Southend, London.



MM: The Pratt students used the 130,000 responses to *Swale* in their new planting plans, and they've come up with four great designs. A lot of it depends on the barge structure that will eventually be purchased for the project, and how we have to retrofit those designs.

JGC: What is your timeframe for building? And how long will you maintain *Shoal*?

MM: One year to build it out, and hopefully a lifetime. Right now, Uprose, an organization in Sunset Park, is interested in facilitating education and programming when the barge is at the Brooklyn Army Terminal, where it can be docked for part of the year. The other part of the year, it can be in the Bronx's Concrete Plant Park with programming led by Youth Ministries for Peace and Justice. We're expecting it to launch in the summer of 2024.

JGC: What can individuals and artists do for the environment?

MM: This is an important question. Art leads to alternative possibilities. It's also part of building collective agency because it gives space for more people to be involved through exploring the complexities, ambiguities, and contradictions experienced around climate stewardship and climate change. As a language continually evoking new words and without a key, art can be seen as one of the most powerful forms of communication; it integrates diverse knowledge while capturing an imaginary, offering models for different ways of living and being and engaging people in more embodied and potentially transformative ways. This is all to say that my personal priorities are the same in life and art. I prioritize my desires—loving and being loved, learning and teaching, questioning and bringing people together.

Mary Mattingly's work is currently featured in "RE/SISTERS," at the Barbican in London through January 14, 2024. She has also created a new water clock sculpture for "Invisible Worlds," on view at the ICA, Maine College of Art & Design in Portland through December 15, 2023, and a public water sculpture, on view at the Rockland Center for the Arts Sculpture Park through November 22, 2023.