



# Congratulations,

Class of 2021!



Congratulations to our certificate class of 2021, whom we celebrated at our annual Native Plant Studies Certificate Graduation Ceremony on November 7! Graduates presented their impressive projects, from bioblitzes to independent botanizing, sustainable garden design to native plants in food systems, and plant data tracking to invasive plants management. Most of the graduates and several supporters attended the ceremony, either in person or via livestream. Though the event was masked, we did take a quick class photo. Welcome to the alumni community!

- Sarah Berube. Basic Certificate.
- Laura Costello. Basic Certificate.
- Shoma Haque. Basic Certificate.
- · Laura Knott. Basic Certificate.
- Judith Benedetti. Botany + Conservation, Basic.
- Chris Penniman. Horticulture + Design, Basic.
- Stephanie Radner. Botany + Conservation, Basic.
- Elissa Johnson. *Advanced Botany + Conservation*.
- · George Kocur. Field Botany, Advanced.
- Robert Traver. Field Botany, Advanced.

# Sowing Seeds Alumnus Profile: Emil Doyle

Although Emil (Ame) Doyle didn't truly enter the field of botany until about five years ago, his passion for plants and for the environment has been a central theme in every stage of his life.

Growing up in Pennsylvania, he remembers watching his mother enter – and win – many categories in the Pennsylvania Horticulture Society's competitions at the Philadelphia Flower Show.

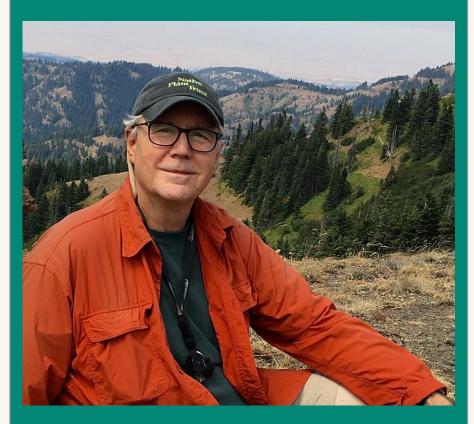
"Each year during the weeks leading up to that event, every flat surface of our house was taken over by dried and live plant parts from all over the world," said Doyle. "None of them looked like anything that grew in Pennsylvania, so that fascinated me."

Doyle then moved to Montana at 21, took his first botany class at Montana State University, and fell in love with the native species of the West – in particular, lichens. He was astonished by the beauty of their colors, which were far brighter than those around Philadelphia.

Although his path led to another career, this early enthusiasm was reignited when Doyle moved to Massachusetts in 2007 and found Elizabeth Kneiper's lichen classes at Native Plant Trust. He subsequently enrolled in the certificate programs, which he credits with allowing him to reconnect to his passion for botany.

"Flatly put, there is nowhere that I know of in the US where one can learn and study with such a professionally qualified group of instructors and enthusiastic students," said Doyle of Native Plant Trust.

He graduated from Native Plant Trust's advanced certificate program with a toolkit for identifying native species that allows him to explore diverse ecosystems in the various places he's lived, ranging from New England's deciduous forests to the temperate rainforests of the Pacific Northwest.



# **Sowing Seeds**

"The certificate program really gives you the fundamentals, and the fundamentals are the fundamentals no matter where you live," said Doyle, who now resides in Walla Walla, Washington.

Doyle said he left the certificate program with a mindset that allowed Doyle to visualize the structure of the places he now visits, studies, teaches, and practices photography. It trained him in observing, understanding, and eventually identifying plants.

Doyle used the final project in the advanced certificate program to develop a field botany program in Walla Walla: "Botany in the Blues," part of Blue Mountain Land Trust's *Learning on the Land* series, which just completed its fourth year.

Botany in the Blues is a unique program in the region. Doyle brings people into the world of native plants, especially those that are overlooked for showy flowers, and educates them about their crucial role in the Blue Mountains ecoregion.

"What I'm interested in doing is trying to fill a gap in the level of understanding the average person about the plant world and about the ecosystems that they are ultimately the stewards for, especially in this time when there are so many challenges facing the public trust lands."

Doyle recently self-published a guide on Northernmost Blues ecology, complete with his own photography and drawn diagrams of native plants in the Blue Mountains of Oregon and Washington.

To Doyle, the certificate programs at Native Plant Trust opened the opportunity not only for his own learning, but also to extend his love for and experience with botany toward educating the public, bringing awareness to conservation issues, and allowing students to develop a deeper understanding of their local flora.

"The certificate programs gave me confidence that I could both participate in and develop projects that had a scope of purpose outside of myself, for greater good," said Doyle.

Doyle offered words of encouragement, as well as advice, for current and future students of Native Plant Trust's certificate programs. He emphasized several points: engaging with teachers, coursework, and fellow students; getting outside in the field and keeping a field journal; and going deeper with any particular plant information that sounds interesting. He emphasized that collaboration with the community of fellow plant lovers is key.

"Continue that when you get involved with pursuits after the program is finished," said Doyle. "It will make the pursuits much richer than if done on your own. And you will get blown away by the kindness and generosity of people who used to be strangers."

Doyle reflected on how lucky he was to find the certificate program – which gave him knowledge extending beyond the native species of New England and into conservation efforts that can apply on the West Coast just as much as the East.

"Education," added Doyle, "is the foundation of effective stewardship."  $\hfill\Box$ 

# **Taking Root**

### **Current Student Spotlight: Tripti Thomas-Travers**

Tripti Thomas-Travers can distinctly recall the moment she decided to dive deeper into botany. After a spring spent gardening while listening to podcasts, she came across an interview with Doug Tallamy, who mentioned that it takes between 6,000 and 9,000 caterpillars to rear one clutch of chickadees. This was an eye-opening moment for Thomas-Travers, who is especially interested in the relationship between birds and plants.

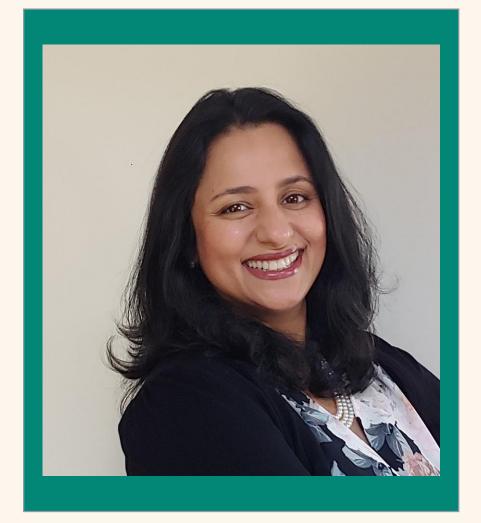
"I was struck by the opportunity I had to do something meaningful for biodiversity, even in my own yard," said Thomas-Travers. "It was empowering."

Her exploration of plant cultivation led Thomas-Travers to Native Plant Trust, where she is enrolled in the Basic Certificate and takes horticulture and design classes as well. With this newfound knowledge, Thomas-Travers is working toward establishing a garden design and coaching consultancy with a focus on eco-gardening and biodiversity enhancement.

As a resident of Newton, MA, Thomas-Travers understands there are obstacles to creating naturalistic spaces within dense suburban areas with small plots of land. However, she sees this as an exciting and necessary challenge.

"Every time I see a patch of grass somewhere, I always wonder, 'What can we turn that into? Why can't we plant milkweed?"

She hopes to focus on the gardens of private homeowners, but also extend her work to community spaces at larger scales, through partnering with local organizations or getting involved with public projects.



**Native Plant Trust** 

# **Taking Root**

Thomas-Travers said that the certificate program not only supports her to learn an entirely new native plant palette, but it has also allowed her to meet like-minded people who are just as passionate about horticulture and conservation.

"The fantastic thing about this field is the opportunity for endless amounts of learning. And that's the common thread I'm finding with all the people who are part of this community," she said. "What energizes them is that they love to learn and there will always be more to learn."

Native Plant Trust has encouraged Thomas-Travers to begin building a network both inside and out of class. Just recently, she met with a classmate at Mt. Auburn Cemetery to walk around and identify the trees they had been reading about in a core course offered this October, Framework Trees of New England.

Although she's loved all the programs she's taken, one elective in particular stands out: Ecology & Conservation of Native Pollination Systems with Dr. Robert Gegear.

"This class really blew my mind," she said. "I realized how little I knew and how much I have to learn, while also giving me some empowering tools like ways to identify different bumblebees and plant lists that will help me further refine and prioritize my plant palette."

With a broad background in public policy, international economic development, and art, Thomas-Travers has found a field through which she can combine all of her interests and experience.

"I've always been service minded," she said. "There's always been this larger question of, I can do this in my garden, but how can I apply that to the community around me?"

Most recently, she's answering this question by experimenting on her home's 'hell strip,' the patch of grass between the sidewalk and road. By planting native species here and observing how well they tolerate the harsher conditions near the pavement, she hopes to identify a new plant palette that, though small, may someday serve as a landing pad for a pollinator. If it works, she hopes to bring this idea to her city council so it can be replicated elsewhere.

Looking ahead, Thomas-Travers is excited for next spring, when she will complete her coursework and start applying what she's learned to her emerging business.

As someone who has also studied and practiced art, Thomas-Travers sees gardening is yet another form of artistic expression, coupled with the enduring goal of sustainability. "I have sort of this innate love of color, texture, putting those things together and figuring out how they work for maximum beauty and impact," said Thomas-Travers. "The garden can also be a canvas."

Many of her paintings, she's realized, are depictions of the New England landscape. "I can now use what I am learning about native plants and ecological design not just to depict but also to expand and sustain what I love." □

# Instructor Spotlight

### Micah Jasny, Botanical Coordinator

As Native Plant Trust's Botanical Coordinator, Micah Jasny works at the intersection of plants and people.

Jasny oversees the Plant Conservation Volunteer program (PCV), a community science program that is comprised of volunteers who are trained to monitor rare plant populations throughout New England. In turn, their work assists natural heritage programs within the region.

"It's really enriching," said Jasny of working with the PCVs. "One thing I really love about this job is being with the volunteers, being with this community of people who are really passionate about plants and conservation."

Currently, Jasny is working on the future of the PCV program with three goals in mind: integrating new technology, focusing on plant management, and increasing data sharing.

The program is in the midst of switching databases, from twodecade old NORM (NEPCoP Occurrence Record Manager) to a soon-to-be launched new database, SPROUT (Species Rare Occurrence Utility). The three-year long process has included the transcription by PCVs of over 7,000 field forms to data that will be accessible in a more efficient and navigable format.

Along with the database, Jasny is working toward hands-on management strategies to better protect native plants.

"Every year, we're losing populations and species, so we need to start thinking about how we move from monitoring to increasing management, where we can actively protect these populations," said Jasny.

Jasny hopes to foster a regional conservation ethic for better communication across natural heritage programs and state boundaries. With this in mind, Micah Jasny helped create a single standardized reporting form for field research that can now be used anywhere in New England.

The PCV program is exciting not only for the research, Jasny noted, but also for the opportunity to be outside.

"It feels like a treasure hunt sometimes – you're trying to find this one elusive species in the woods, or on the shores of a lake, and it's really peaceful and fun to be able to go out into nature."

Jasny has also taught several programs, including Roots of Black Botany in July, highlighting the work of three notable Black botanists: George Washington Carver, Marie Clark Taylor, and O'Neil Ray Collins.

"We like to think that we can focus on plants in a vacuum, but it's not true – they exist on a landscape and within a society. I wanted to bring attention to that through a botanic lens," said Jasny. "It's important that these stories are shared...to provide knowledge and encourage people to explore and support contemporary Black botanists."

Native Plant Trust

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# Instructor Spotlight

As someone with a deep love for nature, Jasny is finding a way to incorporate the diverse dimensions of conservation and botany into his work: communication, technology, ethics, and social justice, among others.

He offered advice for those looking to get involved in this field. "Don't be intimidated...the thing I've found about being in this field is everyone I've met is very willing to share, and gets joy out of looking at plants and sharing their knowledge of them."

The PCV program especially, Jasny added, is a place for everyone – with few requirements to join and a variety of species for volunteers at various skill levels, he always welcomes new applications.

"There are opportunities for everybody," said Jasny. "As long as people care about plants or want to be outside and contribute, there's a place for them in the PCV program." □



Chris Mattrick © Native Plant Trust

From the Garden: Sabatia stellaris Pursh, Sea Pink

Sabatia stellaris is a small, star-shaped annual and member of the Gentian Family (Gentianaceae). It grows on open sandy soils at the upper edges of salt and brackish marshes and interdunal depressions. Though it is abundant along the Atlantic and Gulf Coasts, it is rare in New England and listed as Endangered in MA. The primary threat to *S. stellaris* is the spread of invasive species, especially *Phragmites australis*. It is also sensitive to increased salinity levels, making a rise in sea level due to climate change an increasing threat.

## **Get Involved!**

### **Upcoming Native Plant Trust Programs**

### **Online Programs**

Live Virtual

1/5: History and Principles of Landscape Design (Advanced Core)

1/21: Gardening for Climate Change

2/1: Roots of Black Botany

3/17: Plant Systematics (Advanced Core)

Self-paced Courses

Open Enrollment: Plant Form and Function (Basic Core)

Open Enrollment: Plant Ecology (Basic Core)
Open Enrollment: Plant Families (Basic Core)
Open Enrollment: Designing with Native Plants
Open Enrollment: Gardening for Pollinators

**Around the Region** 

1/21: Brown University Herbarium, Providence, RI

**Western MA** 

2/19: Conservation Biology (Advanced Core)

**Eastern MA** 

1/28: Winter Botany

2/9: Harvard University Herbaria

2/26: Botany Story Slam

3/8: Landscape for Life (Advanced Core)

### **Community Volunteer & Job Board**

### **Volunteer Opportunities**

- Native Plant Trust
- Canton Conservation Commission (alum-led)
- Arnold Arboretum
- Massachusetts Horticultural Society
- Mass Audubon Garden Volunteering
- Tower Hill Botanic Garden, Boylston
- · Berkshire Botanical Garden
- Emerald Necklace Conservancy
- New England Forestry Foundation
- Fenway Victory Gardens

### **Employment Opportunities**

- Executive Director, Grow Native Massachusetts
- Editor of Arnoldia, publication of Arnold Arboretum
- The Harvard University Herbaria Research Fellowship
- New England Forestry Foundation
- Massachusetts Audubon
- · The Trustees of Reservation

### Donate to Support Public Programs by clicking <a href="here">here!</a>

To contribute news, artwork, or other information to the newsletter, please email education@nativeplanttrust.org.

# **Hand-Picked**

### **Artwork by Our Alumni**



This Blue Mountains member of the Saxifragaceae is *Ozomelis stauropetala* (side-flowered mitrewort) and is a relative to the New England native *Mitella diphylla* (two-leaf miterwort) which grows at Garden in the Woods.



New England has four species of the impressive lady's slipper orchids, but here in the more arid Blue Mountains of southeastern Washington and northeastern Oregon, *Cypripedium montanum* (mountain lady's slipper) is the most common of two representatives of this genus.



Pterospora andromedea (woodland pinedrops), a member of Ericaceae, is a non-photosynthetic parasite - it obtains nutrients from mycorrhizal fungi that have established symbiotic relationships with the roots of other plants.

# **Hand-Picked**

**Artwork by Our Alumni** 







Painted Bolete (top left), Fall Wildflowers (bottom left), and Viola Pedata (above), by Carol Govan '96

# Plants Conserving and promoting New England's native plants

www.NativePlantTrust.org