

# New England Botanical Society

## 1179<sup>th</sup> Meeting, June 15, 2024

Polly Hill Arboretum in West Tisbury, MA

Summary by Destynnie Berard

Early on the morning of June 15<sup>th</sup>, a private shuttle greeted the New England Botanical Society group at the ferry docks in Martha's Vineyard to drive everyone to Polly Hill Arboretum, which is surrounded by coastal marshes and sandy, acidic forest that is historically Wampanoag land.

The 72-acre Polly Hill Arboretum property was originally purchased as a homestead in 1926. Resident Polly began her garden at the age of 50, planting many specimens from seed and meticulously documenting every step of her horticultural experiments. In 1997, the results of her work were saved from being demolished for housing, and it instead opened as a public arboretum.



Pergola covered in *Aristolochia tomentosa*

Executive Director Timothy Boland and Curator & Assistant Director Emily Ellingson met the group at the entrance of the Arboretum to introduce themselves and go over the day's itinerary, which would begin with a comprehensive walking tour of the grounds. The pergola at the entrance of the Arboretum was shaded with Dutchman's Pipe (*Aristolochia tomentosa*), a stunning first sight for visitors.

As the walking tour began, Tim and Emily shared insights into the Arboretum's history and collections focus. Many of the collections at the garden originated from North America and temperate Asia, but the Arboretum is focused particularly on maintaining collections of flora native to Martha's Vineyard and the Atlantic coastal plain.

Along the walking trail, the group enjoyed a collection of over 100 hollies (*Ilex spp.*), and many showy species of *Rhododendron* and azalea. Polly had grown many azaleas from seed, including the renowned North Tisbury azaleas, in an area lovingly named "Polly's Playpen" where she would spend most of her time creating cultivars in a fenced area protected from herbivores.

Across from Polly's Playpen began an extensive collection of magnolias, which included several Asiatic species and all eight North American native species.

Unique specimens included a form of big-leaf magnolia (*Magnolia macrophylla* 'Julian Hill') that Polly had named after her husband. In bloom during the trip, these milky white flowers spanned nearly two feet in length.

Polly Hill Arboretum is also home to a nationally accredited *Stewartia* collection, which contains over seventy trees and nine cultivars planted and named by Polly. Many of the blooms were open during the visit, drawing admiration and many photographs from the group. On the way to visit the *Stewartia* collection, the group observed a single blight-resistant American chestnut (*Castanea dentata*) tree with its long, yellowy-white catkins producing pollen to be carried on the wind.



*Magnolia macrophylla* flower



*Emily showing one of Polly's handwritten notes*

Tim and Emily led the group to the homestead offices and cowbarn library. The group toured the offices where staff both work and store historical archives, including many of Polly's original, hand-written notes about her original plantings; a five-year project to properly preserve and archive these works is still ongoing. Staff take care of all the Arboretum's needs from this building, including laser engraving their own plant labels and digitizing herbarium specimens.

After lunch, the tour continued to the nursery and the Littlefield maintenance building. Here, the group learned more about the Arboretum's propagation techniques and conservation efforts and had the opportunity to view a massive collection of dibbles, which are small tools for creating holes in the ground for planting.

During a tour of various herbaria collection devices from around the world, Emily described that their research collection, *The Flora of Dukes County*, represents an estimated 95% of all known vascular plants on Martha's Vineyard. They – with help from an Herbarium Curatorial Intern – take plant specimens through the full process, from collection, drying, and voucher creation, to archiving, digitizing, and storage.



*Tim showing the Arboretum's collection of dibbles*

From the herbarium, the group sat down for a presentation by Executive Director Tim on Polly Hill Arboretum's history and current conservation initiatives. With the formal incorporation of plant conservation into its mission statement in 2006, Polly Hill Arboretum established a dedicated research fund, which has since allowed the arboretum to actively participate in botanical research. Tim expressed excitement in the Arboretum's recent focus on botanical education and the ongoing publication of research papers that contribute to plant propagation knowledge for the botanical community.



Following a short rest and a visit to the gardens' plant sale area, the group embarked on a tour of the Native Tree Trail. This educational path highlighted ten native trees of Martha's Vineyard, including several species of oak (*Quercus spp.*) and a beech (*Fagus spp.*) forest.

*Defoliated beech forest from Beech Leaf Disease, a recently-discovered disease caused by a foliar nematode*

The now decimated beech forest offers the Arboretum an opportunity to discuss the impacts of rapid ecosystem change and open a discussion about different management practices once the trees are defoliated.

The day ended just before sunset with a reception in the Far Barn, where Polly Hill Arboretum provided food for the group, and everyone had a chance to relax and reflect on the day's exploration and observations before the shuttle arrived for the return trip to the ferries.



*Group photo after the day's activities.*