

2024 Florida Rare Plant Conference, March 22nd
Afternoon session - virtual presentations on field trips: 2 – 5 PM

ABSTRACTS – listed in order of field trip number

Chad Washburn, Vice President of Conservation at Naples Botanical Garden, “Field Trip 1 - Keewaydin Island Beach Dune Restoration Tour.”

In 2022, the entire southwest Florida coastline was significantly impacted by storm surge from Hurricane Ian, which brought up to 4.5m of surge height. The surge destroyed much of the beach dunes at the urban interface requiring large-scale restoration of several miles of coastal dunes and several million native plants. Naples Botanical Garden has been monitoring coastal dune succession in disturbed areas for over 5 years, piloting restoration projects in collaboration with the City of Naples, and collaborating with several local municipalities to encourage the use of a diverse plant palette of locally collected genetics to restore the beach dunes of Collier and Lee Counties. During this hands-on experience, participants visited Keewaydin Island with project collaborators from the Rookery Bay National Estuarine Research Reserve to collect propagules as a part of the coastal resiliency project. Travel by boat to the island for a brief walking and collection expedition, then a return to the Garden to process plants in the new Evenstad Horticulture Campus.

Etienne Hernandez and **Gloria Antia**, City of Miami Natural Areas Managers, “Field Trip 2 – Virginia Key North Point Park *Jacquemontia reclinata* project site location tour and maintenance work.”

Participants were led on a short, guided tour/walk of the Virginia Key Beach North Point Park Mabel Fentress Miller Walking Trail before arriving to the restoration site. Virginia Key is surrounded by unique habitats such as the Bill Sadowski Critical Wildlife Area which consists of approximately 460 acres of mangroves, seagrass beds, mud flats, and marsh habitat. Down Arthur Lamb Jr. Road lies Virginia Key North Point Park, a popular destination for windsurfers and mountain bikers, and the site of habitat restoration being undertaken by the City of Miami’s Natural Areas Division. The field location is part of the City’s wider effort to restore coastal dune habitat. This particular dune was previously heavily planted with woody species, but new management plans drafted by the City of Miami’s current site managers called for a restoration back into a true coastal habitat. The first area targeted was where sensitive populations of *Jacquemontia reclinata* were originally reintroduced by Fairchild Tropical Botanic Garden in 2003 and 2005. Field trip participants saw the rare *J. reclinata*, as well as Sea oats (*Uniola paniculata*), Saltmeadow cordgrass (*Spartina patens*), Beach peanut (*Okenia hypogea*), and some reintroduced sea lavender (*Heliotropium gnaphalodes*) and Railroad vine (*Ipomoea pes caprae*). This field trip involved a coastal dune restoration activity where participants helped maintain the site by removing unwanted species such as Madagascar periwinkle (*Catharanthus roseus*), Mexican clover (*Richardia grandiflora*), Virginia creeper (*Parthenocissus quinquevnia*), Durban crowfoot grass (*Dactyloctenium aegyptium*), Two-hole grass (*Bothriochloa pertusa*), and others.

Emily Guinan, Field Botanist, Fairchild Tropical Botanic Garden, “Field Trip 3 – Fern Forest Nature Center habitat improvement.”

Encompassing 247 acres of Cypress Creek's original floodplain, Fern Forest Nature Center is an urban preserve in Broward County that is home to over a dozen species of rare ferns and numerous other rare species. Most of these rare fern species are not known to occur anywhere else in the county, with Fern Forest having a unique mix of swamp, hammock, and limestone outcroppings that provides suitable habitat in an otherwise highly-developed area. Invasive fern species *Tectaria incisa* grows in close proximity to some of these rare fern species, making chemical treatment difficult, and hand-pulling requires a close eye due to its similar appearance to the congeneric state-threatened species *Tectaria heracleifolia*. Participants on this field trip learned the basics on differentiating the invasive and native lookalikes, removed the invasive species from the rare fern habitat, then checked out some of the other rare fern species that were reintroduced into previously cleared areas. .

Colleen Werner, Florida Forest Service Biologist, “Field Trip 4 - Brooksville bellflower survey at the Croom Tract of the Withlacoochee State Forest.”

The endangered Brooksville bellflower, *Campanula robinsiae*, is a very rare, short-lived annual that grows along the margins of ponds and ephemeral wetlands. Participants on this field trip had the opportunity to see this very rare species while helping Florida Forest Service Biologist Colleen Werner and Bok Tower Gardens' Rare Plant Specialist Chico Rivera perform the annual monitoring of this species around Bell Heaven Pond at the Croom Tract of the Withlacoochee State Forest. The pond sits on a perched water table and remains wetter longer than many of the wetlands in the Croom sandhills. The longer hydroperiod may contribute to the pond margin supporting a healthy population of the Brooksville bellflower. Following the plant counts, participants were led on a short walk to some *Pectelima ptiloda* var. *bourgeauana* ferns growing in a rocky creek.

Houston Snead, Jacksonville Zoo and Gardens Plant Conservation Officer, “Field Trip 5 – *Monotropsis reynoldsiae* Survey at Guana Tolomato Matanzas National Estuarine Research Reserve.”

Teeming with life, the Guana Tolomato Matanzas National Estuarine Research Reserve (GTM NERR) is a dynamic, ever changing place with many interconnected habitats from the ocean to the forests. One of 30 National Estuarine Research Reserves in the country, this landscape protects and provides for a great diversity of plants and animals. The Florida Endangered (Florida Natural Areas Inventory G2/S2) *Monotropsis reynoldsiae* commonly known as pygmy pipes has been observed on this property in the past but the location of these plants is currently unknown. Field trip participants joined Houston and GTM NERR staff in conducting a survey for this species, while enjoying the natural dune system, maritime hammock, and coastal strand that make this property so unique.

Ashley Lingwood, Indian River County Conservation Lands Biologist, “Field Trip 6 - Lakela’s Mint census and habitat improvement at the Hallstrom Farmstead Conservation Area.”

The Hallstrom Farmstead Conservation Area is a 93-acre site that includes sand-pine scrub, maritime hammock and disturbed areas where the Hallstrom family farmed pineapple and citrus from 1908-1989. It is not open to the public, and the County is in the process of restoring the natural communities and constructing public amenities. This site has one of the five remaining natural colonies/populations of the Lakela’s Mint, as well as the state-listed *Lechea cernua*. Participants on this field trip helped in the conservation of the endangered Lakela’s Mint (*Dicerandra immaculata* var. *immaculata*) by collecting annual spring demographic data, counting and mapping the total number of Lakela’s Mint plants in the three locations of the species across the conservation area, and improving scrub habitat for the mints by removing love vine, invasive species, and shrub overgrowth.