



CENTER FOR PLANT CONSERVATION



# FLORIDA PLANT RESCUE

## 2023 ANNUAL IMPACT REPORT

Florida Plant Rescue (FLPR) is a statewide seed collections initiative that aims to secure and safeguard Florida's rare plant species in conservation collections to prevent their extinction. Led by the Center for Plant Conservation in collaboration with botanical experts throughout the state, our partner institutions collect, process, and store the seeds of rare plants safely in ex situ collections to preserve the botanical diversity of the Sunshine State.

Photo credit: Wade Collier

Photo credit: Hanna Rosner-Katz

# 2023 YEAR IN REVIEW

Throughout the third year of the Florida Plant Rescue initiative, we continued to make significant progress toward our goal of securing all of the state's 200 globally rare species in conservation collections. In 2023, partners successfully made 15 seed collections to safeguard in seed banks at botanical gardens and at the National Laboratory for Genetic Resource Preservation. For 11 of these accessions, this was the first ever seed collection made for that species! In addition to making field visits to carry out these collections, partners have also recorded valuable information on the status of these populations—including their size, extent, reproductivity, and habitat conditions—helping improve our understanding of these rare flora.

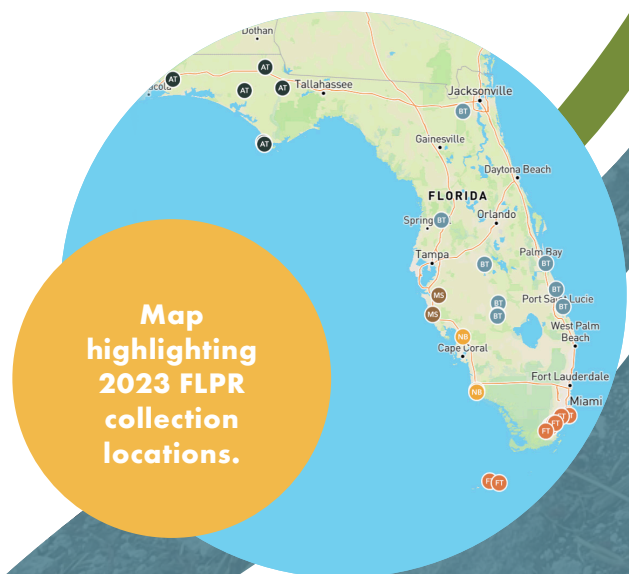
Beyond traditional seed banking, FLPR is increasingly taking on exceptional species projects for the effective ex situ conservation of plants that cannot have their seed stored via conventional freezing methods. In 2022, the first exceptional species project was awarded to Atlanta Botanical Garden for the highly threatened Florida yew (*Taxus floridana*) and in 2023, two additional projects were granted to Marie Selby Botanical Gardens and Naples Botanical Garden for the equally rare Manasota pawpaw (*Asimina manasota*) and smallcup spiderlily (*Hymenocallis punta-gordensis*), respectively.

A notable accomplishment for the initiative over the last year was the launch of a comprehensive, interactive accessions database. This platform combines the seed bank data from FLPR members with the rare plant occurrence data from Florida Natural Areas Inventory (FNAI), the state's natural heritage program, to provide an efficient way of determining which plant populations are still in need of collection. With this resource, FLPR members can make well-informed decisions about which species to prioritize for collection. Furthermore, members can continually add their accessions to the database to keep it as updated as possible.

With our high ambitions for complete ex situ conservation of Florida's rarest plant species, we are always looking to expand our capacity, broaden our partnerships, and increase our support. We hope to welcome two new member institutions to the initiative in 2024 whose extensive botanical expertise will contribute greatly to our efforts. A developing agreement with the U.S. Forest Service will streamline the permitting process for members to make collections within Florida's National Forests, all three of which harbor high-priority species for collection. Additionally, FLPR has secured an agreement and funding from the National Park Service to make collections in the Everglades and Big Cypress, which greatly expands the geographic breadth of this initiative.

## Species Secured in 2023

- Pine barren false foxglove (*Agalinis georgiana*)
- White Indian-plantain (*Arnoglossum album*)
- Variable-leaved Indian-plantain (*Arnoglossum diversifolium*)
- Florida milkvetch (*Astragalus obcordatus*)
- Highlands goldenaster (*Chrysopsis highlandsensis*)
- Cilicate-leaf tickseed (*Coreopsis integrifolia*)
- Lakela's balm (*Dicerandra immaculata* var. *immaculata*)
- Savanna balm (*Dicerandra immaculata* var. *savannarum*)
- Narrow-leaved Carolina scalystem (*Elytraria caroliniensis* var. *angustifolia*)
- Sandmat (*Euphorbia deltoidea* ssp. *adhaerens*)
- Edison's ascyrum (*Hypericum edisonianum*)
- Pine pinweed (*Lechea divaricata*)
- Savanna Gayfeather (*Liatris savannensis*)
- Tiny purslane (*Portulaca minuta*)
- Pineland noseburn (*Tragia saxicola*)





## Broadening Our Scope



### Database

Thanks to the contribution of accessions data from FLPR members and the sharing of FNAI occurrence data, an interactive database integrating all this information in one place is available to members.

### Exceptional Species

The wealth of botanical knowledge and experience from our members, combined with their willingness to experiment, has allowed for three exceptional species projects to be undertaken for those plants that cannot be traditionally seed banked.

### Partnerships

FLPR is in the midst of expanding our capacity with two additional members in the process of joining the initiative and partnerships with the U.S. Forest Service and National Park Service are underway.



### Ciliate-leaved tickseed

(*Coreopsis integrifolia*) is a wildflower that some might say has gotten lost in the crowd of Florida's 14 other tickseed species. While this plant is available in the horticultural trade, wild populations are restricted to small areas of northeastern and panhandle Florida where they grow in notoriously under-surveyed floodplain and bottomland forests. However, Atlanta Botanical Garden was more than willing to accept the challenge, traveling by kayak along the scenic Chipola River to check on long-unvisited populations. In places, plants were very floriferous, allowing for successful well-timed seed collection.



Once thought endemic to the Bahamas, **Tiny purslane** (*Portulaca minuta*) was only discovered within the state in the last decade when local botanists astutely noticed something a little different about this species compared to other purslanes known to occur in south Florida. Known here only from three islands in the Keys, this species is extremely threatened by sea-level rise. With this new sense of urgency, Fairchild Tropical Botanic Garden stepped in to collect seeds from this incredibly tiny plant, only measuring about an inch across at full size. The morphology of the fruit capsules required extra attention and careful technique to ensure seed was not lost, but nothing Fairchild botanists couldn't handle!



**Manasota pawpaw** (*Asimina manasota*) is a recently described species with an extremely restricted range, only occurring in scrubby habitat of two Florida counties. Because the seeds of all pawpaws are recalcitrant, a different method besides traditional seed collection was required for this species. Thankfully, tissue cryopreservation techniques for other related species had already been developed by the Center for Conservation and Research of Endangered Wildlife. A collaboration between them and Selby Gardens has led to the successful growth of germplasm lines in vitro.

# FLORIDA'S RARE PLANTS NEED YOUR SUPPORT!

## Make a gift to help conserve Florida's imperiled plants!

Please indicate "FLPR" in your  
check or online donation

To make a donation, please:

- Visit [saveplants.org/donate](https://saveplants.org/donate)
- Call 760.796.5686
- Make checks payable to:  
Center for Plant Conservation  
15600 San Pasqual Valley Road,  
Escondido, CA 92027-7000

- **102 of 202 FLPR Target Species  
Secured in Conservation Collection**

- **\$354,000 Raised to Support FLPR**

The Center for Plant Conservation and FLPR member institutions have made significant strides to conserve Florida's imperiled flora. However, due to climate change, construction, and invasive species, the urgency to save these plants remains just as great as ever. To fulfill our short-term goal, we require \$394,000 in collections funding to FLPR partners to collect one population per remaining species + coordination and database support.

To fulfill our ultimate goal, we require \$1.79M to collect three representative populations throughout a species range + coordination, database, and seed bank infrastructure support.

We wish to thank the following donors and foundations for their integral support of the Florida Plant Rescue initiative:

Josephine Bush • Coleman and Susan Burke •  
BAND Foundation • Curtis & Edith Munson Foundation •  
River Branch Foundation • National Park Service

33

SEED COLLECTIONS  
SECURED

50% Of Florida's rarest plants  
are conserved in seed banks

9

FLPR member  
institutions whose  
contributions and  
expertise make this  
project possible

Photo credit: Bruce Holst

Photo credit: Bruce Holst

Photo credit: Bruce Holst