



FLORIDA SEED BANK

floridaseedbank.org

CONSERVE
RESTORE
EDUCATE
COLLABORATE
FOR FLORIDA

FLORIDA'S NATIVE PLANTS.
THRIVING TOMORROW.

Standard Operating Procedures (SOP)

SEED CONSERVATION · RESEARCH · PROPAGATION
RESTORATION · PARTNERSHIPS · A MORE RESILIENT FLORIDA

*Preserving
Florida's native
plant genetic
diversity so
future generations
can restore
resilient ecosystems.*



I. Mission, Scope & Conservation Model

Healthy native plant communities build healthy ecosystems, healthy wildlife, and a more resilient Florida.

Florida Seed Bank (FSB) is a nonprofit conservation organization dedicated to collecting, preserving and stewarding wild-origin native plant genetic material from Florida's native flora. We conserve seeds, living plants, tissue cultures and other germplasm as appropriate for each species, with a focus on ecological restoration, research and education.

FSB is designed as a broader native-germplasm and ecosystem-restoration program, complementary to - not a replacement for - established rare-plant conservation networks.



*Striped batpin
(Eriocaulon decangulare)
Florida native*

What Defines the FSB Model

BROADER NATIVE-FLORA SCOPE

Conserve ecologically important Florida natives across plant communities, not only species already categorized as rare or endangered.

MULTIPLE CONSERVATION PATHWAYS

Use seed banking, in-vitro/tissue culture, living collections, pollen banking and partner-based cryopreservation when appropriate.

WILD-POPULATION PROVENANCE

Treat location, population and maternal-line information as part of the biological value of every accession.

RESTORATION & SEED INCREASE

Separate irreplaceable conservation holdings from propagation and seed-increase material intended to support future restoration-scale needs.

ECOSYSTEM-BASED CONSERVATION

Build collections that can support restoration of whole Florida plant communities - grasses, wildflowers, shrubs and trees together.

COLLABORATION, NOT DUPLICATION

Coordinate with established institutions when work overlaps, reducing pressure on wild populations and filling genuine conservation gaps.



2. Central Florida Sandhill Conservation Pilot

A model for ecosystem-based native plant conservation.

The Central Florida Sandhill Conservation Pilot is our founding ecosystem-focused project. Rather than treating a habitat as a list of isolated species, the pilot will document, collect and preserve representative native germplasm from the plant community while maintaining population-level provenance.

“By conserving the plants of Florida’s native ecosystems today, we help ensure these extraordinary landscapes endure for future generations.”



Central Florida Sandhill

Pilot Objectives

- ✓ Develop conservation-quality accessions for at least 15 key native species.
- ✓ Document source population, habitat, collection conditions and provenance.
- ✓ Establish cleaning, storage, germination and viability records for each species.
- ✓ Develop propagation and seed-increase protocols without treating conservation accessions as commodity seed.
- ✓ Create a repeatable model for other Florida habitats.



Florida rosemary
(*Ceratiola ericoides*)

Collection Principle

The goal is not to remove as much material as possible. Wild recruitment comes first. Collection intensity is adjusted to population size, reproductive output, species biology and applicable permits or landowner authorization.

Why Sandhill?

Florida Sandhill is a fire-shaped upland ecosystem whose restoration depends on more than a few conspicuous species. The pilot is intended to preserve locally documented genetic material that can support future research, propagation and restoration planning.



3. Collection, Conservation & Research Procedures

From wild population to conservation accession.

01

Plan & Authorize

Confirm land access, permissions, permits, existing collections and whether collection is ecologically justified.

02

Assess the Population

Record population condition, reproductive output, habitat, phenology and threats.

03

Collect for Diversity

Sample across multiple individuals or maternal lines while leaving ample material for natural recruitment.

04

Create the Accession

Assign a unique accession ID. Record taxonomy, source population, date, collector, habitat, permissions, quantity and restricted locality data.

05

Process & Test

Clean carefully, prevent cross-contamination, document quantity/quality and establish viability baselines as capacity permits.

06

Choose the Right Pathway

Use seed storage for appropriate species; route exceptional material to living collections, in-vitro, tissue culture, pollen or cryogenic strategies where needed.

07

Monitor & Use Responsibly

Track viability over time. Ensure research, propagation or restoration use remains linked to the original accession and does not jeopardize the conservation holding.



Florida pitcher plant
(*Sarracenia flava* var. *ornata*)



Native seed collection

4. Partnerships & Off-Site Safety Collection

A geographically resilient collection for a more secure future.

Florida Seed Bank plans to maintain a primary collection in Florida with a geographically separate safety collection in Champaign, Illinois, in collaboration with the University of Illinois Urbana-Champaign.

- Long-term seed storage for duplicate accessions
- Scientific collaboration and research opportunities
- Access to plant biology, seed science and tissue culture expertise
- Student and faculty involvement
- Increased resilience against natural disasters
- A stronger foundation for the long-term security of Florida's native plant genetic resources.



University of Illinois
Urbana-Champaign
(prospective partnership)

*"Stronger together -
Florida's plants, a wider
safety net, and a future
built on collaboration."*