

# Seed Banking & Conservation Collections



The Garden maintains Southwest Florida's only conservation seed bank. The ever-growing collection represents rare and common native species as storms, climate change, sea-level rise, invasive pests, and urban sprawl threaten all plants. It includes species from the Caribbean because Southwest Florida shares a plant palette, growing conditions, soil types, and weather patterns with its island neighbors.

Garden conservationists conduct novel research into long-term preservation strategies, plant growth habits, and preferred conditions. The seed collection and the knowledge gleaned from it allows the Garden to embark on restoration projects, amass native plants for use following natural disasters, and advise local governments on the trees and plants best suited for ecosystem health.

## The seed bank includes:

Over **1,000,000** seeds, representing **166** species

**158** species native to Florida

**89** species native to the Caribbean

**17** plants that grow only in our region

**16** state-threatened species

**13** state-endangered species

**2** federally listed threatened species

*Note: Figures as of June 2026*

## Notable Holdings

### *Iva imbricata*

This plant captures and accumulates the sand that forms protective dunes along the coast. It was not commonly used in local restoration projects until the Garden began collecting and propagating it. Only two other seed banks in the United States hold its genetics.

### *Crocanthemum nashii*

The Garden believes it holds the state's only seed collection of this vulnerable wildflower. They were gathered from its 90-acre Preserve, home to more than 400 native species.

### *Digitaria pauciflora*

This plant is considered "critically imperiled" and known to exist only in one 31-square-mile plot within Everglades National Park. In an example of botanical collaboration, the seeds protected in Naples were initially held at Fairchild Tropical Botanic Garden in Miami, which sought a secondary place to safeguard the plant, due to its vulnerability.





## Projects & Collections

### Rookery Bay Plant Surveys and Seed Collection

Specialists from the Garden and Rookery Bay National Estuarine Research Reserve are working to collect seeds and cuttings from habitats within the 110,000-acre reserve that are at risk of disappearing because of sea-level rise, erosion, storm damage, and other pressures. The seeds saved now can help restore ecosystems in the future.

### Beach Dune Restoration

Garden conservationists collect seeds and cuttings from native coastal plants, study how to multiply and grow them, and tend thousands of seedlings for use in restoration projects. Using local plant genetics—rather than ordering commercial stock from elsewhere—creates a better functioning ecosystem.

### Puerto Rican Cacti

Two invasive pests threaten the survival of Puerto Rico's native cacti. Through a partnership including Puerto Rican plant specialists and the U.S. Department of Agriculture, conservationists collected seeds and cuttings from uninfected cacti and shipped them to the Garden for safekeeping, ensuring the plants persist even if lost in their native habitats.

### Swamp Bay

The invasive *Xyleborus glabratus*, or redbay ambrosia beetle, carries a fungal disease that has decimated red bay (*Persea borbonia*) and swamp bay (*Persea palustris*) throughout the southeastern United States. The Garden's swamp bay collection has shown resistance to laurel wilt disease, making it a potential asset for future restoration projects. Moreover, swamp bay is a “crop wild relative,” or genetic cousin, to the avocado (*Persea americana*). Its genetics could be introduced to the popular fruit to bolster its resistance to disease.

### Netted Pawpaw

*Asimina reticulata* is another crop wild relative related to the edible pawpaw fruit that grows in temperate regions of the United States. The shrub began to flourish once the Garden began periodic prescribed fires in our Preserve.

