

30 pine rockland plant species, including 10 species which are federally endangered, state endangered or state threatened were planted on January 28, 2017 as part of ongoing restoration work at Zoo Miami. With funding from the Florida Native Plant Society's Conservation Grant Program, Zoo Miami's Conservation and Research Department and Miami-Dade County's Natural Areas Management hosted a Pine Rocklands Restoration Planting in the pine rocklands surrounding Zoo Miami.

The restoration area was a 1/2-acre linear mound of introduced fill in the pine rocklands surrounding Zoo Miami that dated from the site's history as the Richmond Naval Air Base before the site was developed as a zoo (~1945). The disturbed substrate of this artificial fill pile provided ideal habitat for invasives - cane grass, ear-leaf acacia, and Brazilian pepper that had recently been treated through an FWC contractor. Excavation of the fill was a major task, requiring a crew from Zoo Miami to work on removal for nearly three weeks. The fill pile's extent and impacts were more extensive in the area than estimated by visual surveys. This led to a larger area in need of restoration. Upon removal of the introduced fill, the exposed natural sand and oolitic limestone was ideally suited for pine rockland plant reintroduction.

During a volunteer-driven planting on the 28th of January, 16 volunteers from Miami, Ft. Lauderdale, and the Florida Keys visited the zoo to help plant more than 700 native plants from 30 pine rockland species. Volunteers planted the Federally Endangered *Amorpha herbacea* var. *crenulata* (Crenulate Leadplant), as well as state-endangered species *Bourreria cassinifolia* (Little Strongbark), *Ernodea cokeri* (Coker's Creeper), and *Scutellaria havanensis* (Havana Skullcap). Florida-threatened species included *Coccothrinax argentata* (Silver Palm), *Crossopetalum ilicifolium* (Quailberry), *Crossopetalum rhacoma* (Maidenberry), *Ilex krugiana* (Krug's Holly), *Mosiera longipes* (Longstalked Stopper), and *Tetrazygia bicolor* (West Indian Lilac). Many of these species are assumed extirpated from the Zoo Miami pine rocklands. Restorations like this are the perfect opportunity to increase these imperiled species presence in their native range without impacting intact pine rockland areas. The *Amorpha* plantings at this new site are going to be adding a new restoration site planting comparison to a permitted long term reintroduction planting that Fairchild Tropical Botanic Gardens is conducting with the species in the adjacent Martinez pineland preserve.

This represents the fourth pine rocklands restoration planting at Zoo Miami. The area will be incorporated into Zoo Miami's funding of Miami-Dade County's Natural Areas Management annual invasive plant control and prescribed burn management programs. Plants funded with the gracious support of the Florida Native Plant Society covered approximately one third of the excavated site, so Zoo Miami and Miami-Dade Natural Areas Management look forward to further public planting events in the near future.

