Volusia Sandhill Ecosystem AT STETSON UNIVERSITY'S GILLESPIE MUSEUM 234 E. MICHIGAN AVE DELAND, FL 32723 386-822-7330 EMAIL GILLESPIE @STETSON.EDU WEBSITE: WWW.STETSON.EDU/SANDHILL



We need to know our nonhuman neighbors and come to see them as friends. Learning about the geologic history, flora, and fauna of the place we live helps us feel that we belong here

 Reed Noss, Forgotten Grasslands of the South (2013)

Volusia Sandhill

The landscape you see here is intentionally "wilder" than the rest of campus and contains species that would have historically been found in and around DeLand prior to European settlement when longleaf pine (*Pinus palustris*) towered over a diverse, open understory maintained by regular fire.



Mature sandhill, with longleaf pine in the overstory and diverse herbaceous plants in the understory.

Interpretative signs throughout the site provide details about the historical, cultural, and ecological significance of this native ecosystem.

Volusia Sandhill

As you walk through the site you will see the highest density of wildflowers in the Pollination Garden. Here, plants of diverse stature, shape, and color attract a variety of insect pollinators.



Common visitors to flowers in the Volusia Sandhill include: a) wasps (*Cerceris* sp. on tickseed), b) butterflies (gulf fritillary on milkweed), and c) bees (bumblebee on beebalm).



Typical of dry, upland pinelands in central Florida, most of the rest of the Volusia Sandhill has widely-spaced trees and plants, and includes some bare sandy areas. Incremental improvements continue to be made in areas where turfgrass and exotic weeds are being replaced with native sandhill species.

Seasons in the Sandhill

What you will see on any given day in the Volusia Sandhill depends on the time of day, weather conditions, and time of year. In Central Florida, the wet season begins in May and continues into October. Many plants are at their showiest during this time of year. To avoid the dry conditions that typically occur in November through April, many plants either: a) complete their life cycle within the wet season or b) die back to an underground taproot from which they resprout when rains return in spring.

Partridge pea (Chamaecrista fasciculata) is an annual plant that completes its life cycle during the

wettest months of the year. Seeds produced at the end of the summer will germinate and grow into next year's adults.



Pinewoods milkweed (Asclepias humistrata), a



long-lived perennial becomes dormant during the driest months, but reappears in spring when it uses energy stored in its taproot to grow quickly before flowering in late spring.

Diversity in Peril

Longleaf pine forests of the southeastern United States have been reduced to approximately 3% of their historic range.



In Florida, the conversion of longleaf pine ecosystems to human-constructed landscapes has reduced plant and animal diversity in the state. While too small to support many of the vertebrate animals associated with longleaf pine habitat, the Volusia Sandhill's diverse plant community currently supports a diverse insect community. Additional

members of the food web are sure to follow.



All photos courtesy of Dr. Peter G. May

Use Florida native wildflowers in your own garden

Some native wildflowers that are easy to grow in a home garden include:

Blazing star or gayfeather (Liatris sp.)

Passionflower

(Passiflora incarnata)

Blanketflower

(Gaillardia pulchella)

Tickseed

(Coreopsis sp.)

Butterflyweed

(Asclepias tuberosa)

Spotted beebalm

(Mondarda punctata)



Plant Natives

Find nurseries in your area that specialize in Florida natives through the Florida Association of Native Nurseries (FANN)

Purchase native wildflower seeds from the Florida Wildflowers Growers Cooperative

Adopt-a-Wildflower or borrow seeds from Stetson's Volusia Sandhill Ecosystem or our Seed Library