

Conservation of Endangered Florida Scrub Plant Species

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Introduction: Florida scrub ecosystems are quickly disappearing and along with it dozens of endemic plant species. Conserving and managing these endemic species is now critical for their future survival.

Background: By the 1990's, nearly 69% of Florida scrub habitat had already been lost (Robinson and Smith, 2004). The endemic plant species chosen highlight those characteristic to scrub.

Hypothesis: As a result of intense habitat loss, plants characteristic to scrub are mentioned in hopes of increasing awareness of the importance and need to conserve these species and other like it.



Cladonia perforata Evans

Status: Endangered (Endemic)
Description: Very low growing lichen, growing about 0.8 inches to 2.5 inches tall. Densely forked branches, with holes along the forked branches. Color can range from pale whitish green to a deeper yellow green.
Habitat: Well drained sand of rosemary scrub found on the Florida panhandle as well as the Lake Wales Ridge
Threats: Foot traffic, fires, clearing of populations on private property
Things to note: Only 30 populations of this species remain, half on conservation lands (Florida Natural Areas Inventory, 2000)



Bonamia grandiflora

Status: Endangered (Endemic)
Description: Perennial trailing vines with stems up to 3 feet long. Small leaves, 1-2 inches forming small bracts, leaves are oval with pointed leaf tips, entire margins, silky hairs covering leaves. Flowers have a funnel shaped corolla that is whitish in the center and turn light purple to blueish purple at the flower petals.
Habitat: Disturbed or open areas of white sand scrub on central ridges in Florida, many individuals are found in Ocala National Forest.
Threats: Habitat fragmentation, fire suppression, housing developments, citrus groves, invasion of low growing exotic plants, off-road vehicles
Things to note: Only species of its genus present in the United States



Prunus geniculata

Status: Endangered (Endemic)
Description: Scrub plum is classified as a shrub that can grow up to 6 feet tall, dense branching, partially buried trunk. Branches have spiny tips and younger growth has reddish-brown in color as this species is in the Rosaceae (Rose) family. Leaves are highly alternated with the branch forming a zig zag pattern giving the entire plant an overall gnarled appearance. Flowers are white in color with many visible stamens extending above the 5 petals.
Habitat: Scrub plum is endemic to central Florida where it grows in sandhill and oak scrub, which are fire dependent ecosystems. These scrub ecosystems are characterized by very open canopy, few trees, open sand patches, with shrubs and low growing plants being in abundance, and nutrient poor sandy soil.
Threats: The largest threats to this ecosystem are expanding housing developments and agriculture, specifically orange groves.
Things to note: More than 100 populations remain



Pinus clausa

Status: Least concern
Description: Evergreen conifer that is found in most of the southeast. Growing up to 65 feet tall with a lifespan of about 60 years. Yellow-green needles 2-4 inches in length with 2 needles per fascicle. The species depends on fire. The species is not endangered but in Florida Sand pines are essential in Florida sand pine scrub habitats, the species helps support 21 federally endangered or threatened plant and animal species (Trees for Me).
Habitat: Strongly acidic sandy soils that are nutrient poor. Largest sand of untouched Sand pine is found at Ocala National Forest.
Threats: Housing developments and citrus groves
Things to note: Sand pine is not classified as endangered, however this pine is a keystone species in sand pine scrub, helping support about 20 species such as the Scrub jay.



Asclepias curtissii

Status: Endangered (Endemic)
Description: Perennial herb with small stems, growing up to 2 feet tall. Milky sap. Opposite glabrous leaves. Large white flower clusters at top of the plant, with purple lines on flowers and solitary seed pods.
Habitat: Excessively drained white sand soils found in sand pine scrub and sandhills, as well as disturbed areas in these habitats
Threats: Housing developments, golf courses, and citrus groves.
Things to note: Pollinated by the Ceranus blue, Hairstreak, and Skipper butterflies (Imagine our Florida, 2019)

Conclusion: As unprecedented numbers of both plants and animals are declining it is important to take note of this changing environment and continue to promote conservation of Florida's diversity and native species. Simple ways to do so:

- Support Florida State Parks, National Forests, National Parks, and Wildlife refuges
- Be plant aware- Take note of different plants, even the tiny ones
- Join conservation organizations
- Plant Florida Native in your own yard to promote diversity in your very own yard!

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