

Common Name: FLORIDA SENNA

Scientific Name: Chamaecrista deeringiana Small & Pennell

Other Commonly Used Names: Deering's partridge-pea

Previously Used Scientific Names: Cassia deeringiana (Small & Pennell) Macbride

Family: Fabaceae/Leguminosae (pea)

Rarity Ranks: G2G4Q/S1?

State Legal Status: Special Concern

Federal Legal Status: none

Federal Wetland Status: none

Description: Perennial **herb** with 2 - 4 erect, unbranched **stems**, 8 - 28 inches (20 - 70 cm) tall, rising from a horizontal, woody root or crown. **Leaves** with 8 - 18 pairs of oblong **leaflets**, $\frac{3}{8}$ - $\frac{5}{8}$ inch (1 - 1.5 cm) long, that fold up when touched. **Leaf stalk** $1\frac{3}{8}$ - $2\frac{3}{8}$ inches (3.5 - 6 cm) long, with a reddish, round gland near the base. **Flowers** wider than 1 inch (2.5 cm), the larger petals $\frac{1}{2}$ - $\frac{3}{4}$ inch (1.3 - 1.8 cm) long; with 5 yellow **petals** (red-spotted at the base), 10 red **stamens**, and red **flower stalks** longer than $\frac{3}{8}$ inch (1 - 1.5 cm). **Fruit** a flat, oblong pod, $1\frac{3}{16}$ - $2\frac{3}{8}$ inch (3 - 6 cm) long.

Similar Species: Partridge-pea (*Chamaecrista fasciculata*) is a common, weedy annual with a taproot that sends up a single, much-branched stem. Its flowers usually have yellow stamens. Sensitive-plant (*C. nictitans*) also has several branches; its flowers are about ³/₈ inch (1 cm) wide, with 5 - 9 red stamens; its leaves have 7- 25 pairs of leaflets; the flower and fruit stalk is less than ¹/₄ inch (0.6 cm) long. Like Florida senna, both of these species have leaves that fold up when touched and the red gland on the leaf stalk.

Related Rare Species: None in Georgia.

Habitat: Longleaf pine-wiregrass savannas and Fall Line sandhills.

Life History: Florida senna is pollinated by bees, which are drawn to the flower's color and pollen; the flowers do not produce nectar. Florida senna has a gland at the base of each leaf stalk known as an "extra-floral nectary" that exudes a sweet substance; ants (and possibly spiders) feed on the nectar and discourage leaf-eating insects.

Survey Recommendations: Surveys are best conducted during flowering (June–August).

Range: Georgia, Florida, Alabama, and Mississippi

Threats: Fire suppression. Conversion of habitat to pine plantations, pastures, fields, and development.

Georgia Conservation Status: Four populations have been discovered, but only 2 have been seen in the last 50 years. Both occur on privately owned research sites.

Conservation and Management Recommendations: Apply prescribed fire to longleaf pine stands every 2 - 3 years, primarily in the growing season. Protect sandhills and savannas from conversion to pine plantations and development.

Selected References:

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Wolfe, A.D. and J.R. Estes. 1992. Pollination and the function of floral parts in *Chamaecrista fasciculata* (Fabaceae). American Journal of Botany 79(3): 314-317.

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Date Compiled or Updated:

L. Chafin, Oct. 2007: original account

K. Owers, Jan. 2010: updated status and ranks, added pictures

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