

COOLEY'S WATER-WILLOW

Justicia cooleyi Monachino & Leonard

Synonyms: none

Family: Acanthaceae (acanthus)

FNAI Ranks: G2Q/S2

Legal Status: US-Endangered FL-Endangered

Wetland Status: US-FACW+ FL-OBL



Billy B. Boothe

Field Description: Perennial **herb** to 16 inches tall, with erect, square, hairy **stems** with few branches. **Leaves** to 2 inches long, opposite, short-stalked, ovate or lance-shaped, with long hairs and short, brown lines on the upper surface. **Flowers** in zigzag, usually 2-branched clusters on long stalks emerging from angle of leaf and stem. **Flower** about 0.5 inch long, dark pink with purple and white spots, glandular-hairy, 2-lipped with the lower lip 3-lobed; stamens 2, attached to the lip; **sepals** 4, linear; **flower bracts** linear, sepal-like. **Fruit** a capsule, about 0.5 inches long, hairy.

Similar Species: Cooley's water-willow differs from the common water-willow (*Justicia ovata*) by its thin leaves, dense overall hairiness, abundant glandular hairs, and dark velvety color of flower lip.

Related Rare Species: Thickleaf water-willow (*Justicia crassifolia*), state-endangered and a species of management concern to USFWS, has fleshy leaves and

Cooley's water-willow

Justicia cooleyi

large, purple flowers 0.5 - 1.2 inches long. It is endemic to FL Panhandle flatwoods.

Habitat: Mesic hardwood hammocks over limestone.

Best Survey Season: All year; August - December.

Range-wide Distribution: Endemic to central FL.

Conservation Status: The habitat of this species has been greatly diminished by limerock mining, clearcutting, and agricultural and residential development. Seventeen populations are known; about half are in conservation areas but most of these are threatened by exotic plant invasion.

Protection and Management: Eradicate exotic pest plants. Monitor and protect roadside populations. Avoid mechanical disturbance in hardwood hammocks. Protect populations on private lands by purchase or conservation easement.

References: Coile 2000, Kral 1983, Monachino and Leonard 1959, 1970, Long USFWS 1993b, Ward 1979, Wunderlin 1998, Wunderlin and Hansen 2000a.