

CELESTIAL LILY Nemastylis floridana Small Synonyms: none Family: Iridaceae (iris) FNAI Ranks: G3/S3 Legal Status: US-none FL-Endangered



Purple to blue flower with six style branches spreading between the bright yellow anthers. Photo taken at Hungryland WEA by Kelly Anderson.

Field Description: Perennial **herb** from a bulb with a single, tall, slender **stem**, occasionally branching on robust plants. **Basal leaves** few, grass-like, sometimes more than 2 feet long. **Stem leaves** small and scattered along the stem. **Flowers** more than 1.5 inches across, with 6 dark blue, spreading **petals and sepals (tepals)**; flowers open around 4 pm and close by dusk. **Stamens** with 3 coiled, yellow anthers; **style** divided into 6 narrow, pointed branches. **Fruit** an erect, oval capsule, about 0.5 inch long.

Similar Species: Blue-eyed grasses (*Sisyrinchium* spp.) are also in the iris family; they have much smaller blue flowers that are open throughout the day in the spring and summer. Celestial lily is the only iris-like species in FL to open in the late afternoon in the fall.

Related Rare Species: Bartram's ixia (*Calydorea caelestina*), stateendangered, occurs in wet to mesic flatwoods in NE FL. The large blue-violet petals are similar to celestial lily, but appear in early morning and fade by 10:00 am. **Habitat:** Wet flatwoods (often in cabbage palm flatwoods variant), prairies, marshes, cabbage palm hammock edges.

Best Survey Season: Fall; flowers from 4-6 pm, August - October.

Range-wide Distribution: Endemic to eastern counties of FL, primarily in the St. Johns River drainage.

Conservation Status: Once widespread in eastern FL, this species now occurs in about 28 managed areas, where it may be locally abundant if its habitat is frequently burned.

Protection and Management: Burn flatwoods and prairies every 2-3 years (FNAI 2010). Protect wet flatwoods, mesic flatwoods, and wet prairies from draining, ditching, and conversion to pasture and pine plantation.

References: Coile 2000, Goldblatt 1975, Kral 1983, MacKiernan and Norman 1979, Small 1931, Ward 1979, Wunderlin and Hansen 2011, Wunderlin et al. 2018.



Purple to blue flower and six style branches spreading between the bright yellow anthers. Photo taken at Salt Lake WMA by Kelly Anderson.

celestial lily



Capsules egg-shaped, flattened at the tip, 6-9mm. Photo taken at Salt Lake WMA by Kelly Anderson.



Growing in recently burned wet flatwoods. Photo taken at Tosohatchee WMA by Amy Jenkins.