

***Carex viridistellata* Derieg, Reznicek, & Bruedele**  
Green Star Sedge



**Family:** Cyperaceae

**Synonyms:** None

**Description:** *Carex viridistellata* is a recently discovered species (2008) in *Carex* section *Ceratocystis*, one of the most well studied sedge groups worldwide. Calciphilic sedge that is always found in sunny, open areas of calcareous wetlands. Can be distinguished from similar species by overall size, particularly perigynium and beak length. Plants are caespitose with perigynia (3-6 mm long)

spreading or reflexed. The beaks clearly deflexed on lower portion of spike and nearly or fully half as long as the body. The pistillate scales are yellowish green, similar color as perigynia and inconspicuous in the spikes, the widest leaves are 3.8 mm wide. The larger pistillate spikes are 10-14 mm wide (measured beak tip to beak tip).

**Flowering:** May-early June

**Fruiting:** June-July

**Similar Species:** *Carex viridistellata* is very similar to *C. cryptolepis* and *C. flava*. In the field, confusion with *C. cryptolepis* is most likely because both have similar pistillate scales and individuals can overlap in size characteristics. The longer perigynium beaks (2-3 mm long) and larger pistillate spikes (10-14 mm) distinguishes *C. viridistellata* from *C. cryptolepis* which have shorter pistillate spikes (7-10 mm) and perigynium beaks (1-2 mm). It differs from *C. flava* by having green scales compared to brown scales.

**Total Range:** IN, MI, OH

**Ohio Range:** Adams, Greene, Seneca, and Wyandot counties

**Ohio Status:** <http://naturepreserves.ohiodnr.gov/>

**Habitats:** Endemic to undisturbed calcareous wetlands of Michigan, Indiana, and Ohio. Typically occupies variety of wet, open habitats, with sandy soils that are rich in calcium; ranges from prairie openings on wet, sandy soils overlying limestone bedrock (e.g. Lynx Prairie, Ohio) to sparsely vegetated marly seeps in fens. Rare across its range, but can be abundant locally and even a dominant species in open areas of some sites. The number of individuals found in a population is often few, but can range from less than 25 individuals to 1,000 or more; in most cases, population extent is not great and plants are consequently closely spaced.

**Threats:** Habitat destruction due to development, mineral extraction, natural succession, displacement or suppression by non-native, invasive species.

**Conservation Potential:** *Carex viridistellata* is a rare endemic with a limited distribution throughout its range in Michigan, Indiana, and Ohio, and has a high degree of habitat specificity. It is known from 20-25 sites historically, many of which are currently protected.

**Inventory guidelines:** Collect mature fruiting specimens for positive identification. Habitat specificity will also aid in identification. Note the habitat, fruiting characteristics, and general size and vegetative form.

**Comments:** Although this species is cryptic and easily overlooked, its distribution in Ohio may be close to being known due to its high degree of habitat specificity.

**Selected References:**

Derieg, N.J., S.J. Weil, A.A. Reznicek, and L.P. Bruederle. 2013. *Carex viridistellata* sp. nov. (Cyperaceae), a New Cryptic Species from Prairie Fens of the Eastern United States. *Systemic Botany* 38(1):82-91.

Voss, E.G. and A.A. Reznicek. 2012. *Field Manual to Michigan Flora*. University of Michigan Herbarium Press, Ann Arbor, Michigan. 1008 p.



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