

Cypress-knee Sedge



Carex decomposita line drawing

Scientific Name *Carex decomposita*
Muhl.

Family Name Cyperaceae
Sedge Family

Did you know?

This species is rare and local throughout its range and very rare in the north but *Carex decomposita* appears to prefer the most inhospitably thick buttonbush swamps. Therefore, perhaps it is more common than believed but simply difficult for people to penetrate the habitat it prefers.

The specific epithet *decomposita* means decompound in reference to the much compound inflorescences (Fernald 1970).

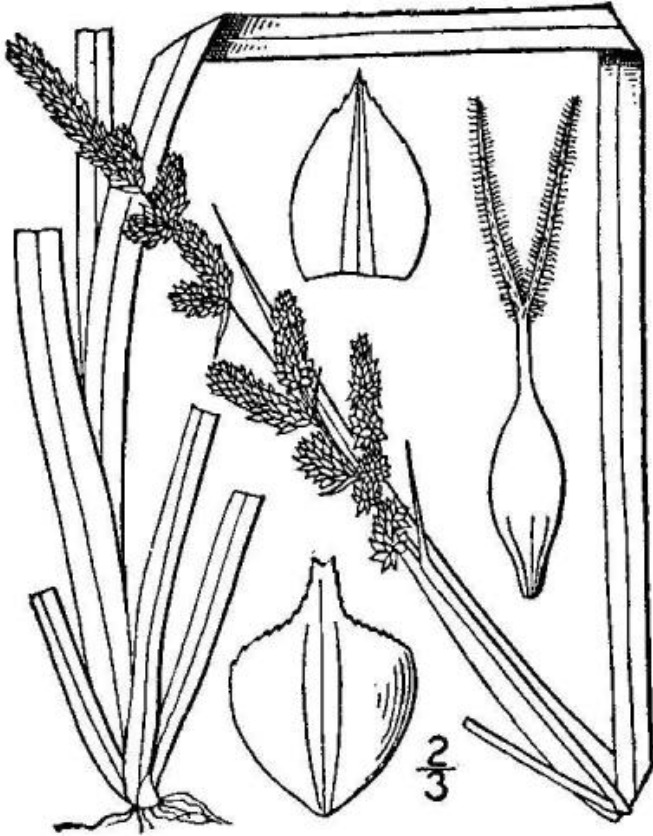


Photo credits: Britton, N.L., and A. Brown (1913); downloaded from
USDA-Plants Database.

Summary

Protection Endangered in New York State, not listed federally.

This level of state protection means: listed species are those with: 1) 5 or fewer extant sites, or 2) fewer than 1,000 individuals, or 3) restricted to fewer than 4 U.S.G.S. 7 ½ minute topographical maps, or 4) species listed as endangered by U.S. Department of Interior.

Rarity G3G4, SH

A global rarity rank of G3G4 means: Vulnerable globally, or Apparently Secure -- At moderate risk of extinction, with relatively few populations or locations in the world, few individuals, and/or restricted range; or uncommon but not rare globally; may be rare in some parts of its range; possibly some cause for long-term concern due to declines or other factors. More information is needed to assign a single conservation status.

A state rarity rank of SH means: This plant is only historically known from New York State, typically with the last plant observed over 20 years ago. Many SH plants have not been seen in 50-100 years.

Conservation Status in New York

There are no known populations of this plant in New York, but at least six historical locations have been recorded. These sites are either on floating logs or within difficult to survey buttonbush swamps. There is a high likelihood that this is hiding out somewhere within New York, but it is probably a very local and very rare plant within the state. More survey effort is needed in an attempt to relocate this plant.

Short-term Trends

No populations have been seen in recent years so, the short term trends are unknown.

Long-term Trends

There appears to be at least six populations that are only known from historical records. The locality data for these records is not precise and it makes searching for these populations difficult. Still, numerous searches to at least some of the areas where populations occurred historically have been conducted without successfully relocating the populations. *Carex decomposita* is a relatively big and obvious plant so should not easily get overlooked although, it may be growing in habitat that is difficult to access. Therefore, at least some of the historical populations may still be extant but it is also likely that at least some of them have been extirpated. Overall, long term trends are unknown but may indicate at least some decline.

Conservation and Management

Threats

No threats are known.

Conservation Strategies and Management Practices

No management is currently needed.

Research Needs

Surveys need to be continued at all historical localities. Surveys will probably be most successful if conducted by boat around the edges of the perspective ponds and lakes with close attention being paid to floating logs and bases of *Cephalanthus* or perhaps *Decodon* or other shrubs. In addition, it is important that surveys happen at the appropriate season (when the plants are in fruit) to facilitate easily seeing this plant from a distance.

Habitat

There is no specific habitat data known for New York but *C. decomposita* probably occurs or occurred at the edges of ponds or lakes on floating logs or the bases of *Cephalanthus* or perhaps

Decodon shrubs (New York Natural Heritage Program 2006). Blackwater swamp forests, often growing on cypress knees, cypress bases, or fallen logs (often at or near water level) (Weakley 2006). Marshes, swamp forests, usually on rotten stumps, floating logs, or bases of trees (often Taxodium) or shrubs (Cephalanthus) on lake, pond, and slough margins (Cochrane 2002). Wooded swamps, often on floating logs and bases of trees (most often Taxodium) (Fernald 1970).

Associated Ecological Communities

Other Probable Associated Communities

Shrub swamp
Sinkhole wetland

Associated Species

Common Buttonbush (*Cephalanthus occidentalis*)

Identification Comments

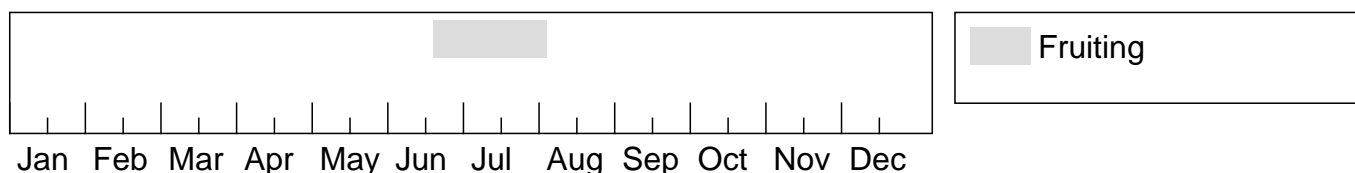
Cypress knee sedge is a densely tufted grass-like perennial. Its leaves are strap-like and 2.5-7.0 mm wide. Stems are 5-120 cm tall and towards its apex numerous secondary stems branch off of the main stem. Along these secondary stems as well as at the apex of the main stem are dense flower/fruit clusters (spikes). These spikes are densely arranged and are composed of separate female and male flowers. Female flowers develop into deep olive green to brown fruits (perigynia) which are 1.8-2.6 mm long (Cochrane 2002).

Best Life Stage for Identifying This Species

This species is relatively easy to identify when it has immature to mature perigynia. Perhaps the biggest challenge with finding this species is its rarity. When in fruit the inflorescences are large and plants should be visible from a distance.

The Best Time to See

Carex decomposita starts to produce perigynia in mid-June and these persist till about the end of July or perhaps longer. Towards the end of this season the fruits are starting to shed. Therefore, the best time to survey for this species is from mid June till late July.



The time of year you would expect to find Cypress-knee Sedge in New York.

Similar Species

Carex decomposita superficially resembles the closely related *C. diandra* and *C. prairea*. *Carex decomposita* can readily be distinguished in the field by the larger inflorescences. *Carex decomposita* has inflorescences mostly 7-15 cm long, lowest inflorescence branch with 9-33 or more spikes, and adaxial leaf sheath apices concave and not prolonged beyond junction with the blade. In comparison, *C. diandra* and *C. prairea* have inflorescences mostly less than 8 cm long, lowest inflorescence branch with up to 12 spikes, and adaxial leaf sheath apices truncate to convex and prolonged beyond the junction with the blade.

Carex sparganioides is perhaps a little similar but it is an upland species and the lower branches of the inflorescences, if present, only have a few spikes and are short.

Conservation Comments

Carex decomposita is in section *Heleoglochin* (Cochrane 2002). Past authors (Fernald 1970, Gleason and Cronquist 1991) have placed this species in section *Paniculatae* but that name has been relegated to synonymy (Cochrane 2002).

Taxonomy

Kingdom Plantae

└ Phylum Anthophyta

└ Class Monocots (Monocotyledoneae)

└ Order Cyperales

└ Family Cyperaceae (Sedge Family)

Additional Common Names

Sedge

Additional Resources

Links

USDA Plants Database

<http://plants.usda.gov/java/nameSearch?mode=sciname&keywordquery=CAREX+DECOMPOSITA>

NatureServe Explorer

<http://natureserve.org/explorer/servlet/NatureServe?searchName=CAREX+DECOMPOSITA>

Google Images

<http://images.google.com/images?q=CAREX+DECOMPOSITA>

New York Flora Atlas

<http://www.newyork.plantatlas.usf.edu/Plant.aspx?id=973>

Flora of North America

Best Identification Reference

Cochrane, T.S. 2002. *Carex* Linnaeus section *Heleoglochin* Dumortier. Pages 278-281 in Flora of North America Editorial Committee (editors), *Flora of North America, North of Mexico, Volume 23, Magnoliophyta: Commelinidae (in part): Cyperaceae*. Oxford University Press, New York, New York, USA. 608pp + xxiv.

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