

## **Natural Heritage** & Endangered Species **Program**

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Massachusetts Division of Fisheries & Wildlife

## **Livid Sedge** Carex livida

(Wahlenb.) Willd.

State Status: Endangered Federal Status: None

**DESCRIPTION:** The Livid Sedge (*Carex livida* var. radicaulis) is a perennial herb of rich fens and wet meadows. A member of the sedge family (Cyperaceae), this northern plant ranges from about 8 to 20 inches (20 to 50 cm) tall. It does not grow in tussocks as many sedges do, but instead stems are produced singly or a few together from a long, thin underground stem (called a rhizome). Its leaves are whitish-green (glaucous) and narrow, less than an eighth of an inch wide.

**AIDS TO IDENTIFICATION:** The Livid Sedge may be identified by a combination of characters. The leaves, as noted above, are thin and glaucous, and may be channeled or in-rolled (involute). Like many sedges, the small, inconspicuous flowers are borne in terminal, erect spikes. The terminal spike of the Livid Sedge is composed primarily or entirely of male flowers. The scales of the inflorescence are purplish-brown with a green mid-stripe. The vase-shaped achene bearing sacs (called perigynia) of the female flowers are long and thin in shape (although each is only a few millimeters long), and do not have apical constricted "beaks" as is characteristic of many other sedges.

**RANGE:** The Livid Sedge is a northern species with an interruptedly circumboreal distribution. In North America, the species is found from Newfoundland south to New Jersey and Minnesota, west to northern California.

**SIMILAR SPECIES:** Some members of this genus can be difficult to distinguish from one another, and the Livid Sedge superficially resembles a number of other sedges. A technical manual should be used to identify the different species of sedge. One sedge of wetlands that may be confused with the Livid Sedge is the Slender Woolly-fruited Sedge (Carex lasiocarpa), which also has very narrow leaves and terminal, erect spikes. However, as the name implies, the Slender Woolly-



Holmgren, Noel H. 1998. The Illustrated Companion to Gleason and Cronquist's Manual. New York Botanical Garden.

fruited Sedge has perigynia that are very hairy, and those of the Livid Sedge are smooth. Another sedge that could be confused with Livid Sedge is the Fen Sedge (Carex tetanica); however, its leaves are wider than those of the Livid Sedge, not involute, and not whitish in color as in the Livid Sedge. The Millet-sedge (Carex panicea) is an introduced species in our region and looks much like the Livid Sedge; however, it grows in drier conditions and has flat leaves that are not as white as those of the Livid Sedge.

**HABITAT:** The Livid Sedge is usually found growing in northern, alkaline fens and wet meadows. In our region, the species is most common in fens of northern Maine. In Massachusetts, the Livid Sedge was known from one sloping graminoid fen. Associates of this species in New England include the Mud Sedge (Carex limosa), the Slender Woolly-fruited Sedge (Carex

A Species of Greatest Conservation Need in the Massachusetts State Wildlife Action Plan

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*lasiocarpa*), the Bog Sedge (*Carex exilis*), Shrubby Cinquefoil (*Dasiphora floribunda*), and various species of moss (especially in the genus *Sphagnum*).

## POPULATION STATUS IN MASSACHUSETTS:

The Livid Sedge is listed under the Massachusetts Endangered Species Act as Endangered. All listed species are protected from killing, collecting, possessing, or sale and from activities that would destroy habitat and thus directly or indirectly cause mortality or disrupt critical behaviors. This sedge has only been reported from Essex County in Massachusetts.

MANAGEMENT RECOMMENDATIONS: As for many rare species, the exact needs for management of the Livid Sedge are not known. The following comments are based primarily on observation of populations in Massachusetts. Recent searches for the Livid Sedge at its one documented occurrence have been unsuccessful, and it is speculated that changes in hydrology at the site have rendered conditions too dry for this species. Maintaining the hydrological conditions at sites containing the Livid Sedge may be an important management consideration. This species is intolerant of shade, and shrub succession may need to be controlled in order to maintain populations of the Livid Sedge.

**Mature Perigynia Present** 

	Jan		Feb		Mar		Apr		May		Jun		Jul		Aug		Sep		Oct		Nov		Dec	

Updated 2019