## Fraser's sedge (Cymophyllus fraserianus)

Pennsylvania Endangered Plant Species
State Rank: S1 (critically imperiled) Global Rank: G4 (apparently secure)

#### What it looks like:

Fraser's sedge is a perennial grass, the only species in the genus *Cymophyllus*. Its stems, which have a triangular cross-section, grow 10 to 40 centimeters above a set of broad basal leaves.

**Leaves** are two to four centimeters across, wider than most other sedges' leaves, and dark green with parallel veins.

**Flowers** are white and unisexual, clustered at the apex of the stem with the staminate (male) flowers above the pistillate (female) flowers. The ovary at the base of each pistillate flower is surrounded by a sheath called a perigynum.



## Where it is found:

Fraser's sedge grows in rich mountain forests on moist slopes and along streams, within a fairly restricted range in the southern Appalachian Mountains. Populations are documented from Pennsylvania south to Georgia and Tennessee.

## Why it is rare:

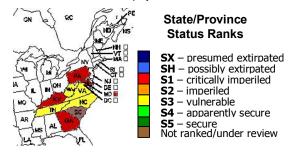
The narrow range of Fraser's sedge and the loss of its habitat have reduced it to a relatively small number of scattered populations. There is some concern that the existing populations may be so small that they are falling victim to genetic drift, a loss of genetic diversity that can reduce a species' ability to adapt to changes in its environment.

## Pennsylvania Distribution by County



current data • records > 30 years old (1975)
 Pennsylvania Natural Heritage Program data 2005

# North American State/Province Conservation Status Map by NatureServe



### **Conservation considerations:**

Preservation of Fraser's sedge will require conservation of suitable habitat to allow existing populations to expand, control of invasive competitors, and protection from human disturbance. If sedge populations are able to expand and reestablish, the risk of genetic drift will be greatly reduced.





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#### References

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- Godt, Mary Jo, J.L. Hamrick, and Albert Meier. 2004. "Genetic diversity in Cymophyllus fraserianus (Cyperaceae), a rare monotypic genus." Genetica, 122: 207-15.
- NatureServe, 2004. NatureServe Explorer: An online encyclopedia of life [web application]. Version 4.1. NatureServe, Arlington, Virginia. Available http://www.natureserve.org/explorer. Accessed 3 March 2005.