Rough Cotton-grass
Eriophorum tenellum

Description

The group of plants known as Cotton-grass includes grass-like plants (actually members of the sedge family, or Cyperaceae) that are made conspicuous by the tufts of cotton-like hairs that are attached to their minute flowers and fruits. Five species of Cotton-grass grow in Pennsylvania, mostly in bogs and bog-like wetlands, and share additional features such as 3-sided stems, narrow grass-like leaves, and 3-sided, dry, mostly brownish fruits about 1/8 inch (2-3.5 mm) in length. The combination of features that distinguish Rough Cotton-grass from the other 4 species include the minutely roughened upper stem, the very narrow leaves mostly 1/16 inch (1-2 mm) in width with a channel-like trough on the upper side, the blade portion of the leaf that tends to equal or be longer than the sheath portion of the leaf that surrounds the stem, the clusters, or spikelets, of flowers and fruits that usually have slender stalks that cause them to spread outward or droop, and the flowering and fruiting time occurring in summer.

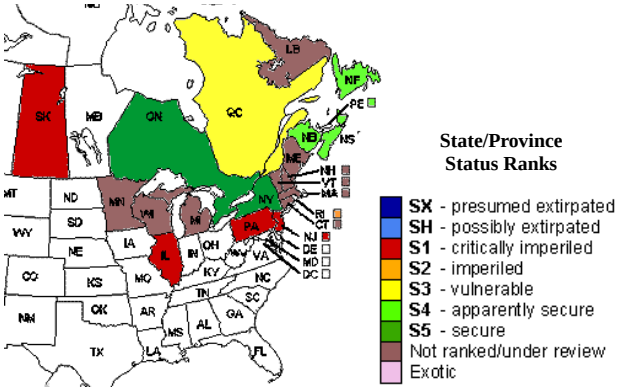
Photo source: John Kunsman (PNHP)

Distribution & Habitat

Rough Cotton-grass ranges from Newfoundland to Saskatchewan and south into New Jersey, Pennsylvania, and Illinois. In Pennsylvania, it can be considered a northerly species and has been documented historically in the northern, particularly the northeastern, counties. It grows in boggy wetlands, typically on floating bog mats.

North American State/Province Conservation Status

Map by NatureServe 2010

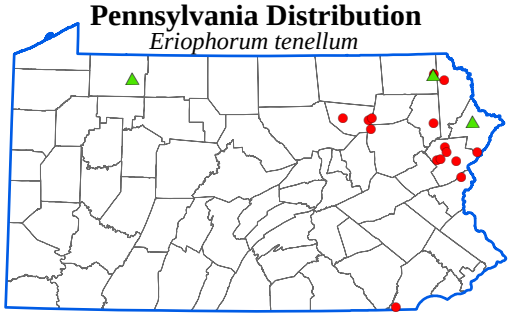


Current State Status

The PA Biological Survey (PABS) considers Rough Cotton-grass to be a species of special concern, based on the few locations recently confirmed and the specialized bog habitat. It has a PA legal rarity status and PABS suggested rarity status of Endangered.

Pennsylvania Distribution

Eriophorum tenellum



▲ records since 1980 ● records pre-1980

Pennsylvania Natural Heritage Program Data 3-2011

Conservation Considerations

The viability of populations of Rough Cotton-grass and its habitat may be enhanced by creating buffers and protecting the natural hydrology around bogs and controlling invasive species. Rough Cotton-grass is an indicator of bog habitats that feature various orchids, insectivorous plants such as sundew, bladderwort, and pitcher plant, and other interesting species.

NatureServe conservation status ranks

G5 – Globally secure; S1 – Critically Imperiled in Pennsylvania

References

- NatureServe. 2011. NatureServe Explorer: An online encyclopedia of life [web application]. Version 7.1. NatureServe, Arlington, Virginia. Available at http://www.natureserve.org/explorer.
- Pennsylvania Natural Heritage Program. 2011.
- Rhoads, A.F. and W.M. Klein, Jr. 1993. The Vascular Flora of Pennsylvania. American Philosophical Society, Philadelphia, Pennsylvania.
- Rhoads, A.F. and T.A. Block. 2007. The Plants of Pennsylvania: An Illustrated Manual. 2nd edition. University of Pennsylvania Press, Philadelphia, Pennsylvania.

PNHP
Pennsylvania Natural Heritage Program