

Sphagnum flavicomans

A sphagnum

Status

Federal status: G3 N?, Not listed

NH state status: S1S2, Not listed; proposed for endangered status (5/03)

ME state status: Not ranked or listed

Considered a rare species by several sources, however nothing indicates whether its rarity is result of a decline or is its natural state. Population trends are unknown locally and globally.

An expert panel was not held for *Sphagnum* species and those experts who did provide information about this species were not asked to identify viability outcomes.

Distribution

This species is oceanic and endemic to northeastern North America, ranging from Newfoundland south along the coast to Delaware and Virginia. It is also known from the mountains in New Hampshire, and the North Carolina/Tennessee border.

In New Hampshire there is one extant occurrence each in Rockingham and Belknap Counties and one historic occurrence in the White Mountains of Coos County. The historic occurrence from Coos County was likely in the WMNF. In Maine, it is known from Hancock, Washington, and Lincoln Counties, none near the WMNF.

Habitat

In New Hampshire, it occurs on medium to tall hummocks in bogs and poor fens. *Sphagnum flavicomans* is an indicator species for the *Sphagnum rubellum/Vaccinium oxycoccus* dwarf heath moss lawn in New Hampshire. This species is oligotrophic to weakly minerotrophic.

Limiting Factors

Ditching, flooding, draining, grading, and logging all can have substantial impacts on peatland habitats, which then affects the suitability of these habitats for *Sphagnum* species. Activities that change local hydrology cause the greatest changes in habitat suitability.

Sphagnum species, in the form of peat, are collected for a variety of purposes. This collection not only impacts the individual plants, it can make the habitat unsuitable for *Sphagnum* species.

Trampling can directly affect *Sphagnum* species and their peatland habitats.

Studies in Britain have shown changes in peatland habitats from acid rain, but studies in North America do not show similar results. Climate plays a key role in development and maintenance of peatlands, but what effect accelerated climate change will have is unknown.

Viability concern

Rounded G3 rank and documented occurrence on the WMNF make it an automatic Regional Forester's Sensitive Species for the Forest. Proposal by NHNHI to list this species as endangered also indicates concern for this species.

Management activities that might affect viability

Activities that alter water levels in bogs and fens could impact habitat suitability, depending on the timing, regularity, and intensity of changes in water levels. Such activities might include construction, modification, or removal of dams, including removal of beaver-created dams. Road and trail construction or other activities that alter the hydrology of a pond or bog also could affect this species if it is present.

Recreational use and facility construction along pond, fen, and bog shores could reduce habitat suitability and increase the risk of direct impact to populations.

References

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