Mossy Bog Mat

State Rank S4

Community Description

The bryophyte layer is the most obvious component of this peatland type. A dense and usually very wet layer of peat mosses contributes most of the cover. Low herbs and stunted shrubs are often scattered across the moss lawn, but usually form <25% cover overall. Characteristic vascular plant species include leatherleaf, bog rosemary (very dwarfed), horned bladderwort, small cranberry, and white beak-rush. The most typical bryophytes are *Sphagnum cuspidatum* and bog-mat liverwort.

Soil and Site Characteristics

Bog Moss Lawns occur within raised bogs and fens, typically in the wettest areas such as bog pools, boggy pond margins, and water tracks. They may form extensive areas on the higher areas of raised bogs. The substrate is highly acidic (pH \sim 4.0).

Diagnostics

A carpet of bryophytes, mostly Sphagnum mosses, is the main feature



Small Cranberry

in this peatland setting. Vascular plants generally contribute <25% cover.

Similar Types

This is the only vegetation type in which bryophytes form the major continuous vegetation layer. Sedge - Leatherleaf Fen Lawns, Low Sedge - Buckbean Fen Lawns, and Leatherleaf Boggy Fens can all have similar vascular plant species, but will have the vascular plants more strongly dominant (typically >50% cover).

Conservation, Wildlife, and Management Considerations

This community type is well represented in Maine and has been subject to few threats to date. Several examples occur

Location Map



Community is known from this Ecoregion
Community may occur in this Ecoregion
Bailey's Ecoregion





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on public lands and private conservation lands. Impoundment or draining would have negative impacts on bog hydrology and consequently on the vegetation. Slow vegetation growth rates, due to the nutrient-poor environment, result in slow recovery from physical disturbances, such as recreational trail use. If disturbance, such as foot traffic or logging access, is a necessity, traversing during frozen conditions or using boardwalks can minimize impacts.

Several rare dragonflies may be found in this community. Very wet locations with abundant inundated peat moss may host a number of uncommon damselflies and dragonflies including the Quebec emerald, zigzag darner, subarctic darner, incurvate emerald, and delicate emerald. Sites in northwestern Maine may include the bog fritillary butterfly, which uses small cranberry as its larval host plant.

Distribution

Statewide, mostly from central Maine northward (New England - Adirondack and Laurentian Mixed Forest Provinces). Presumably extends westward, northward, and eastward from Maine.

Landscape Pattern: Small Patch

Characteristic Plants

These plants are frequently found in this community type. Those with an asterisk are often diagnostic of this community.

Dwarf Shrub

Black crowberry Dwarf huckleberry Leatherleaf* Pale laurel Small cranberry

Herb

Horned bladderwort Pitcher plant Round-leaved sundew Tawny cotton-grass White beak-rush

Bryoid

Bog-mat liverwort Mylia liverwort Sphagnum mosses*

Associated Rare Animals

Ouebec emerald

Examples on Conservation Lands You Can Visit

- Crystal Bog Preserve Aroostook Co.
- Great Heath Public Lands Washington Co.
- Number Five Bog Public Lands
 Somerset Co.
- Wiggins Brook, Squaw Mountain Public Lands - Piscataquis Co.



Sphagnum Mosses