Leatherleaf Bog

State Rank S4

Community Description

This peatland vegetation type is dominated by leatherleaf and other low heath shrubs. Most of the vegetation is usually less than 1 m tall, although taller shrubs including black huckleberry, maleberry, and sweetgale may be sporadic. In the dwarf shrub/herb layer, leatherleaf is always present and usually dominant (30-60% cover at most sites). Other heath shrubs and sedges are mixed in with the leatherleaf. Graminoid cover is usually less than 30%. Typical bog plants including pitcher plant, sundew, and small cranberry are scattered on the peat moss substrate. Trees, if present at all, are <15% total cover.

Soil and Site Characteristics

This type is common in the wetter parts of bogs and acidic, nutrient poor fens (average pH is 4.0) with peat substrate. It usually occurs in settings where groundwater contact is maintained, and so is technically a fen from a hydrologic standpoint, although it is often referred to as "bog" because of the dominance of heath vegetation. This type is often a major constituent of "kettlehole bog" ecosystems, and it may be present in lakeshore peatlands or other sites with a fluctuating water table.



Ringed Boghaunter

4 | Diagnostics

In a peatland setting, dwarf shrub cover exceeds herb cover, but sheep laurel is not dominant because most sites are hydrologically fens. Tufted cotton-grass and/or tawny cottongrass are common sedges; white beak-rush is frequent but does not form high cover as it can in other types.

Similar Types

This type is intermediate in composition and nutrient regime between a Sheep Laurel Dwarf Shrub Bog (which is drier and has sheep laurel more abundant) and Sedge - Leatherleaf Fen Lawn or other graminoid dominated fen community types (which have graminoids more dominant).

Conservation, Wildlife, and Management Considerations

This type is well represented in Maine and is





Leatherleaf

fairly stable in extent, with several examples on public lands and private conservation lands. Some sites in kettlehole settings have been degraded by adjacent gravel mining. Changes to bog hydrology through impoundment or draining could lead to vegetation changes. Slow vegetation growth rates, due to the nutrient-poor environment, mean slow recovery from physical disturbances, such as recreational trail use. If disturbance, such as foot traffic, is a necessity, traversing during frozen conditions or using boardwalks can minimize impacts.

The ringed boghaunter, a rare dragonfly restricted to York and southern Oxford counties, is found in this natural community type, especially in very wet locations with abundant inundated peat moss (often suspended in the water column). Occurrences of this community type in northwestern Maine may include the bog fritillary butterfly, which uses small cranberry as its larval host plant. Occurrences in northern Maine may be inhabited by the subarctic bluet, an uncommon damselfly that inhabits open marshes and fens and reaches the southern edge of its range in northern Maine.

Distribution

Statewide; extends in all directions 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.

Sapling/shrub

Black huckleberry* Maleberry*

Dwarf Shrub

Bog rosemary* Leatherleaf* Sheep laurel* Small cranberry Sweetgale*

Herb

Beaked sedge* Bog aster* Few-flowered sedge* Pitcher plant* Tawny cotton-grass Three-leaved false Solomon's seal* Tufted cotton-grass* White beak-rush*

Bryoid Sphagnum mosses*

Associated Rare Plants

Inkberry Long's bulrush Screwstem Swamp birch

Associated Rare Animals Ringed boghaunter

Examples on Conservation Lands You Can Visit

- Brownfield Bog Wildlife Management Area - Oxford Co.
- Great Heath Public Lands Washington Co.
- Number Five Bog Public Lands - Somerset Co.
- Salmon Brook Lake Bog Public Lands – Aroostook Co.
- Sunkhaze Meadows National Wildlife Refuge Penobscot Co.