

Acidic Graminoid Fen

State Rank: S3 - Vulnerable



Acidic Graminoid Fen, sedges, shrub patches on peat. Photo: Patricia Swain, NHESP.

Description: Acidic Graminoid Fens (AGF) are acidic peatlands dominated by mixed sedges and other graminoids with herbaceous species. Shrubs occur in clumps but are not dominant. Peat mats may be quaking and unstable and often have pools of standing water. Sphagnum usually covers the surface below the sedges and forms the peat.

Characteristic Species: Species of Sphagnum moss are the most common plants in all acidic peatlands. Acidic Graminoid Fens are the most species-rich of the acidic peatland communities. Typical graminoids include cotton-grasses and other sedges such as beaked sedge, slender woolly-fruited sedge, white-beaked sedge, and twig-sedge. Threeway sedge and buckbean are characteristic of wet, nutrient enriched edges. Associated herbaceous species include St. John's-wort, arrow-arum, and rose pogonia. Large cranberry can be abundant. There is

Acidic Graminoid Fens are sedge and sphagnum-dominated acidic peatlands that experience some groundwater and/or surface water flow but no calcareous seepage. Standing water is often present throughout much of the growing season.

patchy tree and shrub cover, including red maple saplings, swamp azalea, highbush blueberry, sweet pepper-bush, poison sumac, leatherleaf, and water-willow.



Acidic Graminoid Fen with large area of buckbean and threeway sedge. Photo: Patricia Swain, NHESP.

Differentiating from Related Communities: Acidic Graminoid Fens are dominated by sedges or other graminoids such as cottongrass and lack extensive shrubs. Acidic Shrub Fens have extensive low shrubs and are not dominated by graminoids. Dense water-willow and sweet gale are indicative and

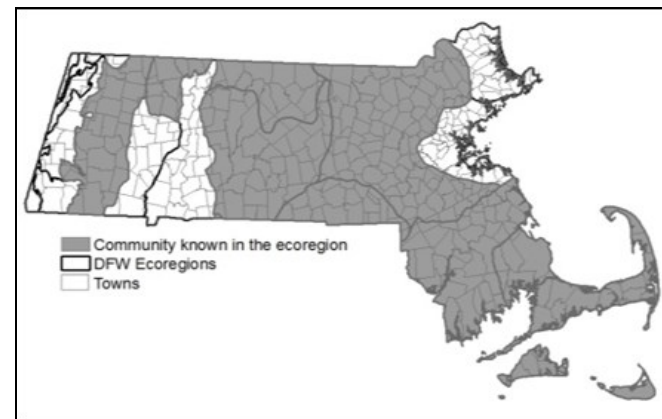


Buckbean flowers. Photo: Patricia Swain, NHESP.

characteristic. Level Bogs and Kettlehole Level Bogs have deep and well developed sphagnum peat. Graminoids are present but not dominant, and shrubs are dominated by leatherleaf. Sea-level Fens occur between estuarine marshes and upland seepage slopes. Diagnostic species include saltmarsh straw-sedge, saltmarsh spike-sedge, and Olney's threesquare. Twig-sedge at the edges of salt marshes is also an indicator of Sea-level Fens.

Habitat for Associated Fauna:

Due to the extended periods of saturation, lack of nutrients, and the high acidity and low oxygen content of the water, acidic peatlands are inhospitable to many animal species. Winged animals and large terrestrial animals can use peatlands as part of their habitat and then move on when conditions are unfavorable. Moose and white-tailed deer browse in acidic peatlands; their trails are often evident across the peat mat. Bears are attracted to the cranberries and blueberries in season. Many bird species use peatlands for part of the year as nesting or foraging habitat. Many dragonflies and damselflies inhabit



acidic peatlands, especially where there is adjacent open water.

Examples with Public Access:

Tully Lake property (USACE), Royalston; Quaboag WMA, Brookfield; Noquochoke WMA, Dartmouth; Hockomock Swamp WMA, Bridgewater; Grassy Pond, Acton.



Acidic Graminoid Fen with white-beaked sedge. Photo: Patricia Swain, NHESP.

