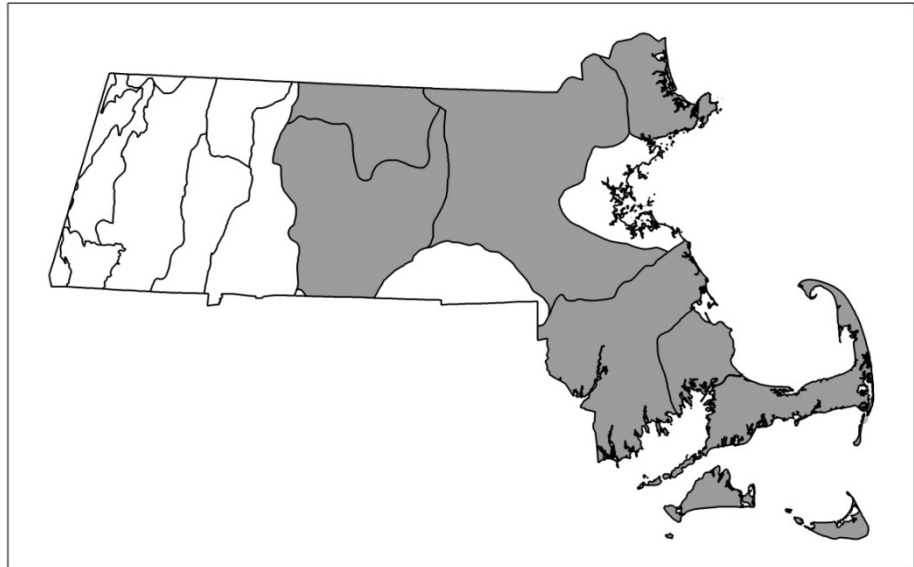




Highbush Blueberry Thicket

Community Code: CP2BOC2000

State Rank: S4



Concept: Acidic peatlands dominated by dense highbush blueberry bushes on hummocky sphagnum moss.

Environmental Setting: Highbush Blueberry Thickets occur as a border thicket around more open peatlands or coastal plain ponds, and within small basins or seasonally flooded zones in larger wetlands. This community is influenced by a strongly fluctuating water table with flooded conditions in spring and early summer, followed by a drop in the water table below soil surface usually by late summer. The sphagnum mat is variable: it can be thick and stable on peat, or as a shallow organic layer often over sand, or there may be moss on hummocks at the base of shrub stems, with unstable muck in the surrounding hollows.

Vegetation Description: Highbush Blueberry Thickets are tall-shrub peatlands dominated by dense highbush blueberries (*Vaccinium corymbosum*) with swamp azalea (*Rhododendron viscosum*), winterberry (*Ilex verticillata*), sweet pepper-bush (*Clethra alnifolia*), and scattered red maple (*Acer rubrum*) as common associates. Typical short shrubs include leatherleaf (*Chamaedaphne calyculata*), sheep laurel (*Kalmia angustifolia*), and dwarf huckleberry (*Gaylussacia bigeloviana*). The variable herbaceous layer tends to be sparse, but can be locally abundant. Ferns can be the most common herbs present, including cinnamon fern (*Osmundastrum cinnamomeum*), royal fern (*Osmunda regalis*), marsh fern (*Thelypteris palustris*), sensitive fern (*Onoclea sensibilis*), and Virginia chain-fern (*Woodwardia virginica*), along with pitcher plants (*Sarracenia purpurea*) or other herbs of fens including marsh St. John's-wort (*Triadenum virginicum*), three-leaved Solomon's seal (*Maianthemum trifolium*), wild calla (*Calla palustris*), northern water-horehound (*Lycopus uniflorus*), and threeway



sedge (*Dulichium arundinaceum*). A layer of peatmoss is common and varies in cover.

Differentiating Occurrences: The physical and biological characteristics of Highbush Blueberry Thickets, Acidic Shrub Fen, Shrub Swamp, and Fresh/ Brackish Tidal Shrubland overlap and intergrade. They all lack tree cover (<25% canopy cover); they are all dominated by dense shrubs on wet substrates. Highbush Blueberry Thickets are tall-shrub fens, dominated by highbush blueberries or other members of the blueberry family, on peat or at least have sphagnum at the base of the shrubs. Acidic Shrub Fens are dominated by low-growing shrubs, along with sphagnum moss and herbaceous species of varying abundance on wet, often weak, peat. Shrub Swamps lack peat, are often quite diverse, and are not dominated by blueberries or other ericaceous plants. Fresh/Brackish Tidal Shrubland are dense to open shrublands along tidal sections of coastal rivers.

Associated Fauna: Moats of wet, ponded areas associated with highbush blueberry thickets provide important amphibian breeding habitat and function as vernal pools if they have two to three months of ponding and lack fish.

Public Access: Punkhorn Parklands (town-owned), Brewster; Briar Swamp - Dogtown Commons (town-owned), Rockport; Quaboag WMA, East Brookfield.

Threats: Hydrologic alterations and nutrient enrichment from road and lawn runoff may impact this community. More information is needed.

Management Needs:

USNVC/NatureServe: A1018 *Vaccinium corymbosum* Peat Thicket Alliance - *Vaccinium corymbosum*/*Sphagnum* spp. Shrubland [CEGL006190]; *Vaccinium corymbosum* - *Rhododendron viscosum* - *Clethra alnifolia* Shrubland [CEGL006371].