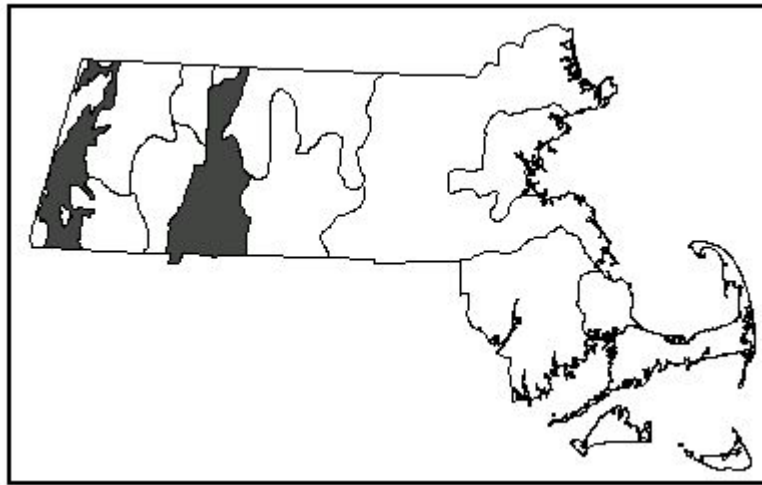


Community Name: CALCAREOUS SEEPAGE MARSH
Community ELCODE: CP2B0A2000
SRANK: S2



Concept: Mixed herbaceous/graminoid/shrub wetlands that experience some calcareous groundwater seepage. Calcareous seepage marshes are intermediate in richness of the three types of calcareous fen communities described in Massachusetts.

Environmental setting: Marsh community with some calcareous seepage. This community type is found in a variety of physical settings--in basins, in canopy gaps in rich forested swamps, in current or former beaver drainages, or in level to slightly sloping sites associated with sloping fens. There is typically 50-200+ cm of moderate to well-decomposed organic sediments.

Vegetation Description: Open emergent community with scattered shrubs, such as swamp-birch (*Betula pumila*), hoary willow (*Salix candida*), meadowsweet (*Spiraea latifolia*), and poison-sumac (*Toxicodendron vernix*). The herbaceous layer is a mixture of typical marsh species, including marsh sedge (*Carex lacustris*), tussock sedge (*C. stricta*), and marsh fern (*Thelypteris palustris*). Other characteristic species are phragmites (*Phragmites australis*), cat-tails (*Typha angustifolia* and *T. latifolia*), purple loosestrife (*Lythrum salicaria*), Labrador-bedstraw (*Galium labradoricum*), and swamp loosestrife (*Lysimachia thyrsiflora*). Calcareous seepage marshes are distinguished from other emergent marshes by the presence of calciphilic (calcium-loving) species, including swamp birch, hoary willow, shrubby cinquefoil (*Pentaptyloides floribunda*), and fen-bedstraw (*Galium labradoricum*).

Associations: Seven calcareous fen vegetation associations have been described for western New England and adjacent New York state [Motzkin, 1994]. Calcareous seepage marshes include four of Motzkin's associations [all grouped in his Group II]: 1. *Betula pumila* type with a well-developed shrub layer, 2. *Carex lacustris* type which lacks extensive woody cover, 3. *Carex stricta* type with higher frequency and cover of *C. stricta*, and 4. *Typha angustifolia*-*Carex lasiocarpa* type which has less *Pentaptyloides floribunda* than the other types.

Habitat values for Associated Fauna: Calcareous seepage marshes can function as vernal pool habitat in sections that have two to three months of ponding and lack fish; these sections provide important amphibian breeding habitat.

Associated rare plants:

BETULA PUMILA	SWAMP BIRCH	T
GALIUM LABRADORICUM	LABRADOR BEDSTRAW	SC
SALIX CANDIDA	HOARY WILLOW	- WL

Associated rare animals:

CLEMMYS GUTTATA	SPOTTED TURTLE	SC
CLEMMYS INSCULPTA	WOOD TURTLE	SC

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Examples with Public Access:	Several examples in Berkshire County are on private lands.		
Threats:	Changes in groundwater quality and quantity; and any human activities that disturb the vegetation, substrate, or water supply. In disturbed areas, cattails may displace calcium-loving species. Beaver activity threatens calcareous fen communities by altering surface water chemistry. There is evidence to suggest that ponding of water by beaver dams may increase the water's relative acidity possibly due to the accumulation of organic acids or to dilution from acid rain [Motzkin, 1992].		
Management needs:	Fires, grazing, and /or mowing may be necessary to maintain open fen habitats. More information is needed.		
Synonyms USNVC/TNC:	includes Cornus amomum-Salix candida/Pentaphylloides floribunda/Carex stricta shrubland [CEGL006359].		
MA [old name]:	SNE Seepage Marsh [CP3C100000].		
ME:	Not described.		
VT:	Not described.		
NH:	Not described.		
NY:	similar to Medium fen.		
CT:	Potentilla fruticosa-Betula pumila/Carex lacustris community.		
RI:	Not described.		
Golet & Larson, 1974:			
Other:	Group II [Motzkin, 1994].		
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