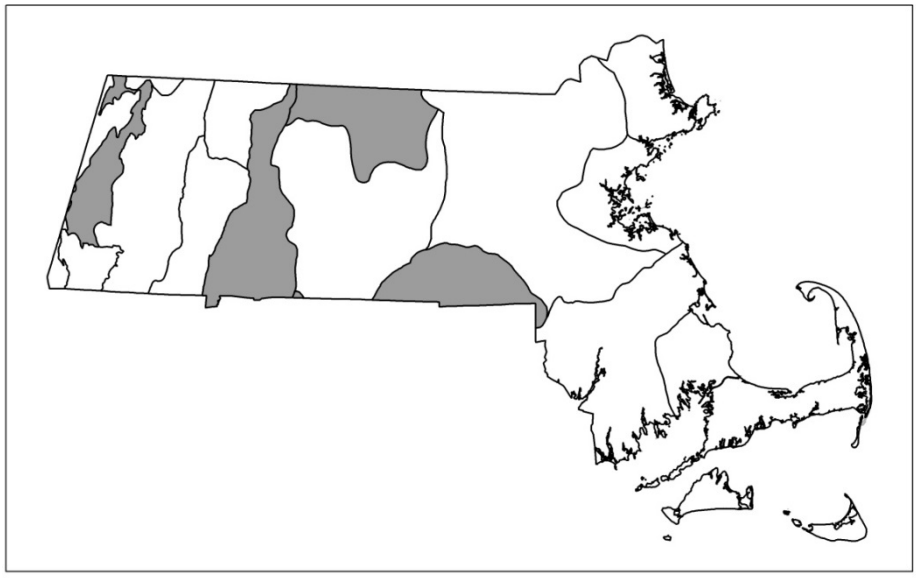
Wet Meadow

Community Code: CP2A0A2000

State Rank: S4



Concept: Graminoid/emergent herbaceous communities that are similar to Deep and Shallow Emergent Marshes, except that they are temporarily rather than seasonally flooded. The soil is saturated during the growing season but not generally inundated. Repeated disturbance, usually from grazing or mowing, keeps these communities open.

Environmental Setting: Wet Meadows occur in lake basins, wet depressions, along slow-moving streams, and in sloughs and other areas with impeded drainage along rivers. The mucky mineral soils are permanently saturated and flood occasionally, but standing water is not present throughout the growing season as in Deep and Shallow Emergent Marshes. As Wet Meadows flood only temporarily, woody plants could become established: many sites are managed using other forms of repeated disturbance, including grazing or mowing, to prevent succession to shrubs or woodland.

Vegetation Description: Wet Meadows are often uniform-appearing communities dominated by a single species from the sedge family or sometimes a rush or a grass. Tussock-forming sedges, such as tussock-sedge (*Carex stricta*) or lakeside sedge (*Carex lacustris*), often have over 50% cover, with variable proportions of other graminoids and herbaceous species. Canada bluejoint (*Calamagrostis canadensis* var. *canadensis*), wool-grass (*Scirpus cyperinus*), woolly-fruited sedge (*Carex lasiocarpa* ssp. *americana*), slender spike-sedge (*Eleocharis tenuis* var. *tenuis*), stalked wool-grass (*Scirpus pedicellatus*), rice cut-grass (*Leersia oryzoides*), and brown beak-sedge (*Rhynchospora capitellata*) are typical of wet meadows and may occasionally be dominant. Characteristic herbaceous associates include water smartweed (*Persicaria amphibia*), river-horsetail (*Equisetum fluviatile*), nodding bur-marigold

(*Bidens cernua*), spotted joe-pye-weed (*Eutrochium maculatum*), and northern blue flag (*Iris versicolor*). Calcareous wet meadows have additional lime-loving species, including red-footed spike-sedge (*Eleocharis erythropoda*), delicate sedge (*Carex leptalea* ssp. *leptalea*), and fen-sedge (*Carex tetanica*). Wet Meadows are called "sedge meadows" in many other states, but "wet meadow" is used in Massachusetts because of known occurrences of meadows dominated by rice cut-grass, Canada bluejoint, and other non-sedge species.

Differentiating Occurrences: The physical and biological characteristics of Wet Meadow, emergent marsh, and shoreline communities overlap and intergrade. The vegetation for all these types is broadly defined: focused surveys might establish which dominant species and hydrological situations define identifiable community types, or might determine that there is a continuum of types that require arbitrary separation. Wet Meadows are graminoid wetland communities similar to, and could be considered to be subtypes of, Shallow Emergent Marshes, but typically a single sedge or grass species dominates. Standing water is not present throughout the growing season as in emergent marshes. Kettlehole Wet Meadows, a specialized type of Shallow Emergent Marsh, are in small basins that have dense graminoid marshes on mucky peat. They are temporarily inundated after storms as well from high groundwater. Shallow Emergent Marshes are graminoid wetlands in broad, flat areas bordering rivers or along lake margins, are seasonally flooded, and usually have surface water all year. Coastal Plain Pondshore Communities and Coastal Plain Pondshores - Inland Variant are generally on sand around ponds in closed basins that intersect groundwater which affects pond levels. By late summer, an exposed shoreline supports herbaceous species that is not generally dominated by tall dense graminoids. Sediments are sandy or mucky, but not peaty. Acidic Pondshores/Lakeshores are broadly defined, variable shorelines around open water not explicitly included in calcareous or coastal plain pondshores. The shore line is often not distinct, merging into marsh or other wetlands.

Associated Fauna: Many animals, vertebrates, and invertebrates, common and rare, use Wet Meadows and marshes for feeding, nesting, roosting, cover, and movement corridors. The sedges, bulrushes and grasses of Wet Meadows provide a food resource for a variety of marsh birds. Large patches of Wet Meadow are the key habitat for such species as Wilson's Snipe and Sedge Wren. Inconspicuous ("secretive") water birds, such as rails and bitterns, nest in Wet Meadows and marshes that lack human disturbance.

Public Access: Hop Brook WMA, Lee; Ashburnham State Forest, Ashburnham.

Threats: Wet Meadows are threatened by filling and dredging, and by nutrient inputs from adjacent roads, fields, or septic systems. The invasion and spread of purple loosestrife (*Lythrum salicaria*) alters community structure and composition.

Management Needs: Efforts are needed to control the spread of purple loosestrife. Continue activities that have kept the community open, e.g., fall mowing.

USNVC/NatureServe: G771, Includes: (part of) A4107 *Carex* spp. - *Calamagrostis canadensis* Eastern Wet Meadow Herbaceous Alliance, *Carex stricta* - *Carex vesicaria* Herbaceous Vegetation [CEGL006412]. A1399 *Leersia oryzoides* - *Glyceria striata* Herbaceous Alliance, *Leersia oryzoides* - *Sagittaria latifolia* Herbaceous Vegetation [CEGL006461].