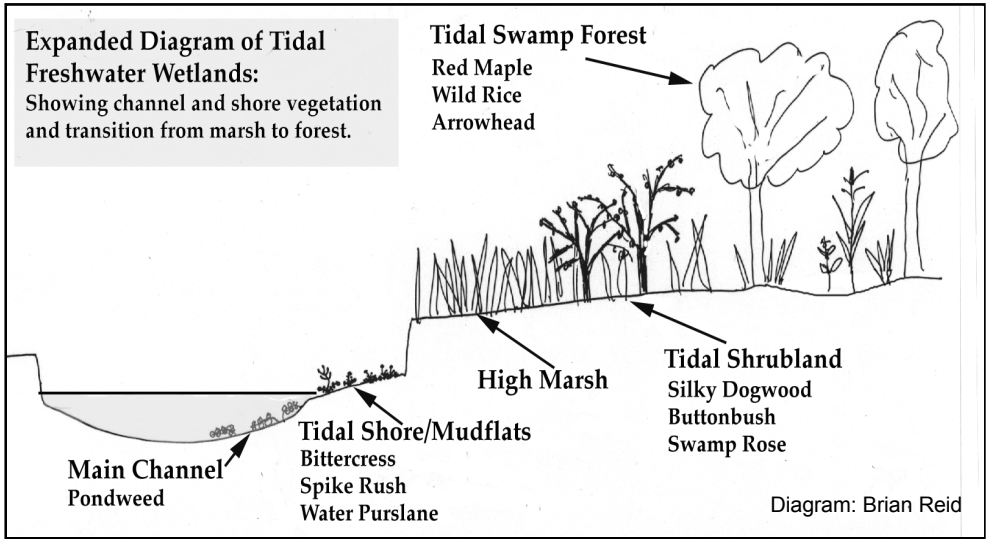
Fresh/Brackish Tidal Shrubland

State Rank: S1 - Critically Imperiled



Description: Fresh/Brackish Tidal Shrublands are dense to open shrublands flooded by daily tides, occurring along the freshwater to brackish reach of coastal rivers. Tidal shrublands are often a transition between tidal marsh and tidal swamp; there may also be patches of tidal shrublands in areas of slightly higher elevations throughout all types of tidal marshes and along the upland fringes of salt marshes. Tidal shrublands have a great deal of micro-relief (tussocks and furrows) leading to high species diversity. Waters are typically slightly acidic (pH less than 5) and soils are usually mineral without significant peat deposits. Average annual salinity values of less than 0.5 ppt would be expected in freshwater tidal areas, and up to 18 ppt in brackish tidal zones. Shrub die-backs are caused by periodic inundation by salt water during storms.

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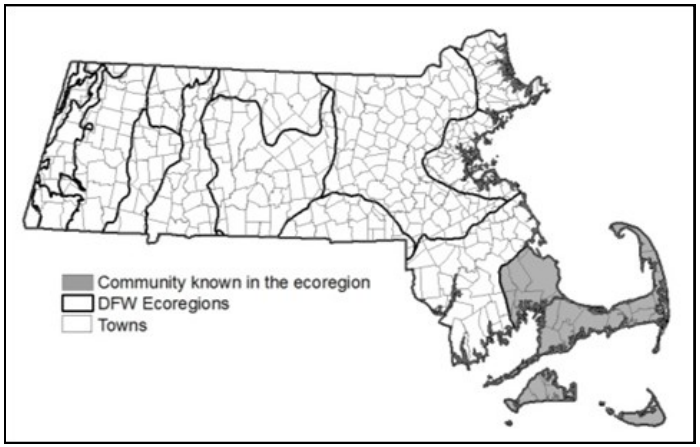
Characteristic Species: Tidal freshwater or slightly brackish shrublands may be dominated by sweet gale and smooth alder with some speckled alder. Some examples may have a mixed canopy with other shrubs such as silky dogwood, swamp-rose, winterberry, black elderberry, willow, buttonbush, and poison ivy. More northern examples may contain northern arrow-wood and meadowsweet. Tussock-sedge may also be present. Some herbaceous associates are royal fern, marsh-fern, bedstraws, common cat-tail, arrow-arum, New York aster, false nettle, touch-me-not, and swamp milkweed. A variant at the brackish upland edges of salt marshes are dominated by groundsel-tree and hightide-bush (maritime marsh-elder) - these areas are often invaded by common reed.



Differentiating from Related Communities: Tidal Swamps are forested, dominated by trees. Tidal Shrublands have less than 25% tree canopy. The key difference from other types of Shrub Swamp is that Tidal Shrublands are restricted to the area of freshwater/ brackish water tidal action on coastal rivers or where there is freshwater seepage along the edges of salt marshes just above the zone of regular salt water incursion. An additional difference is the presence of salt marsh plants mixed with the more usual freshwater species. Maritime Shrublands are upland communities. Shrubby areas within and at the upland edges of salt marshes would be mappable as Fresh/Brackish Tidal Shrubland if large enough, otherwise considered to be part of the expected variation of Salt Marshes.

Tidal Shrubland at upland edge of salt marsh. Photo: Patricia Swain, NHESP.

Habitat for Associated Fauna: Size and structure of the shrubland present are more important to most animals that would use such a habitat than the slight fluctuations in water levels on a daily basis; the species present are often those of maritime and coastal shrublands. Coastal shrublands are particularly important to migrating flocks of song birds. Freshwater Tidal Swamps and Shrublands provide habitat for nesting Gray Catbird, Common Yellow-throat, Swamp Sparrow, Wood Duck, Marsh Wren, and Veery. The habitat is used by Great Blue Heron, Green Heron, and raptors like Red Tailed Hawks.

Examples with Public Access: There are no examples on public land in the NHESP database.

From: *Classification of Natural Communities of Massachusetts* http://www.mass.gov/nhesp/
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