

Coastal Atlantic White Cedar Swamp

State Rank: S2 - Imperiled



Coastal AWCS in the spring with moss hummocks. Photo: Patricia Swain, NHESP.

Description: Coastal Atlantic White Cedar Swamps (AWCS) - as with all AWCS - usually have standing water for at least half of the growing season. Water and soil are acidic and nutrient-poor. Leaf litter decomposition is slow. When conifers dominate the canopy, occurrences may be dark and have limited understory growth. Fallen and tipped trees are common and the resultant openings become tangles with dense shrub and sapling growth around downed trunks. Coastal AWCS generally occur in southeastern Massachusetts in basins or seepage wetlands.

Characteristic Species: All AWCS are defined as having >25% cover of Atlantic white cedar (AWC) in the canopy. Plants that commonly co-occur

Coastal Atlantic White Cedar Swamps are acidic, low nutrient basin swamps dominated by Atlantic white cedar in the overstory and a mixture of species in the understory. This community type occurs at low elevations in SE Massachusetts.

with AWC include red maple, high-bush blueberry, swamp azalea, and sphagnum moss. Occasional additional associates in Coastal AWCS include pitch pine, white pine and hemlock. These swamps can have a very dense shrub layer, additionally including sweet pepperbush, swamp-sweetbells, and, especially on Cape Cod, inkberry. The herb layer is sparse and patchy with cinnamon fern, Virginia and netted chain ferns, starflower, and wild sarsaparilla. The ground layer is dominated by sphagnum mosses.



Coastal AWCS with sweet pepper-bush. Photo: Patricia Swain, NHESP.

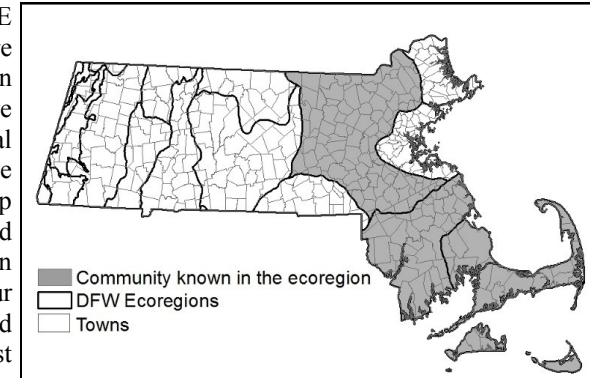
Differentiating from Related Communities: Although each of the AWC swamp community types has a characteristic vegetation structure and composition, as with all natural communities, transitions and mixes do occur. Coastal AWCS generally occur

below 60 ft. elevation in SE Massachusetts. Species that are found in greater abundance in coastal regions than elsewhere include pitch pine as an occasional canopy associate, greenbrier, the shrubs inkberry, dangleberry, sheep laurel, and swamp sweet-bells, and Virginia chain-fern and netted chain-fern. Inland AWCS typically occur at elevations between 60 ft. and 1000 ft., and are not in southeast MA. Yellow Birch is more common than in Coastal AWCS. Inland AWCS have lower abundance of coastal indicators than in Coastal AWCS. AWC also occurs in AWC Bogs, relatively open peatland communities with canopy cover <25%. Alluvial AWCS are along streams. The vegetation is highly variable. AWC and red maple dominate the tree layer, the shrub layer includes silky dogwood, and the herb layer often has sensitive fern, royal fern, and bugleweed.



AWC branch. Photo: Jennifer Garrett, NHESP.

Habitat for Associated Fauna: AWCS contribute variation to the habitats of wide-ranging wildlife species. Young AWC thickets provide excellent cover for deer, rabbits, and birds. Swamps provide vernal pool habitat if water remains for 2-3 months and they lack fish.



Examples with Public Access: Marconi AWC Swamp, Wellfleet; Mashpee Pine Barrens WMA, Mashpee; Freetown - Fall River SF and Copicut WMA, Freetown; Great Cedar Swamp, Lakeville; Hockomock Swamp WMA, Taunton/Bridgewater.



Dark interior of a Coastal AWCS with ferns under tipped trees. Photo: P. Swain, NHESP.

