

Declining Habitats – Atlantic White Cedar

Suitable area – Southeast Virginia (Suffolk, Chesapeake, Virginia Beach) in saturated coastal plain muck or peat soils

Atlantic white cedar (AWC) (*Chamaecyparis thyoides*) is an obligate wetland species that occurs from Maine to Florida, and west along the Gulf Coast to Mississippi. Historically, it was estimated to have covered as much as 500,000 acres, with an estimated 115,000 acres remaining today. In Virginia, AWC originally covered much of the area around the Great Dismal Swamp, but was largely drained in the 18th century....leaving scattered AWC groves. Logging and catastrophic fire also contributed to the loss.

Today, AWC is considered rare in Virginia, being confined to wetland flats with deep organic soils in scattered areas of the Dismal Swamp, Cities of Suffolk and Chesapeake, and in remote peat flats along the North Landing River of the City of Virginia Beach.

AWC is a fragrant, rot-resistant wood that historically has been used for building shingles, boats, decoys, utility poles and channel-marking posts. Under good conditions, AWC grows into a thick, single species dominated forest.

Cedar swamps support a high density of nesting birds. In the Dismal Swamp area, these swamps are known to support about 1300 nest/Km², which is the highest density for any of eastern U.S. coniferous forest habitat. In addition, the Dismal Swamp is known habitat for the rare Hessel's hairstreak butterfly.

Although AWC will grow in wet sandy soils, it usually requires organic peat conditions to survive and prosper. For establishment, it is very important to obtain proper soil wetness. This means a careful hydrological study before planting, with seedlings established at medium elevation on hummocks, where the root collar will be dry but lower ends of the roots moist. AWC has precise wetness needs – it tolerates neither inundation nor drought. Seedlings obtained from a local source, usually North Carolina

(from either NC Forest Service or Weyerhaeuser), should be used for best chance of reproducing a natural forest. Protection from deer will usually be needed to assure plantings success. Annual aerial application of Capsaicin has been effective at reducing deer browse damage during the first 2 years of establishment. Typical seedling spacing is 9 X 10 feet, with planting best made in late fall to early spring. Once established, AWC will normally produce mature seed production within 1-3 years. Monitoring, especially in the first 5 or so years, will be needed to make sure trees overgrow vegetative competition.