

Common Name: ATLANTIC WHITE CEDAR

Scientific Name: Chamaecyparis thyoides (Linnaeus) Britton, Sterns, and Poggenburg

Other Commonly Used Names: swamp cedar, southern white cedar, juniper

Previously Used Scientific Names: Cupressus thyoides Linnaeus

Family: Cupressaceae (cypress)

Rarity Ranks: G4/S2

State Legal Status: Rare

Federal Legal Status: none

Federal Wetland Status: OBL

Description: Evergreen, cone-bearing **tree** up to 92 feet (28 meters) tall. **Bark** of older trees gray to reddish-brown, with long furrows and fibrous ridges, often twisted around the trunk. **Branches** held in a single plane, forming flattened, fan-like sprays. **Twigs** flattened, not 4-sided. **Leaves** on older branches very small, scale-like, in pairs at right angles to nearby pairs; most leaves with a tiny resin gland on the outer surface. Leaves on new growth are needle-like. **Female and male cones** on the same tree. **Female cones** about ½ inch (5 - 8 mm) wide, round, with 6 - 12 small, leathery, plate-like scales, each with a point in the center; becoming woody and brown with age, opening in the fall to release winged **seeds**, and persisting through the winter. **Male cones** mostly less than ½ inch (2 - 4 mm) long, solitary at the tips of branchlets. **Seeds** are small, light, winged, and abundant.

Similar Species: Eastern red cedar (*Juniperus virginiana*) is an upland tree with loosely shredding, reddish or light gray bark. Its branches do not form flattened sprays, and the twigs are 4-sided. Female and male cones are on separate trees; female cones ("juniper berries") are fleshy, blue-green, and smell like gin; male cones are yellow and showy in the fall and winter.

Related Rare Species: None in Georgia.

Habitat: Sphagnum bogs and wet terraces along spring-run streams in the Fall Line sandhills, often growing with the state-listed (Threatened) sweet pitcherplant (*Sarracenia rubra*).

Life History: Atlantic white cedar may begin producing cones as early as 3 years of age, though most seed production begins at 10 - 20 years. Male cones drop their pollen in March and April; female cones mature by late summer, shedding seeds primarily in October and November and also during the winter and spring of the next year. Although trees are killed by fire, the long-term survival of Atlantic white cedar stands depends on occasional fire to create seedbeds and kill competing hardwoods such as red maple and swamp black gum.

Survey Recommendations: Surveys may be conducted all year.

Range: Georgia, Florida, Alabama, Mississippi, and northwards, primarily in the Atlantic Coastal Plain, to Maine.

Threats: Logging, clearing, and draining wetlands and streamside zones. Sedimentation into streams during road and bridge construction.

Georgia Conservation Status: Only a few thousand trees in 40 populations are known; all but 6 populations are on private lands.

Conservation and Management Recommendations: Avoid logging, clearing, and draining wetlands. Avoid damming Fall Line streams. Prevent sedimentation into streams during road construction. Protect streamside buffer zones.

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Date Compiled or Updated:

L. Chafin, Nov. 2007: original account

K. Owers, Jan. 2010: updated status and ranks, added pictures

ATLANTIC WHITE CEDAR Chamaecyparis thyoides winged seed gland male cones at tip of twig scale-like leaves female cones J.C. Putnam H.

