Technical Report

Wetland Flora

No. 93-7 / July 1993

Gene Silberhorn

Bald Cypress

***Taxodium distichum* (L.) Richard**

Growth Habit and Diagnostic Characteristics

The most familiar image of bald cypress is that of a majestic, open-crowned conifer, laden with spanish moss, buttressed trunks, "knees" protruding from standing water, in a misty, southern, swampy setting. These features and habitat indeed typify *Taxodium distichum.* In addition, tan, slightly ridged bark, feathery needles and spherical female cones, shedding seeds in autumn are also distinctive features of the species. The bark of young trees is often stringy and flakes away from the trunk longitudinally. Bald cypress, however, does not always produce "knees" (pneumatophores - unbranched shoots originating from roots), swollen or buttressed trunks, nor is it always of great stature after long life. *Taxodium*, when not growing in flooded or periodically flooded conditions, does not produce knees or buttressed trunks. These morphological adaptations typically occur only when cypress are found in wetlands that are at least periodically flooded.

This conifer is also deciduous, loosing needles and branchlets (after turning rusty-brown) in winter. The habit sketch depicts cypress in winter stage. *Taxodium* and *Larix* (larch or tamarack) are of a very few genera of deciduous conifers.

Bald cypress may attain heights up to 120 feet and may live to over thousand years. Because of its unique characteristics and habitat, *Taxodium distichum* is seldom confused with any other conifer.

Distribution

Bald cypress is mainly a coastal southeastern tree, but its range in the Mississippi Watershed extends as far north as southern Indiana along the Ohio River.

Habitat

Bald cypress is one of the dominant species in coastal bottomland forests of the southeast. In Virginia, *Taxodium* is found in major coastal plain wetlands and waterways. Specifically, cypress is common in the Great Dismal Swamp and its watershed, the Chowan River Basin (Blackwater, Meherrin, and Nottoway rivers), the Chickahominy River and tributaries and Dragon Run. Cypress is less common in other areas of Virginia's Coastal Plain.

Cypress dominated palustrine forested wetlands are usually considered the wettest, hydrologically, of all wetlands of this type. Water tupelo (*Nyssa aquatica*) commonly co-dominates with *Taxodium* along the Blackwater and Nottoway rivers in "southside" Virginia. When tupelo dominates a paltustrine wetland, it is often an indication that the cypress were timbered from the site years before, as cypress stumps are frequently encountered in this situation. Other associated trees in cypress swamps are red maple (Wetland Flora, no. 91-7, July 1991), which usually survives on deadfall or stumps; green ash (*Fraxinus pennsylvanica*), black gum (*Nyssa sylvatica* var. *biflora*), and river birch (*Betula nigra*).

The most common shrubs are swamp rose (*Rosa palustris*) and alder (*Alnus serrulata*).

Ecological Values/Benefits

Cypress swamps serve well as flood water retenton basins, sediment and nutrient traps, fish and wildlife habitat, recreation areas and other attributes. The canopy occasionally serves as heronries and hollows in dead snags are frequently occupied by wood ducks. The cypress lumber is highly prized for its color, texture, straight grain, resistance to decay and strength. It has had many uses over the years including railroad ties.

Venerated as a symbol of southern wetlands, it is understandable that esthetics are certainly not the least of cypress' values.

Hydrophytic Factor/Wetland Indicator Status

As reported in the *National List of Plant Species that Occur in Wetlands: Virginia (1988), Taxodium distichum* is classified as a **obligate plant (OBL).** OBLs are plants that almost always occur in wetlands (<<99% probability).

Ulmus americana L.

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