

Technical Report



Wetland Flora

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Gene Silberhorn

Sweet Bay

Virginia Magnolia

Magnolia virginiana L.

Growth Habit and Diagnostic Characteristics

Sweet bay is one of the more attractive trees that is associated with wooded wetlands. Two of the most distinctive features of this tree are its shiny, leather-like leaves and showy white flowers. The leaves are alternate, dark green above and whitish below, deciduous in Virginia and farther north, but evergreen in the southern part of its range. The pleasantly fragrant flowers are multi-petaled, 5-7cm (2-4 inches) across with bright yellow pistils and stamens in the center. The tightly compacted, cone-like fruit (follicle) is green soon after flowering (July), but dries and turns brown by August, exposing bright red seeds.

Generally considered to be a small or medium sized tree in our area (20 to 40 feet), farther south it may grow to 80 feet tall. Other characteristics of sweet bay are its smooth gray bark and greenish new branches. A closely related species, southern magnolia (*Magnolia grandiflora*) is a much larger tree with larger evergreen leaves and larger flowers. Most natives of the tidewater area would not confuse the two trees.

The vegetative features of another, similar tree found in coastal wooded wetlands, red bay (*Persea barbonia*) also has alternate, leathery (evergreen and spicy-fragrant) leaves; however, even when neither tree is in flower, one would note that red bay leaves are green (burnished with brown) underneath, not whitish as sweet bay. Also, the flowers of *Persea* are rather nondistinct when compared to the showy blossoms of *Magnolia virginiana*.

Distribution

Sweet bay is mainly a coastal tree that is infrequent north of our area, but can be found as far north as eastern Massachusetts. However, *Magnolia virginiana*

is larger and more common from Virginia south to Florida and along the Gulf Coast to Texas.

Habitat

Sweet bay is often found in an association of trees that dominate in palustrine wooded wetlands such as bald cypress (*Taxodium distichum*), tupelos/black gums (*Nyssa* spp.), green ash (*Fraxinus pennsylvanica*), red maple (*Acer rubrum*) and others. *Magnolia virginiana* very seldom dominates in these wetland types, but often is a subcanopy or understory component in our area. In contrast, when sweet bay is allowed to grow in full sunlight, it has the capacity to mature into a rather substantial tree.

Ecological Values/Benefits

As an associated species in palustrine wetlands and tidal swamps, *Magnolia virginiana* accrues, at least in part, the general ecological values of these wetland habitats. Specifically, sweet bay seeds are generally regarded as having low value as a wildlife food in the literature; however, the author has observed tree swallows and squirrels feeding on the colorful seeds in late summer.

Hydrophytic Factor/Federal Delineation

According to the *Federal Manual for Identifying and Delineating Jurisdictional Wetlands* and the *National List of Plant Species that Occur in Wetlands: Virginia*, *Magnolia virginiana* is classified as a **facultative wetland plant (FACW)**. FACW plants usually occur in wetlands (estimated probability 67%-99%).

Magnolia virginiana L.



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