Technical Report

Wetland Flora

No. 96-5 / May 1995

Gene Silberhorn

Wax Myrtle
Southern Bayberry

***Myrica cerifera* L.**

Growth Habit and Diagnostic Characteristics

Wax myrtle is an evergreen, aromatic shrub or small tree that ranges from 2 to 7 meters (6 to 20 feet) tall. Leaves are alternate, dark green on the upper surface, leathery, waxy, and have a spicy fragrance when crushed. The underneath side of the blade is lighter green and both sides are covered with resinous glands. Leaves in spring are soft and pliable, but as they mature they become leathery as a result of cutin (waxy substance) production. The leaves are also long, tapering downward so that there is virtually little perception of a petiole. Leaf margins are usually smooth with only a few shallow teeth or indentations.

In the spring, the shrub produces both male (staminate) and female (pistillate) catkins on terminal branches (as illustrated). Small (3.5mm - 1/16 in) globular, waxy, blue-grey fruits are evident by late summer, appearing as dense spike-like clusters below the leafy stem tips (foreground illustration).

If left to grow naturally, the typical growth habit of *M. cerifera* is to develop from a single trunk and mature into a small tree that may live 50 years or more. In areas where myrtle thickets are burned or bush-hogged, the shrub's response is to produce suckers from underground runners which results in a low, 'brushy' colony of dense shrubs. Similarly, wax myrtle is extensively used as an ornamental shrub or hedge. It can be easily shaped with proper pruning.

Wax myrtle can be confused with northern bayberry (*Myrica pensylvanica*), a northern coastal shrub that is near its southern distribution range in Virginia. The two shrubs resemble one another at first glance, however, closer examination will find that the leaves of *M. pensylvanica* have resinous dots mainly on the underneath sides of the leaves. The waxy fruits of northern bayberry are also larger (5 to 6.5mm - 1/8 in) and the leaves are deciduous in the fall. The waxy fruits of both species can be used in scented candle making, but *M. pensylvanica* yields more wax than *M. cerifera.*

Distribution

Wax myrtle ranges along the coast from southern New Jersey to the Gulf of Mexico.

Habitat

Myrica cerifera is found almost exclusively in the coastal plain of Virginia in various habitats. Wax myrtle is a common component of the tidal salt or brackish marsh shrub community, an ecotone near the very upper limits of saline marshes and uplands. In this community, it is often associated with groundsel tree (*Baccharis halimifolia*)(Wetland Flora, no. 92-11, November 1992) which is usually at slightly lower elevations in the high marsh zone.

Myrica is also a dominant species in maritime dune or dune swale shrub communities. Wax myrtle is somewhat saltspray tolerant, but its wind-swepted growth habit among seaside dunes indicates that at least the windward side of the leaf canopy is controlled by this natural stress. Other shrubs associated with wax myrtle in the dune/swale shrub community are *M. pensylvanica* and *Myrica heterophylla*, highbush blueberry (*Vaccinium corymbosum*) and yaupon (*Ilex vomitoria*). Also, it is not uncommon to find myrtle growing at the edges of palustrine hardwood forests. In extreme situations, it even grows on old stumps or deadfall in swamps.

Ecological Values/Benefits

The waxy fruit of this shrub is one of the food sources for tree swallows. It is not unusual to see large flocks of swallows feeding in the dune shrub community during their migration south in the fall. Curiously, other than these berries, the primary food source for tree swallows is insects.

On the Eastern Shore of Virginia, large mature stands of myrtle have become rookeries for the great blue herons. The low barrier islands offer few trees for nesting but large salt marshes for foraging, hence the birds have learned to adapt in order to survive. Eventually, the birds move to other sites because guano accumulation kills the shrubs.

Wax myrtle also offers thick cover for wildlife such as the marsh hare.

Hydrophytic Factor/Wetland Indicator Status

According to the *National List of Plant Species that Occur in Wetlands: Virginia (1988), Myrica cerifera* is classified as a **facultative plant (FAC).** FACs are plants that are "equally likely to occur in wetlands or non-wetlands (estimated probability 34%-66%)."

Myrica cerifera L.

Wetlands Program
School of Marine Science
Virginia Institute of Marine Science
College of William and Mary
Gloucester Point, Virginia 23062

This report was funded by the Wetlands Program of the Virginia Institute of Marine Science.

Dr. Carl Hershner, Program Director

Illustration by Karen Podd

Printed on recycled paper.