

Maine Tree Species Fact Sheet

Common Name: Black Willow (Swamp Willow, Dudley Willow)

Botanical Name: *Salix nigra*



Tree Type: Deciduous

Physical Description:

Growth Habit: Black willow is the largest native willow. It is a short-lived and fast-growing tree. The bark is thick and rough with wide ridges covered by thick scales. It varies in color from light to dark brown. The twigs are slender, smooth, somewhat drooping, very brittle at the base and reddish-brown in color. Fallen twigs may take root and grow. The alternate and simple leaves are very narrow, sometimes sickle-shaped, finely toothed and 3-6 inches long. They are dark green in color above and pale green below

Height: The black willow grows to a height of 45-65 feet.

Shape: Black willow often divides into several crooked, medium-sized trunks close to the ground. The stout, upright spreading branches give the tree a broad, irregular outline.

Fruit/Seed Description/Dispersal Methods:

The flowers are dioecious and appear in late June. The many-flowered catkins usually appear at the time of, or immediately after, the tree has leafed out. The fruit is a smooth capsule, about 1/8-inch long, occurring in large numbers on drooping tassels. They ripen in the spring and are reddish-brown in color. Seeds appear within the capsule and are covered with a dense tuft of long silky hairs. When the seeds fall, the hairs act as wings to carry them very long distances. The seeds are widely disseminated by wind and water.

Range within Maine:

Black willow occurs throughout Maine, but may be rare or absent in Aroostook, Piscataquis and Washington Counties. This species is hardy to Zone 3.

Distinguishing Features:

The black willow has very narrow, sickle shaped leaves and small buds with one bud scale. The seeds are covered with a dense tuft of long silky hairs.

Interesting Features:

The wood is soft, light and weak and is usually straight grained without an odor or taste. It works well with tools, glues, stains and finishes well but is very low in durability. Because the wood is lightweight, doesn't splinter easily and holds its shape well, it was once used extensively for

artificial limbs. It is still used for boxes, crates, furniture core stock, table tops, charcoal, farm lumber and pulp.

Ancient pharmacists recognized the bark and leaves of willow as useful in the treatment of rheumatism. In 1829, the natural glucoside *salicin* was isolated from willow. Today, a synthetic version is the basic ingredient of aspirin.

Relationship to Wildlife:

Yellow-bellied sapsuckers feed on sap from the holes they peck through the bark. This early injury to the tree degrades the lumber.

Landscape Use:

Black willow prefers moist or wet soils along streams or lakes.

Common Problems or Pests of the Tree in Maine:

Several insects attack willow, including the forest tent caterpillar, gypsy moth, the willow sawfly, borers, and the imported willow leaf beetle, but few cause serious damage. Diseases affecting willows include willow blight, cankers and leaf rust.

References:

Forest Trees of Maine, Twelfth Edition. Maine Forest Service/Department of Conservation. 1995.

Know Your Trees. Cope, J.A. and Fred E. Winch, Jr. Cornell Cooperative Extension. 1992.

United States Dept. of Agriculture: Silvics of North America
http://www.na.fs.fed.us/spfp/pubs/silvics_manual/volume_2/salix/nigra.htm

