Maine Tree Species Fact Sheet

Common Names: White Spruce (Canadian Spruce, Cat Spruce, Skunk Spruce) Botanical Name: *Picea glauca*

Tree Type: Coniferous

Physical Description:

Skunk Spruce)

Growth Habit: White spruce requires an open sunny area to grow. It grows on shallow, rocky sites. The branches are long and thick, densely clothed with stout, rigid lateral branches, are curved upward and form a somewhat open, irregular head having a broad base. The bark on old trees has light gray, plate like scales, which are thin, irregular, and with a somewhat brownish surface. The bark on younger trees is light gray and smooth. The leaves on the lower side of the branches are often bent upward. They start out as pale blue-green and later turn a dark blue-green. The cones are slender, cylindrical in shape, pale brown and shiny when ripe and approximately 2 inches long. The cone scales are thin and flexible. The twigs don't have hairs.

Height: White spruce grows to a height of 60-90 feet, with a trunk diameter of 2 feet. This species is hardy to Zone 2.

Shape: When grown in the open it develops a conical crown, which extends nearly to the ground. Spreading branches add to its appearance and may mature to a spread of 15 feet.

Fruit/Seed Description/Dispersal Methods:

Both male and female flowers (strobili) are on the same tree (monecious). Pollination is in the spring and the cones mature in one season and ripen in early fall. After seeds are shed, cones usually fall from the tree.

Range within Maine:

This species can be found along the rocky coast, the mountains, cleared areas and unused pastures in every county except Sagadahoc and York.

Distinguishing Features:

Blue-green needles with whitish lines are four-sided, sharp and stiff, and are arranged spirally on the twigs. The foliage exudes a foul smelling odor, which sets it apart from other species hence the names "cat spruce" and "skunk spruce". The inner bark of the twigs is silvery and glistens.

Interesting Facts:

The wood is fairly light, soft; finishes well and is moderately strong. It is used for pulp, paddles, lumber, piano sounding boards, furniture, boxes and crates.

Relationship to Wildlife:

White spruce is an important source of food for grouse and seed-eating birds. Red squirrels are known to cut cones as they mature and eat the seeds. The white spruce grows harmoniously in a wide range of environmental plant-life offering shelter and resource to wildlife.

Landscape Use:

White spruce provides shade and shelter from the wind. Some species make a lovely ornamental in the garden and it is also used for hedges. With careful selection, it can also be used as a Christmas tree.

Common Problems or Pests of the Trees in Maine:

Due to its shallow roots, the White spruce is easily blown over especially if the soil is thin and/or wet. The areas where the spruce is blown down can become prime breeding areas for the spruce beetle--leading to beetle infesting mature trees and causing uncontrollable damage. The white spruce bark, especially on young trees, attracts porcupines that enjoy dining on it to the point of destruction. Black bears also have been recorded stripping bark to get at the sweet sapwood.

Eastern dwarf mistletoe, spruce budworm, and the hemlock looper also affect the species.

References:

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Tree Book -- White Spruce: www.for.gov.bc.ca/pab/publctns/treebook/whitespruce.htm

White Spruce Picea glauca (Moench) Voss: http://www.christree.org/treetype/wht.spr.html

White Spruce Stands on Great Cranberry Island Damaged by Hemlock Looper: <u>http://www.umaine.edu/news/Archives/2000/June2000/tree.html</u>, June 5, 2000.

