

White Spruce

Picea glauca

White spruce, a common Christmas tree, is native to Aitkin County. White spruce needles are $\frac{1}{3}$ " to $\frac{3}{4}$ " in length, and the cones are approximately 2" long. These trees provide important habitat for moose, bear, hares, grouse, hawks, and songbird species. White spruce wood is used to make paper, as well as lumber for furniture, canoe paddles, and sounding boards for musical instruments. Young white spruce are popular Christmas trees.

Height: 60' to 80', occasionally up to 100'

Under favorable conditions, young white spruce grows several inches/year. Growth tends to accelerate as the tree reaches maturity. White spruce reach their maximum height between 50-100 years of age; this age is heavily dependent on the tree's environment.

Planting environment:

Soil composition: Most types; sand, sandy loam, clay loam

Soil moisture: Moist to well-drained soil

Sunlight: Intermediate (will grow in mixed sun and shade)

White spruce prefers organic-rich soil, with minimal competition from established trees. Consider clearing existing vegetation and the use of a tiller or disk harrow to prepare soil for white spruce planting.

Plant white spruce seedlings with 10'-15' spacing; mature trees may grow to a spread of 20'.

Maintenance:

As trees reach maturity, consider thinning white spruce to encourage vigorous growth. White spruce is a slow-growing plant that may be outcompeted by other fast-growing vegetation. Disease will also spread among spruce planted closely together; consider removing trees that show signs of diseases.

Top diseases/pests:

1. Spruce budworm
2. Deer/hare (seedlings)

