

White Poplar



White Poplar (*Populus alba*)

General Description

Medium to tall tree sometimes confused with Silver Maple since the leaves on long shoots are maple-shaped, while leaves on short shoots are more like aspen leaves in shape. The tree is native to central and southern Europe, western Siberia and central Asia. Introduced to North America by early settlers. The largest tree in North Dakota is 65 feet tall with a canopy spread of 50 feet.

Leaves and Buds

Bud Arrangement - Alternate.

Bud color - White, hairy.

Bud size - 1/2 inch.

Leaf Type and Shape - Simple, 3 to 5 palmate lobes on long shoots and coarsely-toothed on short shoots.

Leaf Margin - Coarsely-lobed to sinuate-dentate.

Leaf Surface - Smooth above, tomentose beneath, including petioles.

Leaf Length - 2½ to 5 inches, 1 to 2 inches on short shoots.

Leaf Width - 2½ to 4 inches, 1 to 2 inches on short shoots.

Leaf Color - Lustrous, dark-green above and whitish, hairy below.

Flowers and Fruits

Flower type - Dioecious, female catkins 2 inches long, male catkins longer, fringed with long hairs, 4 stigmas, stamens 6 to 10.

Flower color - Greenish-white.

Fruit type - Dehiscent capsules, seeds bare long, silky hairs.

Fruit color - Silvery-white.

Form

Growth Habit - Spreading crown, broad.

Texture - Medium-coarse, summer; coarse, winter.

Crown Height - 40 to 60 feet.

Crown Width - 35 to 50 feet.

Bark color - New stems white hairy, mature stems whitish-gray; bark smooth, becoming rough and blackish on lower trunk.

Root system - Deep fibrous, suckering. Suckers become more pronounced when parent tree is under stress, roots are cut, or if entire tree is cut down.

Environmental Requirements

Soils

Soil texture - Clay to sandy soils.

Soil pH - 6.0 to 8.0.

Windbreak Suitability Group - 1, 1K, 3.

Cold Hardiness

USDA Zone 3.

Water

Appears slightly more drought tolerant than cottonwood, but extended periods of drought may cause dieback.

Light

Partial shade to full sun.

Uses

Conservation/Windbreaks

Medium to tall tree for farmstead windbreaks and highway beautification.

Wildlife

Used for cover and habitat. Buds provide food for grouse.

Agroforestry Products

Wood - Lower class firewood.

Medicinal - Used for intermittent fevers, diuretic, diarrhea and a source of salicin.

Urban/Recreational

Used as a landscape tree in yards and parks. Dark green/silvery-white contrasting foliage colors add interest.

Suckering from roots limits use.

Cultivated Varieties

Bolleana Poplar (*Populus alba* 'Pyramidalis') - Narrow columnar form.

Richard's White Poplar (*P. alba* 'Richardii') - Leaves with yellow cast.

Related Species

Bigtooth Aspen (*Populus grandidentata*)

Quaking Aspen (*P. tremuloides*)

Pests

Poplars generally have a wide host of diseases and insect pests. Diseases include stem and branch cankers, leaf spots, leaf rusts. Insect pests include poplar borer and carpenter worm. Extracts of various *Populus* species are effective against some insect pests.