

White Willow



White Willow

(*Salix alba*)

General Description

A large, low-branching tree forming a broad, spreading round-topped crown. One of the first to leaf out in spring and last to drop leaves in autumn. The largest tree in North Dakota is 75 feet tall with a canopy spread of 54 feet.

Leaves and Buds

Bud Arrangement - Alternate.

Bud Color - Terminal buds absent, laterals somewhat silky-downy.

Bud Size - 1/5 inch long, rounded at apex, and flattened against the twig with a single, cap-like bud scale.

Leaf Type and Shape - Simple, lanceolate.

Leaf Margins - Finely-serrate.

Leaf Surface - Smooth above, glaucous and silky beneath.

Leaf Length - 1½ to 4 inches.

Leaf Width - 1/4 to 5/8 inch.

Leaf Color - Bright green above, glaucous below.

Flowers and Fruits

Flower Type - Catkin.

Flower Color - Light green to yellowish.

Fruit Type - Cottony or silky hairy seeds.

Fruit Color - Greenish-yellow.

Form

Growth Habit - Low branching tree with long and flexible limbs.

Texture - Fine, summer; medium, winter.

Crown Height - 40 to 65 feet.

Crown Width - 30 to 50 feet.

Bark Color - Yellowish-brown to brown, ridged and furrowed.

Root System - Shallow and wide-spreading.

Environmental Requirements

Soils

Soil Texture - Performs best on moist, deep loams along stream beds and wetlands.

Soil pH - 5.5 to 8.0.

Windbreak Suitability Group - 1, 1K, 2, 2K, 2H.

Cold Hardiness

USDA Zone 2.

Water

Does well on moist sites and survives severe flooding. Often dies back during periods of extended drought.

Light

Full sun to partial shade.

Uses

Conservation/Windbreaks

Medium to tall tree for field and farmstead windbreaks and riparian plantings.

Wildlife

Very good for wildlife. Used as food and cover for a wide variety of wetland wildlife.

Agroforestry Products

Wood - Pallets, crates, unexposed furniture parts, cooperage, wooden ware, carving and firewood.

Medicinal - Early Americans and Europeans used extracts for headaches, fever, gout and pain. Willow is a source of salicin which is broken down to salicylic acid, the main component in aspirin.

Urban/Recreational

Wet areas in parks and other landscape sites.

Cultivated Varieties

Golden Willow (*Salix alba* 'Vitellina') - Yellow-twigged selection.

Redstem Willow (*S. alba* 'Chermesina') - Red-twigged, more upright selection.

Siberian White Willow (*S. alba* 'Sericea') - Long silky hairs on leaves impart a silvery-gray color to foliage.

Weeping Golden Willow (*S. alba* 'Tristis') - Popular specimen yard tree but very messy due to twig drop.

Related Species

Peachleaf Willow (*S. amygdaloides*)

Laurel Willow (*S. pentandra*)

Pests

Common diseases include Cytospora canker and stem decay.