

# 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.