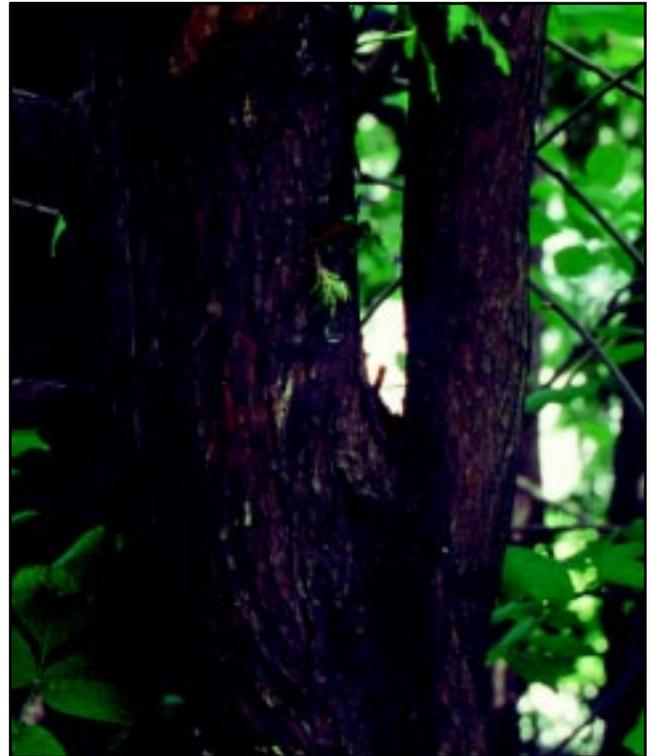


# Siberian Arborvitae



# Siberian Arborvitae (*Thuja occidentalis* 'Wareana')

## General Description

A broad pyramidal cultivar that is more dense and rounded than the species American Arborvitae. Very resistant to winterburn or drying winds. Merits much greater use in the Northern Plains. The largest tree in North Dakota is 18 feet tall with a canopy spread of 17 feet.

### Leaves and Buds

Bud Arrangement - Opposite.

Bud Color - Dark green, hard to distinguish from leaves.

Bud Size - 1/8 inch.

Leaf Type and Shape - Simple, scale-like leaves (see species information).

Leaf Surface - Smooth, thicker, and more leathery than the species. May enhance drought and winterburn resistance.

Leaf Length - 1/12 inch.

Leaf Width - 1/8 inch.

Leaf Color - Dark green with blue tinge. Little fall or winter color change.

### Flowers and Fruits

Flower Type - Monoecious, both male and female rather inconspicuous.

Flower Color - Purplish-brown.

Fruit Type - Brown cones about 1/2 inch long with 8 to 10 scales, seed 1/8 inch long.

Fruit Color - Light brown cones, seed light brown, winged.

### Form

Growth Habit - Broad, pyramidal or tear-drop shaped crown when young, becoming broadly rounded in form with age.

Texture - Fine, summer and winter.

Crown Height - 10 to 18 feet.

Crown Width - 10 to 18 feet.

Bark Color - Gray, shredding. Older bark has shallow fissures in a network of flat ridges.

Root System - Variable, shallow, spread to crown dripline.

## Environmental Requirements

### Soils

Soil Texture - Prefers deep moist loam in well-drained soils, will tolerate sandy soils with high water table.

Soil pH - 6.0 to 8.0. Prefers slightly acid to neutral. Will not tolerate saline soils.

Windbreak Suitability Group - 1, 1K, 3, 4, 4C.

### Cold Hardiness

USDA Zone 2.

### Water

Prefers moist soils. May not withstand periods of extended drought.

### Light

Partial to full sun, very resistant to winterburn.

## Uses

### Conservation/Windbreaks

Small conifer for farmstead windbreaks.

### Wildlife

Good for cover, nesting and food.

### Agroforestry Products

Wood - Species used as fence posts, boxes, bowls, cups and furniture.

Medicinal - Used for intermittent fevers, rheumatism, dropsy, coughs, scurvy, toothaches. *Thuja* species are a source of thujaplicins, an antibiotic.

### Urban/Recreational

Used in foundation plantings around homes and buildings, landscapes in public areas, and for screens or borders.

## Cultivated Varieties

Winona Arborvitae (*Thuja occidentalis* 'Winona') - Appears identical to cultivar 'Wareana'. Very winterburn resistant.

## Related Species

Eastern Red-cedar (*Juniperus virginiana*)

Rocky Mountain Juniper (*J. scopulorum*)

## Pests

Spider mites and bagworm may be occasional pests. Extracts of this species have been toxic to certain insect pests.