

Sandbar Willow



Sandbar Willow (*Salix interior*)

General Description

A medium shrub, native along riverbanks, lakes and sloughs throughout most of North Dakota. Suckers profusely.

Leaves and Buds

Bud Arrangement - Alternate.

Bud Color - Greenish-yellow.

Bud Size - 1/8 to 1/4 inch long.

Leaf Type and Shape - Linear to linear-lanceolate.

Leaf Margins - Sharply toothed, the teeth larger, farther apart than on most willows.

Leaf Surface - Smooth, slightly pubescent on juvenile growth.

Leaf Length - 2 to 4 inches.

Leaf Width - 1/4 to 1/2 inch.

Leaf Color - Green, paler beneath.

Flowers and Fruits

Flower Type - 3/4 to 2 inches long, catkins on new leafy branches.

Flower Color - Yellowish-green.

Fruit Type - Capsule, seed attached to cottony hairs.

Fruit Color - Brown and white.

Form

Growth Habit - Medium shrub, rounded, suckers to form a thicket of wispy, slender stems.

Texture - Fine, summer; medium-fine, winter.

Crown Height - 5 to 10 feet.

Crown Width - 5 to 10 feet.

Bark Color - Brownish-tan.

Root System - Fibrous, spreading.

Environmental Requirements

Soils

Soil Texture - Performs best on deep, moist loams; found along stream beds.

Soil pH - 5.5 to 8.0. Adaptable to moderately high pH soils.

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

Cold Hardiness

USDA Zone 3.

Water

Does well in moist sites and survives severe flooding.

Not drought tolerant.

Light

Full sun.

Uses

Conservation/Windbreaks

Medium shrub for wildlife plantings. Suckering habit is an advantage for riparian plantings to stabilize stream banks.

Wildlife

Dense thickets provide cover to many wildlife species and game birds. Hoofed browsers may feed on leaves and twigs.

Agroforestry Products

Medicinal - Used for headaches, fever, gout, pain, analgesic, disinfectant, antiseptic and skin ointments. Salicylic acid is active chemical contained in tissues.

Urban/Recreational

Rounded form or thicket for use in wet areas. Suckers profusely and not recommended for use in home landscapes.

Cultivated Varieties

Silver Sands Willow (*Salix interior* 'Silver Sands')

Related Species

Laurel Willow (*Salix pentandra*)

Peachleaf Willow (*S. amygdaloides*)

White Willow (*S. alba*)

Pests

Most willows are susceptible to twig cankers, tar spots, aphids, willow galls and scale insects.

SANDBAR WILLOW

Salix exigua Nutt.

Plant Symbol = SAEX

Contributed by: USDA NRCS Plant Materials Program



Robert H. Mohlenbrock
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Alternate Names
narrowleaf willow

Uses

Erosion control: Sandbar willow is used for streambank and lake shore stabilization and riparian area development or restoration. It is recommended for deep wet lowland, overflow areas, wet meadow sites, streambanks, lake shores, and other areas with a high water table.

Wildlife: This plant provides wood and shelter for many game birds and forage for deer.

Status

Please consult the PLANTS Web site and your State Department of Natural Resources for this plant's

current status (e.g. threatened or endangered species, state noxious status, and wetland indicator values).

Weediness

This plant may become weedy or invasive in some regions or habitats and may displace desirable vegetation if not properly managed. Please consult with your local NRCS Field Office, Cooperative Extension Service office, or state natural resource or agriculture department regarding its status and use. Weed information is also available from the PLANTS Web site at plants.usda.gov.

Description

Salix exigua Nutt., sandbar willow, is a common native suckering shrub 3 to 20 feet high found throughout the Northern Great Plains and the Northeast US. It quickly forms thickets on sand or gravel deposits along streams, roadside ditches, sloughs, and other places frequent to flooding. Branchlets are reddish brown, smooth or nearly so. Leaves are 2 to 5 inches long, narrowly lance-shaped, and pointed at both ends, with margins that have shallow, widely spaced teeth; they are green and smooth on both surfaces or sometimes silvery-silky. Leafstalks are very short and stipules, if present, are very small. This shrub is dioecious, so male and female flowers are produced by separate plants.

Sandbar willow leaves are very narrow with serrated leaf edges. The leaf edges of purpleosier willow are not serrated, and the leaf width is greater. Also, purpleosier willow does not form thickets.

Note: sandbar willow is an aggressive spreader and this should be considered when selecting materials for a given site. It can spread off of the streambank to other sites under favorable circumstances.

Adaptation and Distribution

Sandbar willow is adapted to sandy soils in stream, river, and shoreline sites, it is not well adapted to other sites.

Sandbar willow is distributed primarily throughout the West. For a current distribution map, please consult the Plant Profile page for this species on the PLANTS Website.

Establishment

Planting 1-0 rooted cuttings or unrooted cuttings are both effective planting methods. The un-rooted cuttings should be used where moisture conditions are good. On droughty sites, the rooted cuttings are preferred. Plant rooted cuttings using techniques that are common to bare root seedlings. Un-rooted cuttings should be at least 12 inches long, with the lower 10 inches buried vertically in the sand. Plant spacing of 2x2 to 4x4 work well.

Sandbar willow is also planted in soil bioengineering systems. It should be planted in mixtures with other species such as 'Streamco' and 'Bankers' willows and 'Ruby' dogwood for live fascines, brush layers and brush mattress.

Under-seeding with a cool season grass mixture is recommended.

Management

Once sandbar willow is planted, it requires little care. Blowouts along the stream should be addressed when they occur and repaired.

Pests and Potential Problems

This willow is susceptible to twig cankers, tar spot, aphids, willow galls, and scale insects.

Cultivars, Improved, and Selected Materials (and area of origin)

'Greenbank' is the only Northeastern cultivar. It was released for commercial production by the Big Flats PMC in 1996. 'Greenbank' is a male clone. It was selected from field testing of several clones, and provided stronger growth over a wide range of conditions.

The cultivar 'Silver Sands' was released by the Bismarck (ND) PMC for use in the Northern Great Plains.

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For more information about this and other plants, please contact your local NRCS field office or Conservation District, and visit the PLANTS Web site <<http://plants.usda.gov>> or the Plant Materials Program Web site <<http://Plant-Materials.nrcs.usda.gov>>

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