

Sitka willow, Salicaceae *Salix sitchensis* Sanson ex Bong

Description
A shrub or small tree 6 – 23' tall often found along rivers and streams and used in riparian restoration projects.

Range
Western N. America - Alaska to California, east to Montana.(2)

Climate, elevation
Sitka willow can be found at low to middle elevations (0–400 m). (3,4)

Local occurrence (where, how common)
Sitka willow is the most common willow in Puget Sound area. (4) Abundant along rivers and streams. (5)

(1)

Habitat preferences
Found mainly on rich mucky or other moist soils on the banks of streams and in low moist ground. 2 Prefers sunny locations but will tolerate some shade. (6)

Plant strategy type/successional stage (stress-tolerator, competitor, weedy/colonizer, seral, late successional)
Early seral (successional) stages of stream bank and floodplain. (7)

Associated species
Riparian species: Aspen and cottonwoods (Populus spp.) Gooseberry and Currant (Ribes spp.), Blackberry and other edible berries (Rubus spp.), Sedges (Carex spp.) and numerous grasses and forbs. (8)

May be collected as: (seed, layered, divisions, etc.)
Seed, Cuttings (6)

Collection restrictions or guidelines
Seeds must be collected as soon as the fruits ripen, as indicated by the capsule turning from green to yellow in late spring / early summer (May-July).(9) Seeds must be surface sown as soon as they are ripe. (6)

Seed germination (needs dormancy breaking?)

Willow seeds have no dormancy and germinate within twelve to twenty-four hours after falling on moist ground. (6)

Seed life (can be stored, short shelf-life, long shelf-life)

Seeds are viable for only a few days and the maximum storage period is four to six weeks with germination rates dropping off fast after ten days at room temperature. (6)

Recommended seed storage conditions

Seedbeds must be kept moist until seedlings are well established. (6)

Propagation recommendations (plant seeds, vegetative parts, cuttings, etc.)

Willow is easily propagated by hardwood cuttings and have a rooting percentage of ninety to one hundred percent without the use of rooting hormones. Cuttings can be collected and prepared for insertion when they are well ripened, from November to March. Cuttings seven to ten inches long and a half to one inch thick are initially stuck in the ground at close spacing and lifted after one year (6).

Soil or medium requirements (inoculum necessary?)

Sitka willow requires moist or wet soil. It prefers acid and neutral soils. (2)

Installation form (form, potential for successful outcomes, cost)

Cuttings of mature wood of the current year's growth can be planted straight into their permanent position in the autumn. (2)

Recommended planting density

6'+ spacing for rooted plants. (10)

Care requirements after installed (water weekly, water once etc.)

Requires moist soil but is often planted in riparian areas and requires little if any care. To maintain a view, you can cut them down by half their height without significant harm to the plants. (4)

Normal rate of growth or spread; lifespan

Height: 6 to 30'. *Spread*: to 25'. (10) *Growth rate*: Rapid, *Vegetative Spread Rate*: Slow
Lifespan: Moderate (11)

Sources cited

(1) USGS <http://esp.cr.usgs.gov/data/atlas/little/salisitc.pdf>
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(3) Veins of Life Watershed Society: <http://volws.bc.ca/resources/Plants/plant_descriptions_photos/Trees.htm>
(4) Sound Native Plants <http://www.soundnativeplants.com>
(5) Pojar, Jim and Markinnon, Andy. 1994. Plants of The Pacific Northwest Coast Washington, Oregon, British Columbia & Alaska. B.C Forest Service, Research Program.
(6) Moore, Lincoln M. USDA, NRCS, Plant Guide: <http://www.plants.usda.gov/plantguide /pdf/cs_sasi2.pdf#search='Sitka%20Willow%20propagation'>
(7) University of Nottingham, School of Geography: <http://www.geog.nottingham.ac.uk/~thorne/riverbank /mainpar2.html>
(8) USDA Forest Service <http://www.fs.fed.us/r5/rsl/projects/classification/ncoast-veg-descript.shtml>
(9) Young, James and Young, Cheryl. 1992. Seeds of Woody Plants in the United States. Dioscorides Press, Portland,

Or.
(10) WA Dept. of Ecology, Controlling Erosion Using Vegetation: Plant Selection Guide <http://www.ecy.wa.gov/programs/sea/pubs/93-30/table3.html#sitkawillow2>
(11) NRCS: Plant's Database <http://plants.usda.gov/cgi_bin/plant_attribute.cgi?symbol=SASI2>
Photos courtesy of Dendrology at Virginia Tech.

Data compiled by:

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