

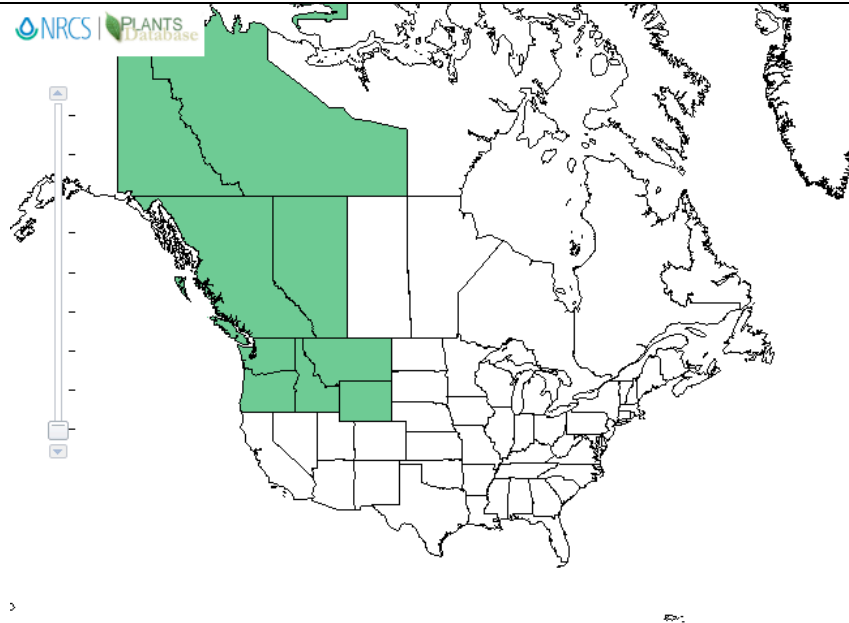
Plant Propagation Protocol for *Salix farriae*

ESRM 412 – Native Plant Production

Protocol URL: <https://courses.washington.edu/esrm412/protocols/SAFA.pdf>

TAXONOMY	
Plant Family	
Scientific Name	Salicaceae (USDA)
Common Name	Willow family (Giblin)
Species Scientific Name	
Scientific Name	<i>Salix farriae</i> Ball (Giblin)
Varieties	<i>Salix farriae</i> Ball var. <i>microserrulata</i> Ball <i>Salix hastata</i> L. var. <i>farriae</i> (Ball) Hultén (USDA)
Sub-species	
Cultivar	
Common Synonym(s)	<i>Salix farriae</i> var. <i>microserrulata</i> Ball <i>Salix hastata</i> L. <i>Salix hastata</i> L. var. <i>farriae</i> (Ball) Hultén (Qian) Commonly confused with <i>Salix barclayi</i> (FNA) Also commonly confused with <i>Salix pedicellaris</i> and <i>Salix planifolia</i> var. <i>monica</i> . (Kovalchik)
Common Name(s)	Farr's willow (USDA)
Species Code (as per USDA Plants database)	SAFA (USDA)
GENERAL INFORMATION	

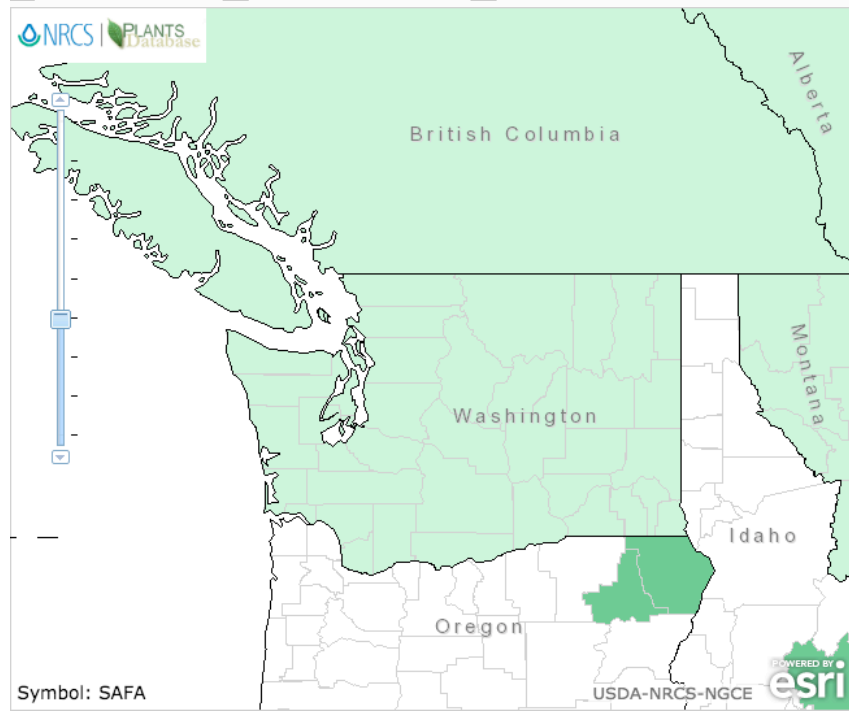
Geographical
range



Symbol: SAFA

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(USDA)

	 <p>While the USDA distribution map shows <i>S. farriæ</i> as widespread throughout Washington, this map from Giblin's entry on the Burke Museum of Natural History and Culture states the distribution as known only in Okanogan County.</p>
Ecological distribution	Low-gradient streams, low-gradient valleys (Nature Serve) Boreal White and Black Spruce Zone, Subalpine Fir Zone, Hemlock Zone, Montane Spruce Zone, Sub-Boreal Spruce Zone (CFCG)
Climate and elevation range	Subalpine and alpine zones between 2600-5600 feet (Nature Serve)
Local habitat and abundance	<i>S. farriæ</i> is a cordilleran species; meaning it occurs within a system of parallel mountain ranges with intervening plateau features. (FNA) Wet to moist meadows and streambanks in the montane and subalpine zones; infrequent in SE BC; E to AB and S to WY, ID and WA (E-Flora)
Plant strategy type / successional stage	Like many willows, <i>S. farriæ</i> has a notable rooting ability and is able to root in many stressful conditions. Its stress-tolerance makes it a colonizing species in many areas, especially in its common habit of riverbanks where it helps prevent soil erosion. (Margolin)
Plant characteristics	Broad-leaved deciduous shrub/sapling that can vary in height, but remains less than 1 m tall (Nature Serve) Perennial that blooms in June-July (Giblin)
PROPAGATION DETAILS	
Ecotype	This species can be found near low-gradient streams, in very broad, very low-gradient valleys, typically on sedge-peat soil. (Nature Serve)
Propagation Goal	Cuttings

Propagation Method	Vegetative
Product Type	Bareroot
Stock Type	Stems ½ to 1 ¼ inches in diameter. 18 inch cuttings (may not be possible depending on size of plant) (Colorado)
Time to Grow	Cuttings can be planted directly into site after minor preparation.
Target Specifications	Established root system
Propagule Collection Instructions	Cuttings can be taken any time of year, late Spring is ideal (especially is bareroot) because it allows the tree to become established before winter. (Margolin)
Propagule Processing/Propagule Characteristics	Dip top ends in 50:50 mix of latex pain and water to prevent drying or cracking and store cuttings for up to 6 months in dark, moist (60-70% humidity), cool (33-36 degrees F) environment. (Colorado).
Pre-Planting Propagule Treatments	Remove moldy, dried or sprouted cuttings prior to any treatments. Soak willow cuttings in water for 5-14 days prior to planting to establish root system; 50-80% of the cutting should be in contact with water during soaking. (Colorado).
Growing Area Preparation / Annual Practices for Perennial Crops	Prepare pilot holes at least 1 foot deep.
Establishment Phase Details	Tree guards or fencing and watering may be necessary during the establishment and active growth phase.
Length of Establishment Phase	6 weeks
Active Growth Phase	
Length of Active Growth Phase	
Hardening Phase	Reduce watering after establishment and active growth phases.
Length of Hardening Phase	

Harvesting, Storage and Shipping	N/A, bareroot
Length of Storage	Up to 6 months
Guidelines for Outplanting / Performance on Typical Sites	Again, use of a fence to deter wildlife and supplemental watering may be needed during the first 6 weeks after outplanting.
Other Comments	
INFORMATION SOURCES	
References	<p>Centre for Forest Conservation Genetics (CFCG). The University of British Columbia. Faculty of Forestry. http://coloradoriparian.org/a-guide-for-harvesting-storing-and-planting-dormant-willow-cuttings-2/</p> <p>Columbia. Faculty of Forestry. http://cfcg.forestry.ubc.ca/</p> <p>Douglas, George W., Del Meidinger, and Jim Pojar. <i>Illustrated Flora of British Columbia</i>. British Columbia: Ministry of Environment, 2000. Print.</p> <p>E-Flora BC: Electronic Atlas of the Flora of British Columbia. http://linnet.geog.ubc.ca/Atlas/Atlas.aspx?sciname=Salix%20farriar</p> <p>Flora of North America (FNA). FNA Vol. 7 Page 116. http://www.efloras.org/florataxon.aspx?flora_id=1&taxon_id=242445714</p> <p>Kovalchik, B. L. 2001. Classification and management of aquatic, riparian and wetland sites on the national forests of eastern Washington. Part 1: The series descriptions. Page 429. http://www.reo.gov/col/wetland_classification/wetland_classification.pdf</p> <p>Margolin, Malcom. <i>The Earth Manual: How to Work with Nature to Preserve, Restore and Enjoy Wild Land without Taming It</i>. Print.</p> <p>Nature Serve. Ecological Association Comprehensive Report. <i>Salix farriar</i>. http://explorer.natureserve.org/servlet/NatureServe?searchCommunityUid=ELEMENT_GLOBAL.2.688758</p> <p>Giblin, David. Burke Museum of Natural History and Culture. http://biology.burke.washington.edu/herbarium/imagecollection.php?SciName=Salix%20farriar</p> <p>Qian, H., & Klinka K. (1998). <i>Plants of British Columbia: Scientific and common names of vascular plants, bryophytes, and lichens</i>. Vancouver: UBC Press.</p> <p>USDA. PLANTS database. http://plants.usda.gov/core/profile?symbol=safa</p>
Other Sources Consulted	
Protocol Author	Rylie Robles
Date Protocol Created or	05/24/16

Updated	
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