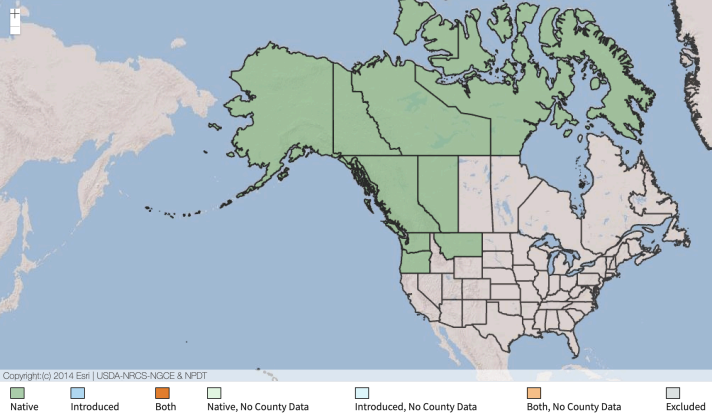


**Plant Propagation Protocol for *Saxifraga nelsoniana***

ESRM 412 – Native Plant Production

URL: <https://courses.washington.edu/esrm412/protocols/2025/SANE3.pdf>

<b>TAXONOMY</b>	
<b>Plant Family</b>	
Scientific Name	Saxifragaceae
Common Name	Saxifrage family
<b>Species Scientific Name</b>	
Scientific Name	<i>Saxifraga nelsoniana</i> D. Don
Varieties	
Sub-species	<i>Saxifraga nelsoniana</i> D. Don ssp. carlottae (Calder & Savile) Hultén <i>Saxifraga nelsoniana</i> D. Don ssp. cascadiensis (Calder & Savile) Hultén <i>Saxifraga nelsoniana</i> D. Don ssp. insularis (Hultén) Hultén <i>Saxifraga nelsoniana</i> D. Don ssp. nelsoniana
Cultivar	n.a.
Common Synonym(s)	<i>Micranthes nelsoniana</i> (D. Don) Small <i>Saxifraga punctata</i> L. var. carlottae (Calder & Savile) B. Boivin <i>Saxifraga punctata</i> L. var. cascadiensis (Calder & Savile) B. Boivin <i>Saxifraga punctata</i> L. var. nelsoniana (D. Don) Macoun
Common Name(s)	heartleaf saxifrage, Nelson's brook saxifrage, dotted saxifrage ("ITIS - Report: <i>Micranthes Nelsoniana</i> Var. <i>Nelsoniana</i> ")
Species Code (as per USDA Plants database)	SANE3
<b>GENERAL INFORMATION</b>	

Geographical range	 <p>Locations indicated on map, as well as northern Canada and Russia. Source: (“USDA Plants Database”)</p>
Ecological distribution	It prefers wetlands, moist riverbanks, and eastside, westside, and subalpine forests (Turner)
Climate and elevation range	It prefers cooler climates in USDA hardiness zones 3-7 (Gregarious), with an elevation range of up to 6,000 feet (“Flowers of Rainier”)
Local habitat and abundance	It can live in rocky, wet environments or forests (“Flowers of Rainier”) or on cliffs. Other common plants to find with it include <i>Sedum divergens</i> , <i>Oxyra digyna</i> , and <i>Solidago algida</i> (“Mount Rainier National Park Nature Notes”)
Plant strategy type / successional stage	Early successional species that can grow in disturbed soils
Plant characteristics	Perennial herb. Has white, pink, or orange flowers that bloom in early summer. Grows up to 14 inches tall (“Lady Bird Johnson Wildflower Center - the University of Texas at Austin”). Leaves have rosettes (many heart shapes)

**PROPAGATION DETAILS: VEGETATIVE**

Ecotype	n.a.
Propagation Goal	Plants
Propagation Method	Vegetative
Product Type	Propagules (divisions from the parent plant)
Stock Type	container
Time to Grow	No precise time was found in the literature. Recommended 6 months for roots to reestablish in containers after separation. (“Saxifraga Punctata Dotted Saxifrage PFAF Plant Database”)

Target Specifications	No exact target listed, but the plant should not be flowering when it is planted. (“Saxifraga Punctata Dotted Saxifrage PFAF Plant Database”)
Propagule Collection Instructions	General information for <i>Saxifraga</i> suggests separating 2-3 stems with leaves from the parent plant in the fall or early spring. This can be done by digging up the entire plant and separating it into two. (Prop Master 2K)
Propagule Processing/Propagule Characteristics	n.a. Plant divisions immediately in the media to prevent roots from dying out
Pre-Planting Propagule Treatments	n.a. Propagules should not be exposed to frost during their first year
Growing Area Preparation / Annual Practices for Perennial Crops	One source suggests compost is an appropriate media (“Saxifraga Punctata Dotted Saxifrage PFAF Plant Database”), but it should be well-draining (“Alpine Garden Society”). The container size should be large enough to prevent roots from spiraling at the base
Establishment Phase Details	Plant divisions will already be established
Length of Establishment Phase	n.a.
Active Growth Phase	They grow most actively during the summer, including their root systems. They can take 2-3 years to bloom as young plants, however, this might not be applicable to divisions (Grant)
Length of Active Growth Phase	No scientific information listed
Hardening Phase	They need to experience their first winter in a greenhouse (“Saxifraga Punctata Dotted Saxifrage PFAF Plant Database”). As per regular plant production, hardening can include exposure to more direct wind, rain, and light after the first year of reestablishment in the containers so they are prepared for outplanting.
Length of Hardening Phase	No scientific information listed
Harvesting, Storage and Shipping	prevent them from experiencing frost while they are still establishing
Length of Storage	No scientific information listed
Guidelines for Outplanting / Performance on Typical Sites	Plant after the last frost has occurred in late spring. Larger divisions can be planted directly into new sites without going to grow in containers first. (“Saxifraga Punctata Dotted Saxifrage PFAF Plant Database”)
Other Comments	n.a.

**INFORMATION SOURCES**

References	See below
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Other Sources Consulted	Prop Master 2K. “How to Propagate Saxifraga × Arendsii.” <i>Propagate One</i> , 16 Sept. 2024, propagate.one/how-to-propagate-saxifraga-x-arendsii/#:~:text=Selection:%20Carefully%20choose%20healthy%20leaves,moisture%20and%20water%20as%20needed.
Protocol Author	Gabriel Kennedy-Gibbens
Date Protocol Created or Updated	05/26/25

### Works Cited

“Alpine Garden Society.” *Alpine Garden Society*, 2018,

[encyclopaedia.alpinegardensociety.net/plants/Saxifraga](https://encyclopaedia.alpinegardensociety.net/plants/Saxifraga).

Burke, Herbarium. “CPNWH Search Results.” *Pnwherbaria.org*, 2025,

[www.pnwherbaria.org/data/results.php?DisplayAs=WebPage&ExcludeCultivated=Y&GroupBy=ungrouped&SortBy=Year&SortOrder=DESC&SearchAllHerbaria=Y&QueryCount=1&IncludeSynonyms1=Y&Genus1=Saxifraga&Species1=nelsoniana&Zoom=4&Lat=55&Lng=-135&PolygonCount=0](http://www.pnwherbaria.org/data/results.php?DisplayAs=WebPage&ExcludeCultivated=Y&GroupBy=ungrouped&SortBy=Year&SortOrder=DESC&SearchAllHerbaria=Y&QueryCount=1&IncludeSynonyms1=Y&Genus1=Saxifraga&Species1=nelsoniana&Zoom=4&Lat=55&Lng=-135&PolygonCount=0).

Grant, Bonnie L. “Saxifraga Plant Care - Tips for Growing Rockfoil Flowers.” *Gardening Know*

*How*, 17 July 2013,

[www.gardeningknowhow.com/ornamental/groundcover/rockfoil/growing-rockfoil-plants.htm](http://www.gardeningknowhow.com/ornamental/groundcover/rockfoil/growing-rockfoil-plants.htm).

Gregarious Inc. “ Saxifraga Zones.” *Greg App* , 2024, [greg.app/saxifraga-hardiness-zone/](https://greg.app/saxifraga-hardiness-zone/).

“ITIS - Report: Micranthes Nelsoniana Var. Nelsoniana.” *Itis.gov*, 2025,

[www.itis.gov/servlet/SingleRpt/SingleRpt?search\\_topic=TSN&search\\_value=895081#null](http://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=895081#null).

“Lady Bird Johnson Wildflower Center - the University of Texas at Austin.” *Wildflower.org*, 2020, [www.wildflower.org/plants/result.php?id\\_plant=SANEC](http://www.wildflower.org/plants/result.php?id_plant=SANEC).

“Micranthes Nelsoniana - FNA.” *Floranorthamerica.org*, 2020, [floranorthamerica.org/Micranthes\\_nelsoniana](http://floranorthamerica.org/Micranthes_nelsoniana). Accessed 27 May 2025.

“Mount Rainier National Park (Nature Notes).” *Npshistory.com*, 2025, [npshistory.com/nature\\_notes/mora/vol6/vol6-4g.htm#:~:text=Saxifraga%20nelsoniana%20or%20the%20stonecrop,soil%20to%20maintain%20itself%20there](http://npshistory.com/nature_notes/mora/vol6/vol6-4g.htm#:~:text=Saxifraga%20nelsoniana%20or%20the%20stonecrop,soil%20to%20maintain%20itself%20there).

“Nelson’s Brook Saxifrage - Flowers of Rainier.” *Flowers of Rainier*, 26 Mar. 2024, [flowersofrainier.com/flower/nelsons-brook-saxifrage/](http://flowersofrainier.com/flower/nelsons-brook-saxifrage/).

“Nelson’s Saxifrage - Micranthes Nelsoniana - Lee Petersen.” *Lee Petersen*, 31 Jan. 2023, [www.lwpetersen.com/alaska-wildflowers/nelsons-saxifrage-micranthes-nelsoniana/](http://www.lwpetersen.com/alaska-wildflowers/nelsons-saxifrage-micranthes-nelsoniana/).

“Saxifraga Nelsoniana (Heart-Leaf Saxifrage) | Idaho Fish and Game Species Catalog.” *Idaho.gov*, 2025, [idfg.idaho.gov/species/taxa/40598](http://idfg.idaho.gov/species/taxa/40598).

“Saxifraga Punctata Dotted Saxifrage PFAF Plant Database.” *Pfaf.org*, 2025, [pfaf.org/user/Plant.aspx?LatinName=Saxifraga+punctata#:~:text=Plant%20Propagation&text=Surface%20sow%2C%20or%20only%20just,frame%20for%20their%20first%20winter](http://pfaf.org/user/Plant.aspx?LatinName=Saxifraga+punctata#:~:text=Plant%20Propagation&text=Surface%20sow%2C%20or%20only%20just,frame%20for%20their%20first%20winter).

Turner, Mark. “Saxifraga Nelsoniana Ssp. Cascadensis | Nelson’s Brook Saxifrage | Wildflowers of the Pacific Northwest.” *Pnwflowers.com*, 2025, [www.pnwflowers.com/flower/saxifraga-nelsoniana-ssp-cascadensis](http://www.pnwflowers.com/flower/saxifraga-nelsoniana-ssp-cascadensis).

“USDA Plants Database.” *Usda.gov*, 2025, [plants.usda.gov/plant-profile/SANE3](http://plants.usda.gov/plant-profile/SANE3).

“USDA Plants Database.” *Usda.gov*, 2025, [plants.usda.gov/basic-search-results?resultId=e5c8a2f2-984f-417a-bb4d-d6e7f7065db6](http://plants.usda.gov/basic-search-results?resultId=e5c8a2f2-984f-417a-bb4d-d6e7f7065db6).