

**Plant Propagation Protocol for *[Insert Species]***  
**ESRM 412 – Native Plant Production**  
 URL: <https://courses.washington.edu/esrm412/protocols/2022/GASH.pdf>



Figure 1 <http://nativeplantspnw.com/salal-gaultheria-shallon/>

<b>TAXONOMY</b>	
<b>Plant Family</b>	
Scientific Name	Ericaceae
Common Name	Heath Family
<b>Species Scientific Name</b>	
Scientific Name	<i>Gaultheria shallon</i> Pursh
Varieties	
Sub-species	
Cultivar	
Common Synonym(s)	Known as Shallon in Britain, also known as Oregon Wintergreen
Common Name(s)	Salal
Species Code (as per USDA Plants database)	GASH
<b>GENERAL INFORMATION</b>	
Geographical range	Found along the West Coast, in mid-western Washington and Oregon, and along the West coast of California, as well as throughout British Columbia and the southern parts of Alaska (USDA database)
Ecological distribution	One of the most common understory shrubs, but can also occur in wetlands
Climate and elevation range	Typically grows west of the Cascade Mountains, prefers shady conditions but can grow in full sun, low to medium elevation Able to grow in a variety of soil conditions, typically grows in nutrient poor to moderately rich soils. (FEIS Database)
Local habitat and abundance	Very versatile in where it can be grown, can be slow to establish, but will aggressively fill in space when allowed to

Plant strategy type / successional stage	Colonizer, grows well in freshly disturbed sites
Plant characteristics	Shrub, oval-shaped, leathery green leaves. 2-4 inches long and 1-3 inches wide. Flowers are white-pink when blooming, edible berries are dark purple.
<b>PROPAGATION DETAILS</b>	
Propagation Goal	Seedlings
Propagation Method	Vegetative or Seed, seedling establishment is insignificant where plants are already established (FEIS Database)
Product Type	Container
Stock Type	1 gallon container
Time to Grow	Early seedling growth make take 2-3 years, only 1 year from cuttings
Target Specifications	3-5 inches in height for seedlings
Propagule Collection Instructions	Salal blooms during late spring, with the fruit beginning to grow in the summer. Fruit should be collected between summer and fall, crushed up and floated to retrieve seeds, filtered through pantyhose (Potash et al. 1997)
Propagule Processing/Propagule Characteristics	# of seeds per pound: 5,000,000 (USDA Database) Seeds remain viable for several years when stored under proper conditions, but much less under natural conditions (FEIS Database)
Pre-Planting Propagule Treatments	Stratification is not required for germination, but periods of light up to 8 hours a day are. (FEIS Database)
Growing Area Preparation / Annual Practices for Perennial Crops	Seeds need to be planted in the fall
Establishment Phase Details	8 hours of light a day for germination (FEIS Database)
Length of Establishment Phase	Seedlings germinate within 3-5 weeks. Keep between 40-50 degrees F during winter (Potash et al. 1997)
Active Growth Phase	Transplant seedlings to larger container when they are large enough to handle. Need to be careful, roots are very sensitive, resulting in wild-dug plants not transplanting well.
Length of Active Growth Phase	1-2 years
Hardening Phase	Not much information is available in regard to the hardening phase of <i>Gaultheria shallon</i> Pursh.
Length of Hardening Phase	Not much information is available in regard to the hardening phase of <i>Gaultheria shallon</i> Pursh.
Harvesting, Storage and Shipping	Need to be careful, roots are very sensitive and need to be kept intact for best chances of survival
Length of Storage	No specific information found about length of storage
Guidelines for Outplanting /	Plant in the spring once plant shave reached target size.

Performance on Typical Sites	
Other Comments	<p>Very slow to establish from seed, layering is the most efficient way to reproduce.</p> <p>Wild, established adult plants don't transplant well, can take several years to show new growth, if they survive. (Native Plants PNW)</p>
<b>INFORMATION SOURCES</b>	
References	<p>Gaultheria shallon Pursh. (n.d.). Retrieved May 4, 2022, from <a href="https://plants.sc.egov.usda.gov/home/plantProfile?symbol=GASH">https://plants.sc.egov.usda.gov/home/plantProfile?symbol=GASH</a>.</p> <p><i>Salal, Gaultheria Shallon</i>. Native Plants PNW. (2015, September 28). Retrieved May 4, 2022, from <a href="http://nativeplantspnw.com/salal-gaultheria-shallon/">http://nativeplantspnw.com/salal-gaultheria-shallon/</a></p> <p>FEIS database: Accessed on 5/4/2022, <a href="https://www.fs.fed.us/database/feis/plants/shrub/gausha/all.html">https://www.fs.fed.us/database/feis/plants/shrub/gausha/all.html</a></p> <p>Potash, Laura L. and Carol A. Aubry. 1997. Mt. Baker – Snoqualmie National Forest Native Plant Notebook: Second Edition. North Cascades Institute: SedroWoolley. pp.125-126.</p>
Other Sources Consulted	<p>Oregon State University. (n.d.). <i>Landscape plants</i>. Gaultheria shallon   Landscape Plants   Oregon State University. Retrieved May 4, 2022, from <a href="https://landscapeplants.oregonstate.edu/plants/gaultheria-shallon">https://landscapeplants.oregonstate.edu/plants/gaultheria-shallon</a></p> <p>MacKinnon, A., Pojar, J., &amp; Alaback, P. B. (2004). Gaultheria shallon. In <i>Plants of coastal British Columbia including Washington, Oregon &amp; alaska</i> (pp. 53–53). essay, Lone Pine Pub.</p>
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