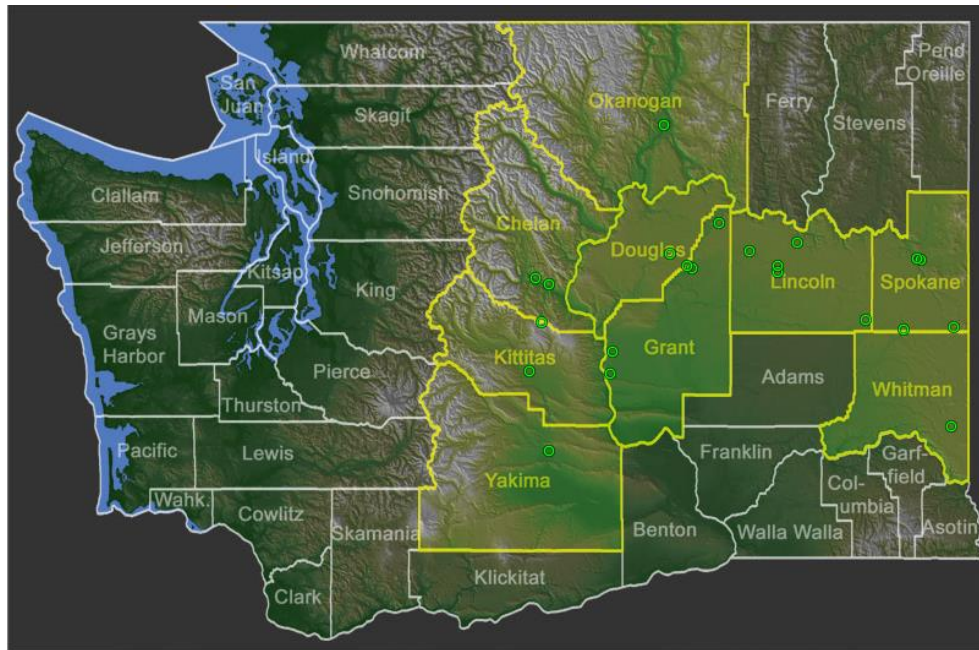


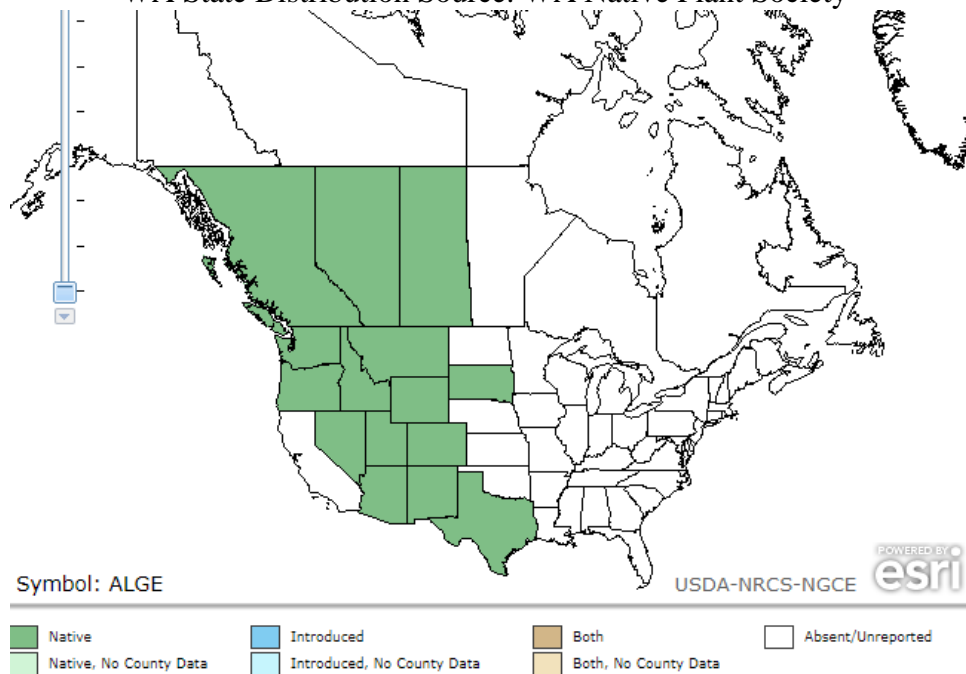
Plant Propagation Protocol for *Allium Geyeri*

ESRM 412 – Native Plant Production

Protocol URL: [https://courses.washington.edu/esrm412/protocols/\[USDA Species Code.pdf\]](https://courses.washington.edu/esrm412/protocols/[USDA Species Code.pdf])



WA State Distribution Source: WA Native Plant Society ⁴



USA Distribution Source: USDA ¹

TAXONOMY

Plant Family

Scientific Name	Liliceae ¹
Common Name	Lily Family ¹
Species Scientific Name	
Scientific Name	<i>Allium geyeri</i> ¹
Varieties	<i>Allium geyeri</i> S. Watson var. <i>chatterleyi</i> S.L. Welsh – Geyer's onion <i>Allium geyeri</i> S. Watson var. <i>geyeri</i> – Geyer's onion <i>Allium geyeri</i> S. Watson var. <i>tenerum</i> M.E. Jones – bulbil onion ¹
Sub-species	N/A
Cultivar	N/A
Common Synonym(s)	<i>Allium dictyotum</i> Greene <i>Allium funiculosum</i> A. Nels. <i>Allium pikeanum</i> Rydb. ⁴
Common Name(s)	
Species Code (as per USDA Plants database)	ALGE ¹
GENERAL INFORMATION	
Geographical range	In Washington State, Geyer's Onion ranges east of the Cascade Mountains. ⁴ In North America, Geyer's Onion has a widespread distribution from south-western Canada region, to southern US, Texas. It ranges from the mid-west plains to the west coast states. ² Maps above.
Ecological distribution	Found in low meadows, grasslands near streams and wetlands. ⁵
Climate and elevation range	Prairie-level to mid-mountain ⁵
Local habitat and abundance	It is considered least concerned in US ²
Plant strategy type / successional stage	Prefers moist, well-drained soil in a sunny area. Is shade-intolerant. Bulbs cannot over-winter in wet conditions. ⁵
Plant characteristics	Geyer's Onion is an edible perennial bulbous plant. The bulbs remains dormant in the winter, and the plant sprout and produce flowers between April and May. ²
PROPAGATION DETAILS	
Ecotype	N/A
Propagation Goal	Seeds or bulb division ⁵
Propagation Method	Seeds
Product Type	Propagule
Stock Type	containers
Time to Grow (from seeding until plants are ready to be outplanted)	Collect seeds in summer to fall, sow in spring, greenhouse store in the first winter, and plant matures

	in the following growing season.
Target Specifications	Should be vigorous, healthy second year plants. In cones or ½-1 gallon pots.
Propagule Collection Instructions (how, when, etc)	Collect matured, dried flower heads after blooming in April-May. Separate black, shiny seeds from flower heads. ⁵
Propagule Processing/Propagule Characteristics	Cleaned seeds should be stored in 33-38 Fahrenheit cool, dry conditions in cloth or paper bag. ³ Number of Seeds per Pound: 169,250. ³
Pre-Planting Propagule Treatments	Plant is inferred to be physiologically dormant. Cold stratification for over winter recommended. ³ Stratify seeds in a mesh bag, cover in squeezed moist peat and cold stratify 3 months prior to sowing. Check weekly for signs of mold and fungi. Sanitize containers and tools in a bleach solution if necessary.
Growing Area Preparation / Annual Practices for Perennial Crops	None specific. Sow in containers, cones recommended.
Establishment Phase Details	Soak seeds in water 24 hours prior to sowing in March. Prepare clean cones and fill with a fine bark mulch/compost media. Adding perlites or other drainage pellets recommended. Sow 2-3 seeds per cone at around 1 inch depth. Water well, and place in a sunny, unshaded area.
Length of Establishment Phase	Seeds should germinate within a few weeks to a month of sowing.
Active Growth Phase	Allow germinates to access full sun. Thin seedlings if too crowded. Water to keep media moist but do not over-water.
Length of Active Growth Phase	3-4 months, or throughout the growing season
Hardening Phase	Plants are not cold-wet tolerate if propagating in the west side of the cascades.
Length of Hardening Phase	N/A
Harvesting, Storage and Shipping	When roots are well-established and fills the cone, transfer plant into a larger pot. Seedlings will increase in size and flower when they mature. After plant goes dormant in fall, inspect for bulbs. Bulbs can be stored in dry, cool area without soil.
Length of Storage	Over dormant season. Do not store bulbs once green shoots are sprouting. Plant as soon as possible.
Guidelines for Outplanting / Performance on Typical Sites	Unknown
Other Comments	Toxic in large amounts and to dogs ⁵
INFORMATION SOURCES	
References	See Below
Other Sources Consulted	
Protocol Author	Aileen Liu

Date Protocol Created or Updated	Created: 04/25/2018
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References:

1. *Allium geyeri* S. Watson var. *geyeri* Show All Geyer's onion. (n.d.). Retrieved April 25, 2018, from <https://plants.usda.gov/core/profile?symbol=ALGE>
2. *Allium geyeri* . (n.d.). Retrieved from <http://www.iucnredlist.org/details/full/64263485/0>
3. Barner, J. (n.d.). Native Plant Network. Retrieved April 21, 2018, from <https://npn.rngr.net/renderNPNProtocolDetails?selectedProtocolIds=liliaceae-allium-3307>
4. Knoke, D. (n.d.). *Allium Geyeri*. Retrieved April 22, 2018, from <http://biology.burke.washington.edu/herbarium/imagecollection.php?Genus=Allium&Species=geyeri>
5. Watson. (n.d.). *Allium geyeri* - Watson. Retrieved April 23, 2018, from [https://www.pfaf.org/user/Plant.aspx?LatinName=Allium geyeri](https://www.pfaf.org/user/Plant.aspx?LatinName=Allium%20geyeri)