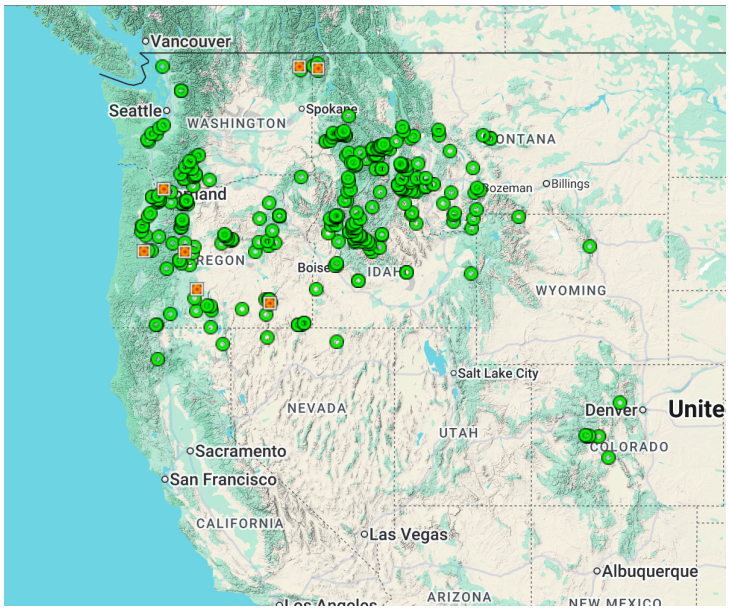
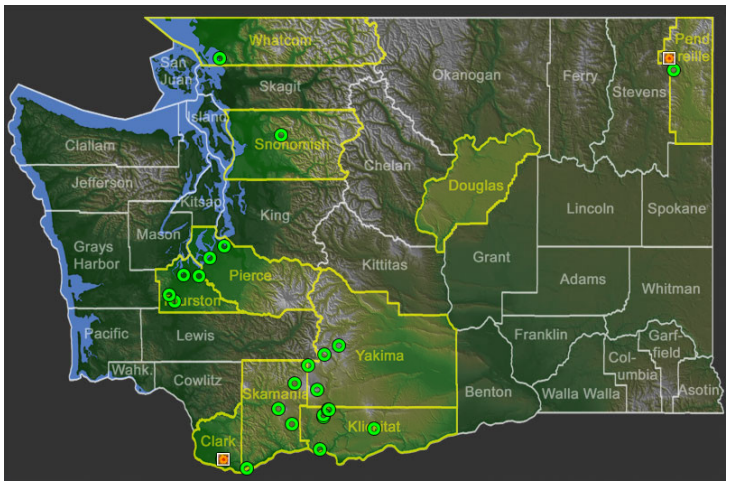
Plant Propagation Protocol for *[Insert Species]*
ESRM 412 – Native Plant Production
URL: https://courses.washington.edu/esrm412/protocols/*2026/[SAOR2.pdf]*

TAXONOMY	
Plant Family	Saxifrage Family
Scientific Name	Saxifragaceae
Common Name	Oregon Saxifrage
Species Scientific Name	*Saxifraga oregana*
Scientific Name	*Saxifraga oregana* Howell
Varieties	Saxifraga oregana var. montanensis (Small) C.L. Hitchc., Saxifraga oregana var. sierrae (Coville) (USDA NRCS, 2012)
Sub-species	Micranthes arnoglossa (Small) Micranthes brachypus (Small), Micranthes oregana (Howell). Saxifraga montanensis (Small). Saxifraga oregana var. montanensis (Small) C.L. Hitchc., Saxifraga oregana var. sierrae (Coville). (USDA NRCS, 2012)
Cultivar	None
Common Synonym(s)	Micranthes arnoglossa (Small), Micranthes brachypus (Small), Micranthes oregana (Howell). Saxifraga montanensis (Small) (USDA NRCS, 2012)
Common Name(s)	Bog saxifrage, Oregon bog saxifrage, swamp saxifrage, Oregon marsh saxifrage (USDA NRCS, 2012)
Species Code (as per USDA Plants database)	SAOR2
GENERAL INFORMATION	

Geographical range	  [(Source: Burke Herbarium)](#) Dots are observations in the Burke herbarium database
Ecological distribution	Commonly associated in montane or subalpine environments near water. Common ecosystems are bogs, marshes or lake margins. (Montana Field Guide), (Park, 2012)
Climate and elevation range	1000-2500 m (Park, 2012)
Local habitat and abundance	Common in higher elevations, but near a water source. Common on western slopes of the Sierra Nevada and Cascade ranges in the west (Park, 2012) Usually found in association with Yellow Pine Forest, Red Fir Forest, Lodgepole Forest, Subalpine Forest, wetland-riparian (Calflora)

Plant strategy type / successional stage	Grows quickly during the wet season in winter, then flowers in spring. It establishes a wide basal rosette which allows adequate moisture and sunlight absorption. Can outcompete other low lying plants with rosette. (USDA NRCS)
Plant characteristics	Strong perennial herb, stems are solitary and hairy, usually between 15-70cm in height. Leafs are all basal, green and between 4-20cm long. Flowers have lobes 1–2 mm long; hypanthium 1 mm or less long and petals white, ovate, 2–4 mm long. (Montana Field Guide, USDA NRCS)
PROPAGATION DETAILS: FROM SEED	
Ecotype	Seeds were collected in Lane Co., Oregon near Eugene (Bartow, 2004)
Propagation Goal	Plants (Bartow, 2004)
Propagation Method	Seed (Bartow, 2004)
Product Type	Container (Plug) (Bartow, 2004)
Stock Type	Requires constantly wet soil during growth stages. (USDA NRCS)
Time to Grow	6 weeks (Bartow, 2004)
Propagule Collection Instructions	Broadcast seeds on the soil surface in early fall when the soils are still warm but damp outside. If in a greenhouse, simulate these conditions with heat and moisture. (USDA NRCS)
Propagule Processing/Propagule Characteristics	Seeds sown on restoration sites generally at around 1 pound per acre (USDA NRCS)
Pre-Planting Propagule Treatments	Seeds were sown into cone-tainers filled with moistened Sunshine # 1 (a soil-less peat-based media) amended with micro-nutrients (Micromax) and a slow-release fertilizer (Osmocote 14-14-14.) The flats of cone-tainers were covered with poly-ethylene bags and placed in a walk-in cooler (35-40 degrees) for 2 weeks. (Bartow, 2004)

Growing Area Preparation / Annual Practices for Perennial Crops	Flats were removed from the cooler after 2 weeks and placed in greenhouse set at moderate temperatures (70 degree days/50 degree nights.) (Bartow, 2004)
Establishment Phase Details	Transport seedlings from warm wet environment into a colder environment for half the time. 75% survival from germination (Bartow, 2004)
Length of Establishment Phase	Seeds germinated within one to two weeks. (Bartow, 2004)
Active Growth Phase	Consistent water supply is very important for the growth phase. Apply constant irrigation practices. There is initially slow juvenile development with flowering occurring in the second year. (USDA NRCS)
Length of Active Growth Phase	Spring through early summer, flowering occurs later in the season before hardening phase. (USDA NRCS)
Hardening Phase	Warm dry temperatures typical of a Mediterranean summer climate trigger the hardening phase. (USDA NRCS)
Length of Hardening Phase	Hardening phase occurs through the dry summer ending in early autumn with more precipitation. (Montana Field Guide)
Harvesting, Storage and Shipping	Seed heads ripen unevenly an individual stalks can be harvested by hand once majority is ripe. Whole stalk is recommended as seeds will spill out right after harvest. For highest yields, vacuum seed from the weed fabric once all of the stalks have been harvested. (USDA NRCS)
Length of Storage	No information found
Guidelines for Outplanting / Performance on Typical Sites	For best seed production field establishment, sow seeds in containers placed outside in early September until germination occurs. Then move containers into a greenhouse to grow throughout the winter. Once seedlings develop, out plant on fertile, moist soils typical in riparian systems or low lying meadows. (USDA NRCS)
INFORMATION SOURCES	
Protocol Author	Nathan Wolford
Date Protocol Created or Updated	05/18/26

References:

Bartow, Amy. 2004. Propagation protocol for production of Container (plug) Saxifraga oregana J. Howell Caudex plants USDA NRCS - Corvallis Plant Materials Center Corvallis, Oregon. In: Native Plant Network. URL: https://NativePlantNetwork.org

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Michael S. Park 2012, *Micranthes oregana*, in Jepson Flora Project (eds.) Jepson eFlora, https://ucjeps.berkeley.edu/eflora/eflora_display.php?tid=33448, accessed on May 18, 2026.

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