

Alaskan Mountain Heather - *Cassiope stelleriana*



Range: Found from Alaska to California and Nevada, in the Canadian Rockies and Western Montana. (borealforest.org, 2006)

Climate, elevation: Located near or above the timberline in alpine heath and alpine parkland. Generally found between 1400 to 2000 meters in elevation. (borealforest.org, 2006)

Local occurrence: Common at high altitudes on open, moist slopes. (borealforest.org, 2006)

Habitat preferences: Found on open slopes that are covered by snow in the winter. Prefers a moist, partial to full sun environment. (borealforest.org, 2006)

Plant strategy type/successional stage: Stress tolerator, climax to near climax successional stage (Franklin and Dyrness, 1988).

Associated species: *Antennaria lanata*, *Deschampsia atropurpurea*, *Leutkea pectinata*, *Phyllodoce empetriformis*, *Vaccinium deliciosum*. (Franklin and Dyrness, 1988)

May be collected as: Seeds, Layers, Cuttings. (Pojar & Mackinnon, 1994)

Collection restrictions or guidelines: For cuttings, avoid flowering and secondary growth stems. Use shaded sections of the plant. (Potash & Aubry, 1997)

Seed germination: There is no advantage to stratification for *C. stelleriana*. Seeds germinate based on light. (Potash & Aubry, 1997)

Seed life: not available

Recommended seed storage conditions: No available information for seed storage. Cuttings can be stored in a refrigerator for 3 to 4 weeks if given fresh water every 3 to 4 days and kept in an open zip-lock bag. (Potash & Aubry, 1997)

Propagation recommendations: It is easiest to propagate cuttings from existing plants found in the wild. Seeds take a long time to grow to a transplant size. Cuttings take less time to reach an adequate size for planting. (Potash & Aubry, 1997)

· Cuttings: 10 steps to propagating cuttings from Potash and Aubry:

1. Slice 1/8" off base of 3-5" cutting
2. Remove leaves within 1/2 " of basal end and keep cuttings in bucket of cold water
3. Make a solution of 1 tablespoon "Dip 'n Grow" to 1 quart water
4. Suspend basal end of cuttings in solution and soak for 24 to 72 hours
5. Use 10 x 20" flats with "cuttings compost mix" (see table 1)
6. 50 cuttings per flat
7. Place on mist bench with bottom heat at 55-65 °F in winter and 65°F in spring/summer
8. Shade from full sun
9. Fertilize every 2 weeks with 9-45-15 plant starter diluted to 1/2 strength and Maxicrop liquid kelp at 1/4 recommended strength
10. Transplant to shallow pots after 3-4 months or when roots fill-out flat

· Seeds: Collect seeds from early September until first snowfall. Cut entire inflorescence and place in paper

bag upside down. Allow to dry for 2 to 4 weeks inside of paper bag. Using #30 screen, separate seeds from surrounding duff. Grind up all flowers inside of the bag to get any remaining seeds. Using the "Seed mix" (Table 1) in seedling flats, sow the seeds on the surface of the medium. This is because of the size of each seed. The seedlings from seeds will not be transplantable into a larger pot until a full year of growing. Shade seedlings from direct sunlight with a shade cloth in the summer. (Potash & Aubry, 1997)

· **Transplanting:** The best time of year to transplant is winter or spring. During the process, avoid handling the roots. It is best to use a spoon for any transplantation of the seedlings into pots. Once in the pots, keep under shade cloth for a few weeks and mist once or twice a day. In the summer, mound up Douglas fir mulch around the seedlings and water the mulch every day. (Potash & Aubry, 1997)

Soil or medium requirements: *C. mertensiana* has been found to grow best in certain mixes meant for different forms of propagation material. They are cuttings, seeds, and then medium for potting up seedlings.

Cuttings Compost Mix	Seed Mix	Potting Soil Mix
3 parts fine sphagnum peat 3 parts horticulture variety perlite 1 part #4 washed sand (sharp silicon for masonry)	3 parts sphagnum peat 3 parts #3 horticulture vermiculite 1-2 parts propagation grade perlite 1 part #4 washed sand	5 parts ground Douglas fir bark 2 parts fine sphagnum peat 1 part #3 horticulture vermiculite 1-2 parts potting or propagation grade perlite ½ part dry wetting agent, perlite base <1 part #4 sand (sharp quartz)

Table 1: Soil mixtures.

Mixes courtesy of Potash and Aubry

Installation form: The cheapest form to propagate with is cuttings, they root the fastest and are the easiest to come by. Growing in greenhouses until they are in gallon containers are the best form. The costs of propagation materials are the labor of gathering cuttings and the cost of running a greenhouse for over a year to create gallon sized plants. (Potash & Aubry, 1997)

Recommended planting density: 18-24" apart.

Care requirements after installed: Water once daily first summer following transplanting into containers. (Potash & Aubry, 1997)

Growth Rate: Slow. Can grow to be over 20 years old. (Pojar & Mackinnon, 1994)

Sources cited:

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Potash, L. & Aubry, C. (1997). **Native plant notebook : Mt. Baker-Snoqualmie National Forest.** Sedro Wooly, WA: North Cascades Institute.

Pojar, J. & MacKinnon, A. (1994). **Plants of the Pacific Northwest Coast: Washington, Oregon, British Columbia & Alaska.** (pp. 62). Renton, WA: Lone Pine Publishing.

Compiled May 10, 2006 by Ryan Williams