

Plant Data Sheet

Species:

Red Heather, *Phyllodoce empetriformis*



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Range:

Pacific Northwest region east to Idaho and Montana. Also found in Arizona, California and Wyoming.

Climate, elevation:

Mostly cool temperate, subalpine to alpine, generally between 1,400 to 2,000 meters elevation in Washington (Franklin and Dyrness, 1988)

Local occurrence:

Common within subalpine habitat

Habitat preferences:

Moist, moderately well drained to well drained slopes.

Open high elevation forests or subalpine meadows with moderately late lying snowpack (Franklin and Dyrness, 1988)

Plant strategy type/successional stage:

Stress tolerator, climax to near climax succesional stage, (although occasionally subject to invasion by trees in warmer climatic periods) (Franklin and Dyrness, 1988)

Associated species:

Leutkea pectinata, *Vaccinium deliciosum*, *Cassiope mertensiana*,
Deschampsia atropurpurea, *Antennaria lanata* (Franklin and Dyrness, 1988)

May be collected as:

Cuttings: in late summer or fall

Seeds: September to late fall (Potash and Aubry, 1997)

Collection restrictions or guidelines:

Seed is ripe when capsule swells and becomes dark purple or black

Clip entire inflorescence, hang upside down in paper bag for few weeks in dry environment until capsules dehisce

(Potash and Aubry, 1997)

Seed germination:

Cold/moist stratification may improve germination, but is not necessary. (Potash and Aubry, 1997)

It is important to sow seeds on surface of seedling media because seeds are very small. (49,280,000 seeds/kg)
(Luna et al 2001)

Olympic National Park uses;

3 parts fine sphagnum, 3 parts #3 horticultural vermiculite, 1-2 parts propagation grade perlite, and 1 part #4 washed sand

(Potash and Aubry, 1997)

Seed life:

not available

Recommended seed storage conditions:

not available

Propagation recommendations:

The following protocol for cuttings is from, Olympic National Park in Potash and Aubry, (1997):

Slice 1/8" off base of 3-5" cutting

Remove leaves within 1/2 " of basal end and keep cuttings in bucket of cold water

Make a solution of 1 tablespoon "Dip 'n Grow : 1 quart water

Suspend basal end of cuttings in solution and soak for 24 to 72 hours

Use 10 x 20" flats with 3 part fine sphagnum, 3 part horticultural perlite and 1 part #4 washed sand.

50 cuttings per flat

Place on mist bench with bottom heat at 55-65 °F in winter and 65°F in spring/summer

Shade from full sun

Fertilize every 2 weeks with 9-45-15 plant starter diluted to 1/2 strength and Maxicrop liquid kelp at 1/4 recommended strength

Transplant to shallow pots after 3-4 months or when roots fill-out flat

The following additional notes come from Glacier National Park in Luna et al (2001)

Better results from stem heel semi-hardwood cuttings than stem tip semi-hardwood cuttings, higher rooting and higher vigor

8,000 PPM IBA is recommended

1:1 peat/perlite rooting media with soil from stock plant site used for mycorrhizal inoculum

10 weeks in rooting flats, transplanted to 800 ml containers with 6:1:1 sphagnum peat: perlite:vermiculite

Hardened in full sun and overwintered

Out planted 2 years after collection of cuttings

Soil or medium requirements:

See details above

Installation form:

800 ml containers (Luna et al. 2001)

Recommended planting density:

15-20 cm

Care requirements after installed:

Water once daily first summer following transplanting into containers (Luna et al. 2001, Potash and Aubry, 1997)

Normal rate of growth or spread; lifespan:

Slow. Grows to 15-45 cm tall, can layer to form broad clones

Sources cited:

Franklin, Jerry and C.T. Dyrness. 1988 Natural Vegetation of Oregon and Washington. Oregon State University Press, Corvallis, OR 452 p.

Luna, Tara; Wick, Dale; Evans, Jeff. 2001. Propagation protocol for vegetative production of container *Phyllodoce empetriformis* (SW.) D. Don plants (800 ml containers); Glacier National Park, West Glacier, Montana. In: Native Plant Network. URL: <http://www.nativeplantnetwork.org> (accessed 21 April 2003). Moscow (ID): University of Idaho, College of Natural Resources, Forest Research Nursery.

Potash, Laura and Carol Aubry. 1997 Mt Baker Snoqualmie National Forest Native Plant Notebook, 2nd Ed. North Cascades Institute, Sedro Woolly, WA. 412 p.

USDA, NRCS. 2002. The PLANTS Database, Version 3.5 (<http://plants.usda.gov>). National Plant Data Center, Baton Rouge, LA 70874-4490 USA. (Accessed April, 21. 2003)

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