

Elephant's Head *Pedicularis groenlandica*



Range

Mid-montane to alpine areas throughout western North America (1).

Climate, elevation

Middle to high elevations (1).

Local occurrence

In Washington, it ranges from 2500' to 7000' both west and east of the Cascades (2).

Habitat preferences

Fens, wet meadows, seepage area, and streambanks (3).

Plant strategy type/successional stage

Pedicularis groenlandica requires a late successional sedge-rush community, with associate species for companion species.

Associated species

Carex nigricans, *Dodocatheon jeffreyi*, *Achillea millefolium*, *Polygonum bistortoides*, *Aconitum columbianum*, *Castilleja* spp., *Deschampsia cespitosa*, *Fragaria virginiana*, *Ligusticum grayi*, and *Pedicularis bracteosa* (2).

May be collected as

Seed (1).

Collection restrictions or guidelines

Collect seeds in late fall, when capsules turn brown and begin to dehisce. Seeds are brown at maturity (1).

Seed germination

120 days cold stratification. Gibberellic acid treatment is recommended for the *Pedicularis* genus (1).

Seed life (can be stored, short shelf-life, long shelf-life)

Seed longevity is unknown (1).

Recommended seed storage conditions

Clean seeds should be stored in a cool and well-ventilated area.

Propagation recommendations

Seeds.

Soil or medium requirements

Glacier National Park outlines, "Seeds are lightly covered with media.

Growing media used is 6:1:1 milled sphagnum peat, perlite, and vermiculite with Osmocote controlled release fertilizer (13N:13P2O5:13K2O; 8 to 9 month release rate at 21C) and Micromax fertilizer (12%S, 0.1%B, 0.5%Cu, 12%Fe, 2.5%Mn, 0.05%Mo, 1%Zn) at the rate of 1 gram of Osmocote and 0.20 gram of Micromax per 172 ml container (1)."

Installation form

Pedicularis groenlandica is a hemiparasite. In order for seedlings to develop a healthy root system and grow vigorously, a host plant should be introduced into containers. Glacier National Park has been successful using *Carex nigricans* (1).

Care requirements after installed

Container plants should be watered regularly throughout the summer, gradually decreasing irrigation throughout September and October, giving plants one thorough soaking prior to winter dormancy (1).

Normal rate of growth or spread; lifespan

2 years (1).

Sources cited

1. Evans, Jeff; Luna, Tara; Wick, Dale. 2001. Propagation protocol for production of container *Pedicularis groenlandica* Retz. plants (172 ml containers); Glacier National Park, West Glacier, Montana. In: Native Plant Network. URL: <http://www.nativeplantnetwork.org> (accessed 11 May 2004). Moscow (ID): University of Idaho, College of Natural Resources, Forest Research Nursery.
2. Hovanick, Catherine. Some Aspects of the Natural History and Ecology of three *Pedicularis* Species common in the Northwest. Master of Science Thesis, University of Washington. 1983.
3. Pojar, J. and A. MacKinnon. Plants of the Pacific Northwest Coast-Washington, Oregon, British Columbia and Alaska. B.C. Ministry of Forest and Lone Pine Publishing. 1994.

Data compiled by Sacha Johnson 5/11/2004