

Alpine Buckwheat (*Eriogonum pyrolifolium var. coryphaeum*) Polygonaceae (Buckwheat Family)

Status: Red / Not Assessed Best Survey Time: Jun to Sep

General Habitat: Upland

RANGE

- Found in North America from British Columbia south to Idaho, Montana, and California (USA)
- In B.C., known from only three locations within a relatively small area in Cathedral Provincial Park and Protected Area



Figure 1 B.C. distribution of Eriogonum pyrolifolium (BC CDC 2014)

HABITAT

- Open, rocky (sometimes sandy) sites and in talus or fine scree at high elevations in subalpine and alpine habitats in the Interior Mountain Heather Alpine Zone Biogeoclimatic Zone
- Associates include pussytoes (Antennaria sp.),
 Mount Hood pussypaws (Cistanthe umbellata),
 kinnikinnick (Arctostaphylos uva-ursi), juniper
 (Juniperus sp.), heather and blue-listed Brandegee's
 lomatium (Lomatium brandegeei)



Figure 2 Open, rocky, high-elevation habitat in Cathedral Provincial Park and Protected Area, B.C.



Figure 3 Example of subalpine and alpine habitat in Cathedral Provincial Park and Protected Area, B.C.

LIFE HISTORY

- Perennial species that blooms from June into September
- As the flowers wither and die, achenes are released
- Does not reproduce vegetatively (from pieces of the plant or underground roots), so survival of a population depends on seeds
- Seed dispersal is by gravity, water or small mammals

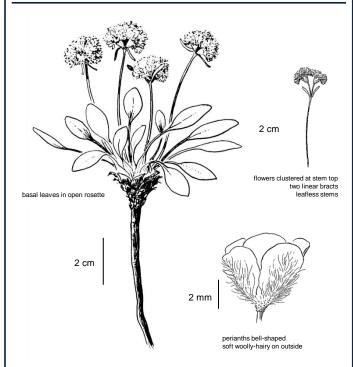


Figure 4 Illustration of *Eriogonum pyrolifolium* by Jeanne R. Janish (Hitchcock et al. 1969)

Eriogonum pyrolifolium var. coryphaeum (continued)

DESCRIPTION

General

- Perennial species that grows from a long taproot
- From 4 to 15 cm tall, with erect or arching leafless stems
- Several simple or branched stems, woody and cushion-like

Leaves

- Leaves basal, growing outward in open rosettes
- Leaves distinctive, from 1.5 to 4 cm long with broadly oval to egg-shaped blades and narrow petioles, light green or green-yellow on upper surfaces, and grey-woolly beneath

Flowers

- Flowers arranged in clusters at top of stems with two linear bracts, 10 to 20 mm long, under inflorescence
- Each cluster composed of numerous, bell-shaped involucres (bracts), each containing several perianths (undifferentiated petals and sepals)
- Perianths bell-shaped, 6-lobed, from 4 to 5 mm long, white to green-white, and soft woolly-hairy on outside
- Perianths turn red to pink following pollination

Fruits

 Achenes light brown to brown, 4 to 5 mm long, with hairs at one end



Figure 5 Typical plant showing flowers clustered at the end of leafless stems and basal leaves in rosettes

IDENTIFICATION TIPS

- Characterized by large, distinctive leaves growing as open rosettes, and head-like flower clusters subtended by only two bracts (versus 4 to 6 in other species)
- Should not be easily confused with other plants in its alpine habitat



Figure 6 Close-up of plant showing bell-shaped, white to greenwhite perianths and distinctive leaves with narrow petioles

GENERAL THREATS AND GUIDANCE

- Avoid development in areas with known occurrences of *Eriogonum pyrolifolium* through project relocation or redesign
- Protect open, rocky sites in alpine and subalpine habitats from disturbance and development
- Follow provincial methods for when and how to conduct plant species at risk surveys
- Follow provincial policy and guidance on how to avoid, minimize, restore and offset impacts to plant species at risk and their habitats
- Report any sightings to the BC Conservation Data Centre (<u>cdcdata@gov.bc.ca</u>) and FLNR Ecosystems Section (<u>josie.symonds@gov.bc.ca</u>)

REFERENCES

BC Conservation Data Centre. 2014. http://a100.gov.bc.ca/pub/eswp/

Douglas et al. (editors). 1999. *Illustrated Flora of British Columbia*. Vol. 4. BC Min. Environ., Lands and Parks, and Min. For., Victoria, B.C.

Hitchcock et al. 1969. Vascular Plants of the Pacific Northwest. Univ. Washington Press, Seattle, WA Klinkenberg, Brian (editor). 2013. E-Flora BC.

http://linnet.geog.ubc.ca/Atlas/Atlas.aspx?sciname= Eriogonum_pyrolifolium&redblue=Both&lifeform=7 NatureServe. 2012.

http://www.NatureServe.org/explorer

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