

BC's Coast Region: Species & Ecosystems of Conservation Concern

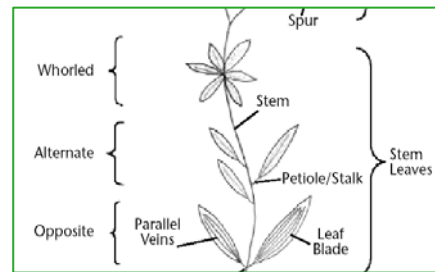
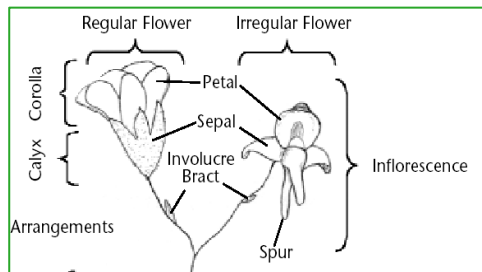
Tall Woolly-heads (*Psilocarphus elatior*)

Global: G4Q Provincial: S1 COSEWIC: E, BC List: Red



Notes on *Psilocarphus elatior*: A member of the family Asteracea (“asters, sunflowers”), this species is also referred to as “meadow woolly-heads”. Two other species of the genus *Psilocarphus*, one provincially red-listed (as well as federally listed as at risk) and the other - blue listed, occur in BC. Only the Pacific population of *P. elatior* is designated as endangered by COSEWIC. Recently the Alberta and Saskatchewan (prairie) populations ranked as special concern by COSEWIC have been confirmed to actually represent misidentified specimens of *P. brevissimus*, making the BC populations of tall woolly-heads of even greater conservation concern due to its restricted range.

Plant Anatomy



Description

Height 5-15 cm. This erect, annual herb, with moderately branched stems emerges from a taproot. The silky woolen hairs that cover the flower heads, stems and leaves give *P. elatior* and other members of this genus their common name. The pointed, slender, 2 cm long leaves grow only along the stem. Plants in this genus usually produce one single flower head (though multiples can occur) at the tips of each stem branch, or from nodes along the stem. The flower heads are spherical like a small golf ball with distinctly long bracts from 2 to 4 mm long. Fruits are cylindrical, producing hairless seed cases 1-1.7 cm long.

Look's Like?

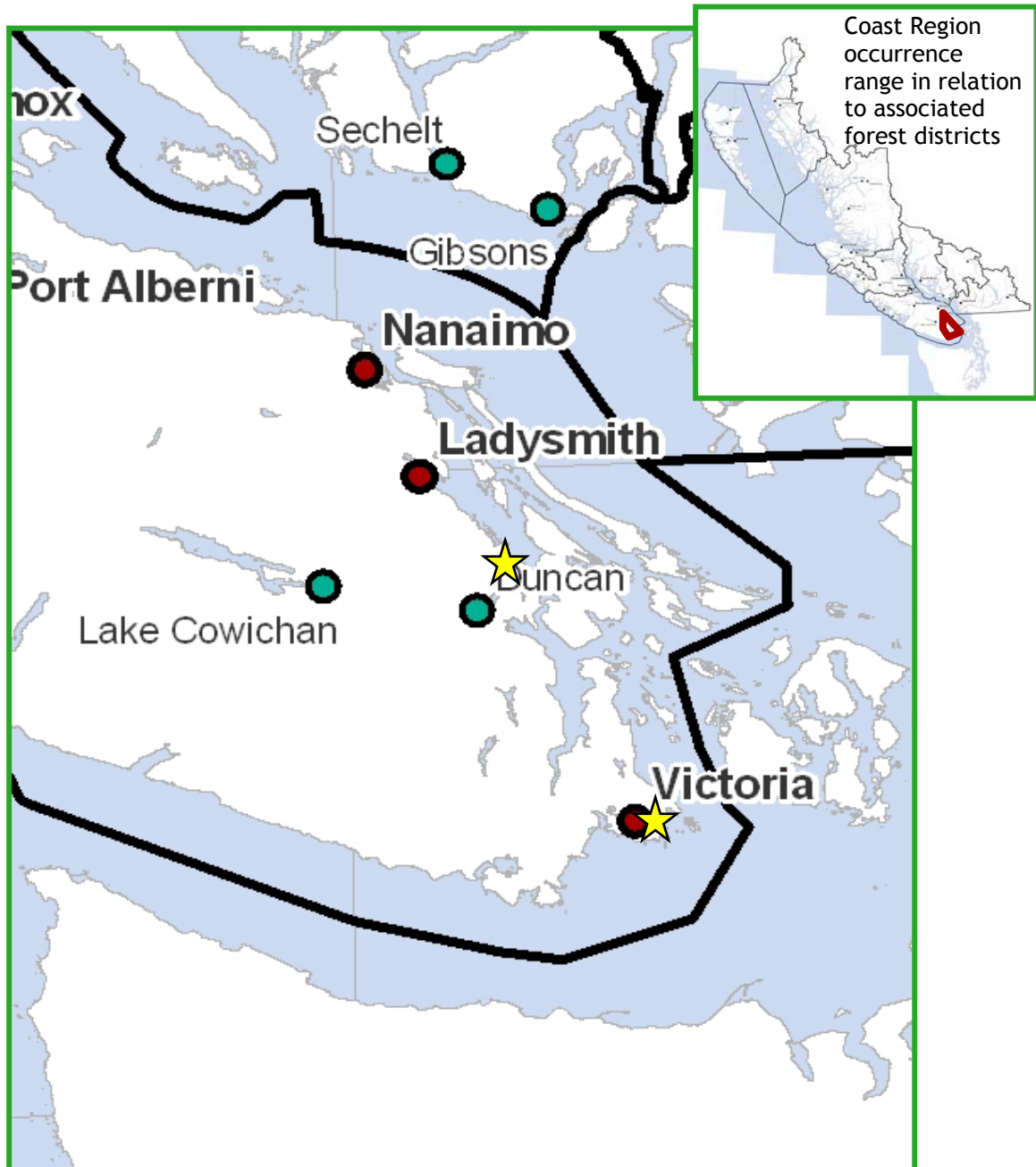
Species in the genus *Psilocarphus* share the trait of being covered in woolly, silken hairs. A relative, slender woolly-heads, which overlaps in range, could be easily confused with *P. elatior*. Slender woolly-heads is more extensively branched and branches spread horizontally along the ground (rather than erect), as the plant matures. As well the flower bracts (modified leaves) are smaller in slender woolly-heads and leaves are often spoon-shaped instead of straight, long and slender. Another potential look-alike, when tall woolly-heads is immature is young plants of the *Gnaphalium* (cudweed) genus. However cudweed differs in that leaves are alternate and flower heads are flat, round and densely woolly with just single petal flowers.



Slender Woolly-heads

Distribution

Elevation 0-100 m. In the US, tall woolly-heads is distributed from northern California, northeastern Oregon, western and southeastern Washington and into Idaho. In Canada populations were historically distributed in 10 disjunct locals that ranged from Ucluelet (unconfirmed) to North Cowichan to Oak Bay. Of these only the North Cowichan (Somenos Creek and marsh), Saanich (Christmas Hill Bird Sanctuary) and Oak Bay (Uplands Park) populations remain.



Tall Woolly-heads (*Psilocarphus elatior*), known range of population occurrences (yellow stars) for the Coast Region

Habitat Preferences

This species occurs primarily in low elevation moist to wet sites, often associated with seasonal (vernal) pools generated by collecting groundwater from springs or inundation from flooding surface waters. This species can occasionally be found in temporary pools on disturbed sites, muddy ditches and water filled tire ruts.



Tall woolly-heads is strongly associated with vernal pools with organic, mineral soils.

Critical Features

Little is known about the exact soil chemistry, composition, depth and micro-climate/nutrient requirements for this species. However this species tolerates vernal pool beds associated with shallow organic and minerals soils overlying bedrock as well as depressions in poorly drained fine marine silts overlying marine clays to compact loam and till materials.

Seasonal Life Cycle

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
		Seedlings emerge early spring, flowering begins early to mid-summer.						Plants die-back in late summer			

Seed development and dispersal timing are unknown. This species is likely self-pollinating with seed dispersal via wind or water. In vernal pools waterfowl activity may help distribute seed cases.

Threats

- ◆ The preferred ecological associations of this species are geographically limited and subject to urban development and associated habitat loss.
- ◆ Changes to soil moisture and seasonal inundation and water table levels due to dredging and diversion of surface and groundwater from adjacent development, logging and agricultural activity.
- ◆ Disturbance and trampling from outdoor recreation activities, direct mortality from infilling of habitat.

Conservation & Management Objectives

- ◆ Apply conservation and management objectives for this species and its habitat as set out in the “Recovery Strategy for Multi-species at Risk in Vernal Pools and Other Ephemeral Wet Areas in Garry Oak and Associated Ecosystems in Canada”.
- ◆ Collection activities should be limited and apply practices identified in the Province’s “Voucher Specimen Collection, Preparation, Identification and Storage Protocol: Plants & Fungi.” Inventory activities should consider approaches and references identified in E-Flora’s Protocols For Rare Vascular Plant Surveys.

Specific activities should include:

- ◆ Assess actual level and extent of threats to existing populations.
- ◆ A targeted inventory is needed to determine if undiscovered populations exist elsewhere within the Coast Region and to assess the status of all known populations.
- ◆ Monitor existing populations on an ongoing basis to assess viability and reduce potential disturbance from land use activities. Where suitable habitat occurs, work with land managers and land owners to ensure development or recreational activities do not disturb or encroach on sensitive areas.
- ◆ Consider historic distribution as part of developing a reintroduction program to suitable sites.
- ◆ Conduct outreach to raise awareness of this species and how to identify it to improve distribution knowledge.
- ◆ Effective long-term control and reduction in competition from invasive or aggressively spreading vascular plants (e.g. invasive grasses) must form part of strategies to protect and recover populations. Disturbance to rare plant species and communities must be minimized during control activities.

This species is listed under the Federal Species at Risk Act (SARA) and may be subject to protections and prohibitions under the BC Wildlife Act. Habitat for this species may also be governed under provincial and federal regulations including the Fish Protection Act and Federal Fisheries Act as well as Regional and local municipal bylaws.

Content for this Factsheet has been derived from the following sources

- B.C. Conservation Data Centre. 2010. [Internet] BC Species Summary: *Psilocarphus elatior*. B.C. MoE.
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- Proulx, Gilbert et al. 2003. A Field Guide to Species at Risk in the Coast Forest Region of British Columbia. Published by International Forest Products and BC Ministry of Environment. Victoria (BC).

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Every effort has been made to ensure content accuracy. Comments or corrections should be directed to the South Coast Conservation Program: info@sccp.ca. Content updated August 2010.

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