

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

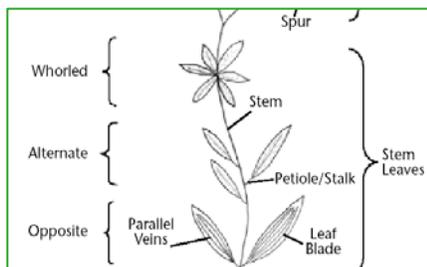
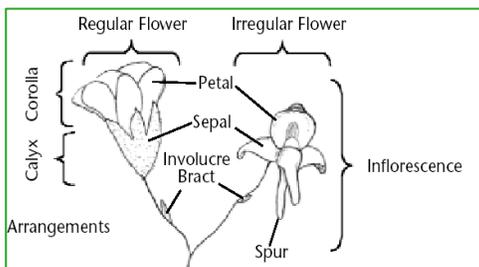
Purple Sanicle (*Sanicula bipinnatifida*)

Global: G5 Provincial: S2 COSEWIC: T, BC List: Red



Notes on *Sanicula bipinnatifida*: Purple sanicle is a member of the family Apiaceae (“carrot”). One of a number of sanicle species found on the Coast Region, BC represents the northern end this species North American range.

Plant Anatomy



Description

Height 10-60 cm. A perennial herb with erect, branched stems growing from a single taproot. The pinnate (divided and somewhat resembling a feather), toothed, 4-13 cm long leaves of the plant are found at the base as well as on the stem. The globe shaped flower clusters are a distinct deep purple or wine colour and made up of several small 5-petalled flowers arising from a single point. Floral bracts (modified leaves), are small and difficult to see. The dry egg shaped fruits are 3-6 mm and covered in hooked prickles. Fruits split open when mature to disperse their seeds.

Look's Like?

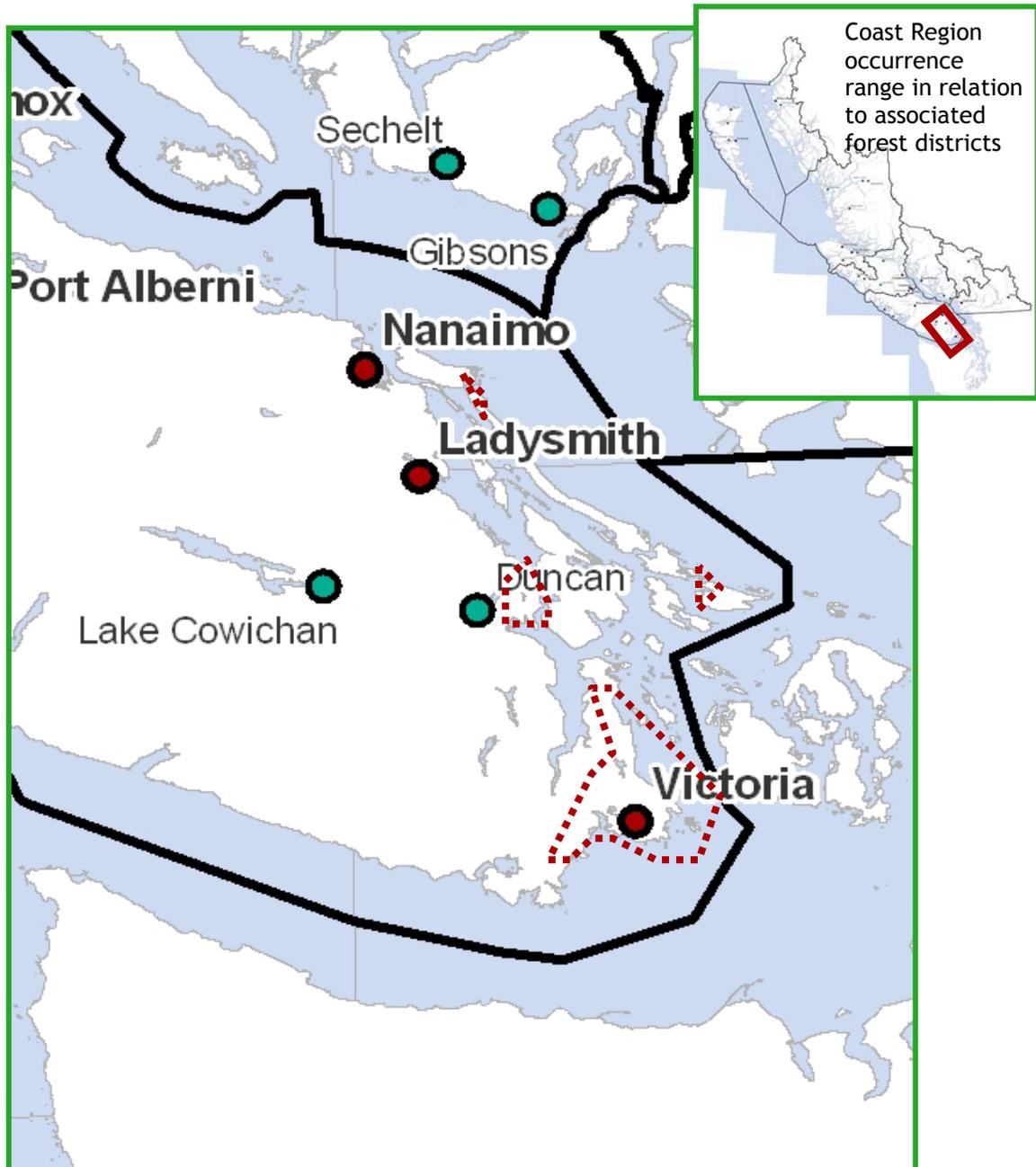
There are a number of sanicle species such as Sierra sanicle and Pacific sanicle that have distributions which overlap with that of *S. bipinnatifida* and may be confused with this species in the absence of flowers or when leaves die back. The leaf axil of Sierra sanicle is smooth and not distinctly toothed. Pacific sanicle is more similar to purple sanicle however the flower clusters of Pacific sanicle are generally yellow (although occasionally pink or purple) and tend to be more sparsely arranged.



Pacific Sanicle (pink flowering form)

Distribution

Elevations 1-320 m. Purple sanicle occurs from northern California to Oregon and in disjunct populations from Washington to southeastern Vancouver Island and the Gulf Islands. Currently, there are 19 known occurrences including Oak Bay, Saanich, Mount Douglas, Thetis Lake, Rithet's Bog and Saturna Island, 2-4 historic locations are presumed extirpated.



Purple Sanicle (*Sanicula bipinnatifida*), known range of population occurrences (red-dotted line) for the Coast Region

Habitat Preferences

As with many associated species of Garry oak marine headlands (common camas, spring gold, gumweed), purple sanicle prefers low-elevation shade-free meadows and tussock fields dominated by herbaceous plants and some grasses. Typically soils are too shallow (e.g. 30 cm), and moisture and aspect conditions too exposed to support tree species. Shrub growth is limited. Populations also occupy exposed rocky outcrops and cliffs along the shoreline.



Purple sanicle is generally restricted to exposed maritime and upland meadows with well drained soils and mild climate variations.

Critical Features

Soils usually remain moist over winter but often are drought stressed by early summer. Herbaceous communities where this species occurs have historically been maintained by light grazing or controlled seasonal burns.

Seasonal Life Cycle

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Established plants resprout late winter, seeds germinate early spring, flowering from early May to end of June					Shoots die back depending on moisture availability, seeds produced late summer, fruits dispersed late summer to fall						

The young plants grow a little larger each year, forming a dense rosette after a few years. Flowering likely occurs in the second year. Barbed fruit are dispersed when animals brush against the plants.

Threats

- ◆ The preferred ecological associations of this species are geographically limited and subject to loss of natural or historic maintenance regimes (e.g. use of fire by First Nations). Suppression or removal of these mechanisms has contributed to spread and encroachment of invasive and competitive vascular plant species which may contribute to changes in soil moisture and chemistry.
- ◆ Due to high seedling mortality rates few plants may survive through to their second year to flower and fruit.
- ◆ Impacts from land management practices (e.g. mowing or pesticide application) and outdoor recreation activities (e.g. trampling).
- ◆ Competition for nutrients and shading from associated vascular plants and subsequently expansion of other more shade tolerant species.

Conservation & Management Objectives

- ◆ Meet conservation and management objectives for this species as set out in the “Recovery Strategy for Multi-species at Risk in Maritime Meadows Associated with Garry Oak 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 the status of previously identified populations and determine actual levels of extirpation within the Coast Region.
- ◆ Conduct outreach to raise awareness of this species and how to identify it to improve distribution knowledge.
- ◆ 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 occur with minimal disturbance to sensitive areas and soil moisture conditions.
- ◆ Effective long-term control and reduction in competition from invasive or aggressively spreading vascular plants (e.g. invasive grasses, Scotch broom, snowberry species), 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] Species Summary: *Sanicula bipinnatifida*. B.C. MoE.
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- Fairbarns, Matt. 2010. Aruncus Consulting [Pers. communications]
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- Parks Canada Agency. 2006. Recovery Strategy for Multi-species at Risk in Maritime Meadows Associated with Garry Oak Ecosystems in Canada. In Species at Risk Act Recovery Strategy Series. Ottawa: Parks Canada Agency. 93 pps.
- Polster, D. et al. 2006.[Internet] Develop with Care: Environmental Guidelines for Urban and Rural Land Development in British Columbia. Prepared for the BC Ministry of Environment. Victoria (BC).
- 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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