

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

### Plant Community: Douglas-fir / Arbutus (*Pseudotsuga menziesii* / *Arbutus menziesii*)

Global: GNR, Provincial: S2, BC List: Red, BEC: CDFmm/02



Notes: Canopy dominated by Douglas-fir and Arbutus (“Pacific Madrone”). Where a shrub layer is well developed, oceanspray and dull Oregon-grape prevail. Alaska oniongrass and purple peavine are useful herb-layer indicator species. This nutritionally impoverished and driest of the forested plant communities is strongly influenced by the driest and mildest (Mediterranean-like climate) of Coastal BC’s climate regimes.

#### Description

Classified as the CDFmm/02 site series, this is the driest of the forested communities in the CDFmm subzone. This small patch community (5-50 ha) has a tree layer dominated by Douglas-fir and Arbutus (“Pacific Madrone”) with a canopy cover ranging from 40 to 90%. A minor component of lodgepole pine may be present. Garry oak is sometimes present if the canopy is sufficiently open, and its abundance increases when adjacent to, or in a mosaic of Garry oak / ocean spray and Garry oak / California brome plant communities. The shrub layer ranges in cover from 5-85%; when well-developed, oceanspray and dull Oregon-grape are dominant. Other shrub-layer species may include common snowberry, tall Oregon-grape, baldhip rose, Saskatoon berry and trailing blackberry. Herb cover varies widely (5-95% cover), but on average the cover is generally low. The herb layer includes a number of grass, sedge and rush species including: western fescue, Alaska oniongrass, blue wildrye, California brome, long-stoloned sedge and many-flowered wood-rush. Pacific sanicle is common along with big-leaved sandwort, purple peavine, white fawn lily and bracken fern. The moss layer is variable within the plant community (1-40% cover) and is most prevalent on outcrop bedrock areas where trees and shrubs are unable to establish. The moss layer features electrified cat’s-tail moss, Oregon beaked-moss, step moss and various clad lichens.

#### Threats

Decline is due to extensive past timber harvesting as well as grazing, and due to these coastal areas being scenic, extensive rural and urban development has occurred (and continues to occur). This geographic area is predominantly private land, where protective measures for red listed plant communities are limited, making the plant communities largely unprotected. All areas continue to have development pressures and it is thought that as low as 0.5% of the entire CDF zone remains as mature or old forest stage in British Columbia. Livestock grazing and ungulate browsing are considered threats. It is also susceptible to invasive species, especially after clearing.

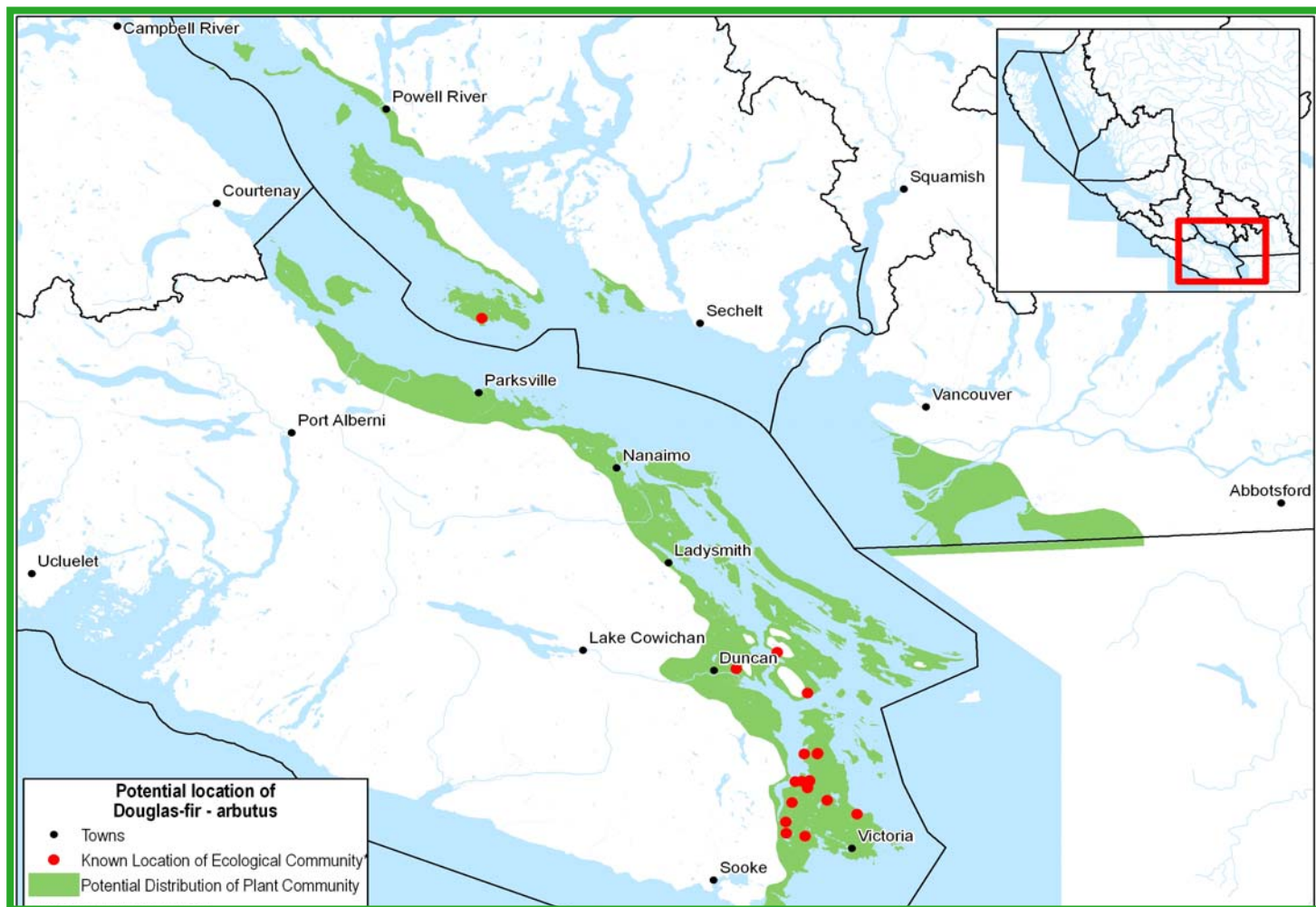
#### Conservation & Management Objectives

BC’s Conservation Framework (CF) action plan sets out three goals that can be used to form the basis for conservation planning for BC’s at risk plant communities: Contribute to global efforts for species and ecosystem conservation; Prevent species and ecosystems from becoming at risk; and maintain the diversity of native species and ecosystems.

**Specific activities should include:** Ecosystem protection, planning (including developing or updating recovery plans), promotion of private land stewardship and compiling or updating status reports (trends, threats, ecological function and processes, successional pathways, identification of information gaps etc.).

## Distribution

Found primarily on hillsides and rocky knolls with strong southerly exposures, sometimes on level ground with very well drained soils. The soil nutrient regime is poor-to-medium. Potentially found on south-eastern Vancouver Island from its most southerly tip northward to between Courtenay and Parksville. Also found on the southern Gulf Islands, Denman, Hornby, Lasquiti, Thormanby, Harwood, Savary, and Hemando Islands, as well as western Texada Island. On the mainland it is found on the outer extremities of the Sunshine Coast from the Halfmoon Bay area northward to the Powell River - Lund area. Although western parts of the Fraser River delta and White Rock are mapped within the CDFmm, the terrain conditions there are unlikely suitable for this plant community.



Content for this Factsheet has been derived from the following sources

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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](mailto:info@sccp.ca). Content updated August 2010.

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