

***Dryopteris arguta* – Coastal Wood Fern**

English name: Coastal Wood Fern

Other English name: Coastal Shield Fern

Scientific name: *Dryopteris arguta* (Kaulf.) Watt

Other scientific name: *Aspidium argutum* Kaulf.

Family: *Dryopteridaceae* (Wood Fern Family)

Risk status

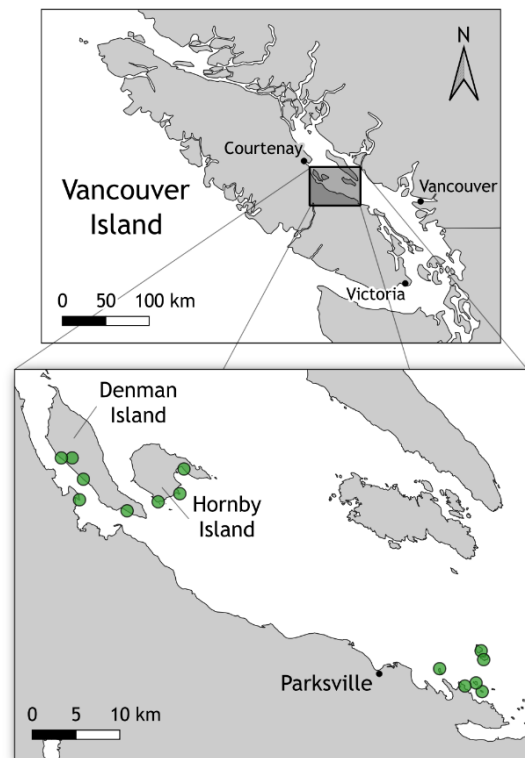
BC: vulnerable (S3); blue-listed

Canada: Special Concern

Global: Secure (G5)

Elsewhere: Washington, Oregon, California not ranked (SNR), Nevada, Arizona critically imperilled (S1)

Range/Known distribution: Coastal Wood Fern ranges from Vancouver Island and the northern Gulf Islands, south through the Puget Trough and Willamette Valley, and the Coastal Mountains and Pacific shores of Washington and Oregon, to the Sierra Nevadas and coastal ranges of California and into Baja California.



Distribution of *Dryopteris arguta*
● Confirmed Sites

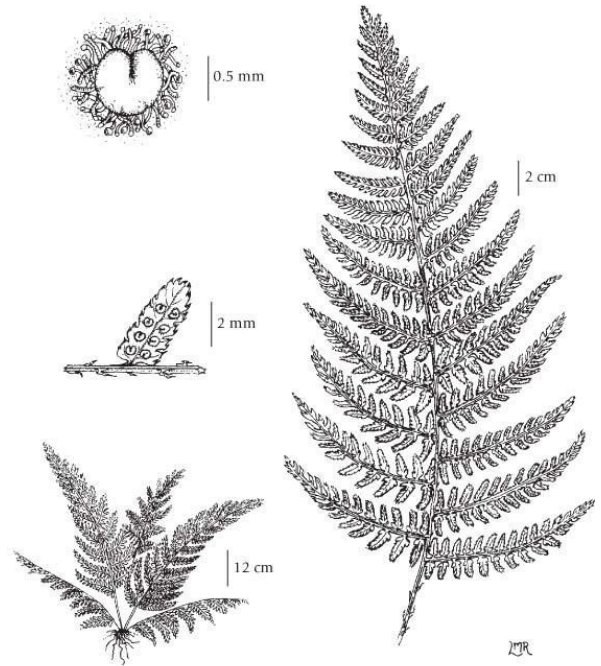
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Field description: Coastal Wood fern is a tufted, evergreen fern arising from a thick rhizome. The fronds are 20-70 cm long and 10-25 cm wide, tapering slightly towards the base. The fronds are once-pinnate although the pinnae are so deeply divided it almost appears to be twice pinnate. The pinnae are unstalked. The pinnules have spreading, spine-like teeth.

Identification tips: The distribution of Male Fern overlaps with that of Coastal Wood Fern and the two are superficially similar. The pinnae of Male Fern are distinctly stalked (although the stalks are very short) and the pinnules of Male Fern aren't spiny although they can be sharp-toothed.



Dryopteris arguta



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Life history: Coastal Wood Fern reproduces vegetatively through elongation of the thick rhizome. Once established, clones probably persist at least for decades and perhaps much longer. Little is known about the biology of Coastal Wood Fern itself and the habitat characteristics of other species in its genus vary so greatly that extrapolations to Coastal Wood Fern should be considered with caution.

Habitat: In Canada, Coastal Wood Fern grows in open coastal rocky bluffs, shrublands, Garry Oak woodlands and forests of Garry Oak (*Quercus garryana*), Douglas-fir (*Pseudotsuga menziesii*), Bigleaf Maple (*Acer macrophyllum*), and Arbutus (*Arbutus menziesii*), generally below 20 m asl (although one sites is > 100 m asl). It tends to occupy moist microsites within droughty ecosystems. Coastal Wood Fern has deep roots (up to 36 cm), which allows the plants to access water in deep soil horizons during extreme drought conditions. Given the diversity of ecosystems where it occurs, the list of associated understory species is very large.

Why this species is at risk: The rarity of Coastal Wood Fern in Canada is a mystery. Most of the areas where it now occurs do not seem to face significant threats. Some of the plants in one subpopulation on Hornby Island have been smothered by invasive shrubs and other subpopulations on Hornby Island are threatened by invasive shrub encroachment. Because it occupies a variety of habitats, its restricted distribution is puzzling. There are many areas with similar habitats in the Victoria area that seem well-suited to the species, yet it is not known from there.

What you can do to help this species: Management practices should be tailored to the needs of the site. Potential management tools will depend on the specific circumstances and may require experimentation prior to implementation. Before taking any action, expert advice should be obtained, and no action taken without it. Public and private landowners should be made aware of new populations of this species if they are discovered, and appropriate management practices suggested.

References

- COSEWIC. 2021. COSEWIC assessment and status report on the Coastal Wood Fern *Dryopteris arguta* in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. xi + 34 pp. (<https://www.canada.ca/en/environment-climate-change/services/species-risk-public-registry.html>)
- Parks Canada Agency. 2011. Management plan for the Coastal Wood Fern (*Dryopteris arguta*) in Canada. Species at Risk Act Management Plan Series. Parks Canada Agency. Ottawa. iii + 35 pp. https://wildlife-species.az.ec.gc.ca/species-risk-registry/virtual_sara/files//plans/mp_coastal_wood_fern_0811_e.pdf

For further information, contact the Garry Oak Ecosystems Recovery Team, or see the web site at: www.goert.ca

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