

Coastal Douglas-fir Forests

What are Coastal Douglas-fir Ecosystems?

The Coastal Douglas-fir (CDF) zone encompasses coastal forests dominated by Douglas-fir, Garry oak woodlands, camas meadows, and a diversity of other ecosystems found on the east coast of southern Vancouver Island, the islands of the Georgia Basin, and a small area of the BC mainland. This assemblage of ecological communities is found nowhere else in Canada. Many ecosystems within the CDF zone are ranked as threatened or endangered in BC, and together they support species at risk.

Why are CDF Ecosystems Important?

CDF ecosystems have:

- The highest diversity of plant species in BC
- The highest diversity of overwintering bird species in Canada
- The highest density of species at risk in BC, including 24 globally imperiled species

Yet 98% of the 45 ecological communities in the CDF zone are at risk of being lost.

In addition to supporting biodiversity, CDF forests benefit our communities by:

- Mitigating climate change by capturing and storing carbon from the atmosphere
- Supporting cultural and spiritual values of First Nations that have lived in the region since time immemorial
- Reducing pollution by removing dust, pollen, and smoke from the air
- Controlling and filtering stormwater runoff into lakes and streams, which protects drinking water and reduces flood risk
- Supporting resilient food systems by providing habitat for native pollinators
- Increasing property values
- Providing recreational opportunities and spaces for relaxation

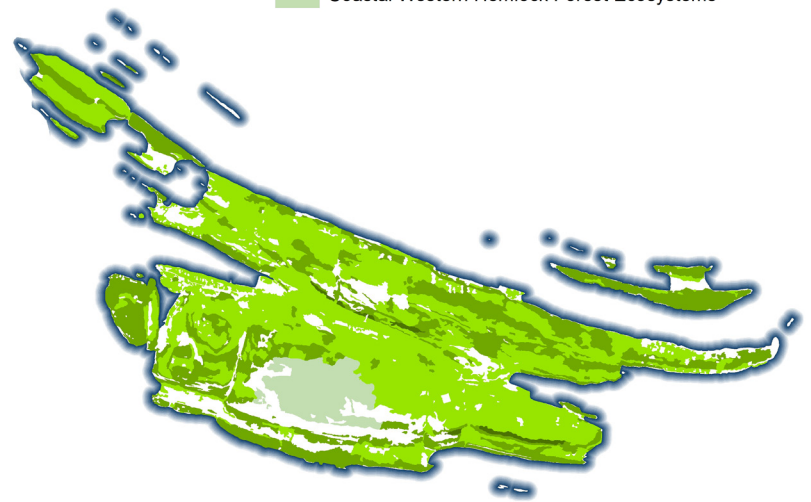
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CDF Forest Ecosystems

- Young Forest (40 - 80 yrs)
- Mature Forest (80 - 250 yrs)
- Old Forest (over 250 yrs)
- Other Land Cover (incl. younger forests)
- Coastal Western Hemlock Forest Ecosystems



*CWH: Coastal Western Hemlock Forest Ecosystem

Why are CDF Forests at Risk?

Since European settlement, almost half of the historically forested land in the CDF zone has been lost due to land uses such as forestry and development. Most old-growth forests have been replaced by second-growth forests that are not as biodiverse or resilient. Remaining CDF forests are in a hotspot of urban and rural development, and under increasing pressure from a growing population.

Climate change will have significant impacts on CDF forests as intensifying summer droughts stress trees. Islander observations indicate that climate change has already impacted western redcedar and other species. It is likely that drought is the primary cause of increased stress, but work needs to be done to understand these changes and adapt conservation of CDF habitats.

CDF forests and associated ecosystems are among the most endangered in Canada, yet only 11% of land in this zone is protected. Eighty percent of the land in the CDF zone is privately owned, highlighting the importance of voluntary conservation actions by individuals to protect what's left.



Only 11% of land in the CDF zone is under some form of protection

What You Can Do

Become a land steward:

- Protect living trees
- Leave large patches of natural forest intact
- Leave standing dead trees (snags) and fallen trees to decay in place to provide shelter and food for wildlife
- Restrict vehicle and livestock access into forests
- Control invasive species, like ivy, holly, daphne, and broom
- Keep cats indoors as much as possible
- Garden with native species
- Keep forest health in mind while managing fire risk. Focus on fire-proofing your home and planting a buffer of fire-resistant native plants like salal and Oregon-grape. Help protect your community by protecting older forests: their high moisture-holding capacity makes them a natural fire break.
- Become a citizen scientist — add your observations to a growing global database using the iNaturalist app, or keep a nature journal

Consider how your community can protect forests through Environmental Development Permit Areas and conservation guidelines in your Official Community Plan and Land Use Bylaw.

Permanently protect your land with conservation covenant.

A covenant is a voluntary, legal agreement between you and a conservancy that protects your land from development — not just while you own and live on the land, but even after your property is sold or transferred to new owners. Covenants registered through the Islands Trust's **Natural Areas Protection Tax Exemption Program (NAPTEP)** are eligible for a 65% reduction in property taxes on the portion of land protected.

Create a nature reserve through a donation of land to a conservancy or parks agency. If you donate land with significant ecological value, you may be eligible for additional tax benefits through the federal [Ecological Gifts Program](#).

Opportunity Fund grants can help cover costs associated with protecting land. Contact Islands Trust Conservancy to learn more at 250-405-5186 or itcmail@islandstrust.bc.ca

Resources

For information on conservation covenants, land donations, and stewardship programs, contact:

Islands Trust Conservancy: visit islandstrustconservancy.ca, email itcmail@islandstrust.bc.ca, or phone 250-405-5186

For information on CDF ecosystems at risk, contact:

Coastal Douglas-fir Conservation Partnership: visit cdfcp.ca or email info@cdfcp.ca

For information about Raincoast Conservation Foundation's Gulf Islands Forest Project, visit: raincoast.org/gulf-islands