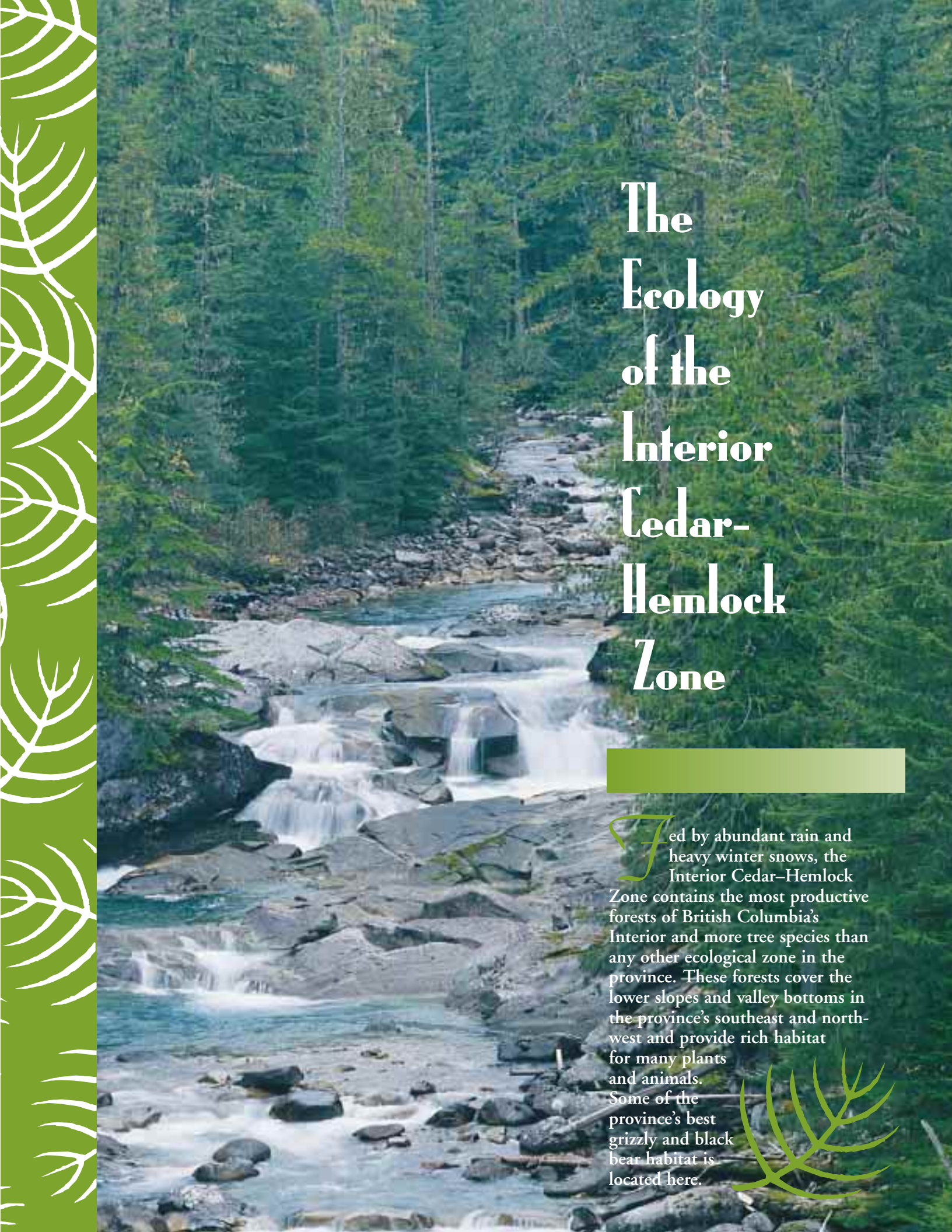


The Ecology of the Interior Cedar–Hemlock Zone

Fed by abundant rain and heavy winter snows, the Interior Cedar–Hemlock Zone contains the most productive forests of British Columbia's Interior and more tree species than any other ecological zone in the province. These forests cover the lower slopes and valley bottoms in the province's southeast and northwest and provide rich habitat for many plants and animals. Some of the province's best grizzly and black bear habitat is located here.

Location

The Interior Cedar–Hemlock Zone occupies two separate parts of British Columbia—the southeast and the northwest. Most of the zone occurs in the southeast quarter of the province, where it takes in the lower slopes of the Columbia and Rocky mountains. In the northwest, the zone occupies most low- to mid-elevations in the Nass River basin, as well as smaller parts of the Skeena, Iskut, and Stikine basins. The lower elevations of Wells Gray Park and the towns of Creston, Nelson, Revelstoke, and Likely all lie within the southern part of the zone. Hazelton is the largest settlement in the northern part.



Climate

The Interior Cedar–Hemlock Zone owes its long, warm summers and cool, wet winters to the predominance of easterly-flowing air masses. Although in most of the zone summers are relatively dry, the slow-melting snowpack helps keep soil moisture levels high during the summer. In general, warm moist conditions prevail in southeast parts of the zone (commonly called the Interior Wet Belt) while the northwest is cooler and wetter.



Bill Sivam

Forests and Other Ecosystems

Productive coniferous forests cover most of the Interior Cedar–Hemlock Zone. Western redcedar or western hemlock characterize these forests, but there are more tree species here than in any other ecological zone in the province. Ponderosa pine, Douglas-fir, western larch, lodgepole pine, and western white pine all grow here. Two deciduous trees—trembling aspen and paper birch—grow in drier parts of the zone, while subalpine fir and spruce thrive in wetter and cooler areas. Western yew grows mostly in southern parts of the zone.



Alex Inselberg

Wetlands make up only a small part of the zone. They are generally confined to valley bottoms, where marshes form along lakes and streams (riparian areas). Widely spaced redcedar, hemlock, spruce, and an understorey of skunk cabbage dominate in small swamps. Devil's club and large ferns grow along stream edges and seepage sites. Small bogs are found in some upland areas. Willows, sedges, and other characteristic wetland plants may dominate in non-forested or sparsely treed ecosystems.

Fire and Succession

In drier parts of the Interior Cedar–Hemlock Zone, wildfire can occur frequently. Because these wildfires burn extensive areas, the natural landscape is often a mosaic of young and old forest patches. New burns are easy to recognize by the bright magenta of fireweed, which is quick to invade. Because fires are less frequent in wetter parts of the zone, these areas are often dominated by large tracts of very old trees. Today, fire suppression efforts make fires less frequent and less extensive.



MOF

Fireweed
Epilobium angustifolium

cover photo: Alex Inselberg

Old Forests

Old forests predominate in wetter parts of the zone, where fires are infrequent. Here, trees grow to great sizes and ages, rivaling the giant trees on the British Columbia coast. Forests in this zone contain many standing dead trees (called snags) and large accumulations of fallen logs and other woody debris. These features of old forests provide valuable habitat for a wide variety of life forms, from seedlings and fungi to birds and bears.



Bristol Foster



Alex Inselberg

Wildlife and Winter

Abundant moisture and a relatively long growing season produce extensive and productive forest lands, and often provide ideal wildlife habitat. On the other hand, the long, cool, and snowy winters present problems for some species. The most successful wildlife species in this zone have adapted to surviving in or avoiding the deep snow.

Some species spend the months from spring to fall in the Interior Cedar–Hemlock Zone but then migrate to warmer zones to avoid the winter. In southern areas mule deer, white-tailed deer, and Rocky Mountain elk spend summers in the zone and winters in the milder and drier Interior Douglas-fir Zone. Moose are most common in northern areas and are able to winter in this zone because their long legs enable them to move through deep snow and to find plenty of forage. Bears bypass winter altogether by finding a cozy spot to hibernate.



MOF

Birds

A wide variety of birds find food and habitat in this zone's productive ecosystems. Many species rely on conifer seeds and bark-inhabiting insects found in the extensive forests that occur here. Some birds, such as the Pileated Woodpecker and several types of owls, do best in mature or old forests. Other species, including the Ruffed Grouse, Golden Eagle, and American Robin, prefer clearcuts, burns, or young regenerating forests.



Mark Nyhof



Mark Nyhof

Resources

Forestry is the primary land use in the Interior Cedar–Hemlock Zone. Because of the favourable climate, forests here are productive, second only to British Columbia's coastal forests. Because of the wet climate and the mountainous terrain, many large dams have been built for hydro-electric power. Agriculture is confined to valley bottoms and riparian areas in southern parts of the zone. Numerous large lake systems occur in the heart of the zone and provide valuable recreational opportunities for boating, swimming, and fishing.



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The Grizzly



McCrory Wildlife Services

The grizzly bear has a reputation as one of the most ferocious and dangerous animals in North America. In reality, grizzlies are shy creatures and, although dangerous if surprised, they usually flee at any sign of humans. In spring they are often found on open, south-facing slopes feeding on fleshy forbs and roots. In summer they may move to areas where berries are plentiful, and in fall they often congregate along salmon streams. With the onset of winter, they make their dens in caves, hollow trees, or under fallen trees, and spend five to seven months in hibernation. Grizzlies once inhabited the whole of western North America from Mexico to the Arctic, and from Manitoba to the Pacific Coast. Today, they are confined to the Rocky Mountain region, the west coast of British Columbia and Alaska, and the far north.



Devil's Club

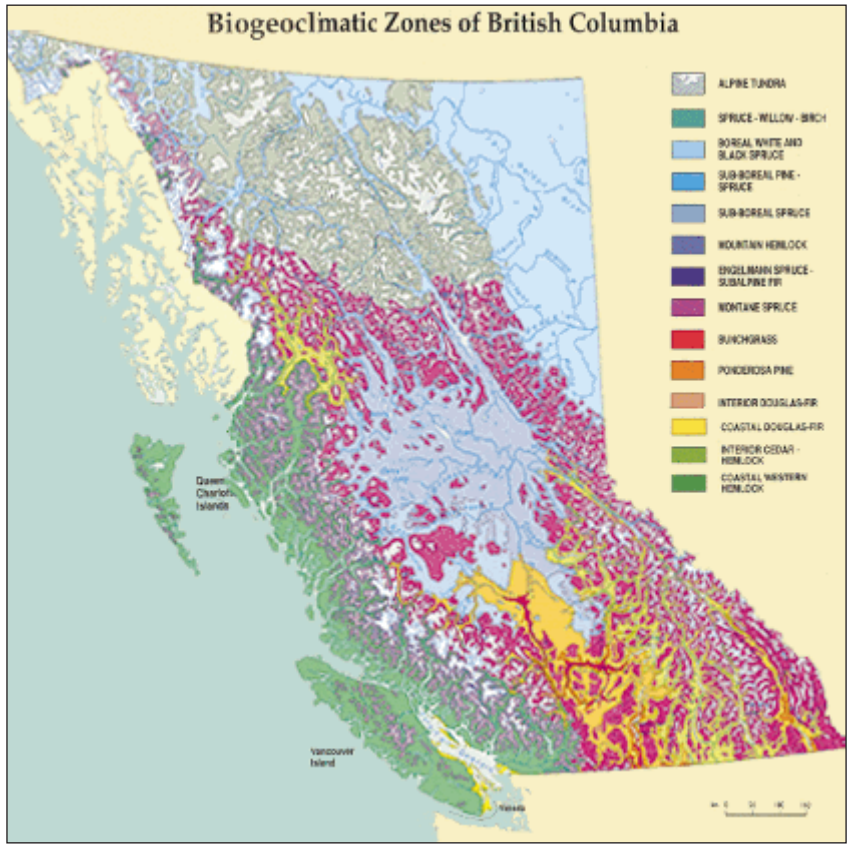


Bill Swan



Bill Swan

Devil's club is a shrub that grows in shady, wet, and nitrogen-rich sites along the coast and in the Interior Wet Belt. It is easy to recognize by the large, flat, maple-like leaves and long curving stems covered with sharp, needle-like spines. This is the plant hikers love to hate, because the spines easily puncture the skin, break off inside, and fester there for weeks on end. Despite (or perhaps because of) its prickly nature, Aboriginal peoples valued devil's club and used it for a variety of medical and cultural purposes, including purification rituals and as a source of good luck.



The Interior Cedar–Hemlock Zone is just one of the fourteen biogeoclimatic or ecological zones within British Columbia. These zones are large geographic areas that share a similar climate within the province. Brochures in this series explore each zone.

BRITISH COLUMBIA

Ministry of Forests

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