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## Canada's Boreal Regions

Canada's boreal landscape is home to billions of migratory birds and some of the world's largest populations of wolves, bear, caribou, and moose. Hundreds of First Nations communities exist in these areas that stretch from Labrador in eastern Canada and move across Quebec, Ontario, Manitoba, Saskatchewan, Alberta, and British Columbia. To the north, the boreal taiga and tundra continue until the high Arctic. These taiga and tundra regions continue into Alaska to the Pacific Ocean.



Forested woodland view along the Beach Trail, Pukaskwa National Park

Here megafauna such as grizzly and polar bears, elk, moose, and woodland caribou live alongside small mammals like beaver, wolverine, otter, and fox. Range areas for boreal taiga caribou herds in the tens of thousands cover millions of acres. Woodland boreal caribou face many risks and are now listed as threatened. Recent efforts to make sure we keep secure migratory bird habitat mean increases in bird-watching, citizen bird counts, and celebration of six billion songbirds that migrate through Canada's boreal forest regions each year.

Some of the largest lakes in the world, and rivers that dominate huge continental watersheds, define the Canadian boreal. Tens of thousands of lakes and hundreds of rivers from these regions supply water to most Canadian communities. There is very little private land in these boreal regions; most boreal lands and waters in Canada are publicly owned lands. Most boreal lands are also historic traditional lands for Canada's Aboriginal Peoples.

The last to 30 years have seen dramatic expansion of forestry operations, mineral exploration and new mines, road building, and protected lands in Canada's boreal regions. New national parks and protected areas established by provincial governments are a response to this expansion of resource extraction. Today we are

much more aware of what Canada's boreal regions mean to us now and into the future. Canadians have also steadily, over the last twenty years, indicated in national polls their concern for the future of our boreal forests—and preference to keep these regions intact, healthy, and protected.

In the recent past, natural resource extraction permits and licences have been issued without regional, lands planning, or remedial plans. In fact, development of the oil sands in Canada's west-central boreal region is expected to affect an estimated 13.8 million ha (34.1 million acres) of boreal forest. Today, in part due to the dramatic growth of the oil sands, Canadians are demanding planning *before* resource extraction. They want to see the establishment of national parks and protected lands. Canadians also know that stewardship of the boreal regions is a moral and international responsibility for today and for future generations.

In the same 30 years Canada's constitution was repatriated and our Charter of Rights guaranteed aboriginal rights. Certain court rulings defining aboriginal rights arise from boreal regions and communities. The consultations and negotiations between governments that result include maintaining the natural world, stewardship of boreal lands and waters, and establishment of newly protected areas. National parks establishment steps now must include any First Nation or aboriginal community that considers itself affected by a new park proposal.

Climate change is causing everything in Canada's boreal regions to move and shift, even the land, and is adversely affecting boreal communities, species, infrastructure, rivers, and forests. More than 1,500 international scientists led by Nobel Prize—winning authors for the United Nations' Intergovernmental Panel on Climate Change have recommended that at least half of Canada's boreal forest be protected from any industrial activities. Yet permafrost, which normally begins to appear well below 60° then gradually expands northward, is now melting. Recent Mackenzie River Valley reports document the drastic results of this melting, and other studies have shown how it will impact northern and arctic communities.

Canada's boreal forests continue to provide services in the face of climate change. They scrub toxins from the water and air, and they help maintain river and lake ecosystems. They also store much of the world's terrestrial carbon, making boreal regions the second lung of the world.

Today Canada's boreal lands are a huge laboratory, where both stewardship and monitoring have become urgent, including to protect communities, species, and the economy of these regions. Scientists and concerned citizens are rushing to keep up with the movement of species, changes in range areas, and identification of species that will tell us the most about taking care of boreal regions in the future. Today woodland caribou are the bellwether for the future of Canada's boreal forests.