

WHY WE MUST PROTECT CANADA'S BOREAL FOREST.

1 IT'S ONE OF THE LAST VAST INTACT FORESTS ON THE PLANET...

- Of the ten largest intact forests landscapes remaining in the world, EIGHT are in Canada's Boreal Forest.¹
- Canada's Boreal Forest houses more than 25 percent of the world's remaining intact forests.²
- The southernmost part of Canada's Boreal Forest has been heavily affected by industrial activity³ less than 15 percent of it remains intact.

2 IT'S OUR SHIELD AGAINST CLIMATE CHANGE

- The world's Boreal is the largest terrestrial carbon storehouse on the planet, containing twice as much carbon per unit area as tropical forests and storing 22 percent of the carbon in the world's terrestrial ecosystems.⁴
- More than 201 billion tonnes of carbon are stored in the trees, soils, water and peat of Canada's Boreal Forest – equivalent to 26-years worth of the worlds emissions from fossil fuel burning.⁵

3 IT'S THE LARGEST FRESHWATER RESERVOIR IN THE WORLD

- The lakes of Canada's Boreal Forest contain 80 percent of the world's unfrozen freshwater.⁶
- 30 percent of Canada's Boreal Forest is covered by wetlands, an estimated 1.5 million lakes and some of the country's largest river systems.⁷

4 IT'S WORTH MORE UNTOUCHED AND ENJOYED

- Canada's Boreal Forest actually saves us money by providing services such as carbon storage and water filtration. The total dollar value of these naturally occurring services is 13.8 times greater than the value of extracted resources such as minerals and timber.⁸
- Recreation-related activities, such as ecotourism, hiking and birding in the Boreal, contribute more than \$4 billion to the economy every year.⁹

5 IT'S HOME TO THOUSANDS OF SPECIES, SOME ENDANGERED

- Woodland Caribou have already been forced from 50 percent of their historic range (territory) within Canada.¹⁰ Highly sensitive to timber harvest activities, woodland caribou have retreated steadily in the face of the northward expansion of forestry in Canada's Boreal Forest.¹¹
- Now more than two thirds of the designated boreal woodland caribou herds in Canada have a 50 percent chance or less of surviving the next 10 years – habitat loss is identified as a key driver.¹²
- More than 30 percent of North America's bird population relies on Canada's Boreal Forest for breeding.¹³

¹ Potapov P., Yaroshenko A., Turubanova S., Dubinin M., Laestadius L., Thies C., Aksenov D., Egorov A., Yesipova Y., Glushkov., Karpachevskiy M., Kostikova A., Manisha A., Tsybikova E., Zhuravleva I. 2008. *Mapping the World's Intact Forest Landscapes by RemoteSensing*. Ecology and Society, 13 (2)
Analysis and interpretation from Global Forest Watch Canada. 2009. Edmonton, Alberta.

² Lee, Peter, Dmitry Aksenov, Lars Laestadius, Ruth Noguerón, Wynet Smith. 2006. *Canada's Large Intact Forest Landscapes*. Global Forest Watch Canada, Edmonton, Alberta. 84 pp.

³ Ibid, Executive Summary

⁴ IPCC (Intergovernmental Panel on Climate Change). 2000. *Land Use, Land-Use Change and Forestry*. R.T. Watson, I.R. Noble, B. Bolin, N.H. Ravindranath, D.J. Verardo, and D.J. Dokken (eds.). Cambridge University Press, Cambridge, U.K (Table 1: *Global carbon stocks in vegetation and soil carbon pools down to a depth of 1 m*).

⁵ Carlson, M., Wells, J., Roberts, D. 2009. *The Carbon the World Forgot: Conserving the Capacity of Canada's Boreal Forest Region to Mitigate and Adapt to Climate Change*. Boreal songbird initiative and Canadian Boreal initiative, seattle, WA, and Ottawa. p. 7. (Note: World's emissions as measured in 2006).

⁶ Schindler, D. W. *Sustaining Aquatic Ecosystems in the Boreal Region*, Conservation Ecology, 1998. Available Online: www.consecol.org/vol2/iss2/art18/

⁷ Schindler, D.W. *A Dim Future for Boreal Waters and Landscapes*. Biosciences vol. 48, 1998, pp. 157-164

⁸ Anielski, M., Wilson, S., 2009. *Counting Canada's Natural Capital*. Pembina Institute and Canadian Boreal Initiative, p. 3.

⁹ Ibid, p. 5.

¹⁰ Schaeffer, J. Long term range recession and the persistence of caribou in the taiga. *Conservation biology*, volume 17, no 5, October 2003.

¹¹ Chubbs, et al, 1993, Responses of woodland caribou to clear cutting in east central Newfoundland. *Can. J. Zoology* 71: 487-493. And Cumming, et al, 1993, Survival of woodland caribou in commercial forests of northern Ontario, *Forestry Chronicle* 69: 579-588.

¹² Environment Canada. 2009. *Scientific Report on the identification of critical habitat of Boreal Woodland caribou populations in Canada*. 80 p. + 192 p. Annex.

¹³ Blancher, P., Wells, J. 2005. *The Boreal Forest Region: North America's Bird Nursery*, Study commissioned by the Boreal Songbird Initiative and Canadian Boreal Initiative, p. 5.