

June 22, 2018

Dear Minister McKenna, Premiers Couillard and Notley, and Premier-Designate Ford:

As members of the U.S. academic community, we aim to develop leaders who have the knowledge and tools to solve the world's most pressing problems. We strive to use our voices in addressing today's needs without compromising the needs of future generations. In this light, we believe in the importance of ecosystem conservation and look to government leaders to address the global threat of climate change.

The Canadian Government has the unique opportunity to be a climate leader by enacting policies that defend the integrity of Canada's boreal forest. This ecosystem is of singular importance for its biodiversity, its cultural value for Indigenous Peoples, its available freshwater, and its role in the fight against climate change. We write to ask the Government of Canada to act swiftly in establishing legally enforceable protections for the Canadian boreal forest in consultation with Canada's Indigenous Peoples, using all available avenues, including boreal caribou habitat recovery plans.

Canada's boreal forest contains a quarter of the world's remaining primary forest.<sup>1</sup> These remaining forests are recognized by the scientific community as important resources in the global effort to reduce human-caused greenhouse gas emissions by capturing and storing atmospheric carbon.<sup>2</sup> In this light, Canada's boreal forest has a large role to play. It has been estimated that 12 percent of the world's terrestrial carbon— or the equivalent of more than 36 years of global carbon dioxide emissions from burning fossil fuels— is stored in Canada's boreal forest soils, wetlands, and peatlands.<sup>3</sup>

However, clearcutting is disturbing the soil and forest floor and speeding decomposition, rapidly increasing the rate at which carbon is released into the atmosphere. Since 1996, more than 28 million acres of Canadian boreal forest— an area nearly the size of Ohio —have been logged.<sup>4</sup> Unsustainable logging is undermining Canada's commitments to reduce national greenhouse gas emissions. Each year, clearcutting across Canada's boreal forest releases more than 26 million metric tons of carbon dioxide into the atmosphere.<sup>5</sup> This quantity equals 12 percent of emissions Canada must cut under its commitment to the Paris Climate Agreement.<sup>6</sup> It is paramount that Canadian governments take stronger political measures to safeguard the boreal forest's carbon storage and mitigate the most drastic effects of climate change.

In addition to the boreal forest's impact on climate change, it provides habitat to many treasured species. It is home to the Canada lynx, grizzly bears, moose, and hundreds of migratory bird species that use the forest as a nursery to hatch their young.<sup>7</sup> The boreal forest is also home to the boreal caribou, an iconic species in Canada central to many Indigenous Peoples' cultures and ways of life.

Boreal caribou are highly sensitive to habitat disturbances and require large swaths of intact forest to survive. Wildlife scientists say that 30% of the country's population could disappear in the next 15 years unless action is

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<sup>1</sup> Boreal Songbird Initiative, "Boreal Forest," [www.borealbirds.org/boreal-forest](http://www.borealbirds.org/boreal-forest) (accessed February 16, 2018)

<sup>2</sup> See UNFCCC, *Paris Agreement*, Article 5 (2015),

[https://unfccc.int/files/essential\\_background/convention/application/pdf/english\\_paris\\_agreement.pdf](https://unfccc.int/files/essential_background/convention/application/pdf/english_paris_agreement.pdf)

<sup>3</sup> The global terrestrial carbon stock is often estimated at 2,500 gigatons. R. Lal, "Soil Carbon Sequestration Impacts on Global Climate Change and Food Security," *Science* 304, no. 1623 (June 2004): p. 1623. Recent studies of the boreal forest carbon stock have found a median value, based on existing research, of 1,095 gigatons. Bradshaw and Warkentin (2015): p. 26. With 28 percent of the boreal located in Canada, we estimate that around 12.3 percent of the global terrestrial sink, or 306.6 gigatons, is located in Canada's boreal forest. Natural Resources Canada, "8 Facts About Canada's Boreal Forest," <http://www.nrcan.gc.ca/forests/boreal/13071> (accessed February 16, 2018). Global greenhouse gas emissions from burning fossil fuels totaled just under 8.4 gigatons in 2007, and we have used this number in our calculations. Mark Z. Jacobson, *Air Pollution and Global Warming: History, Science, and Solutions* (New York, NY: Cambridge University Press, 2012), p. 301.

<sup>4</sup> United States Census Bureau, "State Area Measurements and Internal Point Coordinates," [www.census.gov/geo/reference/state-area.html](http://www.census.gov/geo/reference/state-area.html) (accessed February 16, 2018)

<sup>5</sup> This figure was reached by summing the cumulative impact of 85 years of logging in the Quebec boreal forest based on NRDC's Black spruce model (see: <https://www.nrdc.org/sites/default/files/pandoras-box-clearcutting-boreal-carbon-dioxide-emissions-ip.pdf>) and then extrapolating that number out for the entire boreal forest. This equated to 2.245 billion metric tons of carbon dioxide released over an 85-year period, or 26.4 million metric tons per year. Larson (2017).

<sup>6</sup> UNFCCC, *Canada's 2017 Nationally Determined Contribution Submission to the United Nations Framework Convention on Climate Change*, [www4.unfccc.int/ndcregistry/PublishedDocuments/Canada%20First/Canada%20First%20NDC-Revised%20Submission%202017-05-11.pdf](http://www4.unfccc.int/ndcregistry/PublishedDocuments/Canada%20First/Canada%20First%20NDC-Revised%20Submission%202017-05-11.pdf)

<sup>7</sup> Boreal Songbird Initiative, "Boreal Forest," [www.borealbirds.org/boreal-forest](http://www.borealbirds.org/boreal-forest) (accessed February 16, 2018)

taken.<sup>8</sup> The fate of caribou has far-reaching implications because caribou are considered an “umbrella species,” meaning that protecting their habitat also protects other species and the broader boreal ecosystem. Significant portions of critical caribou habitat also overlay some Indigenous Peoples’ last remaining intact territories as well as areas of extraordinary terrestrial carbon density and carbon sequestration potential. Provincial decisions to expand logging are threatening these critical areas.

In October 2017, Canada’s provinces missed a crucial deadline to establish caribou habitat recovery plans, which are a key component of long-term boreal forest ecosystem health. The science is clear: the time to act is now. We call upon Canada’s provincial governments to submit caribou habitat recovery plans, and for the federal government to establish interim protections until they have done so. We ask that protections to the boreal forest be legally binding, based in science, and drafted with the consultation and consent of the Indigenous Peoples whose traditional territories include boreal caribou habitat.

As members of North America’s academic community, we believe that the boreal forest, with its vast ecological value, needs immediate protection. We hope that Canada will serve as a global example of leadership in the fight to maintain a sustainable and equitable future for communities and species alike.

Sincerely,

Boston University, Students for a Just and Sustainable Future  
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Hamilton College, Student Assembly  
Nadav Konforty – President  
Harvard Extension Student Environmental Club  
Johan Arango – President  
Aaron Gunderson – Vice-President  
Caroline Malcolm Fiore – Director of Internal Affairs  
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Alexander Wilfert – President, 2018-19  
University of Iowa, Environmental Coalition  
Denise Cheeseman – Secretary  
University of Maryland, Student Government Association  
Willem Klajbor – Director of Sustainability

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<sup>8</sup> Committee on the Status of Endangered Wildlife in Canada, “COSEWIC Assessment and Status Report on the Caribou Rangifer Tarandus, Newfoundland Population, Atlantic-Gaspésie Population, Boreal Population in Canada - Species at Risk Public Registry,” 2014, [http://www.registrelep-sararegistry.gc.ca/document/default\\_e.cfm?documentID=2769](http://www.registrelep-sararegistry.gc.ca/document/default_e.cfm?documentID=2769)

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