

Canada's Forest Industry: Setting the Record Straight

The Forest Products Association of Canada (FPAC) has recently made public claims aimed at promoting Canada's forest industry — at home and abroad — as a friend of the environment. Unfortunately, many of these claims are misleading, and in cases verifiably false, about the environmental impacts and practices of the forest industry.

We offer the following referenced analysis to set the record straight.

CLAIM: Canada's deforestation rate is zero⁷.

- **FACT:** The Canadian Forest Service reports the current deforestation rate is approximately 55,000 ha per year.⁸ This does not include losses of forest to logging roads and landings, which may account for up to 7%⁹ of managed forests. Assuming an annual harvest rate of 969,569 ha¹⁰, this means an additional deforestation rate of nearly 68,000 ha per year for a total of over 110,000 ha per year, an area twice the size of Toronto.

CLAIM: Canada still has 91% of its original forest cover¹¹.

- **FACT:** According to the United Nations Food and Agriculture Organization, only 53.3% of Canada's 'primary' forest remains¹²
- **FACT:** A clearcut boreal forest that has been left to regenerate naturally is often composed of different species than those that were present in the pre-harvest tree community. Many formerly pure coniferous stands have been converted to mixed woods or pure hardwoods following clearcut logging.^{13 14 15} Even stands planted with conifers have a tendency to regenerate with greater proportions of hardwood trees.^{16 17}
- **FACT:** The success of regeneration efforts is often not known. For example, the Provincial Auditor of Ontario reported in 2000 that "in 25% of the forest management units audited by registered professional foresters, due to a lack of information, the foresters could not assess the harvest area successfully renewed, which is a key measure of forest sustainability for the Ministry."¹⁸
- **FACT:** Similarly, the independent, government-appointed public commission on forest management in Quebec reported in 2004 that "Following the analysis of timber quantity, quality and accessibility, one of the Commission's conclusions is that, considering all the other pressures exerted on forests, their tim-

ber is overharvested, and this overharvesting is directly associated with the fact that a large part of silvicultural management is inadequate. The commission recommended a 20% reduction in harvest volumes."¹⁹

CLAIM: Canada's forest products industry is a world leader in progressive forestry practices²⁰.

- **FACT:** Clearcutting accounts for 90% of all forest harvest in Canada.²¹
- **FACT:** "Of Canada's 353 species at risk, 85 are forest dependant and include the woodland caribou, wild ginseng, and several reptiles. These observations reflect that species composition of Canada's forests has already been extensively altered by harvesting operations."²²

CLAIM: Canada has more protected forest than any other country²³.

- **FACT:** As of March 1, 2006, the United Nations reports that Canada has less protected forest than any other G8 country (UN data):^{24 25}

◆ Canada	6.84 %
◆ France	11.71 %
◆ Germany	29.95 %
◆ Italy	12.53 %
◆ Russia	8.79 %
◆ UK	12.52 %
◆ USA	23.16 %

CLAIM: Only one half of 1% of Canada's forests is harvested annually²⁶.

- **FACT:** One half of one percent of Canada's entire forest estate translates into one million hectares²⁷. This rate of harvest has already resulted in the loss of roughly half of all of Canada's intact, primary forests. Much of Canada's remaining forest is less productive and will not support the same level of industrial forestry

CLAIM: FPAC members have reduced greenhouse gas emissions by 44% since 1990²⁸.

- **FACT:** These numbers reflect only direct emissions from the forest industry and do not include the greenhouse gas emissions from the generation of electricity also used by the industry. The Canadian Council of Forest Ministers (CCFM) reports that for the forest sector²⁹, "Direct emissions declined by almost 40%

over the study period [1980-2002] mainly because of large reductions in the use of refined petroleum products. At the same time, the sector's indirect emissions from fossil fuel electricity almost doubled mainly because electricity was the fastest growing energy source for the sector."³⁰

- **FACT:** The CCFM continues, "Although there was significant variability over the study period, the forest sector's GHG emissions in 2002 were unchanged from 1980, despite a 23% increase in energy use (Figure 4.1g)."³¹

CLAIM: "The continual improvement of sustainable forest management practices ensures carbon sequestration through reforestation."³²

- **FACT:** Primary, unlogged forests store significantly more carbon than managed forests. For example, managed boreal forest, BC Interior forest and BC coastal forest are estimated to store 12.1%, 25.1% and 50.6% less carbon than primary forests in these regions.³³ Other estimates are in the range of 25-50% increased carbon storage in natural forests.³⁴

CLAIM: "The development of energy-efficient production facilities that run on new, clean and renewable bio-energy are made from wood waste instead of fossil fuels."³⁵

- **FACT:** The forest sector remains the "largest single industrial energy user in Canada and has significant GHG emissions."³⁶ To its credit, the forest sector has increased energy efficiency, slightly reduced its reliance on fossil fuels and substantially increased its use of 'emission-free energy sources'.³⁷

CLAIM: Numbers used by environmental groups related to emissions from logging are misleading. For example, FPAC has said:

- "Environmental campaigners take into account only one part of the whole carbon life cycle; and does not account for sequestration for example through forest regeneration."
- "All harvested forests in Canada are, by law, regenerated."
- "Carbon is also stored in products such as building materials and furniture."
- "Accounting for carbon in forest and forest products is complex and an international process has been under way for some time to determine how current practice might be improved."³⁸
- **FACT:** ForestEthics has publicly communicated that logging in Canada removes approximately 33.42 megatons of forest carbon stores every year,³⁹ more carbon than is emitted annually by all passenger vehicles in the country.⁴⁰ This number corresponds to the amount of carbon actually removed from the forest in the form of trees.
- **FACT:** Additional carbon emissions result from the disturbance of the soil during industrial harvesting activities. Up to eighty percent of forest carbon is stored in the soil.
- **FACT:** Additional significant carbon emissions also result from the burning of fossil fuels used to power the heavy logging equipment and truck transport of logs and chips to mills as well as the mills themselves.

KEY FACTS

- The forest sector remains the largest single industrial energy user in Canada and has significant GHG emissions.
- Between 1980-2002 the forest sector's indirect emissions from fossil fuel electricity (used by mills) almost doubled mainly because electricity was the fastest growing energy source for the sector.¹
- Primary, unlogged forests store significantly more carbon than logged forests. For example, logged boreal forest, BC Interior forest and BC coastal forest are estimated to store 12.1%, 25.1% and 50.6% less carbon than primary forests in these regions.²
- Over 110,000 hectares of forest are deforested in Canada per year.
- According to the United Nations Food and Agriculture Organization, only 53.3% of Canada's 'primary' forest remains.³
- Clearcutting accounts for 90% of all forest harvest in Canada.⁴
- Canada has less protected forest than any other G8 country at 6.84%.
- Only about half of Canada's forests remain intact, or not substantially modified by human activity.⁵ Only 15% of Canada's southern boreal forest remains intact and unaccessed.
- One half of one percent of Canada's forests is logged each year, which translates into one million hectares or 2 hectares every minute⁶.

- **FACT:** While it is true that carbon is stored in forest products like wood and paper, these products have a decay rate that begins as soon as they are harvested. New forest products are being added to the pool of existing forest products all the time. In the absence of reliable models to estimate the balance between new products being created and old ones decaying, the rules of the Kyoto protocol assume that additions of carbon from new forest products merely replace losses from existing forest products that are decomposing (e.g. old fence posts, or last year's newspaper). This is a responsible and reasonable assumption in the absence of sound science to prove otherwise. Furthermore, studies done in both coastal rainforest in BC and Finnish boreal forest show that even when counting carbon stored in forest products, managed forests store significantly less carbon than natural, or unlogged, forests.^{41,42}

CLAIM: Canada has the largest area of 3rd-party independently certified forests in the world (124 million hectares)⁴³

- **FACT:** 16% of all the certified forest in Canada meets the requirements of the Forest Stewardship Council.⁴⁴ The total amount of Canadian forest certified to FSC standards is approximately 21 million hectares.⁴⁵

CLAIM: 70% of Canada's boreal is unaccessed⁴⁶.

- **FACT:** Global Forest Watch Canada reports that only about half of Canada's forests remain intact, showing "no signs of having been substantially modified by human activity or subject to industrial land use for the last six to seven decades."⁴⁷ The southern and most biologically diverse forest regions in Canada have been most affected by human activity. For example, only 15% of Canada's southern boreal forest remains intact and unaccessed.

CLAIM: Canada has world leading forestry practices and regulatory regime – conclusion of an independent third party report conducted by Dr. Benjamin Cashore, Associate Professor of Sustainable Forest Policy, and Chair of the Program on Forest Certification at the Yale School of Forestry and Environmental Studies.⁴⁸

- **FACT:** FPAC misrepresents the findings of Dr. Cashore's report. In a media release responding to Canadian coverage of the report, Dr. Cashore and his co-investigator issued a "strong caution against complacency and misinterpretation of their report":⁴⁹
 - ◆ "[stringency means]...the degree to which the rules include mandatory, standardized requirements for environmental protection...The report takes care to explain that a jurisdiction's stringency ranking does not, by itself, say anything about how sustainable forest policy or forest practices might be. It calls for future research to address these issues."
 - ◆ "Nowhere in the report is it stated that BC or Canada have the 'best' forest practices - indeed the report calls for future research to look at the on-the-ground implementation and environmental impacts of different policy choices that governments have made."

- **FACT:** Studies by expert non-governmental organizations have given Canadian governments poor grades on their protection of environmental and social values. For example, the national average of provincial scores in World Wildlife Fund Canada's Nature Audit was 41%.⁵⁰

CLAIM: "Managed forests support rich, diverse bird communities."⁵¹

- **FACT:** Of the 186 bird species that regularly inhabit Canada's boreal forest, at least 40 species of land birds are experiencing population declines according to long-term trends.⁵²

CLAIM: "FPAC has been actively engaged with the federal government on migratory bird issues since 2000."⁵³

- **FACT:** NAFTA's Commission for Environmental Cooperation released the results of a comprehensive investigation in

February 2007 stating that it could find no evidence that that the Canadian government had enforced the Migratory Birds Act to prevent forest companies from destroying migratory bird nests during the breeding season. The investigation also reported that more than 45,000 nests are probably being destroyed each year in Ontario alone.⁵⁴

CLAIM: "The boreal is relatively young"⁵⁵

- **FACT:** The age of boreal forests is often under-estimated by conventional techniques used by the forest industry. A more accurate study recently carried out in the western boreal forest of Quebec found that 50% of the forest is over 100 years old.⁵⁶

CLAIM: "Fires occur naturally in much of the boreal forest approximately every 100 years"⁵⁷

- **FACT:** Fire is the main natural disturbance in the boreal forest. The length of the fire cycle (i.e. the time between fires) in a given area of forest can range from between 20 to 500 years, resulting in some very old forests.⁵⁸ A well-accepted axiom in boreal forest ecology is that 37% of any given forest will be older than the length of the fire cycle.⁵⁹
- **FACT:** Despite the prevalence of natural fire in the boreal forest, clearcut logging has become the primary forest disturbance in Canadian forests that are allocated for industrial forestry.⁶⁰ For example, between 1951 and 1995 in Ontario, 6.6 million hectares of forest were harvested by clearcutting, versus two million hectares that were burned by wildfire.⁶¹

ENDNOTES

- 1 Canadian Council of Forest Ministers. 2005. Criteria and Indicators of Sustainable Forest Management in Canada. National Status 2005. Indicator 4.1.4 - Forest sector carbon emissions. <http://www.ccfm.org/ci/rprt2005/English/pg79-87_4-1-4.htm>
- 2 Kurz, W.A., S.J. Beukema, M.J. Apps 1998. Carbon Budget Implications of the Transition from Natural to Managed Disturbance Regimes in Forest Landscapes. Mitigation and Adaptation Strategies for Global Change 2, pp. 405-421.
- 3 Food and Agriculture Organization (of the United Nations). 2005. Global Forest Resource Assessment 2005 - Progress toward sustainable forest management. FAO Forestry Paper. Rome, Italy, United Nations, Food and Agriculture Organization: pg 235, annex 3, table 9. <<ftp://ftp.fao.org/docrep/fao/008/A0400E/A0400E14.pdf>> Primary forests are defined as "forests of native species, in which there are no clearly visible indications of human activity and ecological processes are not significantly disturbed." (pg. 40).
- 4 Canadian Forest Service, 2002. Compendium of Canadian Forestry Statistics. <http://nfdp.ccfm.org/compendium/index_e.php>
- 5 Global Forest Watch Canada. 2003. Canada's Large Intact Forest Landscapes. 68pp. <http://www.globalforestwatch.ca/ifl/Can_Lg_Intact_Forest_Landscapes.pdf>
- 6 Forest Products Association of Canada. 2007. Sustainability Report 2007. 24pp. <http://www.fpac.ca/en/who_we_are/pdfs/Publications/FPA-9000_Sustain_E_fnl.pdf>
- 7 Forest Products Association of Canada. The Canadian Forest: 10 Key Facts About Canada's Forests. <http://www.fpac.ca/en/sustainability/forest/tenFacts.php>
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- 25 The Canadian government reports that 9% of Canada is protected, but due to differences in reporting between countries, this number does not allow for an international comparison. <<http://atlas.nrcan.gc.ca/site/english/maps/environment/ecology/protecting/protectedareas/referencesandlinks.html>>
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FOREST ETHICS

Because protecting forests is everyone's business

Founded in 1994, ForestEthics is a nonprofit environmental organization with staff in Canada, the United States and Chile. Our mission is to protect Endangered Forests, and to achieve that goal we've created a revolutionary new approach.

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