



Deforestation in Canada—What are the facts?

The United Nations reported that Canada's rate of deforestation is virtually zero — and it has been virtually zero for more than two decades. Natural Resources Canada's Canadian Forest Service closely monitors forest change and deforestation in Canada using a combination of satellite and aerial images, land-use records, and field inspections.

What Is Deforestation?

Deforestation is the permanent removal of forest cover from an area, and the conversion of this previously forested land to other uses. In Canada, clearcutting or other harvesting practices are used as part of sustainable forest management to provide timber for producing paper or wood products. Natural disturbances such as fire and insects also cause forest cover change. None of these changes are considered deforestation because the area is replanted or regenerates naturally, renewing the forest cover.

Deforestation in Canada—A Snapshot

- Deforestation is not logging—it is the result of clearing trees to allow a change to a non-forest land use, such as agriculture.
- Deforestation affects 0.02% of Canada's forests each year.
- Canada's deforestation rate accounts for only 0.3% of global deforestation.
- Solutions are complex, requiring the involvement of many players. Integrated landscape management and other best practices are part of the answer, as is raising public awareness of the issue.

How Much Deforestation Occurs in Canada?

Canada's 348 million ha of forest lands account for about 9% of the world's forest cover. In 2010, an estimated 45,900 ha were deforested in Canada. Over the past 30 years, except for large hydroelectric projects in the late 1970s and early 1980s, annual deforestation rates have been decreasing. Overall, deforestation affects 0.02% of Canada's forests each year. A portion of this deforestation is offset by increases in forest area due to afforestation (planting of new areas of forest), estimated at 9,400 ha in 2005.



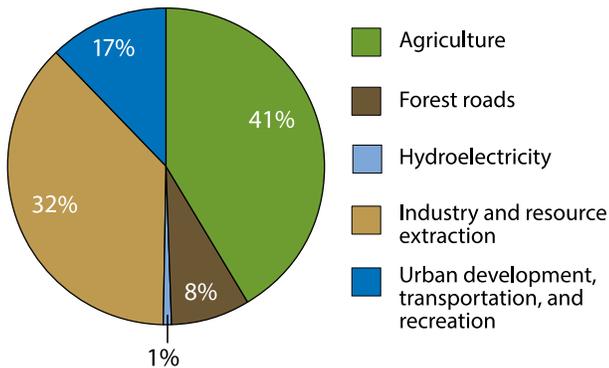
Area deforested for recreational usage (golf course) in Southern Ontario.

Globally, about 13 million ha of forest are deforested each year — the area of Nova Scotia and New Brunswick combined. Therefore deforestation in Canada represents only approximately 0.3% of global deforestation, far less than Canada's 9% share of the world's forests. Worldwide, deforestation is a major issue because it reduces biodiversity, affects water and soil quality, and is an important contributor to climate change. Although the rate of deforestation in Canada is quite low, it still makes sense to try and reduce it where possible.

What Activities Cause Deforestation?

The agriculture sector accounted for 41% of the deforestation in 2010 (see chart), the result of forests having been cleared for pasture or crops. The remainder was caused by urban development, transportation corridors, and recreation (17%); hydroelectric development (1%); the forest sector (8%); and other natural resource extraction industries (32%). About two-thirds of this deforestation occurred in Canada's boreal forest, mainly in areas in Alberta, Saskatchewan, and Manitoba where the forest borders the Prairies.

Causes of deforestation in Canada for 2010.



How Can We Reduce Deforestation in Canada?

Deforestation in Canada is driven by demand for resource development, economic growth, and the need to build infrastructure. Efforts to reduce deforestation must therefore be balanced against other goals, such as expanding the economy, diversifying economic activities, and supporting community employment.

As a result, finding solutions to reduce deforestation is challenging. There is a range of government policies and regulations that affect development, and these vary by sector and jurisdiction. Policies and regulations generally deal with other environmental, safety, or economic issues—not deforestation. A further challenge is the lack of public awareness of deforestation. Governments and the public have only recently begun to focus on this issue.

Because of increasing awareness, governments and industry are trying to better understand and reduce deforestation in Canada. Recognizing that we need a more comprehensive approach, provincial governments are increasingly using innovative practices such as integrated landscape management (ILM). Integrated landscape management means planning land uses over an entire landscape and encouraging different land users to work together. For instance, ILM has been used in Alberta to coordinate forest clearing with oil sands development to ensure forest companies harvest timber from sites to be cleared for oil and gas, and to prevent forest clearing for oil and gas development in newly replanted areas. British Columbia has also used ILM to encourage the various industries operating in forests to share roads rather than each building its own.



Area deforested for agricultural purposes near Quyon, Quebec.

Deforestation and Greenhouse Gas Emissions

The Canadian Forest Service estimates greenhouse gas emissions from deforestation for inclusion in Environment Canada's greenhouse gas *National Inventory Report*. Those estimates show that in 2012 deforestation caused less than 2% of the total greenhouse gas emissions in Canada. In comparison, deforestation worldwide results in up to 20% of global human-caused emissions according to the Intergovernmental Panel on Climate Change — most of this is in developing countries. Since Canada's total greenhouse gas emissions are about 2% of global emissions, deforestation in Canada represents a very small proportion of global greenhouse gas emissions.

Bibliography

- Environment Canada. 2014. *National Inventory Report, 1990–2012. Greenhouse Gas Sources and Sinks in Canada*. http://unfccc.int/national_reports/annex_i_ghg_inventories/national_inventories_submissions/items/8108.php [Accessed March 2015.]
- Global Forest Resources Assessment. 2010. Food and Agriculture Organization of the United Nations. Rome. <http://www.fao.org/forestry/fra/fra2010/en/> [Accessed March 2015.]
- Intergovernmental Panel on Climate Change. 2007. *Climate Change 2007: The Physical Science Basis*. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. S. Solomon, D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor, and H.L. Miller (eds.). Cambridge University Press, Cambridge and New York, NY. 996 p. http://www.ipcc.ch/publications_and_data/publications_ipcc_fourth_assessment_report_wg1_report_the_physical_science_basis.htm [Accessed March 2015.]