



PAPER PRODUCTION AND SUSTAINABLE FORESTRY

In North America, forests are a renewable resource that is continuously replenished using sustainable forest management practices. We grow many more trees than we harvest. While saving trees and protecting forests is a widely shared goal, avoiding the use of wood is not the way to protect forests over the long term. Continued use of paper and other wood products is an important factor in maintaining a forested landscape for future generations.

State of North American Forests

Between 1987 and 2012, forest area expanded in the U.S. from 733 to 766 million acres. Forest area remained stable at 766 million acres between 2012 and 2017.¹

In 2017, there was a total tree volume in the U.S. of 985,238 million cubic feet and an annual growth of 25,000 million cubic feet. Removals of wood volume from timberland, which includes both harvested volume and volume that was “removed” from the timberland base because of reclassification into reserved land or another land use, have declined by 17% from 16,000 million cubic feet since 2006 to 14,000 million cubic feet in 2016.¹

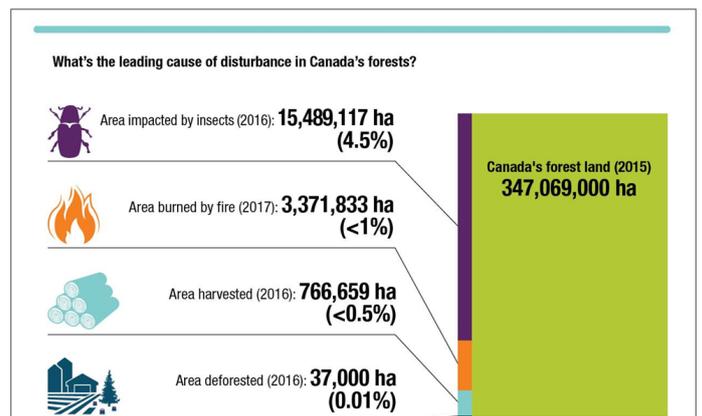
Tree cutting and removal in the U.S. occurs on less than 2% of forest land per year in contrast to the nearly 3% disturbed annually by natural events like insects, disease, and fire.¹

Based on the continuation of historical trends in population growth, economic growth and land use change, the USDA projects that forest land area will continue to grow until it reaches a maximum area in 2030 and will slowly decline through 2060. Specifically, forest area will increase from about 677 million acres in 2015 to 690 million acres in 2030 and decline to 684 million acres in 2050.²

Canada’s total forest area was quite stable between 1990 and 2016. It decreased from 859 to 857 million acres (less than 0.5% of the total forested area).³

In 2016, the total tree volume in Canada was about 1,660 billion ft³. Approximately 5,474 million ft³ or 0.3% of the total volume was harvested, which is well below the estimated sustainable wood supply level of 7,875 million ft³.⁴

Harvesting occurs on less than 0.5% of Canada’s forest lands each year while 4.5% is disturbed by insects and less than 1% by fire.³



Leading causes of disturbance in Canadian forests³

Causes of Deforestation and Forest Fragmentation

Deforestation is defined by the FAO as the “conversion of forest to other land use or the long-term reduction of the tree canopy cover below the minimum 10 percent threshold. The term specifically excludes areas where the trees have been removed as a result of harvesting or logging, and where the forest is expected to regenerate naturally or with the aid of silvicultural measures.”⁵

In North America, sustainable forest practices, forest certification and government regulations require mandatory regeneration so that harvested areas continue to produce forests for the long term.³

Conversion of forests to agricultural land is the major cause of deforestation in Canada, followed by activity in the mining,

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oil and gas sectors as well as hydroelectric development and urban expansion.³ The area deforested in Canada in 2016 was 37,000 ha or 0.01% of Canada’s forest lands and this rate is expected to be stable over the near term.

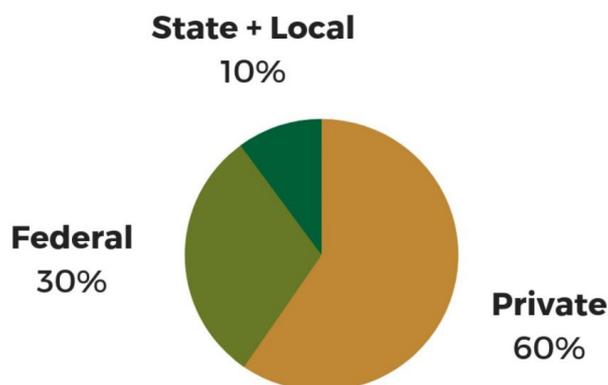
Fragmentation of forest lands (i.e. inclusion of non-forest lands) caused by human activities (urban development, roads, utility corridors, agricultural expansion etc.) and natural events (fire) may lead to the isolation and loss of species and gene pools, degraded habitat quality and a reduction in the forest’s ability to sustain the natural processes that are necessary to ecosystem health. In the U.S., there was a 4.3% increase in forest fragmentation between 2001 and 2006, the latest data available.^{6,7}

Forest Ownership

Of the 455.9 million acres of timberland within a 32-state study area (representing 91.4% of all timberland in the contiguous U.S., 335.5 million acres (74%) are privately-owned.⁸ Of those, 95% are “Family and Individual” ownerships, 4% are “Corporate” ownerships and 1% are “Other Private” ownerships.⁹

About 89% of wood harvested in the U.S. comes from private forests. Forest product markets ensure that landowners have an incentive to keep their land forested and sustainably managed.¹

Wood supplies on family-owned forestland are abundant — these forests currently have more than 358 billion cubic feet of standing wood. Development threatens 132 billion board feet of timber. Parcellation threatens 197 billion board feet of wood.¹⁰



Forestland ownership in the United States¹¹

The majority of Canada’s forest land, about 94%, is publicly owned and managed by provincial, territorial and federal governments. This means that all three jurisdictions together have the ability to create and enforce the laws, regulations and policies required to meet Canada’s commitment to sustainable forest management across the country.

Only 6% of Canada’s forest lands is privately owned and this land generates one-tenth of the timber harvested in Canada.¹²

Forest Certification and Sustainability Initiatives

“Managing forests sustainably means increasing their benefits, including timber and food, to meet society’s needs in a way that conserves and maintains forest ecosystems for the benefit of present and future generations.”

FAO, 2017.¹³

Certification promotes forest management practices that must result in outcomes that are economically viable, ecologically sound and socially just. Roughly half (531 million acres) of the total global area of certified forests is in North America.¹⁴

AF&PA members that own forestland “conform to credible forest management program standards, such as the Sustainable Forestry Initiative® (SFI®), the Forest Stewardship Council (FSC®) program, the American Tree Farm System (ATFS) or the Programme for the Endorsement of Forest Certification (PEFCTM).” “Wood fiber that members sourced from third-party certified forestlands increased from 23 percent in 2005 to 29.1 percent in 2016.”¹⁵ AF&PA member companies make more than 75% of U.S. pulp, paper, paper-based packaging and wood building materials.

Since it emerged in the 1990s, forest certification has been adopted quickly across Canada, and now more than 48% of the country’s forests are certified. At the end of 2017, Canada had over 169 million hectares (419 million acres) of independently certified forest land (to either CSA®, SFI® or FSC®). That represents 37% of all certified forests worldwide, the largest area of third-party certified forests in any country.¹⁶

The Better Practices, Better Planet 2020 sustainability initiative by the AF&PA includes extensive sets of sustainability goals for the U.S. paper and wood products manufacturing industry. The goals “focus on improving energy efficiency, increasing paper recovery for recycling, reducing greenhouse gas emissions, improving worker safety, promoting sustainable forestry and reducing water use.”¹⁷

Economic Contributions of the North American Forest and Paper Industry

The U.S. paper and forest products industry contributed \$89 billion to the total U.S. manufacturing Gross Domestic Product (GDP) in 2016 or approximately 4% of the total U.S. manufacturing GDP. The industry is among the top ten manufacturing sector employers in 45 U.S. states and directly employed 934,000 people in 2017 with an annual payroll of about \$53 billion.¹⁶

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In the U.S., “approximately 935,000 of the 1.09 million direct jobs and \$47.2 of the \$55.4 billion of the direct payroll in forestry-related businesses is attributable to private timberlands in the study area. The total direct, indirect and induced employment effect associated with private timberlands is around 2.5 million jobs and \$109.4 billion in annual payroll.” “Private timberlands contributed approximately \$92.0 billion of the total \$107.5 billion contribution of forestry-related businesses to GDP. On average, private timberlands supported 5.2% of manufacturing GDP and 0.7% of total GDP in the study area.”⁸

Private timberland is responsible for \$8.8 billion or 86.7% of total timber sales in the U.S.⁸

In 2017, production in the Canadian forest sector contributed \$24.6 billion.¹⁸ The industry directly employs about 209,940 people¹⁹ in 600 communities. Half of those depend on forestry for at least 50 per cent of household income, and about 160 of those communities are solely reliant on forestry.²⁰

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