



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

Net forest area in the U.S. has been stable since the early 1900s and increased by about 2% from 752 million to 765 million acres between 2007 and 2017.¹

Canada's total forest area was quite stable between 1990 and 2017. It decreased from 859 million to 857 million acres (less than 0.5% of the total forested area).²

The total live-tree volume on U.S. timberland exceeds 1 trillion cubic feet. That translates to nearly 9 billion stacked cords of wood, or enough wood to fill the Great Pyramid of Giza 12 times. Of live-tree volume in the country, 88 percent is considered growing stock, and live-tree volume is nearly split in half between softwoods and hardwoods.¹

Canada's forests contain about 45 billion cubic meters of wood - enough to build over 1 billion average single-family homes.²

Each year, forests in North America grow significantly more wood than is harvested. In the U.S., the net average annual increase in growing stock on timberland is about 25 billion cubic feet.¹

Only a very small portion of Canada's forests are harvested each year. Of Canada's 45 billion cubic meters of standing wood volume, about 0.3% (155.2 million cubic meters) was harvested in 2017.²

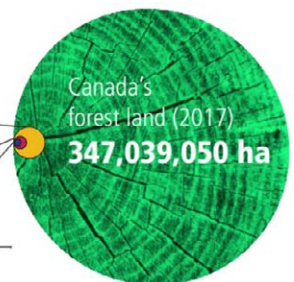
Tree cutting and removal in the U.S. occurs on less than 2% of forestland per year in contrast to the nearly 3% disturbed annually by natural events like insects, disease, and fire.¹

Harvesting occurs on 0.2% of Canada's forestlands, while 4.5% is disturbed by insects and 0.7% is disturbed by fire.²

Forestland is the largest terrestrial carbon sink on earth. The accumulation of carbon in forest ecosystems is driven by tree growth resulting in sequestration of carbon dioxide in live biomass.¹

What's the leading cause of disturbance in Canada's forests?

Disturbance	Area (ha)	Percent of forest area (%)
Area impacted by insects (2017)	15,628,659	4.5%
Area burned (2018)	2,272,274	0.7%
Area harvested (2017)	755,884	0.2%
Area deforested (2017)	35,385	0.01%



Leading causes of disturbance in Canadian forests²

Causes of Deforestation and Forest Fragmentation

Deforestation is defined by the FAO as the conversion of forest to other land use independently, whether human-induced or not, including permanent 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.³

Print and Paper
have a great
environmental
story to tell



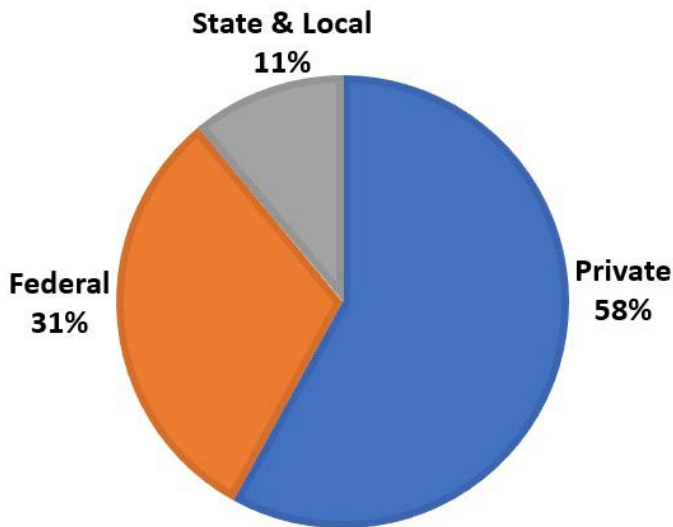
In North America, sustainable forest practices, forest certification and government regulations require mandatory regeneration so that harvested areas continue to produce forests for the long term.²

Forest Ownership

More than half (58%) of the forestland in the U.S. is owned and managed by approximately 11 million private forest owners, collectively referred to as family forest owners. This group controls more forest than any other group.¹

About 89% of wood harvested in the U.S. comes from private forests,¹ which provide most of the wood for domestically produced wood and paper products. Forest products markets ensure that landowners have an incentive to keep their land forested and sustainably managed.

Wood supplies on U.S. 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, and parcellation threatens 197 billion board feet of wood.⁶



Forestland ownership in the United States¹

Over 90% of Canada's forestland 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 forestland is privately owned and this land generates one-tenth of the timber harvested in Canada.⁷

Forest Certification and Sustainability Initiatives

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.⁸

“ Sustainable forest management is a dynamic and evolving concept, which aims to maintain and enhance the economic, social and environmental values of all types of forests, for the benefit of present and future generations. ”

UN Food and Agriculture Organization, 2020

As a condition of membership, the few members of the American Forest and Paper Association (AF&PA) that own forestland conform to credible forest management program standards such as the Sustainable Forestry initiative (SFI), Forest Stewardship Council (FSC), American Tree Farm System (ATFS) and Programme for the Endorsement of Forest Certification.⁹

AF&PA member companies represent 83% of U.S. paper, paper-based packaging and wood products capacity.¹⁰

American Forest and Paper Association (AF&PA) members adhere to sustainable fiber procurement principles, which assure that wood is received from suppliers committed to sustainable management and harvesting practices. In turn, members' adherence to these principles creates incentives and provides resources for forest owners to commit to sustainable forest management.⁹

In 2018, AF&PA members procured 99% of the total wood fiber used for products through a Certified Fiber Sourcing Program. Wood fiber that members sourced from third-party certified forestlands increased from 23% in 2005 to 28.1% in 2018.⁹

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 forestland (to either Canadian Standards Association® (CSA®), SFI® or FSC®). That represents 37% of all certified forests worldwide, the largest area of third-party certified forests in any country.¹¹

Print and Paper
have a great
environmental
story to tell



Economic Contributions of the North American Forest and Paper Industry

The U.S. paper and forest products industry manufactures approximately \$300 billion in products annually, and accounts for around 4% of total U.S. manufacturing Gross Domestic Product (GDP). The industry is among the top 10 manufacturing sector employers in 45 U.S. states and directly employs 950,000 people with an annual payroll of about \$55 billion.¹⁰

In 2018, the Canadian forest products industry contributed \$21.8 billion or 1.3% of the country's Gross Domestic Product (GDP). The industry directly employs about 211,000 people in 600 communities. Half of those depend on forestry for at least 50% of household income, and about 160 of those communities are solely reliant on forestry.¹¹

Sources

1. USDA Forest Service, 2019
2. Natural Resources Canada (NRCAN), The State of Canada's Forests, 2019
3. UN Food and Agriculture Organization (FAO), Global Forest Resources Assessment, Terms and Definitions, 2020
4. USDA Forest Service, U.S. Forest Resource Facts and Historical Trends, 2014
5. Snyder, M. 2014
6. American Forest Foundation, 2018
7. NRCAN, 2019
8. Programme for the Endorsement of Forest Certification (PEFC), Facts and Figures, 2018
9. American Forest and Paper Association (AF&PA), Sustainability Report, 2020
10. AF&PA, Annual Report, 2019
11. Forest Products Association of Canada (FPAC), 2019