

SPLINTER'S TIMBER LOG

- Forests are a major source of wealth for Canadians, providing a wide range of economic, social and environmental benefits.
- The Forest Industry is one of Canada's oldest and most sustainable industries.
- All British Columbians benefit from our forests through recreational activities, employment and the contribution they make to our provincial economy.

The Canadian Forest Products Industry

is the most environmentally friendly resource industry on the planet. Canada has virtually zero deforestation with more original forest than anywhere in the world.

LOGGERS supply the timber used to make the thousands of wood and paper products we use every day.

FOREST PROFESSIONALS AND TECHNICIANS keep our forests healthy and sustainable.

FOREST COMPANIES supply thousands of jobs and help sustain our provincial economy.



Wood & Paper come from a biodegradable, recyclable, renewable resource – trees. Making forest products from sustainably managed forests results in jobs for thousands of people, clean air, clean water, wildlife habitat and carbon storage.

Forestry education is an important part of the forest industry. **Canadian Women In Timber** (CWIT) is a volunteer, non-profit, charitable society dedicated to informing the public about our forests and the forest industry.

CWIT provides forest education programs and materials to schools and the public promoting **Forest Awareness Through Education**. CWIT promotes the shared use of forests and believes that a viable forest industry and healthy forests go hand-in-hand.



ECOSYSTEMS

An **Ecosystem** is a community of plants, animals and smaller organisms that feed, reproduce and interact in the same area or environment. Forests are complex, dynamic ecosystems that support a wide variety of ecological, social, economic, cultural and recreational values.

Benefits provided by forest ecosystems:

Goods—timber, biofuel and extractives and byproducts

Ecological functions—carbon storage, nutrient cycling, water and air purification and maintenance of wildlife habitat

Silviculture—is a branch of forestry dealing with the development and care of forests. It is a science that ensures the long-term continuity of essential ecological functions, and the health and productivity of forested ecosystems.



Trees are the largest plants on earth.

They are complex organisms that harness energy from the sun, and help maintain balanced ecosystems.

Companies that harvest Canada's public forests are responsible for reforestation. They must regenerate them to reflect the original natural diversity. Silvicultural practices must address ecological issues as well as timber production from early planning through harvesting, replanting and tending the new forest.

The **Forest & Range Practices Act** contains special measures to protect biodiversity, wildlife and fish habitat, soils, water and community watersheds.

The **Forest Practices Board** is an independent public watchdog that reports to the public about forest practices in BC. The board conducts audits on the forest practices of government and licence holders on public lands.



ECONOMICS

The Forest Industry is an important employer in many regions of Canada and varies across the country:

- employed about 209,940 people across the country (2017), including an estimated 11,565 Indigenous employees (2016)
- accounted for about 7.2% of Canada's total exports in 2017
- generated more than \$1.4 billion in revenue for provincial and territorial governments in 2016
- contributed roughly \$24.6 billion to Canada's economy in 2017*

The economic wealth of Canada's forests has long been measured in terms of the trees to make conventional forest products, notably softwood lumber, newsprint and wood pulp. Many new and innovative products are being developed and produced, maximizing the value of harvested timber. These products range from value added wood products and new building systems to bioenergy and bioplastics. Numerous forest-derived resources make a significant income contribution to households and communities across Canada.

In 2018, the forest sector was responsible for 32% (\$14.9 billion) of B.C.'s total exports; the sector is the primary employer in many parts of the province. Forestry-related activities directly support over 7,000 businesses and employ more than 50,000 people.**

*Natural Resources Canada
**BC Forestry Innovation Investment



HARVESTING

Forest harvesting refers to the process of cutting trees and delivering them from the forest to sawmills, pulp mills and other wood processing plants. It includes forest engineering, forest-road construction, logging and log transportation. Forest harvesting is planned long before a tree is cut. A harvesting plan and a long-term forest management plan, usually prepared by government and industrial foresters is developed. Fish and wildlife habitat, water and soil quality and recreation are all considered. The plan shows the area to be cut, the proposed rate of cutting and the special requirements of other forest users. It also includes the logging system and the machines that best meet environmental and financial objectives.

Stumpage is the fee that individuals and firms are required to pay the government when they harvest Crown timber in British Columbia. Stumpage is not a tax on logging; it is a payment for utilization of a public resource. Generally stumpage rates are determined through a complex appraisal of each stand or area of trees that is planned to be harvested. This stumpage rate is then applied to the volume (cubic meters) either from a cruise of the timber before it is cut (cruise based) or once harvested (scale based) to determine the rate dollar amount.

The Annual Allowable Cut (AAC) is the amount of wood permitted to be harvested in the Province within a one year period to ensure the sustainability and productivity of our forests. By law, the AAC must be set for major management areas of public forests and requires that AAC's be determined every five years, unless information indicates that no changes to harvest levels would be needed. AAC's are determined for each Forest Management District in the Province. Information is collected and prepared through the Timber Supply Review process and BC's Chief Forester uses this information and professional judgment to decide the AAC.

By law, all harvested areas are to be reforested. This means trees are replaced and the forest restored. This is done by planting seedlings or in some areas by natural regeneration.



A growing tree removes more carbon from the atmosphere than a mature tree. As a result, wood products are not just carbon neutral, they are carbon negative.

The process for reviewing a Timber supply Area (TSA) takes about 20 months and includes the following four steps:

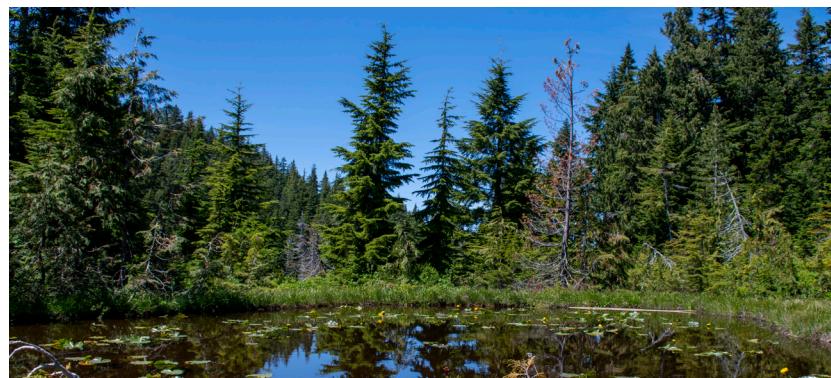
Data package: assembles the best available information on the current forest resources inventory and management practices in a given unit.

Analysis report and public discussion paper: The report reviews environmental factors, and considers socio-economic impacts of changes to the AAC. The analysis report is summarized in a public discussion paper. Both the analysis report and public discussion paper are available to the public.

60-day public review and comment period.

AAC determination: release of the chief forester's rationale statement and the summary of public input.

BC is home to 14.1 million hectares of parks and protected areas or 14.8% of the province and has 600 ecosystems with 40 different species of trees.



The Forest and Range Practices Act (FRPA) and its regulations govern the activities of forest and range licensees in B.C. The statute sets the requirements for planning, road building, logging, reforestation, and grazing. The FRPA maintains high levels of protection for forest values including watersheds and wildlife habitat.

Safety in the workplace is very important to the forest industry. Industry follows best practices to integrate safety into all operations to ensure the safety and well-being of workers. Safety is not only the right thing to do, it's good business.

EDUCATION & CAREERS

Careers in forestry and logging operations offer exciting opportunities to learn and apply a wide range of skills in a variety of jobs. These rewarding careers deliver valuable wood products to the market and ensure the health sustainability of our forests.

Loggers are an important part of the forest industry . They are the workers who perform the initial harvesting and transport of trees for ultimate processing into forest products. Jobs include manual labour, operating heavy equipment and transporting timber and machinery from the forest to the mills. In the past, many loggers received training on the job but now there are a number of post-secondary education programs that provide comprehensive skills training in logging operations, hand falling and heavy equipment operation.

Forest professionals work in a variety of disciplines to manage, harvest, develop and protect Canada's forest resources. They are trained to balance economic issues with social and environmental concerns towards long-term sustainability.

The Canadian Forest Industry builds approximately 15,000 km of logging roads each year. Some of these roads are temporary and some are permanent. All of these roads require planning and surveying. They must be constructed to minimize erosion, protect water quality and cause the least impact on the forest. BC has over 55,000 km of Forest Service Roads that provide access to BC's back country.

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Registered Forest Professionals (RFPs) have a four-year university science degree in Forestry or Natural Resources. They make decisions such as when, where and how to harvest and reforest areas. They also ensure the protection of forest values and are experts in areas like entomology, hydrology, silviculture, road planning and numerous other fields.

Registered Forest Technologists (RFTs) have a two-year forest technology diploma from an accredited program and are an important part of the forestry team that look after our forests.

Forestry Degrees, Technology Programs and Trades

Training are offered in universities, colleges and trade schools throughout BC, Alberta and the rest of Canada. This education includes Foresters, Technicians, Geologists, Technologists, Engineers, Agrologists, Biologists, Planners, Scientists, Researchers, Loggers, Equipment Operators, Mechanics, and Mill Workers.

