

Logging has transformed the forest lands of BC. BC is relatively unique in that the vast majority of logging occurs on unreserved public land (aka “Crown land”). 95% of forest are publicly owned and managed by government. This represents ~2/3 of the province. The logging industry in BC has developed through time and space in response to:

- different markets (from ship masts to paper products)
- technologies
- transportation

### A (BRIEF) HISTORY OF LOGGING IN BC

- **First Nations use**
  - Forests and trees a part of clothing, housing, fuel, art, warfare,
  - Western Red Cedar an especially important species
    - Bark for rope, clothing, roofing, and baskets
    - Roots for cordage
    - Logs for long houses, totem poles, canoes
    - “Tree of Life”; “cornerstone of Northwest Coast culture”
    - Culturally modified trees (CMT) are now somewhat protected under the *Heritage Conservation Act*.
- **Early maritime (1778-1880s)**
  - 1778—Captain James Cook repaired ships at Nootka sound.
  - 1788. Captain John Meares took spars to China—first export of BC tree.
  - 1860s—First small pulp mill built.
  - **Location:** coastal areas
  - **Type of logging:** Large (old-growth) trees. For example, Sitka spruce was highly desirable for ship masts.
  - **How:** Trees cut down by saw and axe and dragged from forest to ocean/river by horses or oxen. Later, “steam donkeys” were used to haul logs. Once in ocean, logs were bound together in booms and towed to waterfront sawmills. Float camps were used to house loggers.
  - Most of the lumber used locally
- **Railroads (1880s-1930s)**
  - 1880—building of Canadian Pacific Railway.
  - 1890s-1914. New export market for timber to interior prairies.

- 1910—Sitka spruce discovered as a good material for airplanes. A spruce tree is only “aircraft” grade once it at least 5ft diameter. Most of the large sitka spruce were harvested as plane markets during WWI and WWII developed.
- No replanting after harvest.
- **Type of logging:** Increased clear-cutting. Still primary product is lumber.
- **Locations:** SW mainland, S. Vancouver Island, and areas close to railroads in S. interior.
- **Roads (1920s-present)**
  - 1920s. Logging trucks introduced. Roads followed.
  - 1929. First gas-powered chain saw
  - Shifting of industry to include the interior
- **1960s-1980s. “Golden years” (for forestry).**
  - Forestry expanded to all parts of BC, especially the interior.
  - Growing market for pulp and paper products, allowing for development of harvest of smaller trees.
- **1978. Forest act.**
  - First land use and environmental battles.
  - Set harvest at  $<\sim 80$ million m<sup>3</sup>.
  - Reforestation the responsibility of tenure holder.
- **1980s-present. Industry challenges.**
  - Costs increasing
    - Reforestation is responsibility of tenure holder
    - Stumpage fees
  - More land protected (13% of BC in parks by 2000)
  - More pressure from ENGOs (e.g., Greenpeace)
    - “All primary industries together (eg., mining, forestry) contribute only 4.7% to provincial employment, the lowest percentage among . . . employment sectors”
    - “Direct subsidies to BC timber industry amount to \$2.5 billion per year.”
  - First Nations forestry tenures
  - US economy down
  - China economy up
  - Climate change and pine beetles

## SHIFTING SOLUTIONS TO THE CHALLENGES OF LOGGING

### How cut down a tree?

- Axe and cross-cut saw
- Chainsaw (1929)
- More mechanized saws

### How get the cut log to the place to process it?

- **Get it to water**
  - Splash dams
- **Get it to rail or road**
  - Ground-skidding
    - Oxen/horses
    - Steam donkeys
  - Aerial cables
    - Cables and spar trees with steam donkeys
  - Loaders
  - Helicopters

### Current status of logging in BC

- **BC Forest and Range Practices Act.** Applies to any forest activity on public land. Forest companies must develop forest stewardship plans that describe how the company will meet objectives.
  - Mandates:
    - Conserve soil
    - Reforest logged areas
    - Protect riparian areas, fish and fish habitat, watersheds, biodiversity and wildlife
- **Interior vs. Coastal logging.** Forestry is dramatically different in interior and coastal forests. Interior logging is for lower “quality” lumber in areas with less valuable trees (smaller and less valuable species) and lower productivity.

Tree species	Price (\$/m3)	
	Coastal	Interior
Alder	60.14	32.9
Cedar	258.5	78.7
Fir	308.3	44.8
Hemlock	136.4	46
Spruce	351.6	

\*data from “[www.for.gov.bc.ca/hva/logreports.htm](http://www.for.gov.bc.ca/hva/logreports.htm)”

Coastal

Interior

Proportion of market	1/3	2/3
Target species	25% cedar/60% hemlock	Pine/fir/spruce
Tree size	Big (although decreasing)	Small
Challenges	Biodiversity	Fire/Beetles
Operating costs	Higher	Lower

### Current logging patterns

#### Timber Scaled by Species - 2009 (million cubic meters)

Species	Volume%
Lodgepole pine	24.8
Spruce	6.8
Hemlock	4.3
Douglas Fir	5.4
Balsam	3.0
Cedar	2.7
Other species	1.8

Product (2009 data)	Amount
Lumber (million cubic metres)	2.8
Pulp (million tonnes)	4.0
Newsprint, paper and paperboard (million tonnes)	2.5

\*Source: Canada Pulp & Paper Assoc. and Statistics Canada