



# BC Forest Facts

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## »»» HARVESTING METHODS IN BRITISH COLUMBIA

Harvest activities on British Columbia's public lands must conserve all forest values, which means forest specialists need to apply the silvicultural system that best meets the unique needs of each site.

A silvicultural system covers all activities related to a specific area of forest, from early planning through harvesting, replanting and tending the new trees. While it is important to achieve the highest commercial value whenever trees are logged, it is more important to conserve all forest values.



THE AVERAGE SIZE OF CLEARCUTS IN B.C. HAS DROPPED TO 23 HECTARES (57 ACRES) IN 2002 FROM 43 HECTARES (106 ACRES) IN 1988.

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### MAKING THE RIGHT DECISIONS

Long before harvesting begins on a site, B.C.'s law requires that forest companies invite public comments through forest stewardship plans, which describe intended activities and expected results. Pre-harvest planning based on an approved forest stewardship plan must ensure the stated results are achieved. This means examining everything from logging techniques to reforesting the site after it has been harvested.

In other words, long before a tree can be cut, resource professionals must know how their work will affect the forest immediately and decades into the future. They must know that the reserves they select will remain safe from wind damage and that harvesting activities will protect scenic vistas and keep silt out of nearby waterways. They must plan the best time of year for logging to avoid soil damage or wildfire risks. They must plan regeneration and order seedling stock best suited to the specific site well in advance so seedlings are ready to be planted once the logging is completed.

### HARVESTING METHODS USED IN B.C.

- » A **clearcut system** removes most of the trees from an area, leaving patches of trees and buffers to protect other forest values.
- » A **patch cut system** uses small cuts of less than one hectare.
- » A **shelterwood system** harvests trees in stages over a short period of time so the new forest grows under the shelter of the existing trees.
- » A **retention system** leaves up to 80 per cent of the trees, individually or in groups. Once the area that was harvested has been replanted and the trees are large enough to harvest, the trees that were originally left behind can be cut.
- » A **selection cutting system** removes timber as single trees or in small groups at relatively short intervals, repeated indefinitely. This must be done carefully to protect the quality and value of the forest area.



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## »»» CHOOSING THE RIGHT METHOD



A RETENTION SYSTEM LEAVES UP TO 80 PER CENT OF THE TREES, INDIVIDUALLY OR IN GROUPS.

Resource professionals in B.C. usually choose clearcutting because it is effective and best suited to the ecology of most forest sites, particularly those with species such as lodgepole pine and coastal Douglas-fir that thrive in full sunlight.

When used appropriately, clearcutting is less disruptive because once the site is regenerated, it is left to grow freely until the new growth is ready to harvest again in 60 to 80 years. Debris such as stumps, branches and fallen trees are left on the forest floor after harvesting to maintain biodiversity and to provide habitat for plants, animal and insects and nutrients for soil development. Clearcutting is safer for forest workers and can be the best way to deal with pests or disease.

Clearcutting leads to stands that are the same age and cover different sized areas, not unlike the result of natural disturbances such as wildfire or windstorms. Other harvesting techniques are used in specific situations such as protecting scenic vistas along popular routes or in interior Douglas-fir and ponderosa pine forests where soils are dry and selection harvesting maintains shade to avoid losing moisture. Clearcutting is not used if terrain is unstable or it will affect wildlife habitat or old-growth management.

While the average size of clearcuts in B.C. has dropped to 23 hectares (57 acres) in 2002 from 43 hectares (106 acres) in 1988, concerns remain about visual appearance. B.C.'s scenery is critical to tourism and to our way of life and, as a result, forest specialists take great care to ensure harvesting does not compromise visual values. Today, logging activities are often not apparent from roads or waterways.



PRE-HARVEST PLANNING EXAMINES EVERYTHING FROM HARVESTING TECHNIQUES TO REFORESTING THE SITE.

B.C. has some of the most stringent riparian management requirements in the world. Where logging is allowed near streams, it is heavily constrained to protect water quality, stabilize stream banks and fisheries habitat.

Forest companies remain responsible for a harvested area until the new growth reaches what is called a free-growing state, which means there is assurance the young trees will grow into a new, healthy forest. This usually takes 6 to 12 years. The independent Forest Practices Board has found that B.C. is doing an excellent job of regenerating its forests.

### For more information:

The BC Market Outreach Network delivers facts about B.C.'s sustainable forest management on behalf of B.C.'s government, industry and communities. Visit our website at [www.bcforestinformation.com](http://www.bcforestinformation.com) to learn more about B.C. forests and how the province has become a world leader in forest management.

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