

17 TRUTHS ABOUT OLD-GROWTH FORESTS

1 | **What makes a tree or forest old growth?**

Old growth is a tree or forest that has attained a certain age without significant disturbance, whether that be wildfire, wind-throw or harvesting.

2 | **At what age is a forest considered old growth?**

Most of BC's coastal forests are considered old growth if they contain trees that are more than 250 years old. Some types of interior forests are considered old growth if they contain trees that are more than 140 years old.

3 | **How much old growth currently exists in British Columbia?**

BC has far more old growth than most people realize. A report¹ by Forsite forest management specialists suggests there are 11.4 million hectares of old-growth trees in British Columbia.

4 | **Where is old growth located in British Columbia?**

Old growth is located throughout BC including on the Coast and Vancouver Island, and in northern and southern Interior, but it can look very different depending on species, location, climate, and natural disturbance patterns that are typical in an ecosystem.

5 | **How much old growth is protected in British Columbia?**

Of the 11.4 million hectares of old growth in BC, approximately 8.5 million hectares are protected in parks and other forms such as old-growth reserves, areas for other resource values such as wildlife, birds, cultural values, and hydrological considerations, or areas not within the timber harvesting land base.¹

6 | **How much old growth is protected by region?**

A report¹ by Forsite forest management specialists suggests: (based on an examination of old growth on provincial and federal lands and excluding private lands) 3 million hectares or 88% of old growth are protected in the non-timber harvesting landbase (THLB) on the Coast region; 618 thousand hectares or 80% of old growth is protected in the non-THLB on Vancouver Island; 1.65 million hectares or 76% of the non-THLB is protected in the Interior region, and 3.8 million hectares or 66% of the non-THLB are protected in the Northern Interior region.

7 | **How much old growth is left in British Columbia and on Vancouver Island?**

Of the 1.99 million hectares of total forested area on Vancouver Island, 770,000 hectares or about 39% is old forest, and of that amount, the area of old growth that is protected in non-THLB totals 618,000 hectares or about 80%.¹

8 | **Are there examples of where large areas of old growth are protected in British Columbia?**

The Great Bear Rainforest is a global treasure that covers 6.4 million hectares on British Columbia's north and central coast, equivalent in size to Ireland. All British Columbians have a stake in protecting it. The agreement features a land use order and act to conserve 85% of the forest and 70% of old-growth trees.²

9 | **Is all old growth the same?**

Not all old forest is the same and old does not necessarily mean big trees. As much as 80% of the area of old forests in some areas and ecosystems of BC consists of relatively small trees growing on lower productivity sites, such as black spruce bogs in the north, high elevation sub-alpine forests, or cedar-hemlock forests on the outer coast. Ecologically, they are important, but not all are the big trees that many people typically envision as old growth.³

10| Why are old-growth forests important?

Old-growth forests are important because of their social and cultural significance, and they contribute to the climate change solution. From an economic perspective, they are often desired for high-end and specialty products such as fine furniture, musical instruments, and specialty finishing products because of their quality and value, which in turn supports BC's value-added sector.

11| Why does old-growth harvesting occur?

Old-growth trees are harvested because they are critical to supporting the value-added industry given their higher quality strength and durability. Wood from old-growth trees is often desired for high-end and specialty products such as fine furniture, musical instruments, windows, doors, and other specialty finishing products.

12| Are old-growth forests carbon sinks?

Old-growth forests become a consistent carbon sink over time and remove carbon dioxide from the atmosphere at rates that vary with climate and nitrogen deposition. However, sustainably harvesting these trees before they turn into carbon emitters allows us to lock carbon into wood products and plant young seedlings to restart the carbon absorption process.

13| Why is it important to save old growth?

Old-growth forests vary widely in their composition and values. In some areas, it is critical habitat for other species, at times it has significant cultural and heritage values, and at times it contributes to biodiversity. For those areas, critical, at-risk old growth should be protected, and the majority is protected in the forest management planning processes based on detailed field reviews by specialists. Additionally, the province's special tree regulation ensures large, old-growth trees on their own can be protected and have buffers around them, so they are not disturbed by harvesting activity.

14| Can old-growth forests survive?

For protected areas, old-growth stands reach an equilibrium over time unless naturally disturbed by wind-throw, disease, or wildfire. A report¹ by Forsite forest management specialists suggests there are 11.4 million hectares of old-growth trees in British Columbia, of which 8.5 million hectares are protected from harvesting because they lie outside of the timber supply area or are protected in parks. In other words, we will never run out of old growth.

15| What is second growth?

Second-growth forests replace old-growth forests after natural disturbances, such as wildfire, wind-throw, or after harvesting. Their size and height vary according to their age and the quality of the site where they grow.

16| How do you identify old-growth lumber?

Growth rings, or annual rings, occur after each year of growth. Since trees from older stands grow so slowly, there is less space between each annual ring. While the appearance of older-growth lumber varies by species, it is commonly characterized by a high proportion of clear lumber with limited knots and tight rings, making it desirable for appearance in higher quality value-added products.

17| Is old-growth wood stronger?

The actual strength of old-growth lumber will vary significantly depending on the extent of knots and other defects present. As an oversimplification, clear lumber produced from the outer rings of a tree will typically be stronger and perform better when exposed to moisture and insect damage. In relation to second growth, again as an oversimplification, a clear and tight ring piece of old-growth lumber compared to a similar second-growth piece will be stronger.

1 Source: https://www.cofi.org/wp-content/uploads/BC_OldGrowth_2021Status-Report_Oct21-2021.pdf

2 Source: <https://www2.gov.bc.ca/gov/content/environment/natural-resource-stewardship/great-bear-rainforest>

3 Source: <https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/forestry/stewardship/old-growth-for-ests/strategic-review-20200430.pdf>