

## **97 percent gone in just 200 years**

Imagine hiking in a valley in British Columbia between rocky cliffs within a beautiful old-growth forest made up of hemlock, cedars and Douglas Fir as your breathing in crisp air. You hike a bit further and in front of you a clearing opens. The crisp air turns to the smell of saw dust, you try to get a closer look as the sun glares into your eyes. You realize what you see is a flat wasteland of massive stumps. You hear the loud roaring of chainsaws cutting into the thick trunk of a giant cedar, shortly after, the buzzing noise ends, and the tree slowly tilts to the side, splitting into several slabs of wood as it crashes to the ground.

In this essay I will explain why I believe the old-growth forests left on the pacific coast should be protected. Then I will explain the history of the logging that is threatening it. Lastly, I will explain solutions to these problems like protecting old-growth in national parks as well as switching to a second growth logging economy.

Scenes like the one you just read are a reality in the old-growth forests in British Columbia. 97 percent of productive old-growth forest has been chopped down. The government In British Columbia has yet to put restrictive measures on the logging of the remaining 3% of British Columbia's old-growth forest.

If you don't know, an old-growth forest is defined as having trees that are 140 to 240 years old. This also depends on the conditions of the forest. Old-growth forests have complex stand structures, with multiple levels of forest, including snags and woody debris.

We need to protect old-growth forests for the critical role they play in a healthy world for humans and other creatures. First, old-growth trees are essential to preventing climate change. In fact, old-growth temperate rainforests sequester more carbon per hectare than the tropics. Second, old-growth forests also provide habitat for an abundance of species of mammals, birds, amphibians and reptiles. Lastly, the roots of old-growth trees hold hillsides together preventing erosion and landslides from destroying more forest and human infrastructure.

Logging can be devastating to old-growth forests considering many animals require these trees to survive. An example of one of these animals is the northern spotted owl which was on the brink of extinction in the late 1900s due to the vast extent of old-growth logging in the Pacific Northwest

The northern spotted owl depends on old-growth ecosystems to survive. Northern spotted owls mainly live in the hollow interior and spiky crowns of snags (dead standing trees). However, for a very long-time loggers considered snags a waste of space and chopped them down because they were dead and had no visible life, but the reality is that many birds and other animals required snags to nest as they provided safety from storms and predators. Chopping down snags doesn't result in any profit because much of the time snags are entirely rotting wood or hollow on the inside resulting in little or no wood being gained from felling them.

In fact, Jeff Peterson, a forester at Oregon State University, estimated that leaving dead trees standing would increase bird numbers by 30 percent! Another part of his research concluded that 70 percent of amphibians and 85 percent of reptiles in the pacific northwest required downed logs to survive. And on top of this downed logs can serve as fertilizer for new trees and plants to

grow. This study is evidence that snags, and downed logs are not wastes of space and should not be cut down.

Recently much of the wood taken from old-growth has started shifting from building materials to a different use. This item could be detrimental to the earth's climate and make the effects of climate change even worse. The item I'm talking about is wood pellets. Wood pellets are burned for power and much of it is used to power the E.U. and the U.K.

The scary part about this new power source is that it is even worse than burning coal. In fact, burning these trees releases 30 percent more carbon than when coal is burned. Many wood pellet companies state that old-growth wood pellets are renewable, however this is far from the truth. Old-growth takes thousands of years to regenerate, especially after intense clearcutting and the thickets of young trees that make it near impossible for sunlight to reach the forest floor.

Second growth trees grow or are planted where old-growth once was. Causes of old-growth forest loss can include windstorms, lightning, fires, or logging.

For solutions I would travel to British Columbia, because that is the area where old-growth logging is damaging the most. What I would do to protect old-growth forests is to create protected areas where logging, mining, and urban expansion is prohibited.

First, I would lobby for the logging industry to switch from an unstable old-growth logging economy to a sustainable second growth economy as much of the landscape of British Columbia is made up of second growth. Second, I would install a new way of planting trees where they are spread out, letting them grow bigger and taller. Lastly, I would install a more sustainable ecotourism economy where people would visit from all around the world to visit old-growth forests to hike and camp in them.

Now think of the scene from the beginning but instead of a wasteland of stumps, think of a forest now protected inside of a national park where salmon can swim healthily, where trees can stand safely, and where chainsaws can no longer be heard. That is why I believe old-growth forests should be protected. If you want to help support protection of old-growth, I would recommend donating to a non-profit organization like ancient forest alliance to help protect the remaining 3 percent of old-growth forest left in British Columbia.

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