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Comments: I recently read The Hidden Life of Trees by the German forest manager and author Peter Wohlleben. In the book Wohlleben discusses many aspects of the health of trees as individuals, as well as that of communities of trees and the many species that depend upon them,and their larger role in the health of the planet. He also explains the impacts of various forest management practices on tree and forest health and on the ability of forests to effectively play their role in keeping things in balance.

In the sixteenth chapter, entitled Carbon Dioxide Vacuums, Wholleben writes about forests' role as carbon sinks. In one passage that I thought was particularly noteworthy, he writes:

"When I was a student of forestry, I learned that young trees are more vigorous and grow more quickly than old ones. The doctrine holds to this day, with the result that forests are constantly being rejuvenated. Rejuvenated? That simply means that all the old trees are felled and replaced with newly planted little trees. Only then, according to the current pronouncements of associations of forest owners and representatives of commercial forestry, are forests stable enough to produce adequate amounts of timber to capture carbon dioxide out of the atmosphere and store it. Depending on what tree you are talking about, energy for growth begins to wane from 60 to 120 years of age, and that means it is time to roll out the harvesting machines. Has the ideal of eternal youth, which leads to heated discussions in human society, simply been transferred to the forest? It certainly looks that way, for at 120 years of age, a tree, considered from a human perspective, has barely outgrown its school days.

In fact, past scientific assumptions in this area appear to have gotten ahold of the completely wrong end of the stick, as suggested by a study undertaken by an international team of scientists. The researchers looked at about 700,000 trees on every continent around the world. The surprising result: the older the tree, the more quickly it grows. Trees with trunks 3 feet in diameter generated three times as much biomass as trees that were only half as wide. So, in the case of trees being old doesn't mean being weak, bowed, and fragile. Quite the opposite, it means being full of energy and highly productive. This means elders are markedly more productive than young whippersnappers, and when it comes to climate change, they are important allies for human beings. Since the publication of this study, the exhortation to rejuvenate forests to revitalize them should at the very least be flagged as misleading. The most that can be said is that as far as marketable lumber is concerned, trees become less valuable after a certain age. In older trees fungi can lead to rot inside the trunk, but this doesn't slow future growth one little bit. If we want to use forests as a weapon in the fight against climate change, then we must allow them to grow old, which is exactly what large conservation groups are asking us to do."

The study puplished in Nature in 2014 can be found here: https://www.nature.com/articles/nature12914