



31 January 2020

Re: Old Growth Strategic Review

Dear Gary Merkel and Al Gorley:

I write in strong support of additional conservation of intact old growth forests in BC as a Professor in the Department of Forest and Conservation Sciences at UBC, and in my capacity as the UBC host of the BC Big Tree Registry. My comments here are my own, and specifically address the need to distinguish the protection of the largest trees in the province, meeting the criteria for protection under the BC Big Tree Policy announced in 2019, from the protection of relatively intact, exceptional old growth forest ecosystems.

The exceptionally large individuals of all tree species in BC, and the stands they are in, deserve protection. This is what the Big Tree Policy of 2019 addresses, at least in part. However, a big tree alone does not make an old growth forest, with all the structural features and diversity that characterize old growth and create habitat. We should protect additional intact old growth forests across scales much larger than the one hectare the Big Tree Policy protects around some (but not all) exceptionally large trees.

Foresters have long thought that given enough time, younger stands could be managed to grow “new” old growth forests in the future. Here, the BC Big Tree Registry database provides some sobering facts. Of the 343 trees in the Registry as of 2019, fully 38 had died since they were nominated, an unsustainable mortality rate of over 10%! Of course, all trees die eventually so some mortality is expected, but 10% in a few decades is staggering for centuries-old trees. This high mortality rate also fits with studies from permanent sample plots across western North America showing mortality rates of mature trees have increased with climate change, and raises a question of whether we will see the development of old growth forests in the future given climate change.

Operating under the precautionary principle, we should be conserving more of the last of the unlogged, unprotected, exceptional old growth forests in the province as it is not clear in this rapidly changing climate that those forests will ever be replaced by something even close to the original. The priority should be for additional protection of higher site index, moisture receiving, wind-protected valley bottom sites that support the richest ecosystems. This would include exceptional low-elevation coastal old growth stands on Vancouver Island as well as those in interior wetbelt (ICH) forests.

We don't know how those forests will fare in our rapidly changing climates, but conserved they have a good chance to continue storing vast amounts of carbon, provide habitat for biodiversity, and remaining for the enjoyment of generations to come.

Thank you for leading this important review – it is a great service to the province. I know it has been tremendously time-consuming, and imagine it is very challenging as well.

Best wishes,

A handwritten signature in black ink, appearing to read 'Sally N. Aitken', with a long horizontal flourish extending to the right.

Sally N. Aitken, Professor