

To the Old Growth Strategic Review Panel:

I implore you to recommend full protection for old growth forests in British Columbia, especially productive old growth rainforest. This late stage forest type takes centuries to achieve the degree of physical complexity of habitat that is required to support the biodiversity of these forests to prevent losing entire species that cannot survive in secondary growth forests. Their large trees with complex shape and coarse bark texture support a multi-tiered canopy and far more epiphytes (plants that must grow on other plants) than can secondary growth forest trees.

Given that the rest of the world has successfully shifted to harvesting 2nd and 3rd growth forests, it is appalling to me that BC still considers it acceptable to log primary forests containing living trees that germinated long before Europeans first landed in North America. These are national treasures; their logging is like dismantling the Great pyramids for their raw stone. They're irreplaceable in a province that harvests forests every 60 years.

And when assessing the level of threat to old growth forest, we must be careful to distinguish productive old growth rainforest in BC (where all the largest trees are located) from old growth in other habitats, such as bogs, which have comparatively lower biodiversity, lower biomass, and lower interest to the forestry industry. Without this distinction, one may be misled to think that old growth forest is not endangered and will persist indefinitely under current forestry practices, whereas in reality, productive old growth rainforest containing the largest trees is very much threatened with virtually complete destruction unless forestry practices are altered.

Speaking to the perspective of the forest industry, harvesting of old growth forest is not essential when so much second growth forest has already been established by forestry practices. Over 80% of BC's productive lands are covered by second growth forest. And given that 80-90% of primary old growth forest has already been logged, removal of the remaining fraction would provide little additional benefit to forestry companies above the harvest of the abundant second growth forests.

I understand that harvesting the largest trees is economically perhaps marginally more immediately efficient during a logging operation, but it is inherently not a sustainable practice anyway, since so little primary old growth forest remains. What is needed now is the development of an attitude of stable, long-term sustained harvesting methods for the reliable and economically profitable future of Canada's forestry industry, not a "gold rush" mentality of picking clean every trace of remaining old growth before needing to settle into long-term thinking anyway.

Selective removal of choice large trees from an old growth forest instead of clear-cutting, as is practiced in several harvesting operations in BC, also does not preserve the forest adequately. Not only do these especially large trees have crucial roles in maintaining high biodiversity, but the construction of winding forestry inroads to access these selected trees also destroys far more forest than the targeted removal of trees does itself. This strategy does NOT represent a compromise at all for harvesting old growth forest less damagingly.

At a time when the devastating effects of climate change are already becoming visible (including an increasing risk of drought and associated fire to the remaining old growth forests!), studies show that first-hand experience of wild places is critically important to helping inspire concern by the public for the preservation of biodiversity and long term attitudes of ecologically responsible living (Alcock et al., 2020). Therefore, ensuring access of our children to primary old growth forests will also be important for Canada to achieve its projected carbon neutrality and conservation goals. We must also take into account the enormous economic incentive of Canada's old growth forests in the ecotourism industry, which benefits our nation concretely right now. I very much fear a day, if old growth forest is not protected from logging, when our children will have to rely on old photographs of old growth forest and never be able to walk through it themselves. We must ensure that they are not denied this experience. And preserving only a few widely spaced stands in national and provincial parks is not enough, because there is too great a risk of losing these few stands to threats such as the impending effects of climate change, which in this part of the globe means increased drought and a concomitant increased risk of forest fires.

Speaking of climate change, we need old growth forests for effective carbon sequestration and storage so that Canada can meet its net carbon emissions targets on time to stave off the worst effects of long term climate change. Studies clearly demonstrate the crucial role of old growth forest in removing carbon dioxide from the atmosphere and locking it into biomass (Keeton et al., 2011). Old forests accumulate and store carbon more efficiently than young ones and continue to be net carbon sinks into old age instead of becoming carbon-neutral, contrary to some industry claims (Luysaert et al., 2008). (Worst of all are clear-cuts, which actually become net carbon sources.) Living trees can accumulate nearly half their lifetime carbon in the last quarter of their lives (Köhl et al., 2017), so old growth forests consisting of a large proportion of the oldest trees sequester carbon more efficiently than young forests.

Logging old growth forest also has initially invisible but important damaging effects on the forest biological community. A study recently found that removal of old growth forests had a smaller impact on the more visible species to us, especially mammals, and a much more severe impact on smaller but ecologically even more important species such as many invertebrates, whose loss may initially not be

noticed during a cursory examination (Gibson et al., 2011).

Speaking from a personal perspective, I am a trained biological scientist (MSc in ecology & environmental biology, PhD in microbiology) and a professional natural history artist. I am a freelancer, living in Vancouver, with no formal affiliation to any organization. Access to old growth forest is crucial to my livelihood as a source of the visual raw material that both inspires me and informs me accurately of the biological composition of these forests for the completion of my work. I have prepared and included a few of my recent paintings of old growth BC forest at the end of this letter (you have my permission to include them and this letter in the summary report or on the website for this strategic review) both to illustrate this point, and also to provide you with a bit of a visual break from all the reading. ;-)

I do NOT oppose the operation of Canada's forestry industry in principle, which supports thousands to millions of Canadian families. I simply ask for a strategy (restricting harvesting to second growth forests instead) that guarantees the coexistence of forestry with the preservation of the remaining stands of old growth forest. This balanced strategy would benefit every group, including (1) rare species that absolutely require old growth forest to survive, (2) indigenous communities who rely on old growth forest as an integral part of their culture and way of life, (3) members of the public (including artists) who derive enormous emotional and physical welfare (and a livelihood) from access to old growth forest, and (4) the forestry industry itself, which can only achieve long term stability by embracing fully sustainable harvesting practices now.

I ask that the BC government:

- (1) Enact legislation to set science-based old-growth protection targets in all forest ecosystems, declaring old growth forest as "unharvestable carbon".
- (2) Place moratoria on the most intact, rarest, and high conservation value old-growth forests while new policies are being devised.
- (3) Implement a provincial land acquisition fund to purchase and protect old-growth forests on private lands.
- (4) Financially support and legally recognize First Nations Indigenous Protected Areas and land use plans that protect old-growth forests.
- (5) Enact incentives and regulations to support the development of a second-growth, value-added forest industry, such as by removing the PST for the purchase of equipment to process second-growth logs or by ending raw log exports.

Also, I ask that the federal government create a dedicated “old-growth protection fund” as a subset of the Canada Nature Fund in order to both purchase old-growth forests on private lands for protection and to help finance BC First Nations to develop Indigenous Protected Areas and land use plans to protect old-growth forests.

I ask that you make the protection of the remaining endangered old-growth forests as the top priority in your forest policies for BC, and to ensure a win-win solution by providing the pro-active leadership needed to develop a sustainable, value-added second-growth forest industry and by supporting First Nations protected areas and conservation-based economies.

References

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Sincerely,

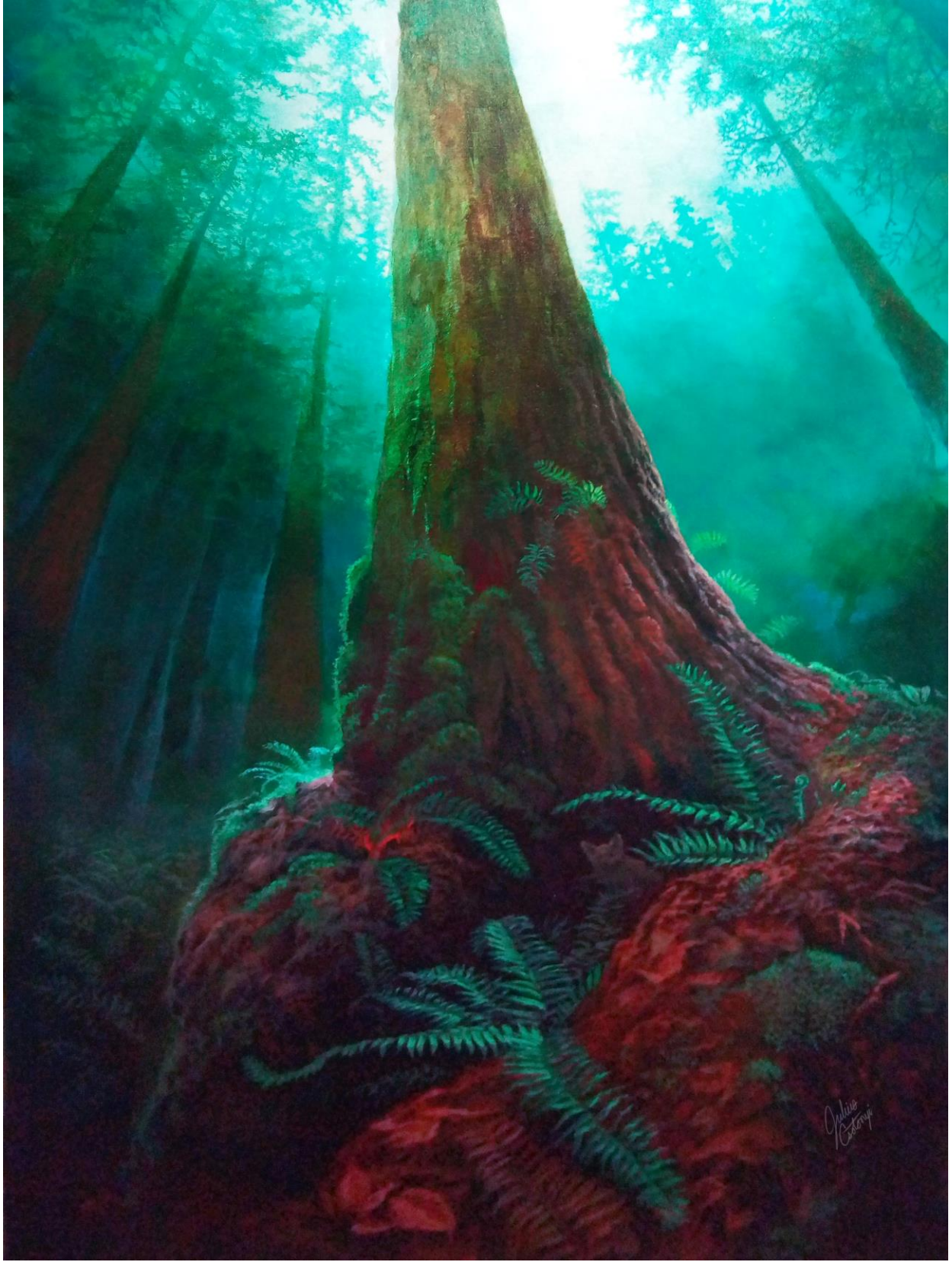
- Dr. Julius Csotonyi



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