

Common Ground on BC's Old Forests: Rachel Holt and Cam Brown May 17, 2022

Change is needed. Status quo management of BC's old forests has gaps that need to be addressed and new strategies are needed to address other recommendations from the Old Growth Strategic Review. Healthy, resilient ecosystems are the objective.

Risk and Expected Levels of Old Forest

Risk to biodiversity increases with deviation from natural/expected amounts of old forest in an ecosystem. Low levels of old forest also make ecosystems less resilient to a changing climate.

- Defining exact risk thresholds is challenging. Specific thresholds for risk and/or geographic scales to assess risk will vary based on stand types and natural disturbance patterns. In some ecosystems, 30% of natural old (or more) may be the high risk threshold, whereas in others, lower levels of old forest may be possible before triggering high risk. Managing for ecological health, as outlined in the OGSR requires management not just to high risk thresholds but to a range of risk levels across the landbase.
- Minimum levels of old forest (e.g. % of total forest area) are important because, as the absolute level of old forest reaches small numbers, factors such as landscape level connectivity start to reduce the overall effectiveness of retention strategies.
- Risk to biodiversity can also be mitigated by retaining biological legacies/structure within harvested and regenerating areas. Both landscape and stand level management strategies are required to address risks to biodiversity.

Managing for Big Tree Old Growth

All sizes of old forest are important, but big tree stands are currently under-represented on the landbase. It is critical to ensure representation of a full range of stand sizes in old forest areas – and because large old growth stands have been disproportionately logged it is important to weight these more heavily in retention strategies. The goal is to ensure representation considers what was originally present, not what remains today.

- Tree size is important, but only one of many considerations for old forest retention strategies. Retention areas should be selected to support the maintenance of biodiversity versus simply putting them in places that minimize timber supply impacts.
- Deferring harvest in very large, rare stand types is important in the short term to maintain options.

There is about ~11 million ha of old growth in the province representing 21% of our forested lands (45-50% of what might have been here 100's of years ago).

- Provincial level numbers don't help us understand risk to biodiversity. It is necessary to look at each ecosystem and the distribution of stand types/sizes within it to understand risk. Today, the highest productivity areas in an ecosystem (BEC variant) often have much smaller proportions of old forest remaining than lower productivity areas, and it is important to determine where this occurs to inform appropriate retention strategies.
- The biggest stands in any ecosystem are naturally rare, and forest harvesting has often made them even more rare. It's important that we identify and retain rare large stands, based on historic abundance of these stand types.

- Height and DBHq are the best metrics in the VRI to identify these stands. The TAP panel's Map 8 provides a provincial scale analysis of old growth organized into five size categories using height and diameter specific to every ecosystem (BEC variant).
- Describing how much of BC's current old forest is 'big' requires a subjective definition of height/DBH by ecosystem and different definitions will produce different answers.
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Protected areas and Non THLB are different and do not confer the same level of protection for old forests. Commercial logging cannot occur in protected areas but it can occur in the Non THLB (its just less likely - by definition). The Non THLB should not be considered representative of the entire landbase.