

BC's Old Growth Forest: A Last Stand for Biodiversity

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ABSTRACT:

Old growth is disappearing globally with implications for biodiversity, forest resilience and carbon storage; yet uncertainty remains about how much exists, partly because assessments stratify ecosystems differently, sometimes obscuring relevant changes. This presentation compares portrayals of BC's old growth forest stratified in two ways: by biogeoclimatic variant, as per policy, and by site productivity. Our analyses confirm provincial government claims that about a quarter of BC's forests are old growth, but find that most of this area has low productivity, including subalpine and bog forests, and that less than 1% is highly productive old growth, growing large trees. Within biogeoclimatic variant, nearly half of high productivity forest landscapes have less than 1% of the expected area of old forest. Low productivity ecosystems are over-represented in protected forest. We suggest that the experiment of managing old growth solely by biogeoclimatic variant has failed, and that current forest policy, in combination with timber harvesting priorities, does not maintain representative ecosystems, counter to the intent of both policy and international conventions. Stratifying old growth by productivity within biogeoclimatic variant seems an appropriate method to portray ecosystem representation, potentially increasing the probability of maintaining ecosystem resilience.