



January 27, 2020

To Whom it May Concern,

Re: Old growth forest management in BC

In an old growth forest, there is varying tree size, more fallen and decaying trees. This higher level of structural complexity allows for more ecological complexity, and you tend to find higher levels of biodiversity in old growth forest ecosystems. In an ecosystem with structural complexity, there are more ecological niches available, or places and spaces for species and populations to live and this more biodiversity. Biodiversity provides a number of benefits and ecosystem functions such as water filtration, healthy soil formation and the breakdown ambient air pollution.

Ancient old growth forests store carbon and also take up carbon from the atmosphere, assisting with climate change impacts. Researchers have found that carbon uptake of trees continuously increases with tree size because the overall leaf area increases as a tree grows. This enables bigger trees to absorb more carbon from the atmosphere, and of course, the largest trees tend to be located in old growth forests.

Old growth forests are vital for the survival of many different species, including several listed as species-at-risk and their forest habitats are being logged at an alarming rate. In the Golden area, species of particular concern include the at-risk mountain caribou, grizzly bear, wolverine, whitebark pine, limber pine, olive-sided flycatchers and a multitude of additional bird species. The old growth forests located at the remote headwaters of the Blaeberry River near Golden are currently being logged. These forests are unique because they are remote, and contain ancient forest stands that support a multitude of biodiversity. These forests were (Prior to logging) still relatively wild, far removed from any towns or cities, and prior to the current logging activities they were also relatively ecologically intact and free from human impact and fragmentation. This area is located on the edge of two of the world's most famous National Parks, Banff and Yoho. Isolated old-growth forest ecosystems, like those found at the headwaters of the Blaeberry River, allows for biodiversity to thrive, including species like grizzly bear and other large carnivores that require large tracts of unfragmented land to persist. There are also healthy populations of olive-sided flycatchers, a blue-listed species in British Columbia, and a threatened species under Canada's Species at Risk Act. The whitebark pine is also found in abundance in the Blaeberry wilderness, this species is blue listed in the province of BC and is listed as an endangered species under the federal government's species at risk act. The seeds of the whitebark pine are the preferred food source for a number of animals including the grizzly bear and the Clark's Nutcracker; a bird species that the whitebark pine relies upon for seed dispersal and regeneration.

The forests in the Blaeberry wilderness were recently proposed by the federal government to received critical habitat designation for the whitebark pine. At a time when we have over 1,000,000 species at risk of extinction on this planet, and when 3.9 billion birds have vanished from North American alone since 1970, largely due to human impact, it is not acceptable to log old-growth forests ecosystems, especially those that provide critical habitat for at-risk species like the olive-sided flycatcher and endangered whitebark pine. Listing species with threatened or endangered status does nothing if we are unwilling to protect their habitats. Our demand on natural resources like old growth forests leads to habitat loss for a multitude of species, and leads to habitat fragmentation for at-risk species. It also has climate change impacts, produces pollution, and introduces invasive species, which is another huge threat to biodiversity. Carrying on with business as usual is unsustainable and unacceptable.

Preserving old growth ecosystems that are relatively undisturbed from human impact is important for a multitude of reasons. For instance, logging introduces new roads which fragments the large tracts of habitat that animals such as grizzly bears need to survive. Mortality risk increases within areas of human activity, and where roads create access. Habitat fragmentation also limits genetic diversity, and affects animal's ability to migrate. As a species that is highly sensitive to human disturbance, it is important to conserve these wild intact spaces for species like grizzly bear that need room to roam freely. As for the whitebark pine, this species is already listed as endangered. We should not be destroying and fragmenting critical habitat for a species already known to be at risk of extinction.

Old growth forests in British Columbia (BC) support a complex array of plants and animals with relationships and biochemical attributes that science is only starting to understand. These forests take several centuries to develop and current forest management practices do not adequately protect these forests for the future. What remains of old growth forests needs to be preserved in a substantial capacity to ensure resiliency with climate change, the continued survival of many species, ecosystem function, genetic resources and cultural values.

Thank you for the opportunity to comment. Please protect what little remains of the old growth forests in BC.

Sincerely,



Rachel Darvill, BSc., MSc., RPBio  
Goldeneye Ecological Services  
e: [racheldarvill@gmail.com](mailto:racheldarvill@gmail.com)  
ph: 250-348-2371