

The Wood Wide Web

By C. Millar

The term “wood wide web” was coined by *Nature Magazine* in 1997 to describe research being done to explain the way trees communicate, both under and above ground. Dr. Suzanne Simard, a forester working in British Columbia, has done hundreds of experiments on trees over the last 30 years and has proven that there are many communications between trees--even between species--including exchanges of carbon and defense systems.

This research shows us that forestry practices must be changed. Canada cuts a larger percentage of trees annually than any other country in the world. Clear-cutting and the planting of mono-culture tree crops are invitations to bug invasions, like the pine beetle, and to mega-fires, such as witnessed in 2017. Old-growth forests produce resiliency. Ways in which trees communicate by sharing carbon through fungi and their root systems, and the ways that cross species fluctuate their carbon trading depending on the time of year, is explained by Simard, easily found in this Ted Talk:

https://www.ted.com/talks/suzanne_simard_how_trees_talk_to_each_other .

Simard contributed a chapter to Peter Wohlleben’s book, *The Hidden Life of Trees*, a 2015 best seller. This gem of a book amazes and engages the reader. Wohlleben owns and manages a forest in Germany. He observes the interconnections of forest life and shares his findings. Each chapter teaches us about some aspect of the communication going on in forests and the way in which bio-diversity creates resiliency.

A few of Wohlleben’s facts about forests include: roots convey chemical messages and electrical impulses; in dry climates, trees ration their water usage; one fifth of all animal and plant species depend on deadwood; trees release phytoncides to disinfect their surroundings; and healthy forests create their own moist climate. Also, the most destructive force in a forest is erosion, because it washes away the layers of humus built up over a long period of time.¹ These discoveries are explained, giving the reader a new appreciation of our natural habitats.

Did you know that the interior of British Columbia is home to old-growth temperate rain forests? There is a particular forest in the Incomappleux Valley in the Central Selkirk Mountain Range which is such a forest. It is home to trees that are up to 1,800 years old! It is also home to many species of lichen, one of which is found nowhere else in the world! Grizzlies and the endangered Mountain Caribou still live here. Surprisingly, the logging company, Interfore, has logging rights here. Logging could devastate this rare old-growth forest. If you would like to join the letter writing campaign to urge government officials to stop allowing logging in this area, please contact the Valhalla Wilderness society at www.vws.org for more information. The more knowledge we have of habitat biodiversity, the more persuasive we can be in using our voices to protect our eco-systems.

Black Mountain, although having been logged in the past and intensively grazed up to the present, still has habitat diversity. Several types of trees thrive here, and a diversity of animal species can still be found, including elk, cougar, bear, snakes, birds, pocket gophers and badgers. With conservation work planned for the park, hopefully the grasslands, forests and riparian (stream and pond) areas will continue to improve and provide a healthy environment for the many species that still exist. Explore the park with the Friends of Black Mountain and experience the grasslands and forests for yourself.

References:

¹ *The Hidden Life of Trees*, Peter Wohlleben. David Suzuki Institute, Greystone Books, Vancouver/Berkley. Ludwig Verlag, Munich, part of the Random House GmbH publishing group, 2015. English translation by Jane Billingham 2016.