

## March accomplishments >>

New article submitted to journal

New presentations and media

Summer planning

Hiring summer students

Suzanne's book, "Finding the Mother Tree" to be published May 4



# The Mother Tree Newsletter

A bi-weekly update on the Mother Tree Project

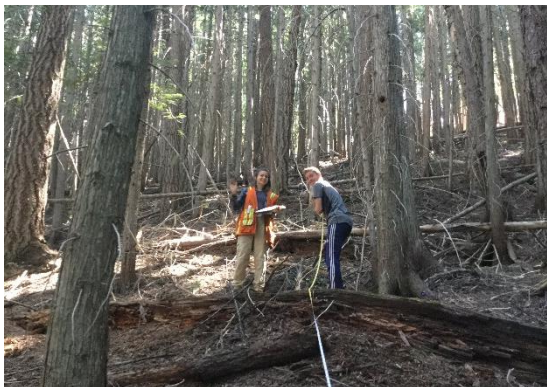


## About the Mother Tree Project >>

Launched in 2016, the Mother Tree Project is investigating forest renewal practices that will protect biodiversity, carbon storage and regeneration as climate changes.

This field-based research compares the effects of various retention levels of Mother trees and their neighbours, as well as planting of novel seedling mixtures, on ecosystem goods and services in Douglas-fir forests located across nine climatic regions in British Columbia.

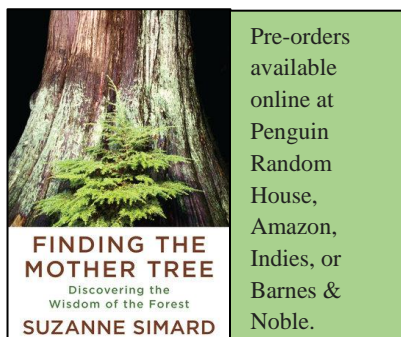
For more information visit:  
<https://mothertreeproject.org>



## Welcome to our newsletter

This is the second in a series of newsletters highlighting the work we are doing. Planning for the 2021 field season is now underway and most of the crew from last summer will be back for another field season this year. We have several new presentations to share with you as well as highlights from a newly submitted journal article.

### Suzanne's upcoming book:



Pre-orders available online at Penguin Random House, Amazon, Indies, or Barnes & Noble.

### New presentations and media:

March 5, 2021. Interview with Publisher's Weekly. [There's No 'I' in Tree: PW Talks with Suzanne Simard \(publishersweekly.com\)](https://publishersweekly.com).

March 11, 2021. Panel discussion with National Film Board on the film, "Borealis." [Live Discussion | Borealis - YouTube](https://www.youtube.com/watch?v=...)

March 12, 2021. Penguin Random House Library Lunch and Learn. [Library Lunch & Learn Episode 2 Virtual Science Fair - YouTube](https://www.youtube.com/watch?v=...)

March 17, 2021. Tapping into the Parlance of Plant-Fungal Networks. <https://www.soilregensummit.com/>

March 21, 2021. Secret Wisdom of Forests with Dr. Suzanne Simard. [Tree Talks with Canopy Planet & Dr. Suzanne Simard \(komusodesign.com\)](https://www.komusodesign.com)

### Our newly submitted paper is:

W. Jean Roach, Suzanne W. Simard, Camille E. Defrenne, Brian J. Pickles, Les M. Lavkulich, and TeresaRyan: **Tree diversity, site index, and carbon storage decrease with aridity in Douglas-fir forests in western Canada.**

Forests are important for biodiversity, timber production and carbon accumulation, but these ecosystem services may be impacted by climate change. We collected field data from forests occurring across a 900 km climatic gradient to assist in forecasting these consequences. In arid Douglas-fir forests near Cache Creek and Merritt, BC, where the climate is warm and dry, Douglas-fir was the only tree species, whereas in more humid Douglas-fir-dominated forests in the West Kootenays a mixture of up to 9 tree species was found. Douglas-fir productivity, as measured by "site index" (height at a reference age of 50 years) declined from 30 to 15 m, and carbon stored within the forest ecosystem decreased from 565 to 222 Mg ha<sup>-1</sup> going from a humid to an arid climate. Ecosystem carbon storage was highest where there were the most tree species. High carbon storage was also associated with few herb species due to dark shady conditions under the productive humid forests. Carbon storage by ecosystem compartment was in the following order: aboveground live trees > mineral soils > large downed wood and dead standing trees > forest floor > small and fine downed wood > understory plants.