

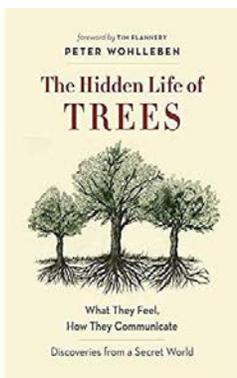
Some Books for the Garden Nerd and Not So Nerdy Gardener



By Lynne Brosch, UCCE Master Gardener of Lake Tahoe

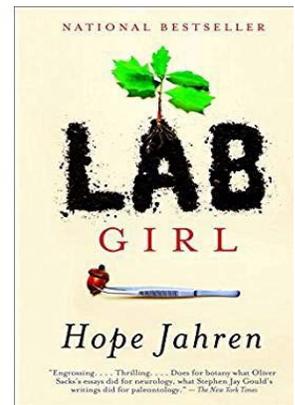
Recently I have been reading some books of great interest to those who are interested in plants and would perhaps be surprised at some of the amazing facts recently discovered by plant scientists. We Master Gardeners sometimes consider ourselves citizen scientists and some of us are perhaps more heavily involved in the science than the average person.

The books I would like to tell you about are of interest to not only those who might think themselves science oriented but also to the average hobbyist gardener who just might find these books quite interesting.

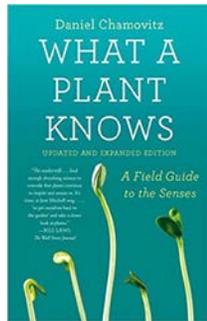


First, **The Hidden Life of Trees** by Peter Wohlleben, published in 2015 is a very readable study of the amazing discoveries about the life of trees. He proves that trees exhibit many animal and even human characteristics in the ways they communicate and care for their young. With chapter titles like Friendships, Language, Social Security and Love, you can learn more about trees as beings than you ever thought imaginable. Trees need family and are dependent on each other for survival. While walking in my neighborhood I look at the trees in an entirely different way after reading this book. Since we are surrounded by trees here in Lake Tahoe we are ever more challenged to understand how they serve us and should be protected.

Next, **Lab Girl** by Hope Jahren, published in 2016, continues the story of amazing science about plants and trees. In this book however, we read a memoir of Hope's life as a lab scientist and professor. Her memoir is in and of itself an adventurous read and relates the story of a truly gifted but tortured woman who suffers manic episodes throughout her high energy devotion to plant science. She interweaves her story with some of the amazing discoveries about plants and trees that she and other scientists have proven through careful experimentation and research. One of the more interesting stories she relates is how the trees in Sitka, Alaska were proven to have a method of communicating an insect attack to each other over a mile apart. She also describes the method of how trees prepare for the below freezing temperatures they will face during the winter months. With our changing climate patterns and wide variety of temperatures we have been experiencing especially this winter, many gardeners begin to worry about how the trees will survive with the changing temps. She explains that the trees shut down their water needs and prepare for winter based on the waning daylight. The amount of light controls their reaction to seasonal differences not temperature. Jahren describes a process called "hardening" where the cell walls release water and keep sugars, proteins and acids that act as an antifreeze. This keeps the tree from freezing during winter.



This also leads me to suggest that we do not water trees during winter, even though it is a dry year, as this water would damage the tree's antifreeze system.



Now to move more into our plants and more about how they grow versus trees, you will enjoy a book that has fascinated me for years. **What A Plant Knows**, by Daniel Chamovitz, published in 2012 is a very quick to read (141pgs.) and easy to digest exploration of the latest in scientific discoveries about how plants have an ability to see, feel, hear, smell, communicate and remember things. This book is truly amazing and there is a free online course that Professor Chamovitz holds which you can learn more about from his website. <http://www.danielchamovitz.com>

All of these books are available through our local library system.