THE FOREST FOR THE TREES

New research is changing our assumptions about trees, how they live and how they respond to threats and stress. The discovery that trees in a forest are connected to each other underground and are communicating with each other has led us to look at the life of a forest in a whole new way. The course will explore the science behind Wood Wide Web. We will investigate the social interactions between trees. What is the importance of fungi to the web? Can trees warn each other of predators or pests? What is the evidence? What awareness do trees have? Can a forest be considered a super organism?

The class is partly based on *the Hidden Life of Trees: What they Feel, How They Communicate-Discoveries from a Secret World (2017) by* Peter Wohllebon. (This is not the illustrated edition which has a different organization.) It will be helpful if you would read the first two chapters before the class begins. We will begin with a consideration of the controversial reception to this book in Europe and why there was a petition signed by concerned citizens and scientists objecting to some of the understandings and interpretations in Peter Wohllebon's book. There will also be other readings supplied by the instructor.

Trees evolved 360-400 million years ago, and (in one case) an individual life span of 9550 years. During the six week session we will consider their evolution and the confusing claims for the oldest, largest, and the broadest trees. What strategies for survival of stresses caused by winter weather, drought, fire and other trees have evolved over millions of years? We will also consider the remarkable adaptations of trees and their dependence on other species for nutrition and reproduction. What are some of the many different types of adaptations to ensure dispersal and survival of seedlings? What are the odds a seedling will survive?

The course will be a blend of lecture and discussion. Due to COVID-19 there will be no field trip to local forests.

Leader: Kay Widmer is an award-winning science teacher who specialized in ecology and environmental issues and has taught science at all grade levels.

Tuesdays: 10:00 a.m. – noon, 6 weeks: September 22 through October 27

Maximum: 25 seats