The Genus Quercus: Ecology, Evolution, and Global Distribution

Paul Manos
March 21st–March 25th, 2022

The oaks (Quercus, Fagaceae) comprise more than 430 species distributed across temperate and tropical regions of the northern hemisphere. They are among the best-known and most ecologically significant forest trees in North America (including Mexico) and Eurasia. Oaks have shaped forest and savanna ecosystems and the diversity of urban forests, often molding the development of human civilization and mythology. This 3-part seminar introduces students to basic oak biology and traits, with a focus on the evolutionary history of the eight major clades. We examine recent investigations into the pattern and timing of the oak tree of life, historical biogeography, ecological niche differentiation, and consequences of hybridization. Case studies include oak species complexes from western and southeastern North America, with updates on the current state of oak classification as informed by phylogenomic data. Current research will highlight what the future might hold for oaks and the myriad of associated biota that depend on them. Ethnobotanical notes on oaks will be presented throughout the seminar.

Along with introductions, the first session provides organization details for sharing oak-related content/photos with the group for later discussion.

Scheduling Details
Three sessions: March 21, 23, 25
7PM–9PM ET

Participants need to have a Zoom account (https://zoom.us sign up for zoom is free). You will receive a secure link to join the instructor before each class. Classes will be recorded so partipants can review them or make up missed ones.

For more information regarding seminar costs and registration please visit: https://www.eaglehill.us/programs/sems-online/general-info.shtml

About the Instructor
Paul Manos (pmanos@duke.edu) is a Professor of Biology at Duke University, Durham, NC. He has worked on the systematics of Northern Hemisphere woody plants with an emphasis on oaks, hickories, and walnuts. He has studied the oaks throughout their range, published extensively for specialists and broader audiences, and lead workshops on the genus. Other interests include the biogeography of the eastern Northern American flora and the evolutionary origins of true blueberry species. https://biology.duke.edu/people/paul-s-manos