

SEE-U Costa Rica

Agroforestry and the Ecology of Coffee

6 credits, 5 weeks

Summer 2019: May 25—June 23 (tentative)

Instructor: Dr. Mandi Caudill,

Columbia University Adjunct Instructor



Turrialba



Coffee Plantation



Jicotea

Although about one billion cups of coffee are consumed worldwide daily—most people do not link the dark, velvety liquid in their cup with the abundant plant and animal life found in regions where coffee is grown. The way that coffee farms are managed varies widely— from a monoculture of coffee plants with little to no shade trees intermixed with the crop (“sun coffee”) to farms with many different types of trees and vegetation interspersed between the coffee plants (“shade coffee”). Sun coffee often uses heavy chemical inputs and provides little habitat for wildlife, whereas shade coffee, which mimics natural forests, provides a refuge for wildlife and ecosystem services and requires fewer, if any, agrochemicals. Can coffee farms be managed in a way that protects wildlife habitat and the environment, while at the same time producing a viable, profitable crop for the farmers?

We will examine the complexities of this question through lectures and discussions, speaking with coffee farmers and researchers, and conducting our own field work. This course will explore the ecology of coffee landscapes; assess coffee certifications such as shade grown, organic, Rainforest Alliance, and Smithsonian Bird Friendly; examine socio-economic and environmental issues associated with the coffee industry; and provide insight into the challenges that farmers face and the complexities involved in defining “sustainable” coffee.

Course development for SEE-U Costa Rica is still ongoing. If you are interested in the course, please email eices@columbia.edu.