



Environmental Science Graduate Program Seminar Series

Modeling Infectious Multi-Species Zoonotic Disease

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October 29th, 2021 | 2:00-3:00 PM

Smith Laboratory, Room 3150



Abstract

Recently, due to the COVID-19 Pandemic, disease transmission from animals to humans has been an increasingly relevant topic. These diseases, also known as zoonotic diseases, have been prevalent throughout that last century in cases such as Avian flu and Swine flu. My research intends to study this phenomenon and utilize the Susceptible, Infected, Recovered (SIR) Model in R in order to predict its broader effect. In addition, I will be analyzing the predicted effects of this disease on multi-species population dynamics to see what addition long-term impacts on public health may occur. The proposed species in this study are white-tailed deer (*Odocoileus virginianus*) in Ohio infected with Chronic Wasting Disease (CWD).