

1106-92-280

Eric A Eager*, eeager@uwlax.edu. *Modeling and Analysis of Disturbance Specialist Plants.*

Disturbance specialist plants are plants whose seeds, roughly speaking, only germinate in disturbed soil. Soil disturbances often occur in very unpredictable ways, both in time and space, necessitating the use of stochastic models when studying their population dynamics. In this talk we introduce a stochastic integral projection model for a disturbance specialist plant population and its seed bank. We show that the mean intensity of disturbance affects the long-term viability of the plant - seed bank population in different ways, depending on the strength of the "storage" effect in the seed bank. We explore the effects of age structure and autocorrelated disturbances on this result. (Received August 19, 2014)