

1106-VG-2108 **J. Christopher Twedde*** (ctwedde@govst.edu), 1 University Parkway, University Park, IL 60484. *Maximum entropy modeling of plant biodiversity.*

Maximum entropy methods are a standard tool in the statistical mechanics study of thermodynamics. Recently these methods have been adopted by ecologists to study biodiversity. This talk will present a brief overview of the methodology and how it may be applied to ecological modeling. Preliminary results modeling the plant species diversity of Illinois prairie land will be presented. In particular, the model will be used to predict the relative abundance of plant species in reclaimed prairie lands as a function of plant traits. (Received September 15, 2014)