IMPLICATIONS OF CLIMATE CHANGE FOR BIODIVERSITY: FROM SPECIES TO ECOSYSTEMS

By Dr. Marta Jarzyna Department of Evolution, Ecology, Organismal Biology

> Wednesday, March 27th at 3:45 PM Scott Hall Room 177 1090 Carmack Rd.

The ability to predict the consequences of climate change to biodiversity and develop sound conservation strategies depend on our understanding of the relationship between changes in biodiversity patterns and climatic variability. To date, the majority of research regarding the implications of climate change to biodiversity has evaluated responses of individual species. The variability of individual species responses is predicted to lead to disruptions of communities and ecosystems, but the complex nature of ecological interactions makes it difficult to extrapolate from the scales of individuals to the community or ecosystem level. In order to fully understand consequences of climate change, it is imperative to develop a more comprehensive understanding on where, when and how climate change can lead to broad-scale changes in community structure and composition. In her talk, Dr. Jarzyna will examine the consequences of climate change to ecological communities, focusing on decadal changes in bird assemblages and their taxonomic, functional, and phylogenetic structure across the US.

