

# BIOLOGY ZOOM SEMINAR

## *Processes determining plant species diversity in restored tallgrass prairies*

Speaker: Dr. Andrew Kaul ('13)



A fundamental goal of restoration ecology is to restore biological diversity in degraded or fragmented environments. In practice, restorations often have lower diversity than reference communities, highlighting a need to identify theoretical and practical barriers to

restoration of target native diversity. North American tallgrass prairie is an ideal system in which to study the restoration of plant diversity, because remnant prairies are rare, prairie restoration projects are now very common, and because the size and longevity of grassland plants makes them easy to measure and manipulate. Dr. Kaul will present the first synthetic study to test the relative importance of soil characteristics, management actions, seed mix design, and site characteristics for predicting prairie restoration success, as well as how plant diversity, functional composition, and abundance of an important forb assemblage, milkweeds, differ between restored and remnants prairies.



Andrew Kaul ('13) is a plant community ecologist with a special interest in restoration ecology of Midwestern habitats. As a 2013 graduate of St. Olaf College, he started graduate work in 2014 at Iowa State University working with Brian Wilsey on tallgrass prairie restoration ecology. His graduate work examined the primary drivers of plant diversity in restored tallgrass prairie communities and how priority effects and seed limitation affect diversity outcomes and community composition. After graduating in 2020, Kaul started a postdoc at the Missouri Botanical Garden in St. Louis Missouri. Currently, he is studying how trait-environment interactions, soil legacy, and species reintroduction affect restoration of the herbaceous understory in Ozark Oak woodlands.



Monday ♦ March 29 ♦ 4 PM



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