

SCHOOL OF ENVIRONMENT AND NATURAL RESOURCES

GRADUATE EXIT SEMINAR

RACHAEL GLOVER

Ecological disturbance and restoration effects on plant functional composition



As pressures from climate change, invasive species, and human expansion continue to threaten the function and extent of many ecosystems across the world, there is an urgent need for restoration ecologists to adapt their management and monitoring approaches to meet novel threats. Many ecologists are turning towards functional traits to answer these difficult questions and find new approaches to restoration. The over-arching aim of my research was to evaluate how plant functional communities respond to disturbance and restoration in two unique ecosystems. First, I explored the functional community of a degraded prairie on a reclaimed mine site. I then tested a customized management plan to investigate whether restoration success could be predicted based on the functional composition of the community and the traits of the species planted or seeded in. This first

included re-introducing disturbance and application of customized seed mix. Additionally, I outplanted pregerminated seedlings to understand whether planting would be a successful alternative to seeding. Secondly, I evaluated the functional composition and functional diversity of two sagebrush steppe sites, each experiencing a long history of repeated disturbances, including wildfire, military training, and grazing.

Advisor: Dr. Matt Davies

MONDAY, AUGUST 15, 2022 10:00 A.M.

Join the seminar via Zoom:

https://osu.zoom.us/j/99542147567?pwd=SElyb3JtQVROTXNJUVhxaTVsMFINZz09 Meeting ID: 995 4214 7567 Password: 498403

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