School of Natural Resources and the Environment

Seminar Series: Spring 2023

RESTORATION IN THE CONTEXT OF PLANT INVASIONS

SPEAKER: Florencia Yanelli, Freie Universität Berlin

DATE: Wednesday, February 8th

TIME: 3:00-4:00 pm

LOCATION: ENR2 S210 & Zoom

ABSTRACT:

The invasion of alien plant species contributes to ecosystem degradation and complicates efforts to restore degraded systems. There are two main approaches used for restoring biodiversity in areas degraded by plant invasions. Namely, active restoration by sowing native species into an area that has been cleared of all plants, or passive restoration whereby invasive plants are removed in the hopes that the system will recover without further actions.



In the first part of the seminar, I will present some examples on how grassland communities could be actively designed to be resistant to arriving invasive species. The idea is to explore if species selection to achieve this resistance during active restoration could be based on well known hypotheses in invasion science. In the second part, I will take you to South Africa to delve into what happens when invasive Australian acacias are removed to passively restore the species-rich fynbos vegetation of the Cape Floristic Region. Here, I will try to disentangle the legacy effects of Acacia invasions on the recovery of native vegetation and soil microbial communities following clearing. Overall, the seminar will cover how to use greenhouse experiments, available plant functional trait and phylogenetic information, as well as unintended field experiments, to explore effective restoration in the face of plant invasions.

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