Project Manager Qualifications

Jim Eckberg is a research fellow at the University of Minnesota. Jim received a Masters in Ecology while working with Dr. Svata Louda at the University of Nebraska-Lincoln. The Louda lab has shown that biocontrol insects released to control noxious plants can themselves become invasive pests. Jim's research addressed the role of native insects as an alternative means to control noxious weeds, specifically thistle. His research demonstrated that native insects can prevent some thistles from becoming invasive, an ecosystem service that has gone unnoticed in the absence of any thistle problems. Jim has designed and implemented multi-site invasion studies, constructed models to predict invasive spread, and has published scientific papers on plant population dynamics and invasions.

As the project manager, Jim will be responsible for coordinating research to address the emerging issue of invasive biofuel crops. Jim will collaborate with Dr. Ruth Shaw, Dr. Neil Anderson and Shelby Flint; their combined experience in selective breeding, invasiveness and genetics will help guide the development of studies to illuminate the potential for engineered invasiveness in biofuel crops. Jim's experience with on-the-ground invasion tests and use of field data to construct invasion models will be instrumental to understanding potential impacts of invasive biofuel crops on native biodiversity. As a Udall Scholar in environmental policy, Jim is highly interested in using this research to inform ecologically sensitive bioenergy policies.

Organization Description

The Ag and Energy Center is a 500 acre research and demonstration station located in the central sand plains. The sand plains are a potential epicenter for perennial biofuel crops given the wide availability of marginal, sandy land. The mission of the Ag and Energy Center is to lead the development of a community-based and sustainable biofuel industry. The Ag and Energy Center is well connected to regional producers, agriculture, bioenergy facilities and the University of Minnesota.

The Center has an established array of biomass demonstration plots containing hybrid poplar, survivor false indigo, hazelnut, Miscanthus, switchgrass, big bluestem, mixed prairie, prairie cordgrass, wheatgrass and many more. Approximately twenty five acres of wasteland are planted to annual and perennial biofuel crops to test their drought tolerance, growth characteristics, nutrient requirements, economic value and environmental benefits.