

Your Location
Your Address

Ph.D. Program
University Name
Address

Dear Dr. [Name],

I am writing to apply for a graduate research assistantship in your Eco Lab. I am interested in the work that your lab is doing in the ecology of plant-insect interactions across spatial scales, and the influence of natural and anthropogenic disturbances on biodiversity and ecosystem function. Over the course of my Master's degree, I studied various aspects of human land-use from the management of grazing in Mongolia, to the effect of nitrogen-based fertilizers on the Great Barrier Reef in Australia, and the influence of climate and landscape change on butterfly populations here in the United States. During my studies, I also engaged and mobilized citizen scientists, both in my classroom as a high school teacher and across my state as part of the iNaturalist City Nature Challenge. I researched and implemented the best field methods for studying schoolyard insect biodiversity. Then, inspired by Doug Tallamy's work on restoring native plants into backyards to support native insects and wildlife, my personal research focused on interactions between insects and native vs. non-native plants. This interest path eventually led to a research collaboration on butterfly populations in Illinois, which I continued after graduation, recently publishing Butterfly declines in protected areas of Illinois: Assessing the influence of two decades of climate and landscape change in PLoS ONE this past fall.

Overall, the work that you are doing in your lab fits perfectly with my career interests. I think it is so important to identify the benefits and harms of current small scale land-use management (such as grazing or controlled burns) as well as the effect of large scale landscape change so that we can adopt the best practices. I'm also really interested in the benefits of conservation border strips for agricultural areas. In the future, I would like to work on research that would help to inform best practices for sustainable agriculture and habitat restoration on a local scale.

I have previous research experience with insect population dynamics which includes managing large amounts of existing data, statistical analysis, and publishing the results as well as presenting our findings to stakeholders at the annual meeting for the Illinois Butterfly Monitoring Network and the annual meeting for the Ecological Society of America. I have excellent communication and organizational skills. Prior to and during my recent Master's degree studies, I taught high school science in inner city schools where I not only wrote my own curriculum and led large classes of diverse students but also established after school

environmental clubs. Along with my interest and enthusiasm for the research that you do, I would bring a unique set of experiences, grit, and maturity to your lab. I hope to hear from you soon.

Sincerely,

[Your Name]