

Elijah Hall

5 January 2021

2020 DeDecker Botanical Grant Recipient Summary

This summer I completed a modified three-month field season at the White Mountain research Center (WMRC). This was the second season of fieldwork for my three-year project, entitled “Phenology and species composition determine reproductive success through the lens of pollination services.” This project aims to examine the importance of plant community composition on flowering phenology, pollinator behavior, and plant reproductive success. Due to strict limitations on WMRC resources, I took six weekend trips from late June to September to collect data at the 18 sites I established last year. I collected floral phenology data but was unable to collect pollinator samples. I also collected data on plant reproductive success to complement the data collected in 2019. While my sampling was reduced due to COVID-19, I still collected the necessary data to continue my project for the three-year duration.

This work is expanding our understanding of the impact that pollination ecology has on plant reproductive success and sheds light on how future shifts in plant and pollinator communities are likely to impact ecosystems’ primary producers. In 2020, I presented this work at the National Ecological society of America conference and received positive reviews on its contribution to our understanding of plant ecology and global change. With this work, I have also gathered natural history information on plant and pollinator communities that has not been collected since the 1960’s to my knowledge. I plan to share my data with WMRC and Inyo National Forest so it can potentially be used for education and conservation purposes.

Thanks to the Mary DeDecker Botanical Grant, I was able to conduct my research despite limitations imposed by COVID-19. This funding paid for the travel and food expenses necessary for my weekend data collection trips to the White Mountains this summer. I could not have completed this season without funding from the Bristlecone Chapter CNPS. Thank you for your contribution to my research and for your dedication to the flora and fauna of the White Mountains and Eastern Sierra. I hope we can reschedule a field trip to the Whites for this summer!

Sincerely,

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