

Georgia Undergraduate Research Conference

Meeting in Gainesville Georgia (Fall 2019)

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Title: A preliminary assessment of native pollinator attraction to bee hotels in northeast Georgia

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Abstract:

Native pollinators are an essential component of ecosystems as they ensure a stable and diverse vegetation community. However, populations at local, regional and global scales are currently threatened and will potentially undergo a large-scale extinction. One of the primary challenges is the constant threat of nesting habitat degradation. These structures are especially important in well-manicured areas where there is a lack of natural debris (e.g., decaying logs, leaves). In this study, we created "Bee Hotels" to serve as pre-constructed native pollinator habitats at UNG's Appalachian Studies Center in The Historic Vickery House gardens. We placed these structures near an open-air garden as well as an enclosed hoop house garden. Pollinators were assessed using the method established in partnership with University of Georgia Extension Great Pollinator Census. We found that pollinator species occupied both structures to an equal degree and inhabited them within three to four days following their construction. These preliminary data indicate that 1) there is a need for increased pollinator habitats across the UNG Dahlonega Campus, and 2) pollinators in open-air as well as enclosed settings utilize these structures. In the future, we will compare pollinator usage of the hotels in manicured versus unmanicured areas. Comparison of data collected prior to and after the establishment of bee hotels will indicate the effectiveness of bee hotels as a native pollinator habitat and inform conservation practices at UNG and more broadly.