

CHANGES IN THE WILD BEE FAUNA OF ROCKEFELLER PRAIRIE

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Bees are considered to be the most important pollinators in many ecosystems, including tallgrass prairie. While recent research highlights the possibility of a global decline in pollinators, the lack of baseline data, species lists and well-documented collections of pollinators for many localities makes assessing anthropogenic impacts difficult. However, wild bees were sampled in the late 1970s at Rockefeller Prairie near Lawrence, Kansas, which provides one useful source of baseline data. A small but high quality prairie remnant, Rockefeller Prairie has not undergone any changes itself since the 1970s, but the land around it has undergone many changes. The goal of this study was to revisit Rockefeller to make comparisons between the past and current bee fauna and relative abundance of bee species. I re-sampled the site by collecting bees from flower species previously sampled in the 1970s, as well as other flower species not previously sampled. I also employed pan traps, a more recent passive method of collection. Pan traps are colored plastic bowls filled with soapy water that attract flower-visiting insects. I found little overlap between my collections and the bee communities of the past collections. The species composition of my sample was markedly different from past samples, with 23 bee species previously found in Rockefeller Prairie in the 1970s that were not later recollected. Most notably missing from my collections was the most abundant bee in the previous collections, *Bombus pensylvanicus*, a species that has become less widespread across the eastern United States in recent years.