Insect Pollinator Diversity in Gardens Across an Urban-to-Suburban Gradient. JACOB LAWSON\*, MARGARET CARREIRO, LINDSAY NASON, PERRI EASON, and AMY CHERRY Biology Department, University of Louisville, Louisville, KY 40292.

Insect pollinator populations, which are crucial for maintaining ecosystems, have been steadily declining across the globe in recent decades, a trend that is intensified in cities. Urban native plant gardens could potentially offset these losses. However, the impact of these urban gardens on the conservation of native pollinators and other insects is not yet fully understood. This research attempts to determine the composition of insect communities in native plant gardens using an urban gradient approach. Across the city of Louisville, KY, seventeen garden sites and two reference meadows were selected. In each of these, bowls of three colors (blue, white, yellow) set at two heights (15 cm and 100 cm) were used to capture insects for identification to taxonomic order. The impact of bowl color, bowl height, garden characteristics, and degree of “urbanness” (measured by % Impervious Surface) on abundance and diversity of insects captured were assessed. We found that yellow bowls captured the most insects, while height played a slightly less significant role, with the high bowls capturing more. At the order level of taxonomic resolution, we found no statistically significant effect of garden characteristics or surrounding impervious surfaces on insect abundance or diversity. However, native plant gardens captured as many or more insects as the meadow reference sites, suggesting that the creation of more native plant gardens may well be a viable conservation strategy for supporting insect species, including pollinators, in urban environments.