UC RIVERSIDE

DEPARTMENT OF ENTOMOLOGY ENTM250 Series Webinar



Speaker: Kaleigh Russell PhD candidate Department of Entomology University of California, Riverside

ate:	Monday, Jan. 04, 2021
ime:	4:00 pm - 4:50 pm
oom:	952-3324-4564
asscode:	835322

Title:

"Elevational effects of pollinator visitation and nectar reward on the foothill penstemon, *Penstemon heterophyllus*"

Abstract:

Global climate change can have longstanding effects on inter-species interactions within pollination systems. For example, as temperatures increase, certain flowers may bloom earlier in the season; this has impacts on native bee health, as bees emerge later in the season and are left with less forage. Microorganisms, such as bacteria, fungus, and viruses, which associate with plants and pollinators play an important role in pollinator networks and may also be affected by temperature increases. Here, we test the effects of temperature on the California native perennial, *Penstemon heterophyllus*, by sampling nectar volume and sugar concentrations, nectar-inhabiting microbial communities, and pollinator visitation. Experimental plants were set up along an elevational gradient at Boyd Deep Canyon UC Reserve in order to experience different ambient temperatures. We sampled nectar once a week for the flowering season ranging from June to August 2019. We expect, as this study continues to unfold, to find differences in nectar-inhabiting microbial communities and pollinator visitation between sites as temperature influences plantpollinator-microbe interactions.