

Bloom-Hays Ecological Research Grant Awards

Bloom-Hays Ecological Research Grant: Five worthy student proposals were selected for funding by the Sea and Sage Science Committee. The objective of the Bloom-Hays Ecological Research Grant is to advance ecological research, particularly research related to avian species and the natural communities upon which they depend, by providing funds or supplies to support research activities benefitting native species and habitats in Southern California.

- **Shannon Lynch**, *University of California, Santa Cruz (PhD)*, “Risk, Spread, and Control of Fusarium Dieback – Shot Hole Borers Throughout Native Plant Communities in Southern California” (\$2,225) Studying the beetle-associated disease Fusarium dieback on riparian and oak woodland communities. Her project aims to identify local options for bio-control measures and to develop a phylogenetically-informed risk model for Fusarium dieback using host plant composition, host microbial composition, biomass, environmental data, and landscape factors.
- **Richard Hedley**, *University of California, Los Angeles (PhD)*, “Tracking Migration of Cassin's Vireo: Identifying Wintering Grounds and Assessing the Impact of Brood Parasitism on Migratory Movements” (\$680) Studying the migratory behavior of Cassin's Vireo by using geolocators to track movements during migration between temperate and tropical ecosystems. His project is also studying the effects of Brown-headed Cowbird parasitism and failed breeding attempts on migratory behavior.
- **Sara Matthews**, *California State University, Humboldt (Masters)*, “Utilizing Unmanned Aircraft Systems to Understand the Changing Phenology of Eared Grebes at Mono Lake” (\$800) Studying the use of weekly unmanned aircraft flights (flown at greater than 30 meters) with the existing annual manned flight for monitoring the increased deaths in the eared grebe population at Mono Lake. Her study also includes workshops with stakeholders to discuss the use of unmanned aircraft.
- **Devyn Orr**, *University of California, Santa Barbara (PhD)*, “Impact of Large Mammals and Climate on Bird Abundance and Diversity in Southern California” (\$800) Studying how abundance and diversity of native birds may change with regard to habitat quality and food availability as a result of livestock grazing and declining large wild mammal populations. Study plots span elevational and topographical gradients that mimic temperature and moisture changes expected to occur with climate change in this region in the next century.
- **Joseph Gamez**, *California State University, Fullerton (Undergraduate)*, “An Investigation of the Population Spread and Potential Host Species of the Pin-Tailed Whydah, an Exotic Obligate Brood Parasite in Southern California” (\$500) Studying the Pin-Tailed Whydah, an obligate brood parasite native to Africa that is increasing in numbers in southern California, to determine their abundance with regard to native and exotic host species and which species are most commonly parasitized. The study will also record the songs of male Whydahs to determine whether they mimic the songs of their host species.