

Endemic Environmental Services





Hot Days and Cold Nights: The Desert's Open Roads Prove to be Full of Life

LYELL BUTTERMORE, QSP, CESSWI

Senior Project Manager Wildlife Biologist

Endemic Environmental Services (EES) has now successfully completed our biological monitoring and surveying services in support of Caltrans District 9 to rehabilitate State Route 14 (SR 14) located in Kern County near Rosamond and Mojave (Project). The Project boundaries spanned from 1.4 miles south of Dawn Road to 0.5 miles north of Silver Queen Road. The project involved repaving the SR-14 lanes, building new on/off ramps and adjacent shoulders, upgrading the guardrails, trafic loop detectors, and roadside facilities.

As the biological services sub for the prime contractor chosen by Caltrans, Endemic wrote and established a Natural Resource Protection Plan (NRPP) to identify and outline species protection measures with an implementation that the project maintained compliance with all permits, licenses, agreements, and certifications (PLACs), as well environmental laws regulations. A Biological Resource Information Program (BRIP) was also prepared and utilized to educate personnel regulated species and habitats, related laws and regulations, and species protection measures and protocols associated with the project.

The sensitive species on the project included desert tortoise, Mohave ground squirrel (MGS), desert kit fox, American badger, nesting/migratory birds, nesting raptors, Swainson's hawk, and Joshua tree. The project also contained three Archeological Environmentally Sensitive Areas and a Species Protection Area that was contained within the entire project limit. Throughout



the project, Endemic biologists conducted frequent surveys of the sensitive resource areas which contained desert tortoise

continued on page 2

Hot Days and Cold Nights: The Desert's Open Roads Prove to be Full of Life

burrows, MGS burrows, and active desert kit fox dens. Desert kit foxes were often found scurrying across the project site in the early morning hours of the day, and the active dens were successfully avoided and protected throughout the project.

Nesting bird surveys were conducted frequently throughout the nesting bird season (Feb 15-Sept 15) in order to ensure no active nests were impacted from construction activities. The desert proved to be surprisingly full of diversity, with avian species such as horned lark, purple finch, western meadowlark, cactus wren, and Swainson's hawk. All dens, burrows, and nests were mapped and monitored throughout the duration of the project.



On October 9th, 2020, Joshua trees were listed as a Candidate Species for under the California Endangered Species Act (CESA) due to the continuous population declines from climate change factors such as extreme heat, fires, and drought. As a result, the Joshua trees on the project were flagged, measured, mapped, and fenced off with a 10 foot buffer in order to provide the necessary protection for this species. The Joshua trees were also closely monitored when construction activities and heavy equipment were in close proximity to the species. Each day, Endemic's biological monitor would provide meticulous updates and notes for the health and status of the Joshua trees present on-site.

Endemic's on-site biologist was for environmental responsible education training for all personnel working on-site through the Biological Resource Information Program. The on-site biologist conducted frequent ground-based surveys prior to clearing. grubbing ground disturbing activities. During biological monitoring, the biologist closely inspected and monitored construction activities that were in close proximity to the sensitive resource areas and protected habitat. Biological monitoring reports were prepared daily to summarize the observations, survey results, and project updates for all sensitive species within the project limits.

Upon project completion, the EES Biological Team prepared a Final Monitoring Report that served to provide a detailed summary and analysis of the avoidance, minimization, and mitigation measures that were successfully implemented to



ensure compliance with the agency requirements and protection of the sensitive species on site.

Endemic looks forward to future desert endeavors with upcoming projects located in Tehachapi, Cactus City, and the Haiwee Dam. The sensitive desert species of these projects continue to amaze and surprise the Endemic Team with their persistence and resilience. Through these projects we get to witness the desert ecosystem reveal its quiet complexity through the species that have so brilliantly adapted to survive in one of the harshest landscapes found on earth.





Reintroducing: Brennan Nerhus



Meet Brennan Nerhus, a returning employee to Endemic Environmental Services. Brennan originally worked as a part time Habitat Restoration and Land Management Tech for our Fairview Park Project through the City of Costa Mesa from 2017-2019. Brennan returned to the company as a part time Field Biologist in June 2021 after earning his B.S. in Environmental Management and Protection with an

emphasis in Wildlife Biology at Cal Poly San Luis Obispo.

Since then Brennan has assisted with Biological Construction Monitoring on various projects through the Central Coast; including the County of Santa Barbara's Floradale Avenue Bridge Replacement Project. He has also assisted with SWPPP inspections at projects in Santa Barbara County including the Fernald Point Lane Bridge Replacement Project, Cold Springs Bridge Painting Project, and a culvert replacement project.

This past fall, Brennan became a full time Staff Biologist and began taking on more responsibilities for the company. Brennan is currently spearheading various business development efforts for EES on the Central Coast. This has looked like

outreach and networking with potential partners and clients. He recently got Endemic to be included as a sub with two companies for an RFP/RFQ for the City of San Luis Obispo's On-call Environmental Services and Community Development Project and hopes to do the same for another RFP/RFQ in the City of Santa Barbara for the State Street Master Plan.

This spring Brennan will begin his endeavors as a Project Manager for yet another County of Santa Barbara Project: the Foothill Road Low Water Crossing Replacement Project in Cuyama. His goal for this year is to establish a new regional territory for the company on the Central Coast. Endemic is excited to see how his enthusiasm and experience will benefit the company in the future.

President's Corner



BARRY NERHUS

President

Some of you may have read or heard that E.O. Wilson and Thomas Lovejoy both passed away this week. These two were instrumental in conservation and biodiversity research for the past 60 years! As leading conservationists they coined the term "biodiversity"; are the reason why we know about habitat fragmentation; and they explained the dynamics of sociobiology.

I never met either of them; however,

I was inspired by reading their books and research, which in part put me in a direction of conservation. I encourage you all to learn about them for your own edification. We are the next generation they hoped to have inspired to carry their legacy!

Books I recommend from E.O. Wilson include:

The Theory of Island Biogeography Sociobiology Biophilia The Diversity of Life Naturalist