



THE PEREGRINE

Fall 2022 (Vol. 1 No. 6)



Protecting Marine Mammals as Port of Los Angeles Infrastructure Grows

CALVIN WON
Marine Biologist

Pier 400, located in the Port of Los Angeles (POLA), is the largest privately-operated container terminal in North America. In October 2018, the Trade Corridor Enhancement Program (TCEP) allocated \$21.6 million to expand the existing rail storage yard from six to 11 tracks. This railway expansion will eliminate an estimated 1,250 truck trips per day by 2040, resulting in a major reduction of carbon emissions. Over 31,000 linear feet of tracks will be added, which requires the construction of a new 400-foot railway bridge between the existing railway and traffic bridges along Terminal Island Roadway.

The construction of this bridge requires the installation of deep foundational structures into the

seafloor using a pile driver. Impact pile driving produces a significant amount of acoustic energy, which places federally-protected marine mammals at risk of severe auditory injury. To mitigate this risk, a NOAA-approved Endemic marine biologist must remain onsite to monitor for the presence of marine mammals during all pile driving activities. If a marine mammal enters the area, the observer notifies the construction crew to immediately pause all construction activity until the animal has moved to a safe distance on its own volition.

The most common marine mammals that frequent this area are California Sea Lions and Pacific Harbor Seals, with the occasional Bottlenose Dolphins, Short-beaked Common Dolphins, and Pacific White-sided Dolphins cruising by. In addition to marine

mammals, the Endemic staff member also keeps a watchful eye out for Green Sea Turtles and other protected wildlife, such as seabirds. Any observations of interactions between wildlife and the construction project are closely monitored and addressed as necessary.



ICRE Experts Present Summer Topics

CALVIN WON is currently a Marine Biologist for Endemic Environmental whose expertise is very useful for Terminal Island (Pier 400) Railyard Enhancement Project for Port of Los Angeles (POLA). He conducts biological monitoring of marine mammals in cooperation with the expansion of a railway bridge along Pier 400's transportation corridor. This project involves in-water pile driving activities, and Mr. Won maintains direct communication with construction operators to minimize risk of physical and auditory injury to resident populations of Bottlenose Dolphins, Common Dolphins, Pacific White-Sided Dolphins, Pacific Harbor Seals, and California Sea Lion. He remains available as an on-call SCUBA diver for pre-construction and post-construction eelgrass monitoring surveys, where data is collected regarding spatial distribution, areal

extent, percent of vegetated cover, and turion (shoot) density.

Calvin earned his M.S. at California State University Northridge, where he studied the spatial and temporal effects of lunar phase and sea surface temperature on spawning Barred Sand Bass off Huntington Beach, CA. He earned his B.S. in Marine Biology from California State University, Long Beach.

Calvin has experience with marine mammal and green sea turtle monitoring, scientific diving, small boat handling, and SONAR data collection and analysis. He is also very proficient at identifying various coastal fish and invertebrate species found in the Southern California Bight.

Calvin has 15 years of field research experience with an emphasis on nearshore, intertidal, and salt marsh



work, and is very experienced in beach seine surveys and intertidal quadrat surveys. He is also moderately experienced in salt marsh infauna and vegetation surveys, in-water acoustic telemetry, and water quality testing. He has excellent practical field skills, technical writing skills, and experience with statistical analyses, GPS, and ArcGIS Field Maps. ●

Watch Calvin's full talk "[Moonlit Summer Love: Exploring the Lunar Effect on Barred Sand Bass Spawning Aggregation Activity Using SONAR Technology](#)" on Endemic's YouTube page [here](#)

ANITA ARENAS is a biologist with a broad range of experience and knowledge with restoring native plant

species, maintaining wetlands, and monitoring biological resources. She has four years of experience working specifically in biological and ecological research.

As field biologist with Endemic, Anita is primarily assigned to the Fairview Park project for the City of Costa Mesa. She conducts environmental surveys, monitors sensitive species, including raptors, nesting birds, (e.g. least Bell's vireo, southwestern willow flycatcher),

bats, and arroyo toads. She also participated in ecological restoration and mitigation projects done for the City of Irvine on-call biological services.

She earned her Bachelor's degree and is currently pursuing her Master's degree in Biological Science from Cal State Long Beach. She completed training to handle Desert Tortoises by the Desert Tortoise Counsel and also CRAM Practitioner certificate. ●

Watch Anita's full talk titled "[The Effects of Yellow Iris \(Iris pseudacorus\) on the Invertebrate Communities in Southern California Estuary Environments](#)" on Endemic's YouTube page [here](#)



Endemic Teams Up with IBP to Monitor Avian Productivity and Survivorship



Pacific Slope Flycatcher
(*Empidonax difficilis*)

PHYLICIA SANCHEZ
Field Biologist

As passionate wildlife conservationists, Endemic biologists have been exploring new avenues of research. We are very excited to tell you about our recent project with the Institute for Bird Populations' (IBP) MAPS program. What is MAPS? The Monitoring Avian

Productivity and Survivorship (MAPS) program is a continent-wide collaboration that utilizes standardized protocols to capture and collect information on factors like age, sex, and other pertinent demographic parameters. Furthermore, banding throughout the summer songbird nesting season allows for ongoing data that helps highlight survival, reproduction, and movement patterns. This insight helps researchers track the population health of various songbird populations, identify existing issues, and ultimately better inform future conservation efforts. As this nesting season ends, we'd like to reminisce on some im-peck-able photos of our super fly team and charismatic avian residents of the Prado Basin Wetlands.

This project was made possible through the expert ornithology knowledge contributed by master bird

banders Dr. Peter Bloom and Dana Kamada, Dick Zembal, the natural resource director of the Orange County Water District, and the facilitation of our President, Barry Nerhus. Last but certainly not least, a huge thank you to our team of egg-ceptional volunteer biologists that helped run our station's mist netting. ●



American Bushtits (*Psaltriparus minimus*). Female (left) and male (right)

Chief Operating Officer Corner

DEAN NERHUS
Senior Biologist/Manager

On September 8th, it will have been three years since I moved up to Yuba City thinking I was only going to stay for a couple weeks, while me and my brother Barry figured out a biologist to cover a project in Marysville, CA. Having been born and raised near the beach my whole life, there was no thought of myself living up here for more than a month let alone three

years, but after having met some amazing people and seen some amazing things it has turned out to have been one of the best decisions I've ever made. Since my move to northern California, our company has grown rapidly, and we have now expanded our services to cover most of the state, with projects in Humboldt County all the way down to Orange County, and from San Francisco to Lone Pine. With this rapid growth, Endemic has brought on and

developed an amazing team of incredible individuals, all of whom are blossoming as environmental professionals. We would truly be nowhere if it wasn't for their passion and devotion to conserving wildlife and the environment. I would like to acknowledge the hard work and diligence that our staff has exhibited this past season and say thank you to all of you for all that you do. ●