

## Whalefest Symposium 2022 - March 19 & 20, 2022

### Saturday, March 19

11:00-11:45

Dan Haifley, Sam Farr

"The Citizen Movement That Created Monterey Bay National Marine Sanctuary."

Former Congressman Sam Farr and former Save Our Shores director Dan Haifley discuss how a decades long citizen movement culminated in the creation of Monterey Bay National Marine Sanctuary, protecting one quarter of California's coastline from offshore oil and other threats.

12:00 – 12:45

Lisa Wooninck, PhD, Superintendent, MBNMS

"50 Years of Whale Conservation by National Marine Sanctuaries."

Nearly fifty years ago, a new era of ocean conservation was born by creating a system of national marine sanctuaries. Since then, the National Marine Sanctuary System has grown into a nationwide network of 15 national marine sanctuaries and two marine national monuments that conserve more than 620,000 square miles of spectacular ocean and Great Lakes waters, an area nearly the size of Alaska. Whale conservation has been central to a number of national marine sanctuaries - from Hawaii to the West Coast to the Northeast. After all the logo of the National Marine Sanctuary System is a whale tail. The Whalefest presentation will focus on 50 years of whale conservation across the system of national marine sanctuaries.

1:00 – 2:00

Documentaries

2:15 – 3:00

Peggy West, Executive Director, Marine Life Studies and the Whale Entanglement Team **(WET)**<sup>®</sup>

"Saving Whales – The Anatomy of a Disentanglement Response"

Learn about the Whale Entanglement Team (WET)<sup>®</sup>, the anatomy of a whale rescue response, updates on recent entanglements, and Marine Life Studies' lost and abandoned fishing gear removal project. Listen how this highly trained team uses specialized equipment to rescue whales from a slow, painful death due to life-threatening entanglements. This work is conducted under the authority of the Endangered Species Act/Marine Mammal Protection Act permit issued to the Marine Mammal Health and Stranding Response Program.

3:15 – 4:00

Matt Savoca, Ph.D., Hopkins Marine Station at Stanford University

"Baleen whale prey consumption and its effects on marine ecosystems."

Baleen whales influence their ecosystems through immense prey consumption and nutrient recycling. It is difficult to accurately gauge the magnitude of their current or historic ecosystem role without measuring feeding rates and prey consumed. Here, we used tags deployed on seven baleen whale

(Mysticeti) species ( $n = 321$  tag deployments) in conjunction with acoustic measurements of prey density to calculate prey consumption at daily to annual scales from the Atlantic, Pacific, and Southern Oceans. We find that previous studies have underestimated baleen whale prey consumption. In the Southern Ocean alone, we calculate that pre-whaling populations of mysticetes annually consumed 430 million tonnes of Antarctic krill (*Euphausia superba*), twice the current estimated total biomass of *E. superba*, and more than twice the global catch of marine fisheries today. Larger whale populations may have supported higher productivity in large marine regions through enhanced nutrient recycling. The recovery of baleen whales and their nutrient recycling services could augment productivity and restore ecosystem function lost during 20th century whaling.

4:15 – 5:00

Daniel Fernandez, PhD, CSUMB

“Coastal fog and its Importance to Regional Ecosystems”

Dr. Fernandez will describe coastal fog, its importance to regional ecosystems, and its role in (and how it may be affected by) processes associated with climate change. He will then describe some of his research and some of his results on fog abundance and water capture.

### **Sunday, March 20**

11:00 – 11:45

Kelly Sorenson, Executive Director, Ventana Wildlife Society

“California Condor Conservation: A Success Story in the Making”

California Condors have faced many challenges in the wild, but are on track toward full recovery. Ventana Wildlife Society has devoted 25 years to hands-on releases to the wild and post-release recovery work in California. The California Condor is truly a survivor of a tumultuous time and is making a comeback despite ongoing challenges.

12:00 - 12:45

Corey Garza, PhD, CSUMB

“A Game of Drones: Advancing Discovery and Innovation in Coastal Research.”

Aerial drones have seen increased use in coastal studies due to their ability to rapidly capture data on the distribution and abundance of coastal resources at a relatively low cost. Modern drones, outfitted with high-resolution digital cameras, provide a method for capturing multi-scale data on coastal habitat distribution and community composition at scales of a few centimeters up to hundreds of meters. Drones can provide stakeholders, resource managers and researchers with timely information on changes in the coastal environment. As the NOAA CCME has a direct student training mission, our drone program can also support training a new generation of scientists in the use of technologies to support the emerging needs of 21st century coastal science.

1:00 – 2:00

Documentaries

2:15 – 4:00

Tim Thomas, Historian; Larry Oda, JACL; Tony Goulart, Portuguese Heritage Publications; Bob Enea  
“The Bounty of the Bay”

How diverse ethnic fishing cultures have benefitted historically from the bounty of the Monterey Bay

4:15 – 5:00

William Gilly, PhD, Hopkins Marine Station at Stanford University, Western Flyer Foundation  
“Return of the Western Flyer”

Western Flyer vessel and its return to Monterey in 2022 where it will provide at-sea educational experience in STEM and humanities subjects.

## **Whalefest Symposium 2022 Presenters**

### **Dan Fernandez, PhD, CSUMB**

Professor Daniel M. Fernandez has been teaching physics at CSUMB for the past 26 years and is a faculty member within the Department of Applied Environmental Science. He also has been and is currently involved with a number of sustainability-related initiatives on campus, including running the Sustainable City Year Program, which partners university classes with regional municipalities to promote enhanced regional sustainability. He also is working on a project with the Aquarium, Artists Ink and with other researchers on an NIH/NIGMS/SEPA grant that addresses the integration of art and science into curriculum designed to look at the impacts of plastic pollution, climate change and agricultural practices on human health. He started his research in fog and fog water collection around 2005 and, since then, has collected fog to measure its abundance from sites across the state

### **Corey Garza, PhD, CSUMB**

Dr. Corey Garza is a Professor in the Department of Marine Science at California State University, Monterey Bay (CSUMB). Prior to arriving at CSUMB he was a research ecologist with the National Oceanic and Atmospheric Administration (NOAA) where he served as scientific liaison to the United States Environmental Protection Agency's (USEPA) Long Island Sound Study. His research interests are in the area of marine landscape ecology. He uses marine technologies and computer modeling to study the relationship between habitat complexity and patterns of species distribution and abundance in marine communities. At CSUMB he oversees a number of National Science Foundation (NSF) and NOAA funded programs that include the Monterey Bay Regional Ocean Sciences Research Experiences for Undergraduates, the NOAA Center For Coastal and Marine Ecosystems and NSF ASPIRE (Active Societal Participation in Research and Education). He is a fellow of the California Academy of Sciences and serves on the board of directors for the American Geophysical Union (AGU)

### **Dan Haifley**

Dan was Executive Director of O’Neill Sea Odyssey, a free, ocean-going science and environment program for mostly low-income elementary school students, from 1999 to 2019. He served as Chief Aide and District Chief for California State Senator Henry J. Mello from 1993 until 1996 and Executive Director of Save Our Shores – where he worked on local laws in California aimed at onshore facilities for offshore oil and helped lead the citizen movement to designate Monterey Bay National Marine Sanctuary – from 1986 to 1993. Dan holds a Bachelor of Arts in Economics from University of California, Santa Cruz.

He serves on the Monterey Bay National Marine Sanctuary Advisory Council, and also is Board member and Secretary for the Monterey Bay National Marine Sanctuary Foundation and is Chair of the Board of Directors of Catamaran Literary Reader. From April 2008 until March 2019, he published an ocean column in the Santa Cruz Sentinel. He is married to Rebecca Haifley and has two grown children, Aaron and Julia, and enjoys ocean kayaking, reading, and exploring our region's wild areas.

**Matt Savoca, PhD, Hopkins Marine Station at Stanford University**

**Matthew Savoca** is an ecosystem ecologist whose research focuses on anthropogenic change in marine systems. Most recently, Matthew has quantified the prey consumption and nutrient recycling services baleen whales provide to marine ecosystems. In fertilizing pelagic environments, whales enhance primary and secondary productivity and carbon storage. Matthew is currently a National Science Foundation postdoctoral research fellow at the Hopkins Marine Station of Stanford University. He is also a visiting researcher at the National Museum of Natural History, Smithsonian Institution, in Washington, DC. Matthew received his PhD in Ecology at the University of California, Davis and has worked as a science-policy fellow for the National Oceanic and Atmospheric Administration. He is also passionate about science communication and has written numerous articles for *The Conversation*, which have been republished in outlets including the *San Francisco Chronicle*, *Scientific American*, and the *Washington Post*.

**Kelly Sorenson, Ventana Wildlife Society**

Kelly's career has been entirely in the field of wildlife conservation, first working to recover the Peregrine Falcon, followed by the Bald Eagle and since 1996, the California Condor. He has B.S. degree in Wildlife and Fisheries Management from West Virginia University and a Master's in Public Administration from Golden Gate University. Kelly has been the executive director of Ventana Wildlife Society since 2003

**Peggy Stap, Marine Life Studies**

Peggy Stap, a Michigan native, saw her first whales on a whale watch in Maui, Hawaii, which was a life-changing experience. In 2006, she founded Marine Life Studies dedicated to research, education, and whale rescue in Moss Landing, California. Peggy, a volunteer herself, has served as Executive Director ever since. She is Co-founder of the Whale Entanglement Team (WET)<sup>®</sup>, co-investigator Level 3 Responder under NOAA MMHSRP permit for whale rescue, and the principle investigator under NOAA NMFS permit to conduct research on whales and dolphins in the Monterey Bay National Marine Sanctuary.

**Lisa Wooninck, PhD, MBNMS**

Dr. Lisa Wooninck was recently appointed the next superintendent for Monterey Bay National Marine Sanctuary. Dr. Wooninck has worked for NOAA for over 20 years, her first seven years with the National Marine Fisheries Service and the past 14 years in various roles for the Office of National Marine Sanctuaries. Prior to coming to NOAA, Dr. Wooninck served as a Knauss SeaGrant fellow for Congressman Sam Farr. Dr. Wooninck completed her PhD at the University of California, Santa Barbara in Ecology, Evolution and Marine Biology; she has a MS degree and a BA degree in Biology from California State University, Northridge. She has been author or co-author on nearly a dozen papers about marine protected area science and management, the science of deep sea coral and sponge habitats, and the reproductive fitness of tropical reef fish.

Dr. Wooninck brings a sound appreciation and understanding of the importance of science in resource management decision-making, a passion for the value of education and outreach in connecting people

to the ocean and fostering coastal stewardship, and a commitment to protecting national marine sanctuary resources. She is a proven collaborator within and beyond the agency, and provides positive energy to her work and relationships. She and her family live in Aptos, CA