

13th Annual Whalefest Monterey Symposium Schedule

SATURDAY, MARCH 18, 2023

11:00 – 11:30 am

Lisa Wooninck, Ph.D, MBNMS: “Whale Conservation and Climate Change in National Marine Sanctuaries”

Dr. Lisa Wooninck is the 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

11:45 – 12:30 pm

Michael Kelly, MBARI: “Construction of MBARI’s New Research Ship R/V David Packard”

Michael Kelly will discuss MBARI’s new research ship, from concept to construction and this ship’s arrival to Moss Landing later this year.

Michael Kelly serves as the Director Marine Operations at MBARI. Michael has over 40 years in the maritime industry, and is a United States Coast Guard licensed Master Mariner. Before joining MBARI in 2015, Michael was the Director and Project Manager of the National Science Foundation funded Ocean Observatories Initiative, a \$400m project to build a global and regional scale integrated ocean observatory. Michael received a Bachelor of Science degree in Marine

Transportation from the Massachusetts Maritime Academy, and later in his career completed an Executive MBA from Rutgers University.

12:30 – 2:00 pm

*****Lunch Break*****

2:00 – 2:45 pm

**Peggy Stap, Marine Life Studies & The Whale Entanglement Team (WET)® :
“Saving Whales – The Anatomy of a Disentanglement Response”**

Learn about the Whale Entanglement Team (WET) ®, the anatomy of a whale rescue response, and updates of recent entanglements; including an entangled whale that went from Monterey to Mexico! 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.

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)®, co-investigator Level 3 Responder under NOAA MMHSRP permit for whale rescue, and the principle investigator under a NOAA Endangered Species permit to conduct research on whales and dolphins in the Monterey Bay National Marine Sanctuary.

3:00 – 3:45 pm

Fred Sharpe, Ph.D., Alaska Whale Foundation: “Lord of the Rings – Humpback Whales Blow Bubble Tori for Humans”

This talk focuses on a sparsely documented genre of bubbles: the bubble ring. Not to be confused with a bubble net (a spiral-shaped trap for prey capture), a ring is a poloidally-spinning, air-infused vortex (like a smoke ring). Come and celebrate these unique and beautiful structures, which appear to be playfully released during friendly encounters with humans. Are these creations (which are deployed from a single nostril) given as gifts, play prompts, or are they signals with deeper meaning?

Dr. Sharpe is a principal investigator with the Alaska Whale Foundation. His interests include foraging ecology, acoustics, tool use and the evolution of social

behavior. Fred is also a naturalist in the classical tradition and has co-authored and illustrated books on birds and plant life.

4:00 – 4:45 pm

John Ryan, Ph.D., MBARI: "Foraging Strategies of Oceanic Giants as Seen from Outer Space & Heard from Inner Space"

To survive, gigantic marine animals need to consume densely concentrated food patches. Using satellite tracking of whale sharks and directional passive acoustic sensing of whales, this talk will explore how oceanic giants move through vast and patchy ecosystems to forage.

John Ryan is a biological oceanographer with the Monterey Bay Aquarium Research Institute, studying the ecology of plankton, fish, and mammals.

SUNDAY, March 19, 2023

11:00 - 11:45 am

Andrew DeVogelaere, Ph.D., MBNMS: "Discoveries in the Deep"

Deep, dark, out of sight-out of mind... not anymore! Monterey Bay National Marine Sanctuary has become an international focus area for deep-sea exploration and research. What many thought was an area devoid of life, boasts beautiful and fascinating sea creatures. Fish that turn from blue to red as they age, corals that are thousands of years old, light shows where you least expect them, and deep-sea octopus brooding gardens are a few of the stars to be highlighted in this presentation. And we've only begun to scratch the surface of what the latest technology will help us explore. We also have a role to play in protecting these wonders for future generations. Come enjoy some unique visuals from the deep and join the conversation!

Dr. Andrew DeVogelaere oversees Monterey Bay National Marine Sanctuary's research program and has published scientific papers on habitats ranging from estuaries to the deep sea. He enjoys developing collaborations among the many central California research institutions to address wildlife management issues. In general, he is interested in using science to inform conservation of marine ecosystems, natural biodiversity, and ecosystem services. He has participated in development of award-winning nature films with the BBC, Netflix and independent producers. Andrew is also an Adjunct Research Faculty at California State University Monterey Bay and a Research Affiliate at Moss Landing Marine Laboratories.

12:00 – 12:45 pm

Tim Markowitz, Marine Mammal Center

Tim Markowitz, Marine Mammal Center:” California Coastal Bottlenose Dolphins Ranging North to Monterey Bay, San Francisco Bay... and Beyond

Since the 1980s, coastal bottlenose dolphins (*Tursiops truncatus*) expanded their range significantly from the Southern California Bight, first to Monterey Bay and subsequently to the San Francisco Bay Area. Some individuals have been observed for extended periods in San Francisco Bay, but most appear to move between different areas with some regularity. Comparisons with other catalogs showed that individuals routinely moved between San Francisco Bay, Monterey Bay, and areas further south. Additional photo-identification records showed some dolphins ranged north along the Sonoma and Mendocino coasts, with a few confirmed along the Oregon and Washington coasts. In 2019, three coastal bottlenose dolphins, previously observed in Monterey Bay and San Francisco Bay, were photographed off the Farallon Islands, 32 km from the nearest mainland coast, the first confirmed record of California coastal bottlenose dolphins in such offshore waters. Subsequently, these dolphins were resighted nearshore just south of San Francisco. The significant change in ranging patterns for a small coastal population of dolphins is likely related to environmental changes and has resulted in new ecological interactions, including salmon predation and “porpicides”. Much remains to be learned about our new dolphin neighbors along the coast of Central and Northern California, including a better understanding of spatiotemporal variation in habitat use, socioecology, and population trends. Members of the public can participate in this effort by sharing sightings and photographs with researchers.

Dr. Tim Markowitz received his B.A. from U.C. Santa Cruz in Environmental Studies, his M.S. from U.C. Davis in Animal Science and his Ph.D. from Texas A&M University in Wildlife and Fisheries Sciences. Over the past 25 years, Tim conducted and supervised field studies examining the behavior and ecology of marine mammals, including dusky dolphins, sperm whales, New Zealand fur seals, humpback whales, killer whales, bottlenose dolphins and belugas. In the course of this effort, he pioneered new research techniques, including the use of digital photography in cetacean identification and the “skin swab” DNA sampling method. More recently, Tim has led research efforts focused on whales, dolphins, and porpoises of the San Francisco Bay area, first as the Research Director for Golden Gate Cetacean Research and subsequently as the Cetacean Field Research Coordinator at the Marine Mammal Center. Over the past five years, Tim supervised research projects examining humpback whales, gray whales, bottlenose

dolphins and harbor porpoises in San Francisco Bay and the surrounding waters. This research has expanded understanding of harbor porpoise reproductive behavior, humpback whale movements and habitat use, gray whale foraging behavior, and the northward range expansion of coastal bottlenose dolphins. Much of this research has important application to conservation efforts for whales, dolphins and porpoises, providing information on vessel interactions, fisheries bycatch, and responses to environmental change. Tim currently holds a part-time faculty appointment at U.C. Berkeley, where he teaches classes in the Departments of Integrative Biology and Environmental Science, Policy, and Management. He also serves as a research advisor and committee member for graduate students at San Francisco State University.

12:45 – 2:15 pm

*****Lunch Break*****

2:15 – 3:00 pm

Will Oestreich, Ph.D., MBARI: “Using Sound to Explore the Lives of Vocal Marine Predators and Their Prey”

The ocean is a world of sound: not only is sound the primary mode of communication for many marine animals, but it is also one of the most powerful tools that researchers have to study marine animals and ecosystems. In this talk, Dr. Will Oestreich will share recent insights on the foraging, migratory, and social behavior of several marine predator species and their group-living prey.

Will Oestreich is a postdoctoral fellow at the Monterey Bay Aquarium Research Institute (MBARI), where he explores the behavior and conservation of animal groups. Much of this research centers on understanding how animals acquire and share information to make behavioral decisions such as when to migrate, where to feed, and how to avoid predators. He previously completed a PhD in Biology at Stanford University, and BS and MS degrees in Environmental Engineering at Northwestern University. Prior to his PhD, Will worked at the Woods Hole Oceanographic Institution and the Natural Resources Defense Council.

3:15 – 4:00 pm

Amanda Kahn, Ph.D., Moss Landing Marine Lab : “The secret lives of sponges: Understanding ancient animals at their own pace”

Dr. Kahn’s research aims to explore the secret lives of sponges—what they contribute to their ecosystems and the timescales they operate on, with a special

focus on the deep sea. Deep-sea communities are often food-starved, relying heavily on imported nutrients either as material sinking from the surface or arriving via lateral currents. Suspension feeders – animals that capture food particles suspended in the water column—create important pathways that link food energy from microbes in the water column with animals on the seafloor. Dr. Kahn’s research focuses on one group of suspension feeders that is highly successful at surviving in the deep sea: the sponges (Phylum Porifera). Through their feeding activity, sponges act as oases of nutrients in the food-poor deep ocean.

Dr. Kahn’s research broadly focuses on the movement of food energy (carbon) within and between ecosystems, and on how animals facilitate this movement – especially in the food-starved deep sea. This research has involved studies of deep-sea sponges from extinct underwater volcanoes off the coast of California, the unique glass sponge reefs of western Canada, and ‘cheese-bottom’ sponge grounds in the fjords of Norway. After obtaining degrees in biology, chemistry, marine science and a Ph.D. in ecology,

she completed postdoctoral fellowships studying sponges in the deep north Pacific and oceanography of the North Atlantic with the University of Alberta and Norway’s Institute of Marine Research, then became a postdoctoral fellow studying the ecology and physiology of the sponges of Sur Ridge with the Monterey Bay Aquarium Research Institute. In 2019 she joined Moss Landing Marine Laboratories and San Jose State University as an assistant professor in invertebrate ecology, where she continues exploring the fascinating lives of invertebrates with her students.

4:15 – 5:00 pm

Bryant Austin, photographer: “Eye to Eye with Whales”

Bryant will share highlights of his time creating the world’s first and only life-size portrait photographs of whales and his experiences sharing them in whaling nations.

Bryant Austin is a photographer known for his life-size portrait photographs of whales; some as large as 8 X 36 feet. He’s worked all over the world photographing whales where he works alone on snorkel, spending up to three months patiently waiting for whales to approach him an arm’s reach away, allowing the portrait session to begin.

He's held numerous exhibitions globally including shows in Norway and Japan where whaling continues. Bryant's books include, Beautiful Whale, Abrams, 2013 and sun, water, being, Datz Museum of Art Press, 2021