## Dr. Julia O'Hern on Whale Sightings, Rescue, and the Role of Ocean Data

Voices of the Region | The Marine Mammal Center

When asked what a typical day looks like for her team, Dr. Julia O'Hern, Associate Cetacean Biologist at The Marine Mammal Center (the Center), chuckles. "It's tough to describe a typical day," she says, "because you never know when you'll get a call about an entangled whale or a stranding event. You always have to be a little on your toes."

The Center is a global leader in marine mammal health, science, and conservation, advancing ocean stewardship through rescue,



Image 1

rehabilitation, research, and education. From monitoring gray whales in San Francisco Bay to responding to emergency disentanglement calls 30 miles offshore, Dr. O'Hern is part of a small, passionate team helping to carry out this mission.

This spring, her team has observed a concerning pattern: an usually high number of gray whales entering San Francisco Bay. "We've seen them come into the Bay before," she notes, referencing past Unusual Mortality Events, "but this year it's just way more whales than we were expecting." Many appear malnourished. O'Hern explains that the uptick in gray whale presence has been accompanied by a concerning rise in deaths: 19 gray whales have been found dead in the region so far this season. Her team is working closely with the Center's Pathology Team and partners, including the California Academy of Sciences, to necropsy stranded whales and determine causes of death.

"We know at least six of them died by vessel strike," she says, underscoring the need for boater awareness. "When you're out on the water, keep an eye out. Gray whales are especially tough to spot—if it's foggy, even something like a humpback can be hard to see."

In the Central & Northern California region, an area characterized by strong upwelling and dynamic ocean conditions, environmental context is essential.



Image 2

From planning surveys to responding to entanglements and strandings, her team regularly consults wind, tide, and fog data. She often goes to the regional Ocean Observing System first because she can "track and trust where the data came from."

Often, O'Hern's team has to operate under low visibility and weather-limited timeframes. That's where regional partnerships and shared data systems come in. As an oceanographer, O'Hern "appreciates all the Ocean Observing Systems—like CeNCOOS—because they help to fill a major gap, creating a forum for understanding what data is available". Through the <u>CalOOS</u> data portal - an interactive catalog and map housing thousands of datasets - researchers and responders like O'Hern can quickly access information vital for ocean operations, such as <u>wind</u>, <u>visibility</u> and <u>precipitation</u>.

O'Hern is also working with other researchers to dig deeper into how ocean conditions affect whale behavior. "We've started looking at precipitation volumes, ocean currents, and tides. Maybe the freshwater and nutrient influx in the Bay creates more habitat during some years than others. Maybe a tidal front is entraining prey for humpbacks."

And beyond the science, O'Hern emphasizes the human side of marine conservation. "The whales don't observe boundaries," she says. "We're constantly talking with folks from southern California, Washington, even Mexico. Human communication has been incredibly helpful—both for planning, and for understanding what's happening with the whales."

One story that stands out is from 2020, when O'Hern and her team responded to an entangled whale in the middle of the pandemic. "It had this horrible, tight wrap around its peduncle (tail)," she recalls. Despite choppy seas and strict COVID protocols, the crew coordinated under pressure to attach a satellite tag and eventually remove all the gear. "That was a really good feeling," she says, "because that whale then swam off—and we had some re-sights later on."

It's a reminder that ocean science is a team effort, and that data,

observation, and community all play

a role. "I feel incredibly lucky to do this work," she adds. "I grew up in Iowa. Finding my way to the ocean took time, so I think about how we can make sure there's room for everyone to bring new ideas and energy into understanding what's going on out there."

Thank you to Dr. O'Hern and the rest of the Center's team for all of the important work you do for the whales in our region! For more information about The Marine Mammal Center's research and initiatives, visit their website at <u>https://www.marinemammalcenter.org/</u>



Image 3



Image 4

Image captions and credits:

- Image 1: Dr. Julia O'Hern (left), Associate Director of Cetacean Conservation Biology at The Marine Mammal Center, scans the Whale Alert app while on a vessel survey to monitor whales in San Francisco Bay. **Photo © Brian Feulner, NOAA Permit #21678**
- Image 2: A dead gray whale is pictured at Kirby Cove in the Marin Headlands, part of Golden Gate National Recreation Area, prior to a necropsy, or animal autopsy, by scientists at The Marine Mammal Center and the California Academy of Sciences on May 28, 2025. Photo by Marjorie Cox © The Marine Mammal Center
- Image 3: Dr. Julia O'Hern (right), Associate Director of Cetacean Conservation Biology at The Marine Mammal Center, attempts to disentangle a humpback whale with fellow trained responders in Monterey Bay National Marine Sanctuary on May 16, 2020.
- Image 4: A gray whale is sighted breaching in San Francisco Bay on February 9, 2024, by The Marine Mammal Center's Cetacean Conservation Biology Team. Photo by Darrin Allen © The Marine Mammal Center, NOAA Permit #26532