RESPECT WILDLIFE

9th California Coastal Wildlife Disturbance Symposium
November 14, 2023
Moss Landing Marine Laboratories

Presentation Abstracts

Community Interactions in Pursuit to Reduce Recreational Impacts on Wildlife
Annie Daw, Bolsa Chica Reserve Watch (Amigos de Bolsa Chica) Program Manager, Bolsa Chica Land Trust

The Bolsa Chica Ecological Reserve (BCER) was established to protect the critical wetland habitat that over 800 species require for survival. As BCER is one of the largest and last remaining wetlands in southern California, its importance for wildlife is evident. However, its location in a densely populated, high-traffic area draws approximately 100,000 people to visit each year. In the fall of 2022, the Bolsa Chica Reserve Watch volunteer program was launched to help educate the visiting public about the importance and reasons behind BCER's rules and regulations so that the reserve can remain a safe and protected ecosystem for wildlife.
In the first 11 months of the program, volunteers interacted with more than 18,000 visitors and reported over 700 reserve violations, most often of which were off-trail, dogs, and bike violations. The violation-to-interaction ratio has decreased from 7% (after one month) to 3.9% (after 11 months), thereby indicating increased visitor awareness at BCER over that period. Bolsa Chica Reserve Watch has been a helpful tool to better manage the public areas of BCER, and the program's palpable success suggests that other properties may want to consider adding a similar program to meet public awareness needs.

Lessons Learned from Sea Otter 841
Jessica Fujii, Sea Otter Program Manager, Monterey Bay Aquarium
Sandrine Hazan, Stranding and Rehabilitation Manager, Monterey Bay Aquarium
Colleen Young, Senior Environmental Scientist, California Department of Fish and Wildlife
Lilian Carswell, U.S. Fish and Wildlife Service

In summer 2023, a southern sea otter went viral after videos and photos of her approaching and "stealing" surfboards at a very popular surf spot in Santa Cruz were shared on social media. Out of concern for animal and human safety, experienced personnel from several agencies, universities, and NGOs worked collaboratively to monitor the sea otter, coordinate capture attempts, and develop and conduct outreach messaging. The unique case of the sea otter's

history, the public attention in a highly visited area, and the range of public opinions on the situation created new challenges. Additionally, indirect effects of the otter's fame led to concerns about increased sea otter disturbances throughout their range. Here, we provide a history of the sea otter, a summary of actions taken by the Aquarium and partners, and an update on Sea Otter 841.

Poster Presentation
Surfers and Sea Otters: Exploring a Unique Relationship
Dakota Peebler, Cofounder, Heirs To Our Ocean (H2OO)
Gena Bentall, Director and Senior Scientist, Sea Otter Savvy

Research by Sea Otter Savvy has established that sea otters are under threat of human disturbance. Marine recreationists like kayakers, paddleboarders, and boaters, wanting to get a better look or photo of this classic California marine mammal, knowingly or unknowingly approach sea otters too closely, disturbing the delicate balance of behaviors sea otters must maintain to survive. Is this true of all types of marine recreationists? Surfers—a user group pursuing a sport in the ocean—may have a different relationship with the wild sea otters inhabiting their favorite surfing spots. Sea Otter Savvy has long pondered this unique relationship and sought to investigate. In the summer of 2023, Dakota Peebler, a cofounder of Heirs To Our Ocean in partnership with Sea Otter Savvy, investigated the frequency, nature, and outcomes of surfer-sea otter interactions at two surfing hotspots on the Santa Cruz coast. Through in-the-field sea otter monitoring and interviewing surfers regarding their experiences with members of this keystone species, Dakota collected data and will share what she has learned at the culmination of this summer research project.

National Marine Sanctuary Enforcement Case Study
Sam Reigner, Enforcement Officer, NOAA–NMFS Office of Law Enforcement

As an Enforcement Officer for NOAA's Office of Law Enforcement (OLE), I am charged with ensuring compliance with federal laws enacted to protect wildlife off the coast of California. These statutes include but are not limited to the Marine Mammal Protection Act, the Endangered Species Act, and the National Marine Sanctuaries Act. I will present a case study on a violation of the National Marine Sanctuaries Act, and I'll walk through the details of a wildlife disturbance case and the steps taken that resulted in the eventual issuance of a penalty. This was the first time a penalty was imposed for this regulation in Monterey Bay National Marine Sanctuary. By taking a written regulation and enforcing it in the field, I will call attention to the elements of the crime and the evidence that made this case unique and led to successful

prosecution. Although the issuance of one fine may not ultimately change a trend of wildlife disturbance in an increasingly populated area, each contact, whether prosecuted or not, shows industries, visitors, and residents that NOAA is serious about protecting our nation's resources and that the Office of Law Enforcement's outreach and enforcement activities can help bring about change.

A Commercial Fisher Perspective on Wildlife Disturbance
Richard (Dick) Ogg, F/V Karen Jeanne, Bodega Bay

As commercial fishermen, we are very aware that we are visitors on the Ocean and are entering into a home occupied by numerous other creatures. To be respectful and understanding of the environment is critical to our very existence. My talk will be based around how we are silent in our presence. How important it is to leave no trace. Work safely without impacting anything other than our targeted species. Provide a sustainable resource that truly belongs to the public. And promote and support the growth of our pristine ocean waters. We are not just farmers of the sea but conservationists of our ocean environment.

Live from the Field with the California State Parks PORTS team
Robin Hazard, Interpreter I/MPA Outreach Educator, California State Parks

The Parks Online Resources for Teachers and Students (PORTS) program brings California State Parks into the classroom, digitally, from over 55 parks in all corners of the state. More than 60 PORTS presenters share their love for the park they are at with students. In addition to live On-Demand and presentations, program developers have created additional digital resources that teachers can find with the PORTS finder to include in their curriculums. This presentation will provide additional information about the PORTS program and share examples of PORTS in action, including engagement with kids on keeping a proper distance from wildlife and engagement with various communities (mainly adults) on recreating responsibly.

California Department of Fish and Wildlife's Human-Wildlife Conflicts Program
Taylor Dutrow, Scientific Aid, Wildlife Health Laboratory, California Department of Fish and Wildlife
Dana Odineal, Scientific Aid, Wildlife Health Laboratory, California Department of Fish and Wildlife
Alex Heeren, Research Scientist III, Wildlife Health Laboratory, California Department of Fish and Wildlife

Human-wildlife Conflict (HWC) describes the conflicts that can occur when and where humans

and wildlife coexist and the resulting impacts on humans, wildlife, natural resources, or property. The occurrence of these conflicts increases as human populations continue to expand, creating competition for limited resources such as habitat, shelter, food, and water. The California Department of Fish and Wildlife works to monitor human-wildlife interactions and the effectiveness of current management and deterrence methods using GPS telemetry collars. Since 2022, the Human-Wildlife Conflicts Program has purchased over 400 GPS collars to track conflict animals such as black bears. Black bear collaring efforts also included yearlings released from permitted wildlife rehabilitation facilities. 2023 marks the first year that CDFW staff has fitted all bears released from rehabilitation facilities with GPS collars to follow their first nine months back in the wild. The Statewide HWC Program (Program) has deployed over fifty conflict-specific collars in the wild, allowing CDFW to track each animal's movements for up to two years. The Program will use data from these collars to evaluate critical sources of conflict, assess the success of rehabilitated black bears, and aid in guiding the future of CDFW's response to conflict.

Marine Mammal Harassment and Audience Perceptions in Central California

Giancarlo Rulli, Public Relations Manager, The Marine Mammal Center
Adam Ratner, Director of Conservation Engagement, The Marine Mammal Center

Experts at The Marine Mammal Center received reports of or observed more than 25 percent of their seal, sea lion, and sea otter patients rescued last year experiencing negative interactions with humans and/or dogs along the Center's 600-mile California response range. Animals experienced a wide range of negative interactions, from beachgoers approaching for photos to bites from off-leash dogs to more severe cases of people removing animals from the beach. With geographic and species data for each animal rescued, researchers were able to identify trends and hot spots for harassment within Central California. Using this data, the Center has engaged media, behavior change experts, and partner organizations to help develop new messaging and approaches to raise awareness and shift these negative behaviors. In-person and digital surveys provided further information on the motivations and attitudes of local and tourist beachgoers toward marine mammals. Now bolstered with multiple data sources for year-over-year analysis, the Center's team is utilizing a multi-pronged approach to address the issue of human-wildlife interaction. Initial efforts include trying to reach beachgoers, tourists, and small businesses in key interaction hot-spot areas with information about how to safely share our shores and local waterways with marine wildlife.

Poster Presentation:

Getting the shot: The effect of camera use on the probability of southern sea otter (*Enhydra lutris nereis*) disturbance in Central California

Samantha Hamilton, Sea Otter Savvy, Johns Hopkins University

The popularity of wildlife photography has substantially increased in recent decades, intensifying pressure on charismatic species. Previous research has shown that photos taken at close distances can elevate stress, cause behavioral changes, and sometimes lead to habituation to humans. Here, we determine if camera use by marine recreationists affects the distance maintained from sea otters at various Central California sites. From February 2021 to September 2023, scan-sampling methods were used by Sea Otter Savvy staff and community science members to collect observational data. We found that individuals with a camera had an average distance of 27.4 meters from sea otters while those without a camera were 37.7 meters away (p<0.001). Among camera users, those with a cell phone were 2.41 meters closer to sea otters on average than those with a single-lens reflex camera (p<0.001). These results demonstrate that cameras, especially on cell phones, shorten the human-otter distance and increase the probability of disturbance. Sea otters are particularly vulnerable given their high energetic demands and can have their survival or reproductive success comprised by human disturbance. Thus, individuals engaging in photography should maintain a respectful distance to achieve peaceful co-existence with sea
otters.

Designing and Implementing Conservation Marketing Campaigns

Sara Melena, Communication Specialist, National Park Service

Resource managers and agencies use science to make informed decisions to protect resources. The same standard applied to conservation marketing campaigns can yield positive results that support public stewardship of the same resources. This starts with a data-driven approach to selecting target behaviors and includes careful selection of strategies that consider messaging, site context, and social and physiological influences. A growing number of conservation organizations are applying conservation marketing approaches to encourage stewardship behaviors. This presentation will showcase examples of successful collaborations and projects from the NPS and other organizations where a conservation marketing approach has been implemented to support positive visitor experiences and stewardship.

Keynote Presentation:

Five Lessons to Guide More Effective Biodiversity Conservation Message Framing

Professor Sarah Bekessy, Royal Melbourne Institute of Technology (RMIT University)

Communication and advocacy approaches that influence attitudes and behaviors are key to addressing conservation problems, and the way an issue is framed can affect how people view, judge, and respond to an issue. Responses to conservation interventions can also be influenced by subtle wording changes in statements that may appeal to different values, activate social norms, influence a person's affect or mood, or trigger certain biases, each of which can differently influence the resulting engagement, attitudes, and behavior. By strategically considering how conservation communications are framed, they can be made more effective with little or no additional cost. Key framing considerations include emphasizing things that matter to the audience, evoking helpful social norms, reducing psychological distance, leveraging useful biases, and, where practicable, testing messages. These lessons will help communicators think strategically about how to frame messages for greater effect.