Climate Change Education at The Marine Mammal Center

The record numbers of sick and injured marine mammals rescued in recent years indicates there is an urgent need for more science and education to help us better understand how climate change may be affecting the health of marine mammals and the ocean environment. By taking action now to ensure a healthy ocean and healthy marine mammals, we are also protecting future generations of marine mammals and people from the anticipated effects as climate change accelerates in the coming years. The Marine Mammal Center is a leading partner on local, national and international programs aimed at raising awareness around the science and impacts of climate change, as well as empowering students and communities to take action to reduce their carbon footprint.

Local Initiatives

The Marine Mammal Center became a founding member of the <u>Bay Area Climate Literacy Impact</u> <u>Collaborative</u>, or BayCLIC, in 2013. Through a needs assessment performed by the Institute at the Golden Gate, capacity, resources and time were the largest barriers towards local organizations addressing climate change in their programs. Joining forces amongst over 30 informal environmental education organizations, BayCLIC is working to provide climate trainings and tools for educators, connecting educators to local scientific resources and data around climate change impacts, and pilot collective sustainability campaigns focused on behavior change. In total, BayCLIC members reach over three million individuals annually. Adam Ratner, Guest Experience Manager at The Marine Mammal Center, has served as a founding member of BayCLIC since 2013 and currently sits on the Steering Committee providing guidance on the vision and direction of the collaborative, as well as facilitating numerous workshops for educators.

Through the generous support of the California Coastal Commission's Whale Tail Program in 2015, The Marine Mammal Center partnered with the California College of the Arts to develop an animated short highlighting the science of climate change, the impact of climate change on marine mammals, and how people can take action to reduce their carbon footprint. Under the direction of Pixar Animator Bret Parker, students produced <u>A Word with Dr. Whizzlepuff: Climate Change</u>, a 6-minute animated video that is utilized in educational programming at The Marine Mammal Center and is available online for all to see and partners to utilize in their programming.

National Initiatives

In 2013, The Marine Mammal Center joined the <u>National Network of Ocean and Climate Change</u> <u>Interpretation</u>, or NNOCCI, to improve the effectiveness of the climate change messaging being utilized. NNOCCI paired Woods Hole Oceanographic Institute climate scientists with social psychologists at Frameworks Institute and informal science centers to scientifically test the most effective language use and communication strategies to increase understanding and willingness to take action around climate change. With more than 300 colleagues at over 150 organizations around the county, NNOCCI-trained organizations reach tens of millions of visitors each year. Adam Ratner, Guest Experience Manager, has served as the regional leader for NNOCCI alumni in Central California from 2015-2017 and was the lead facilitator and trainer for a 6-month training for 20 Bay Area professionals in 2017.

International Initiatives

In 2014, Adam Ratner was selected to the <u>Community Climate Change Fellowship</u> through the North American Association for Environmental Education. Working alongside 25 other professionals, from fields ranging from religious leaders to city planners to formal school teachers, the fellows worked to share strategies and techniques for bringing climate change into the conversation and inspiring communities to take action and become more resilient in the face of climate change. From 2014-2017, Adam and the other fellows presented their work and research regularly at the North American Association for Environmental Education National Conferences. In 2017, Adam co-authored <u>Community Climate Change Education: A Mosiac of Approaches</u>, a collection of stories and strategies from the climate fellows work.

In large part due to his work around climate change education, Adam Ratner was awarded the <u>Environmental Education 30 Under 30: Game Changers for the Planet award</u> in 2017 by the North American Association for Environmental Education.



Students at the California College of the Arts, under the direction of The Marine Mammal Center and a Pixar Animator, developed an animated video highlighting the science of climate change and how we can take actions to protect the ocean



Adam Ratner, Guest Experience Manager, at The Marine Mammal Center led a 6-month long training related to climate change science and communication for the National Network for Ocean and Climate Change Interpretation in 2017 for 20 Bay Area educators