



## **Conservation through cooperative research: a team-based approach to training and testing walruses for auditory assessments**

Rebecca Tagg and Jennifer Martinez (Six Flags Discovery Kingdom)

Lisa Triggs and Amanda Shaffer (Point Defiance Zoo and Aquarium)

Rob Williams and Erin Ashe (Oceans Initiative)

Jillian M. Sills and Colleen Reichmuth (Institute of Marine Sciences, University of California Santa Cruz)

The conservation status of wild walruses is influenced by rapid warming of the Arctic and increasing pressures related to anthropogenic disturbances. To improve knowledge of acoustic sensitivity in this species, we have connected behavioral scientists with zoological partners to gather essential data from trained animals. This study involves three adult female walruses at Six Flags Discovery Kingdom (Vallejo, CA) and Point Defiance Zoo and Aquarium (Tacoma, WA). These individuals are trained to cooperate in an auditory go/no-go signal detection task that will enable assessment of their frequency range of hearing in air. Each walrus completes a progressive training program of six key steps in a protected contact training scenario, using simple equipment, prior to formal testing with calibrated audiometric signals. This is an engaging problem-solving task that provides positive and enriching learning experiences for the walruses and the training teams, while also providing data needed to support meaningful conservation decisions. The project also poses some interesting challenges of teamwork and communication across two facilities and geographically separated individuals with different specialized skills. Here, we describe our behavioral and scientific approach to overcoming these challenges and efficiently providing new information about hearing range in walruses.

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