



21st Biennial Conference on the Biology of Marine Mammals

13-18 DECEMBER 2015
HILTON SAN FRANCISCO UNION SQUARE
SAN FRANCISCO, CA USA

[Presentation Index](#) [Author Index](#) marinemammalscience.org

Cue rate and track kinematics of calling Bryde's whales (*Balaenoptera brydei*) transiting through the U.S. Pacific Missile Range Facility (PRMF)

[Tyler Helble](#) [Stephen Martin](#) [Glenn Jerley](#) [Brian Matsuyama](#)

A Time Difference of Arrival (TDOA) method was used to acoustically localize vocalizing Bryde's whales (*Balaenoptera brydei*) on the Navy's Pacific Missile Range Facility (PMRF) in Hawaii. Over 130 days of data were recorded from 2011-2015, resulting in over 12 Bryde's tracks. The tracks were analyzed for cue rates, swim patterns, bearing, directivity, speed, and dive depths. In six of the encounters the Bryde's appear to be traveling in fairly constant headings (typically south-southwest or westerly) crossing the range area over distances ranging from 12 to 27 km over time periods of 1.5 to 6 h with estimated swim speeds up to 12 km/h. Vocalizing whales produced acoustic cues every 3-7 minutes while transiting. Although the occurrence of transiting Bryde's whales is relatively low, the tracks can provide valuable information about the habitat use of this offshore region, particularly because both visual surveys and animal tagging is difficult in this area.

Copyright 2016 | Duplication of this product and its content in print or digital form for the purpose of sharing with others is prohibited without permission from [Society for Marine Mammalogy](#).

This [Digital Publishing Platform](#) was produced by [Omnipress](#).
[Privacy](#) : [Online Help & Support](#)