



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

Short-finned Pilot Whales (*Globicephala macrorhynchus*) of the Marianas

[Marie Hill](#) [Allan Ligon](#) [Andrea Bendlin](#) [Adam Ü](#) [Aliza Milette-Winfree](#) [Mark Deakos](#) [Erin Oleson](#)

Prior to this study, very little was known about short-finned pilot whales (*Globicephala macrorhynchus*; SFPW) in the Marianas. Small-boat surveys were conducted on 152 days in February - September 2010-2014 within the waters surrounding the southernmost islands of the Mariana Archipelago. Photo-identification data from 19 encounters with SFPWs and satellite-tag data from 6 encounters with SFPWs were used to investigate individual associations, movements, and space use. A total of 178 distinctive individuals were used in the analysis. Over half (63%) were photographed more than once across multiple years. A network diagram of cataloged individuals suggests there may be separate social networks within the southern Marianas. Ten location-only (SPOT-240C, Wildlife Computers) and one location-depth (SPLASH-292B, Wildlife Computers) satellite tags were deployed in the summer of 2013 and 2014. Individual kernel densities estimates (kde) were calculated for tagged SFPWs with >30 (2 daily) tag locations during summer (June-August). These kdes were then combined to get a single kde for all tagged SFPWs, as well as for each of the two largest social networks in order to estimate probability density contours to find areas with the highest probability of use (10%), core areas (50%), and home ranges (95%) during summer. The areas with highest probability of use during summer were off the west sides of Guam and Rota with no overlap between the two networks. Overlap occurred in both core areas and home ranges. Satellite tag data indicate occasional distant offshore movements by individuals, up to 417 km from shore, though the median distance from shore (17 km) indicates a greater use of near-island waters. The location-depth tag duration was 35 days during which 1,321 dives ≥ 30 m were recorded. The deepest dive recorded was 1,183 m with a 16 min duration. The longest dive was 24 min to a depth of 512 m.

Search

Online Help & Support

Copyright 2015 | 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](#)