

2018 Langhans, M., Casey, C. and Reichmuth, C. Call Production in Guadalupe Fur Seal (*Arctocephalus townsendi*) Females and Pups. 99th Annual Meeting of the Western Society of Naturalists, Tacoma, Washington, 8-11 November.

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CALL PRODUCTION IN GUADALUPE FUR SEAL (*ARCTOCEPHALUS TOWNSENDI*) FEMALES AND PUPS

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Guadalupe fur seals (*Arctocephalus townsendi*) are the least studied member of their genus due to a small population size following extirpation and geographic isolation. They breed on offshore remote islands and forage over a limited range at sea, rarely hauling out on mainland beaches.

Given the known importance of vocal communication to other otariid pinnipeds, we sought to provide an initial description of sound production in this under-studied and endangered species.

We opportunistically recorded the attraction calls of mothers (n=4) and pups (n=29) during winter, when pups were ~7 months old. The acoustic parameters of these calls were assessed to determine the cues that could potentially support mother-pup recognition. A comparison of call parameters among individuals showed that fundamental frequency and harmonic interval had high individual variability and thus may support social recognition during the period of maternal dependence. To evaluate possible species differences, we further compared these calls to those of related fur seals (*A. australis*, *A. gazella*, *A. forsteri*, *A. tropicalis*). When considering comparisons within the *Arctocephalus* genus, we found species-typical differences again in both fundamental frequency and harmonic interval. The calls of *A. townsendi* were most like those of *A. tropicalis*, suggesting phenotypic and/or phylogenetic similarities between these species. Given the debated systematics of the Arctocephaline subfamily, studies of this nature may provide insight into behavioral differentiation between related species.