

TABLES

Table S1: Summary of tagging details and dive parameters for the nine tagged lactating southern right whales. Calves tagged in 2017 are indicated by (c) in the tag ID. Mean dive duration is listed as median with interquartile range (IQR).

Year	Tag ID	Tag duration (h)	Total dive time (h)	Tagging coordinates	Median dive duration (min) and IQR	Max dive depth (m) mean \pm SD
2016	ea207a	7.8	4.7	34° 20' S 115° 22' E	3.3 (1.7-4.8)	5.5 \pm 3.6
	ea208a	3.4	2.1	34° 18' S 115° 18' E	3.4 (1.7-6.8)	6.6 \pm 3
	ea209a	5.6	4.1	34° 18' S 115° 17' E	1.6 (1.2-2.5)	4.4 \pm 2.1
	ea217a	5.1	3.5	34° 19' S 115° 20' E	2.6 (1.1-4.3)	4 \pm 1.3
	ea218a	4.3	3.4	34° 19' S 115° 21' E	1.1 (0.5-6.7)	3.9 \pm 2.3
	ea218b	4	2.4	34° 19' S 115° 20' E	6.3 (3.1-7.9)	4.5 \pm 1.8
2017				34° 19' S 115° 11' E		
	ea229a	5.9	3.4		2.6 (1-4.3)	4.5 \pm 1.6
	ea229b (c)	0.7	-	34° 19' S 115° 11' E	-	-
	ea230a	20.5	14.2	34° 19' S 115° 12' E	2.5 (0.8-5.9)	3.4 \pm 2.2
	aa230b (c)	0.08	-	34° 19' S 115° 12' E	-	-
	ea235a (c)	0.1	-	34° 19' S 115° 12' E	-	-
	ea235b	6.3	5.0	34° 18' S 115° 12' E	2.5 (0.5-6)	3.2 \pm 1.4

Table S2: Summary of the sound parameters of tonal and non-tonal acoustic cues. ([†]Number of calls with SNRs<10 dB in parentheses, *Call rate calculated based on the duration where tag is submerged and call rate in parentheses include calls with SNRs <10 dB).

Tag ID	Non-tonal sounds total [†]	Tonal sounds total [†]	Non-tonal sounds per hour*	Tonal sounds per hour*	Descriptive statistics	Received level non-tonal sounds dB re 1 μ Pa	Received level tonal sounds dB re 1 μ Pa	Centroid freq. non-tonal sounds (Hz)	Centroid freq. tonal sounds (Hz)	RMS bandwidth non-tonal sounds (Hz)	RMS bandwidth tonal sounds (Hz)
ea207a	2	0	0.4	0	mean \pm SD (range)	115 \pm 8 (109-120)	-	199 \pm 81 (142-257)	-	296 \pm 97 (228-365)	-
ea208a	29 (21)	45 (35)	13.8 (10)	21.4 (17)	mean \pm SD (range)	129 \pm 5 (115-136)	132 \pm 10 (112-146)	131 \pm 37 (36-196)	140 \pm 84 (85-442)	137 \pm 70 (67-327)	108 \pm 101 (18-353)
ea209a	3	0	0.7	0	mean \pm SD (range)	107 \pm 3 (105-110)	-	308 \pm 82 (227-391)	-	299 \pm 90 (232-401)	-
ea217a	2	8 (7)	0.6	2.3 (2)	mean \pm SD (range)	122 \pm 8 (116-126)	122 \pm 4 (108-125)	1105 \pm 340 (1343-1382)	981 \pm 302 (711-1590)	670 \pm 208 (484-803)	546 \pm 130 (393-722)
ea218a	0	26 (16)	0	7.6 (4.7)	mean \pm SD (range)	-	127 \pm 4 (118-133)	-	755 \pm 291 (269-1202)	-	558 \pm 115 (401-790)
ea218b	10	2	4.2	0.8 (0.4)	mean \pm SD (range)	129 \pm 10 (115-145)	154 (-)	263 \pm 195 (82-717)	121 (-)	285 \pm 170 (103-604)	162 (-)
ea229a	23 (11)	16	6.8 (3.2)	4.7	mean \pm SD (range)	130 \pm 7 (116-142)	139 \pm 9 (116-147)	159 \pm 117 (33-482)	170 \pm 153 (93-456)	151 \pm 111 (58-470)	194 \pm 229 (53-730)
ea230a	292 (175)	46 (33)	20.6 (12.3)	3.2 (2.3)	mean \pm SD (range)	121 \pm 7 (108-143)	138 \pm 8 (121-151)	265 \pm 157 (26-842)	101 \pm 41 (69-251)	323 \pm 182 (39-800)	87 \pm 86 (17-333)
ea235b	30 (18)	61 (47)	6 (3.6)	12.2 (9.4)	mean \pm SD (range)	131 \pm 12 (107-153)	137 \pm 10 (113-148)	212 \pm 289 (55-1333)	183 \pm 169 (85-706)	220 \pm 208 (40-974)	150 \pm 169 (29-724)