

**Table S1.** Contextual information regarding tagged sperm whales. Location key: Gulf of Mexico (GoM), Mediterranean (Med), north-west Atlantic (NW Atl), Azores (Azo). Grey-shaded rows were not included in the final analysis. n/a = data not available.

Identifier	Year	Date (dd/mm)	Location	Number of dives	Number of tagging attempts	Tagging response	Group size	Comment
sw01_199a	2001	18/07	GoM	1	2	1	3	Pilot study
sw01_200a	2001	19/07	GoM	9	1	0	3	Pilot study
sw01_203b	2001	22/07	GoM	1	1	1	1	Pilot study
sw01_204a	2001	23/07	GoM	6	1	1	mother + calf, mother tagged	
sw01_208a	2001	27/07	GoM	1	1	1	1	
sw01_208b	2001	27/07	GoM	1	1	1	1	
sw01_209a	2001	28/07	GoM	1	1	2	1	
sw01_209c	2001	28/07	GoM	4	1	1	1	
sw01_265a	2001	22/09	Med	4	n/a	n/a	n/a	
sw01_275a	2001	02/10	Med	<1	n/a	n/a	n/a	Too short to analyse
sw01_275b	2001	02/10	Med	9	n/a	n/a	n/a	
sw02_190f	2002	09/07	Med	<1	n/a	n/a	n/a	Too short to analyse
sw02_191b	2002	10/07	Med	5	n/a	n/a	n/a	
sw02_235c	2002	23/08	GoM	2	1	1	1	
sw02_237a	2002	25/08	GoM	2	2	1	2	Long first surfacing
sw02_238a	2002	26/08	GoM	4	1	1	2	Long first surfacing
sw02_238b	2002	26/08	GoM	3	1	1	1	
sw02_239a	2002	27/08	GoM	13	1	1	2	
sw02_239b	2002	27/08	GoM	1	1	1	2	
sw02_240a	2002	28/08	GoM	1	1	1	3	
sw02_240c	2002	28/08	GoM	5	1	2	2	
sw02_248a	2002	05/09	GoM	1	1	1	2	Long first surfacing
sw02_249a	2002	06/09	GoM	2	1	1	3	
sw02_253a	2002	10/09	GoM	4	2	1	3	Controlled exposure experiment
sw02_254b	2002	11/09	GoM	17	1	0	3	Controlled exposure experiment
sw02_254c	2002	11/09	GoM	18	1	1	1	Controlled exposure experiment
sw03_156a	2003	05/06	GoM	6	1	1	3	
sw03_162a	2003	11/06	GoM	1	1	1	3	
sw03_164a	2003	13/06	GoM	11	1	1.5	1	Controlled exposure experiment

sw03_165b	2003	14/06	GoM	17	1	1	7	Controlled exposure experiment
sw03_167a	2003	16/06	GoM	3	1	1	1	
sw03_173b	2003	22/06	GoM	1	1	1	4	Controlled exposure experiment
sw03_197a	2003	16/07	NW Atl	2	n/a	n/a	n/a	
sw03_197b	2003	16/07	NW Atl	2	n/a	n/a	n/a	
sw03_201a	2003	20/07	NW Atl	<1	n/a	n/a	n/a	Long first surfacing
sw03_201b	2003	20/07	NW Atl	2	n/a	n/a	n/a	
sw03_202a	2003	21/07	NW Atl	1	n/a	n/a	n/a	
sw03_202b	2003	21/07	NW Atl	0	n/a	n/a	n/a	Long first surfacing
sw03_206a	2003	25/07	NW Atl	5	n/a	n/a	n/a	
sw03_206c	2003	25/07	NW Atl	3	n/a	n/a	n/a	
sw03_207a	2003	26/07	NW Atl	5	n/a	n/a	n/a	Long first surfacing
sw03_251a	2003	08/09	Med	8	1	1	1	
sw03_253a	2003	10/09	Med	7	1	0	6	
sw03_253b	2003	10/09	Med	15	1	1	6	
sw03_253c	2003	10/09	Med	7	1	1	6	
pm10_211b	2010	30/07	Azo	13	n/a	n/a	n/a	
pm10_222a	2010	10/08	Azo	7	n/a	n/a	n/a	
pm10_222b	2010	10/08	Azo	9	n/a	n/a	n/a	
pm10_226a	2010	14/08	Azo	17	n/a	n/a	n/a	
pm10_228a	2010	16/08	Azo	22	n/a	n/a	n/a	
pm10_228b	2010	16/08	Azo	13	n/a	n/a	n/a	
pm10_230a	2010	18/08	Azo	16	n/a	n/a	n/a	