

Brost, B. M., M. B. Hooten, E. M. Hanks, and R. J. Small. 2016. Animal movement constraints improve resource selection inference in the presence of telemetry error. *Ecology*.

Appendix D. Summary of results for an analysis of harbor seal data near Kodiak Island, Alaska, USA.

Table D1. Parameter estimates from an analysis of an adult female harbor seal near Kodiak Island, AK. Reported values are the posterior mean and 95% equal-tail credible intervals based on 100,000 MCMC samples. Convergence was determined based on potential scale reduction factors < 1.1 (Gelman and Rubin 1992). The parameter β_1 describes selection relative to distance to haul-out site, whereas β_2 describes selection for bathymetry. Both covariates were centered and scaled to unit variance prior to model fitting. Note that ϕ , β_1 , and β_2 are process model parameters that describe harbor seal behavior; therefore, they are global parameters that are not estimated for separate Argos location classes.

Argos location class	σ (m)	a	ρ	ν	ϕ (m/hour)	β_1	β_2
3	2259 (1447, 3242)	0.69 (0.42, 0.97)	0.85 (0.51, 0.99)	16.52 (2.80, 29.34)			
2	1089 (614, 1696)	0.42 (0.21, 0.82)	0.73 (0.14, 0.99)	2.29 (1.15, 4.53)			
1	1365 (1051, 1718)	0.64 (0.42, 0.90)	0.40 (0.03, 0.70)	1.72 (1.27, 2.30)	413.00	-2.03	-0.82
0	2720 (2317, 3155)	0.50 (0.37, 0.66)	0.16 (0.01, 0.41)	1.59 (1.29, 1.95)	(350.72, 480.70)	(-2.45, -1.62)	(-1.12, -0.53)
A	2702 (2257, 3186)	0.90 (0.72, 1.00)	0.21 (0.01, 0.48)	1.23 (1.00, 1.50)			
B	13338 (11342, 15542)	0.74 (0.59, 0.92)	0.30 (0.02, 0.53)	1.01 (0.85, 1.18)			

LITERATURE CITED

Gelman, A. and D. B. Rubin. 1992. Inference from iterative simulation using multiple sequences. *Statistical Science* **7**:457-511.