

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 C. Performance of mixture t model in simulation study.

Table C1. Summary of the performance of our mixture t model in the simulation study. “Mean” and “SD” are the mean and standard deviation across the 250 replicates of the Bayesian point estimate (posterior mean). The parameter β_1 describes selection relative to a point of attraction (e.g., 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.

Parameter	True value	Mean	SD
σ_H	2291	2279	129
σ_M	2727	2776	203
σ_L	13252	13580	957
a_H	0.70	0.71	0.07
a_M	0.50	0.52	0.08
a_L	0.75	0.75	0.08
ρ_H	0.85	0.84	0.03
ρ_M	0.16	0.25	0.08
ρ_L	0.30	0.28	0.10
ν_H	16.74	18.14	3.36
ν_M	1.60	1.67	0.18
ν_L	1.00	1.03	0.09
ϕ	424	397	31
β_1	-2.12	-2.14	0.21
β_2	-0.82	-0.83	0.14