

Supplementary Information

Winter survival shaped by forage abundance and snow depth for a long-distance migratory ungulate

Polar Biology

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Table S1. Standardized parameter coefficients from the top-performing Cox proportional hazards model of adult female Western Arctic Herd caribou (*Rangifer tarandus*) overwinter survival (2009–2024). Survival was modeled as a function of mean overwinter experienced lichen interacting with the quadratic effect of snow depth. Coefficient estimates represent hazard rates; a negative coefficient indicates a positive effect on survival, as it corresponds to a reduced hazard rate.

Variable	Estimate	Standard Error	p-value
lichen	-0.60	0.13	<0.001
snow depth	0.11	0.17	0.493
snow depth ²	-0.28	0.15	0.071
lichen:snow depth	0.38	0.14	0.007
lichen:snow depth ²	0.21	0.10	0.046