

Roffler, G. H. and Gregovich, D. P. 2018. Wolf space use during denning season on Prince of Wales Island, Alaska. – Wildlife Biology 2018: wlb.00468

## Appendix 1

Table A1. Mean den entry and exit dates, number of days occupying a den, and standard deviation (SD) in days for Prince of Wales Island wolves, Alaska, USA, 2012–2016.

	Mean entry date	SD	Mean exit date	SD	Days at den	SD
Breeding <sup>a</sup>	23 April	4.4	1 July	24.2	66	26.6
Non-breeding <sup>b</sup>	15 May	8.5	1 July	5.3	48	14.1

<sup>a</sup> entry dates based on three wolves radiocollared prior to denning season, exit dates based on five wolves (two were radiocollared during denning season)

<sup>b</sup> entry dates based on two wolves radiocollared prior to denning season, exit dates based on three wolves (one was radiocollared during denning season)

## Appendix 2

Table A2. Top five candidate models for individual seasonal home range sizes for wolves on Prince of Wales Island, Alaska, USA, 2012–2016. Model covariates include: wolf pack membership (Pack), reproductive status (Repro), annual season (Season), individual wolf (Wolf ID), Sex, Year.

Model structure	df <sup>a</sup>	BIC <sup>b</sup>	$\Delta$ BIC <sup>c</sup>	BIC <sub>w</sub> <sup>d</sup>
Pack	8	658.3	0.0	0.736
Pack + Repro	9	660.4	2.1	0.258
Pack + Repro + Season	12	667.9	9.7	0.006
Pack + Repro + Season + Wolf ID	19	689.0	30.7	0
Pack + Repro + Season + Wolf ID + Sex + Year	22	696.7	38.4	0

<sup>a</sup> degrees of freedom

<sup>b</sup> Bayesian information criterion

<sup>c</sup> difference in BIC compared to the most parsimonious model

<sup>d</sup> BIC model weights

## Appendix 3

Table A3. Top five candidate models for individual pup-rearing season home range sizes for wolves on Prince of Wales Island, Alaska, USA, 2012–2016. Model covariates include: association with active den site (Active den), wolf pack membership (Pack), reproductive status (Repro), Sex.

Model structure	df <sup>a</sup>	BIC <sup>b</sup>	$\Delta$ BIC <sup>c</sup>	BIC <sub>w</sub> <sup>d</sup>
Active den + Pack + Repro	10	156.7	0.0	0.780
Active den + Pack + Repro + Sex	11	159.2	2.5	0.219
Active den + Pack	9	170.0	13.3	0.001
Active den	3	185.7	29.0	0
Pack	8	186.9	30.2	0

<sup>a</sup> degrees of freedom

<sup>b</sup> Bayesian information criterion

<sup>c</sup> difference in BIC compared to the most parsimonious model

<sup>d</sup> BIC model weights

## Appendix 4

Table A4. Standardized selection coefficients ( $\beta$ ), standard errors (SE), and significance level of top model for individual pup-rearing season home range sizes for wolves on Prince of Wales Island, Alaska, USA, 2012–2016. Covariate values in bold are significant at  $\alpha = 0.05$ . The Stanley pack was used as the reference category.

Covariate	$\beta$	SE	p
Repro	<b>-0.798</b>	0.236	0.028
Active den	<b>-0.939</b>	0.236	0.016
Honker pack	<b>1.802</b>	0.227	0.001
Hydaburg pack	0.934	0.346	0.054
Nossuk pack	<b>1.011</b>	0.300	0.028
Ratz pack	<b>1.899</b>	0.300	0.003
Sandy Beach pack	0.116	0.253	0.671
Trocadero pack	-0.001	0.300	0.996