

Griffiths, J. R., Schindler, D. E., Ruggerone, G. T. and Bumgarner, J. D. 2013. Climate variation is filtered differently among lakes to influence growth of juvenile sockeye salmon in an Alaskan watershed. – Oikos 000: 000–000.

Appendix 1

Table A1. AIC model selection for single covariate models. Δ AIC values and AIC model weights (AIC w_i) are shown for each model. AIC weights are the probability that a model is the best model for the data given all the models considered. a) Models explaining variation in sockeye salmon FW1 scale growth, b) models explaining variation in juvenile sockeye salmon length.

a) Scale Growth		
<u>Fixed Effects</u>	Δ AIC	AIC w_i
Stock + Year + Stock:Year	0	1.00
Stock + Fall + Stock:Fall	35.3	0.00
Stock + Spring + Stock:Spring	48.8	0.00
Stock + PDO + Stock:PDO	88.7	0.00
Stock + Winter + Stock:Winter	95.4	0.00
Stock	10.5	0.00
Stock + Escapement	107.1	0.00
a) Juvenile Length		
<u>Fixed Effects</u>	Δ AIC	AIC w_i
Spring	0.0	0.55
Year	0.7	0.39
PDO	6.9	0.02
Sockeye Density	7.2	0.01
Winter	7.9	0.01
Intercept	8.0	0.01
Resident Fish Density	8.7	0.01

Table A2. Top 10 models selected via AIC. Δ AIC values and AIC model weights (AIC w_i) are shown for each model. AIC weights are the probability that a model is the best model for the data given all the models considered. While only 10 models are shown, all models explored were used in the w_i calculation. a) Models explaining variation in sockeye salmon FW1 scale growth, b) models explaining variation in juvenile sockeye salmon length

a) Scale Growth

<u>Fixed Effects</u>	Δ AIC	AIC w_i
Spring + Fall + PDO+ Year + Stock + Spring:Stock + Fall: Stock + Year:Stock	0.00	0.23
Winter + Spring + Fall + PDO + Year + Stock + Winter:Stock + Spring:Stock + Fall:Stock + Year:Stock	0.72	0.16
Spring + Fall + Year + Stock + Spring:Stock + Fall:Stock + Year:Stock	0.79	0.15
Spring + Fall + PDO + Year + Stock + Spring:Stock + Fall:Stock + PDO:Stock + Year:Stock	1.66	0.10
Winter + Spring + Fall + Year + Stock + Spring:Stock + Fall:Stock + Year:Stock	1.73	0.10
Winter + Spring + Fall + PDO + Year + Stock + Spring:Stock + Fall:Stock + Year:Stock	2.00	0.08
Winter + Spring + Fall + PDO + Year + Stock + Winter:Stock + Spring:Stock + Fall:Stock + PDO:Stock + Year:Stock	2.04	0.08
Winter + Spring + Fall + PDO + Year + Stock + Spring:Stock + Fall:Stock + PDO:Stock + Year:Stock	3.66	0.04
Fall + PDO + Year + Stock + Fall:Stock + Year:Stock	5.31	0.02
Fall + Year+ Stock + Fall: Stock + Year:Stock	6.09	0.01

b) Juvenile Length

<u>Fixed Effects</u>	Δ AIC	AIC w_i
Spring + Density + Year	0.00	0.13
Winter + Spring + Density + Year	1.25	0.07
Spring + Year	1.29	0.07
Spring + Density + Year + Spring:Density	1.76	0.05
Spring + PDO + Density + Year	1.77	0.05
Spring + Density	2.14	0.05
Spring + PDO + Density + Year + PDO:Density	2.29	0.04
Winter + Spring + Year	2.62	0.04
Winter + Spring + Density + Year + Spring:Density	2.68	0.03
Winter + Spring + Density	3.16	0.03