



**B<sub>2</sub>**

Regularization			DNN-specific		
Environmental $\alpha_e, \lambda_e$	Spatial $\alpha_s, \lambda_s$	Biotic covariance $\alpha_b, \lambda_b^*$	Hidden layers	Dropout rate	Learning rate
0 to 1, step 0.2	0 to 1, step 0.25	0 to 1, step 0.1	50, 50, 10 25, 25, 10	0.1, 0.2	0.001, 0.002

\*  $\alpha_b, \lambda_b$  were set to the same value for each run

Data split	Full Training (75%)				Test (25%)
Tuning	B <sub>1</sub>	training		validation	
		training		validation	
		training	validation	training	
		training	validation	training	
		validation		training	
Final fit	full training				test