

Model	Parameter	Posterior Median Log-Odds [90% Highest-Density Interval], Probability of Direction					
		Achromatic			Chromatic		
		1 JND	2 JND	3 JND	1 JND	2 JND	3 JND
Breeding Timing	Intercept	-1.16 [-3.87, 1.67], pd = 0.76	-8.36 [-16.28, -0.62], pd = 0.98	-7.81 [-14.83, -1.66], pd = 0.99	-0.88 [-2.98, 1.03], pd = 0.78	-7.21 [-15.29, 0.55], pd = 0.95	-12.71 [-28.03, 0.31], pd = 0.96
	Breeding Season Length ¹	-0.06 [-0.62, 0.56], pd = 0.57	-2.26 [-4.72, 0.05], pd = 0.97	-1.39 [-3.56, 0.4], pd = 0.91	-0.12 [-0.59, 0.34], pd = 0.66	-1.99 [-4.64, 0.35], pd = 0.94	-2.5 [-8.12, 2.21], pd = 0.83
	Partial Migration ² vs. No Migration	-0.04 [-1.16, 1.01], pd = 0.53	1.41 [-1.2, 4.12], pd = 0.83	1.29 [-0.82, 3.57], pd = 0.85	0.79 [-0.06, 1.59], pd = 0.94	1.9 [-0.87, 4.9], pd = 0.88	4.26 [-1.13, 10.99], pd = 0.92
	Full Migration ³ vs. No Migration	1.6 [-0.05, 3.19], pd = 0.96	4.2 [1.16, 7.5], pd = 0.99	3.11 [0.46, 5.73], pd = 0.98	0.83 [-0.37, 1.99], pd = 0.88	4.39 [1.03, 8.14], pd = 0.99	5.46 [-0.68, 12.61], pd = 0.95
	Breeding Season Length x Partial Migration	0.29 [-0.73, 1.37], pd = 0.68	3.03 [-0.14, 6.38], pd = 0.96	2.11 [-0.27, 4.69], pd = 0.94	0.33 [-0.43, 1.14], pd = 0.76	2.2 [-0.82, 5.53], pd = 0.9	3.54 [-2.58, 11.13], pd = 0.85
	Breeding Season Length x Full Migration	1.58 [-0.4, 3.68], pd = 0.9	4.19 [-0.53, 9.34], pd = 0.93	2.8 [-1.3, 6.72], pd = 0.89	0.52 [-1.16, 2.12], pd = 0.7	5.08 [-0.18, 11.12], pd = 0.95	6.07 [-4.27, 17.43], pd = 0.85
	Phylogenetic Signal λ, Median [90% Credible Interval]	0.29 [0.16, 0.43]	0.72 [0.56, 0.86]	0.61 [0.42, 0.8]	0.17 [0.08, 0.28]	0.74 [0.57, 0.88]	0.89 [0.77, 0.97]
Breeding Spacing	Intercept	-1.94 [-6.01, 2.01], pd = 0.8	-9.77 [-20.11, 0.89], pd = 0.95	-10.31 [-19.2, -1.98], pd = 0.98	-0.67 [-3.63, 2.27], pd = 0.65	-8.32 [-18.86, 2.03], pd = 0.92	-12.87 [-30.57, 4.41], pd = 0.91
	Island vs. Mainland	0.08 [-1.38, 1.57], pd = 0.54	-0.64 [-4.43, 2.88], pd = 0.61	-0.09 [-3.02, 2.96], pd = 0.52	-1.3 [-2.45, -0.12], pd = 0.97	-3.39 [-8.67, 1.38], pd = 0.89	-3.26 [-12.57, 4.21], pd = 0.77
	Breeding Range Size ⁴	0.08 [-0.13, 0.28], pd = 0.75	0.21 [-0.27, 0.7], pd = 0.77	0.26 [-0.14, 0.66], pd = 0.87	0.02 [-0.14, 0.18], pd = 0.58	0.21 [-0.29, 0.72], pd = 0.77	0.23 [-0.62, 1.1], pd = 0.69
	Phylogenetic Signal λ, Median [90% Credible Interval]	0.27 [0.15, 0.41]	0.71 [0.56, 0.85]	0.6 [0.42, 0.77]	0.15 [0.07, 0.25]	0.72 [0.55, 0.86]	0.85 [0.71, 0.95]
Breeding Sympatry	Intercept	-0.9 [-3.45, 1.76], pd = 0.72	-6.89 [-14.7, -0.02], pd = 0.95	-6.74 [-13.39, -1.09], pd = 0.98	-1.38 [-3.25, 0.3], pd = 0.91	-6.34 [-13.61, 0.11], pd = 0.95	-11.29 [-22.79, -1.24], pd = 0.98
	Number of Sympatric Species (≥ 30% Breeding Range Overlap)	0.03 [-0.18, 0.24], pd = 0.61	0.14 [-0.31, 0.56], pd = 0.71	0.12 [-0.27, 0.49], pd = 0.71	0.34 [0.17, 0.51], pd = 1	0.46 [0.01, 0.92], pd = 0.96	0.75 [0.03, 1.5], pd = 0.97
	Phylogenetic Signal λ, Median [90% Credible Interval]	0.26 [0.14, 0.39]	0.7 [0.54, 0.83]	0.59 [0.41, 0.77]	0.13 [0.06, 0.23]	0.69 [0.52, 0.83]	0.82 [0.67, 0.94]

¹Length of breeding season in months

²Altitudinal migration and localized movements during non-breeding season

³Consistent long-distance migration to and from breeding grounds

⁴Natural-log transformed square kilometers