Supplemental Tables

Table S1. Model structure, parameter estimates (95% CI), and *P*-values from Wald tests for generalized linear regression models using zero-inflated negative binomial (ZINB) distributions and log link functions examining the relationships between grooming time, bill overhang length and louse abundance in Galápagos Mockingbirds.

Model structure	Distribution	Llink	Intercept (95%CI) *P*-value	Grooming time (95%CI) *P*-value	Bill overhang length (95%CI) *P*-value	Sample size
Number louse eggs ~ grooming time	ZINB	log	4.37 (3.95, 4.78) *P* <0.0001	-4.30 (-7.57,-1.01) *P*= 0.010	-	15
Number louse eggs ~ bill overhang length	ZINB	log	3.75 (3.15, 4.35) *P* < 0.0001	-	0.348 (-0.472,1.168) *P* = 0.405	26

Table S2. Model structure, parameter estimates (95% CI), and *P*-values from Wald tests for generalized linear regression models using negative binomial (NB) distributions and log link functions examining the relationships between grooming time, bill overhang length and mite abundance in Galápagos Mockingbirds.

Model structure	Distribution	Link	Intercept (95%CI) *P*-value	Grooming time (95%CI) *P*-value	Bill overhang length (95%CI) *P*-value	Sample size
Mite index ~ grooming time	NB	log	1.77 (0.96, 2.57) *P* < 0.0001	1.06 (-4.19, 6.31) *P* = 0.69	-	26
Mite index ~ bill overhang length	NB	log	1.76 (0.78,2.74) *P* = 0.0004	-	-0.12 (-1.46,1.22) *P* = 0.86	15

Table S3. Model structure, parameter estimates (95% CI), and *P*-values from Wald tests for generalized linear regression models using beta distributions and a logit link function to examine the relationship between grooming time and bill overhang length in Galápagos Mockingbirds.

Model structure	Distribution	Link	Intercept (95%CI) *P*-value	Bill overhang length (95%CI) *P*-value	Sample size
Grooming time ~ bill overhang length	Beta	Logit	-1.62 (-2.62, -0.63) *P* = 0.0014	-0.53 (-1.85, 0.79) *P* = 0.423	15