

Supplementary Material

No Safe Nesting Height in the Critically Endangered Medium Tree Finch (*Camarhynchus pauper*): Most Offspring Killed by Avian Vampire Flies and Nest Predators

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Table S1. Sample size of monitored Medium Tree Finch (*Camarhynchus pauper*) nests on Floreana Island, Galápagos archipelago, per year.

Study year	Nest monitored
2004	5
2006	33
2008	45
2010	51
2012	33
2013	12
2014	9
2020	34
Total	222

Table S2a. Global model for probability of mortality of Medium Tree Finch (*Camarhynchus pauper*) nests on Floreana Island, Galápagos archipelago, between 2004 and 2020, in dependency of male age (estimated by coloration) in interaction with nest height, study year and annual sum of rain. The response variable was measured as a binary variable (0 = at least one nestling fledged, 1 = nest failed) and fitted with a binomial model with logit function; $n = 107$ records (11 complete nest successes, 12 partial successes, 84 total nest failures).

	Estimate	SE	z-value	X ²	P-value
(Intercept)	81.47	129.75	0.63		0.530
Nest height	-0.58	0.39	-1.47	2.32	0.127
Male age	-1.14	0.81	-1.41	2.11	0.146
Rain	0.0018	0.0014	1.31	1.73	0.189
Year	-0.04	0.06	-0.58	0.33	0.563
Nest height x Male age	0.12	0.11	1.16	1.37	0.241

Table S2b. Backward reduced effect table for probability of mortality comparing models by deviance and Akaike information criterion corrected for small sample sizes (AICc). For mortality, the null model was the minimal adequate model, but all model candidates were ranked within ($\Delta\text{AICc} < 2$); therefore, all predictors were kept in the final model.

Global model: glm(mortality ~ nest height * male age + rain + year, family=binomial(logit))			
Predictor	Eliminated	Deviance	AICc
(none)	0	86.30	98.30
Rain	0	88.03	98.03
Year	0	86.64	96.64
Nest height x Male age	0	87.67	97.68

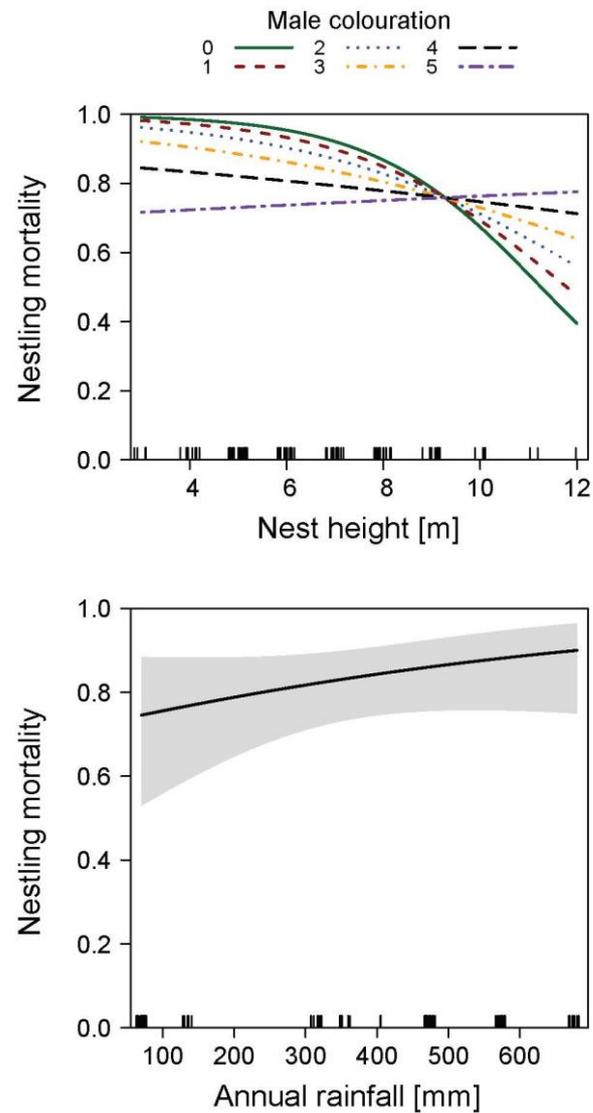


Figure S1. Relationship (statistically not significant) between mortality and (a) male age (estimated by coloration) in interaction with nest height; and, (b) annual sum of rain in Medium Tree Finch (*Camarhynchus pauper*) nests on Floreana Island, Galápagos Archipelago, between 2004 and 2020. Results show predicted line of binomial model with logit function with 95% CIs, tick marks on x -axis reflect sample size, model details in Table S2a. Note that the y -axis 'nestling mortality' ranges from '0' = no mortality (all or some chicks fledged successfully) to '1' = full mortality (no chicks fledged).

Table S3. Height (m) of Medium Tree Finch (*Camarhynchus pauper*) nests on Floreana Island, Galápagos Archipelago, between 2004 and 2020, in dependency of annual sum of rain; $n = 191$).

	Estimate	SE	t-value	F-value	P-value
(Intercept)	7.42	0.29	25.65	657.82	<0.001
Rain	-0.0020	0.0007	-3.00	9.01	0.003

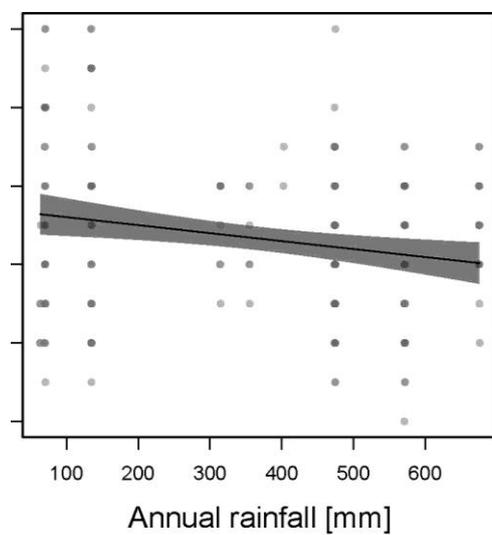


Figure S2. Relationship between nesting height annual sum of rain in Medium Tree Finches (*Camarhynchus pauper*) on Floreana Island, Galápagos Archipelago, between 2004 and 2020. Results show predicted line of linear model with 95% CIs and raw data in background scatter, model details in Table S3.