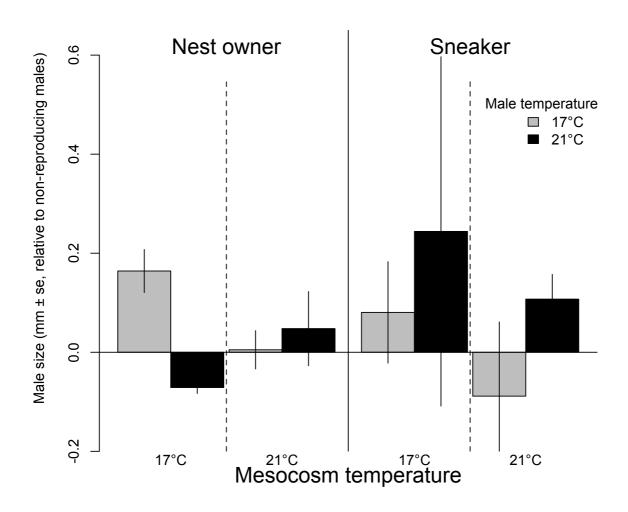
1 SUPPLEMENTARY MATERIAL

- 2 Supplemental figure 1. Male size of nest owners and sneakers (mm) relative to non-
- 3 reproducing males in 17°C and 21°C mating environments (mesocosms).

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- 7 Supplemental table 1: GLMM for fixed effects of the model male size ~ male status (nest
- 8 owner, no reproduction, sneaker) * male temperature (17°C, 21°C) * mesocosm temperature
- 9 (17°C, 21°C). Mesocosm was fitted as a random effect.

	Effect	Posterio r mean	95% CI	Effective sample	p
	(Intercept)	5.205	4.910 - 5.484	900	<0.001
Male status (S)	No reproduction	-0.026	-0.075 - 0.032	900	0.342
	Sneaker	-0.152	-0.2770.037	900	0.004
Male temperature (Male °C)	21°C	-0.113	-0.211 - 0.014	999	0.060
Mesocosm temperature (Meso °C)	21°C	-0.067	-0.461 – 0.357	900	0.727
S*Male °C	No repro:21°C	-0.108	-0.2290.002	1002	0.045
	Sneaker:21°C	0.111	-0.146 – 0.344	900	0.376
S*Meso °C	No repro:21°C	0.021	-0.050 - 0.102	900	0.633
	Sneaker:21°C	0.152	-0.120 - 0.415	900	0.249
Male °C*Meso °C	21°C:21°C	0.053	-0.098 - 0.185	1010	0.480
S*Male °C*Meso °C	No repro:21°C:21°C	0.074	-0.076 – 0.217	1036	0.336
	Sneaker:21°C:21°C	0.002	-0.418 – 0.417	900	0.996