

1 *McGaugh et al.*, “Field-measured heritability of the threshold for sex determination in a turtle  
2 with temperature-dependent sex determination”

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4 Table S1. Logistic regression of paternity status of a clutch analyzed with a binomial  
5 generalized linear model. Maternal carapace length (CL) was log transformed. Logistic  
6 regression does not require that the effects of the model are normally distributed; therefore, no  
7 transformations were done on other variables. “Genotyped” refers to the proportion of the clutch  
8 which was genotyped. Females with multiply sired nests had an average carapace length of  
9 167.70 mm (95% CI: 164.5, 171.1) and those with only single sires detected for their clutch had  
10 an average carapace length of 161.551 mm (95% CI: 159.3, 163.7). Larger females had  
11 significantly larger clutches ( $r = 0.468$ ,  $p < 0.001$ ,  $df = 97$ ,  $t = 5.220$ ) and larger hatchlings ( $r =$   
12  $0.597$ ,  $p < 0.001$ ,  $df = 97$ ,  $t = 7.333$ ). Average egg mass for 88 clutches was available, and  
13 showed a significant relationship with maternal size ( $r = 0.605$ ,  $p < 0.001$ ,  $df = 86$ ,  $t = 7.011$ ).

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15 Response: Mutiple paternity detected in a clutch

	Df	Deviance	Resid.Df	Resid.Dev	P(> Chi )
17 NULL			98	137.23	
18 Maternal CL	1	8.4740	97	128.76	0.0036
19 Genotyped	1	3.1562	96	125.60	0.0756
20 Clutch size	1	0.7514	95	124.85	0.3860

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24 Table S2. A generalized linear model with binomial error variance that evaluated the effects of  
25 maternal size (carapace length, CL), year of nesting, nest identity, and sires identity on sex of an  
26 individual. Intersex individuals were excluded. Maternal carapace length (CL) was log  
27 transformed.

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	Df	Deviance	Resid. Df	Resid. Dev	P(> Chi )
29 NULL			388	539.2	
30 MomCL	1	4.663	387	534.5	0.031
31 Year	7	13.291	380	521.2	0.065
32 Nest	42	94.503	338	426.7	<0.001
33 Sire ID	62	0.000	276	8290.0	1.000

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36 Table S3. A generalized linear model with binomial error variance that evaluated the interaction  
 37 of maternal size (carapace length, CL) and number of sires on sex ratio of the nest. Intersex  
 38 individuals were excluded. Maternal carapace length (CL) was log transformed. In part A,  
 39 paternity was treated as an ordinal effect [1,2,3,4] to account for the number of sires contributing  
 40 to each clutch. In part B, paternity was treated as a binomial variable (multiple sires detected or  
 41 not).

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43 A. Response: Sex ratio

	Df	Deviance	Resid. Df	Resid. Dev	P(> Chi )
44 Null			98	81.088	
45 MomCL	1	0.264	97	80.825	0.608
46 Number of sires	3	2.932	94	77.893	0.402
47 Mom CL * Number of sires	2	3.574	92	74.319	0.167

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50 A. Response: Sex ratio

	Df	Deviance	Resid. Df	Resid. Dev	P(> Chi )
51 Null			98	81.088	
52 MomCL	1	0.2635	97	80.825	0.608
53 MP	1	0.0072	96	80.817	0.932
54 MomCL*MP	1	4.8135	95	76.004	0.028*