

Appendix A: Supplementary Figures & Tables

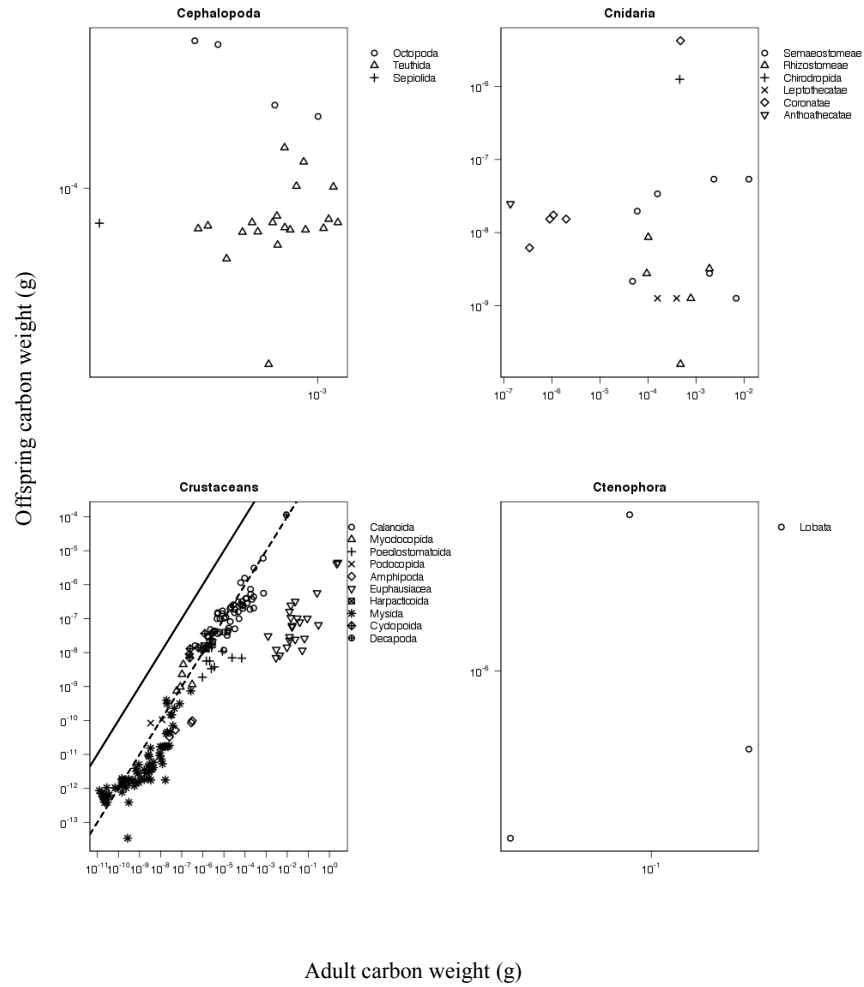


FIGURE A1: Adult-offspring size comparisons for each group (see Table 1) with each point representing species-specific means as adult vs. offspring. Symbols are labeled to identify Orders in each group. Also shown are 1:1 (black solid) and 1:100 (black dashed) lines.

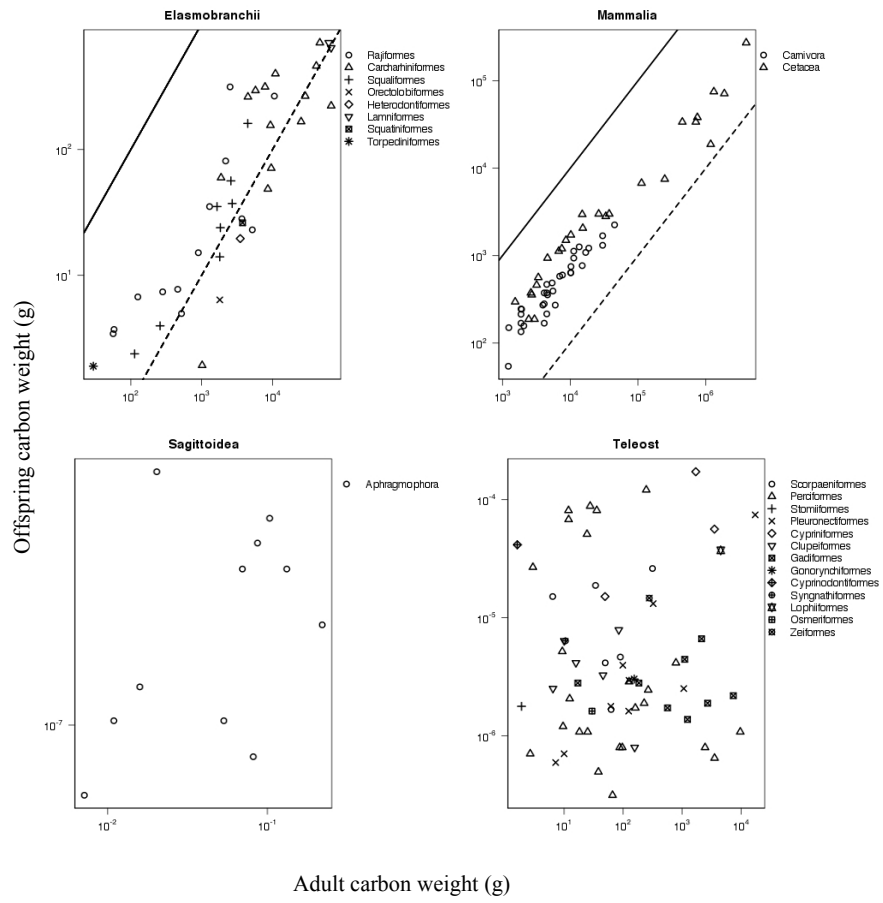
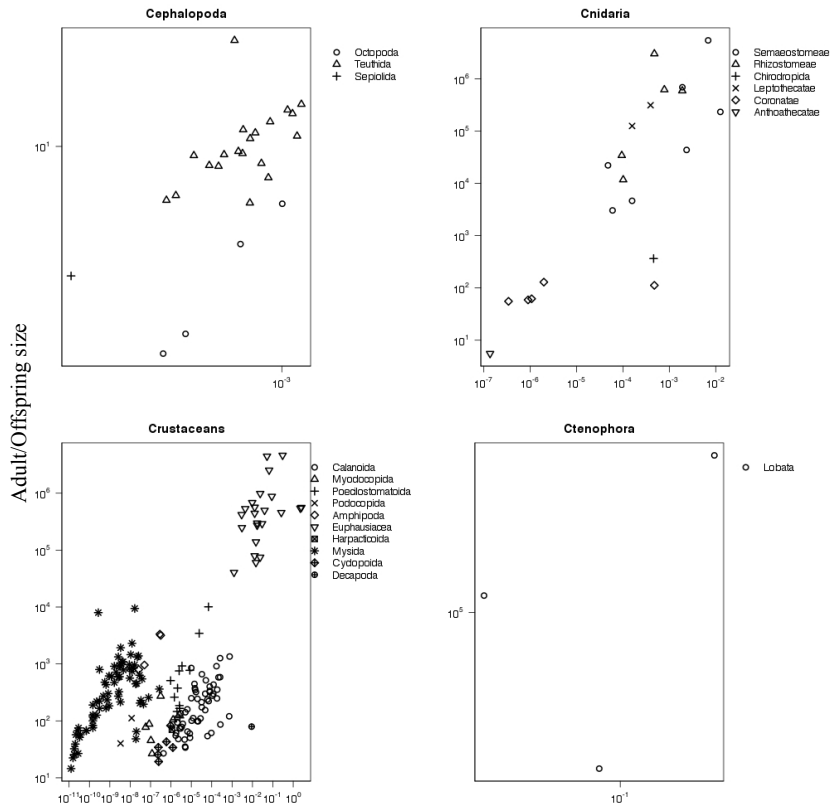


FIGURE A1 (CONT.)



Adult carbon weight (g)

FIGURE A2: Adult/offspring vs. Adult size comparisons for each group (see Table 1) with each point representing species-specific means as adult vs. adult/offspring. Symbols are labeled to identify Orders in each group. Also shown are 1:1 (black solid) and 1:100 (black dashed) lines.

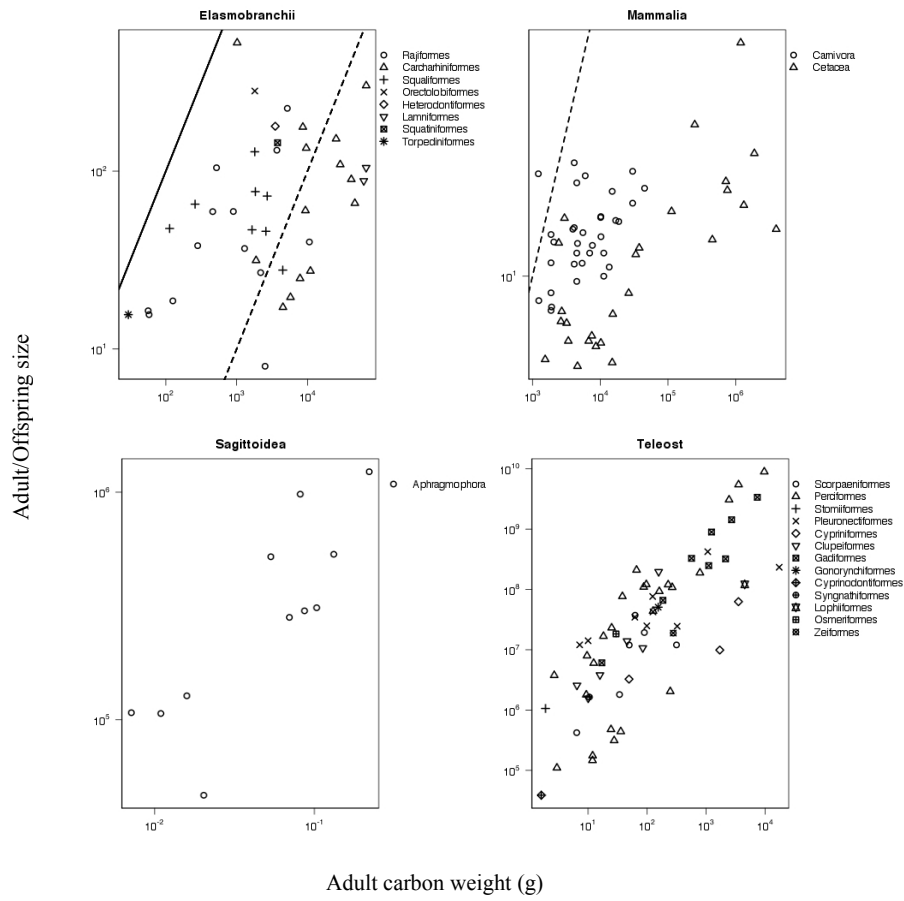


FIGURE A2 (CONT.)

Table A1: Statistical analysis of offspring vs. adult size as  $w_{\text{offspring}} = a \cdot w_{\text{adult}}^b$ , where  $w_{\text{offspring}}$  and  $w_{\text{adult}}$  is offspring and adult size (g carbon weight) respectively. See also Methods and Fig. A1. NA denotes not applicable data cell.

Group	Order	SMA Line-fitting					Slope compare to 1, P-value
		Sample size	P-Value	Squared Pearson correlation coefficient	$b$ estimate (Range)	$a$ estimate (Range) $\text{gC}^{1/b}$	
Cephalopoda	Octopoda	4	0.03	0.94	-0.79 (-1.6 to -0.4)	$6.3 \times 10^{-7}$ ( $8.6 \times 10^{-9}$ to $4.6 \times 10^{-5}$ )	0.31
	Teuthida	20	0.24	0.075	NA	NA	NA
Cnidaria	Coronatae	5	<0.001	0.99	0.92 (0.74 to 1.1)	0.0045 (0.00036 to 0.056)	0.29
	Rhizostomeae	5	0.6	0.1	NA	NA	NA
	Semaeostomeae	7	0.89	0.0044	NA	NA	NA
Crustaceans	Amphipoda	4	0.019	0.96	0.4 (0.23 to 0.71)	$4.0 \times 10^{-8}$ ( $8.7 \times 10^{-10}$ to $1.9 \times 10^{-6}$ )	0.017
	Calanoida	55	<0.001	0.68	0.76 (0.65 to 0.89)	$4.6 \times 10^{-4}$ ( $1.3 \times 10^{-4}$ to $1.7 \times 10^{-3}$ )	<0.001
	Cyclopoida	6	0.083	0.57	NA	NA	NA
	Euphausiacea	23	<0.001	0.6	0.91 (0.69 to 1.2)	$1.8 \times 10^{-8}$ ( $6.2 \times 10^{-7}$ to $5.2 \times 10^{-6}$ )	0.52
	Myodocopida	7	0.013	0.74	0.88 (0.5 to 1.5)	0.0019 ( $7.4 \times 10^{-7}$ to 4.9)	0.6
	Mysida	71	<0.001	0.72	0.77 (0.68 to 0.87)	$3.0 \times 10^{-3}$ ( $4.0 \times 10^{-6}$ to $2.2 \times 10^{-4}$ )	<0.001
	Poecilostomatoida	13	0.81	0.0056	NA	NA	NA

Table A1 cont.

Group	Order	SMA Line-fitting					Slope compare to 1, P-value
		Sample size	P-Value	Squared Pearson correlation coefficient	$b$ estimate (Range)	$a$ estimate (Range) $\text{gC}^{1/b}$	
Elasmobranchii	Carcharhiniformes	14	0.0049	0.50	1.2 (0.8 to 1.9)	0.0018 ( $1.1 \times 10^{-5}$ to 0.29)	0.36
	Rajiformes	13	<0.001	0.69	0.9 (0.63 to 1.3)	0.048 (0.0049 to 0.47)	0.55
	Squaliformes	8	<0.001	0.89	1.1 (0.79 to 1.5)	0.0092 ( $7.1 \times 10^{-7}$ to 0.12)	0.55
Mammalia	Carnivora	33	<0.001	0.89	0.9 (0.8 to 1.0)	0.17 (0.063 to 0.44)	0.11
	Cetacea	26	<0.001	0.96	0.82 (0.75 to 0.89)	0.62 (0.29 to 1.4)	<0.001
Teleost	Clupeiformes	6	0.47	0.14	NA	NA	NA
	Cypriniformes	3	0.41	0.65	NA	NA	NA
	Gadiformes	8	0.95	0.00086	NA	NA	NA
	Perciformes	25	0.15	0.086	NA	NA	NA
	Pleuronectiformes	9	0.0011	0.8	0.63 (0.43 to 0.93)	$1.3 \times 10^{-7}$ ( $3.3 \times 10^{-8}$ to $5.3 \times 10^{-7}$ )	0.026
	Scorpaeniformes	6	0.97	0.00033	NA	NA	NA