

Supplementary material

Reproductive biology of female blue swimmer crabs in the temperate estuaries of south-eastern Australia

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Table S1. ANCOVA summary table for the relationship the total weight of the egg mass (g) and the total bodyweight (g) of the berried crabs by estuary

Asterisks (*) denote significant probabilities

Parameter	Degrees of freedom	Sum of squares	Mean squares	*F*-value	*P*-value
$\log_e$(bodyweight)	1	91643	91643	70.699	<0.001*
Estuary	4	26730	6682	5.155	<0.001*
$\log_e$(bodyweight): estuary	4	5363	1341	1.034	0.393
residuals	103	133512	1296		

Table S2. Summary table of *post hoc* Tukey test performed on ANCOVA for the relationship the total weight of the egg mass (g) and the total bodyweight (g) of the female by estuary

Asterisks (*) denote significant probabilities

Estuary		Mean difference	Lower	Upper	Adjusted *P*-value
Lake Illawarra	Botany Bay	–44.05	–84.87	–3.24	0.028*
Lake Macquarie	Botany Bay	–54.64	–93.52	–15.75	0.002*
Port Stephens	Botany Bay	–65.99	–108.47	–23.51	<0.001*
Wallis Lake	Botany Bay	-45.05	–85.65	–4.44	0.022*
Lake Macquarie	Lake Illawarra	–10.58	–36.65	15.48	0.792
Port Stephens	Lake Illawarra	–21.93	–51.10	9.24	0.296
Wallis Lake	Lake Illawarra	–0.99	–29.56	27.58	0.999
Port Stephens	Lake Macquarie	–11.35	–39.96	17.25	0.805
Wallis Lake	Lake Macquarie	9.59	–16.15	35.33	0.839
Wallis Lake	Port Stephens	20.94	–9.96	51.84	0.333

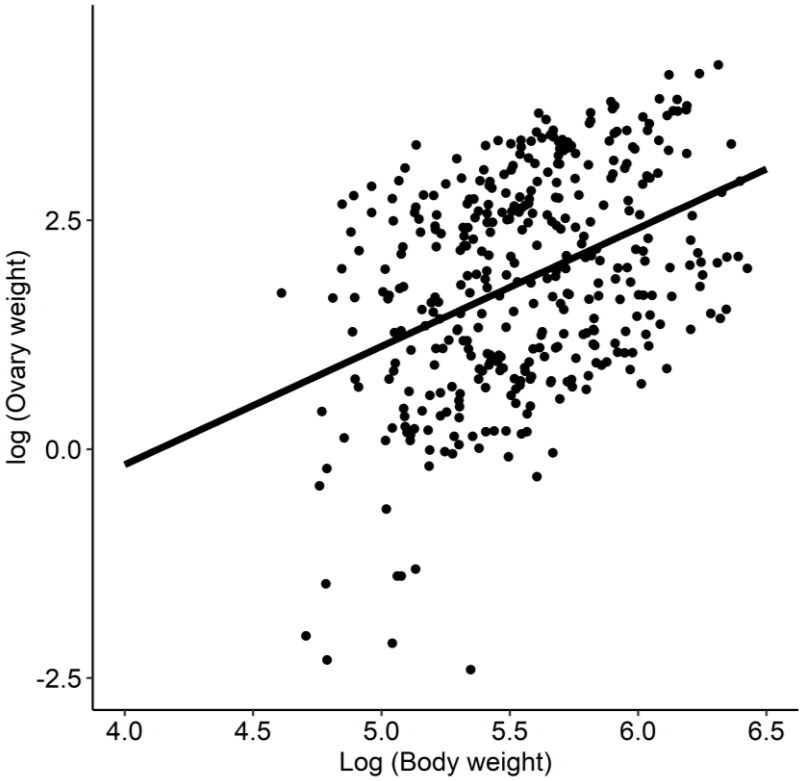

Fig. S1. Linear models illustrating the relationship between the natural log of ovary weight and the natural log of total bodyweight. The slope coefficient is used as the exponent in the calculation of adjusted GSI.

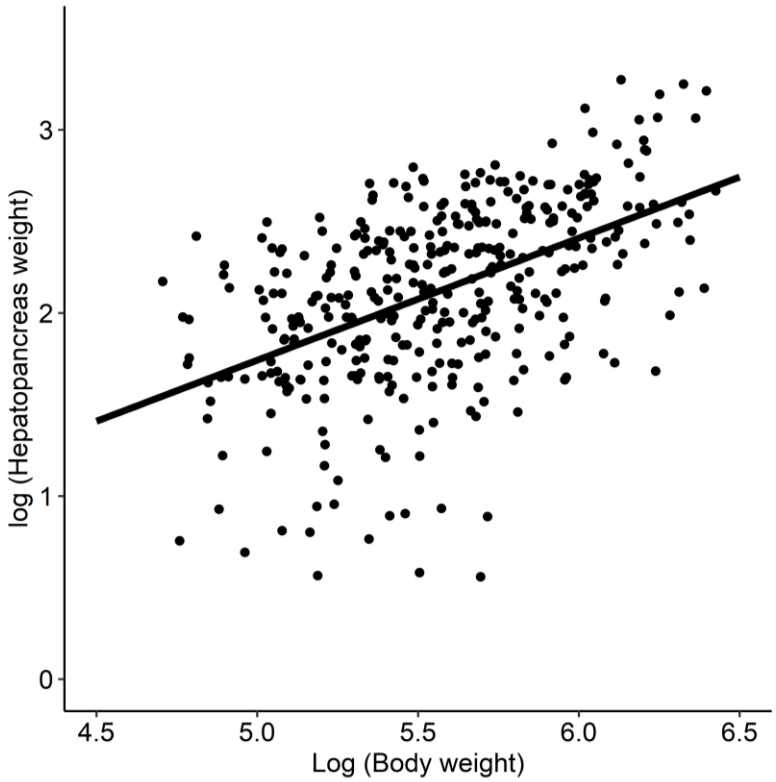

Fig. S2. Linear models illustrating the relationship between the natural log of hepatopancreas weight and the natural log of total bodyweight. The slope coefficient is used as the exponent in the calculation of adjusted HSI.