

	Running speed (m/s)	Stride length (cm)	Stride frequency (Hz)
This study	2.04 ± 0.04	18.76±0.189	11.11±0.15
¹ Blickhan and Full, 1987*	1.1	25.4	6.3
² Perry et al., 2009*	0.9	N/A	~5 - 8
³ Whittemore et al., 2015*	N/A	N/A	~8
⁴ Burrows and Hoyle, 1973*	~1.5	~15 - 10	~8 - 10

* Values taken for crabs with a mass of 40g or carapace width of 40mm

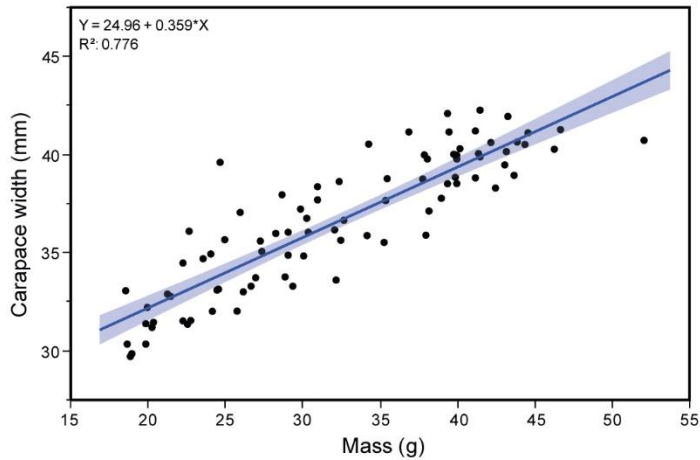


Figure S1 – Carapace width (mm) increased with body mass (g). Carapace width (mm) increased with body mass (g). Each point represents an individual crab used in this study (N=85). Results of a simple linear regression revealed a significant correlation ($p < 0.001$), and is shown with a 95% confidence interval.

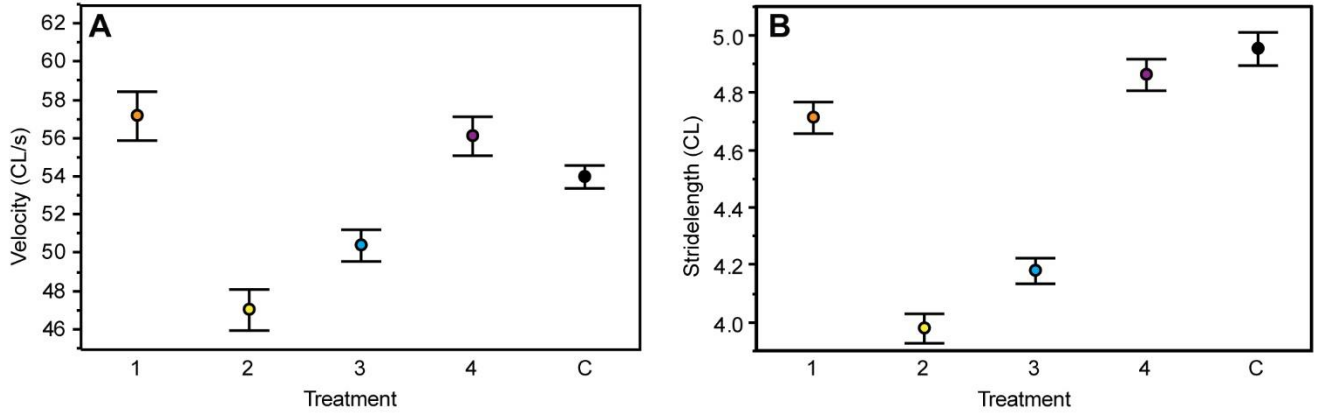


Figure S2 – Average running velocity and stride length, normalized by carapace length (CL). Removal of the 2nd and 3rd legs (yellow and blue, respectively) resulted in decreases in (A) running velocity and (B) stride length when compared to control runs. Removal of the 4th limb (purple) had no impact on locomotor performance for any of these variables. Numbers along the x-axis indicate which limb pair was autotomized. Carapace width normalized data resulted in similar results as the original dataset in Fig. 2.