

Supplementary material

Friend or foe? Development of odour detection, differentiation and antipredator response in an embryonic elasmobranch

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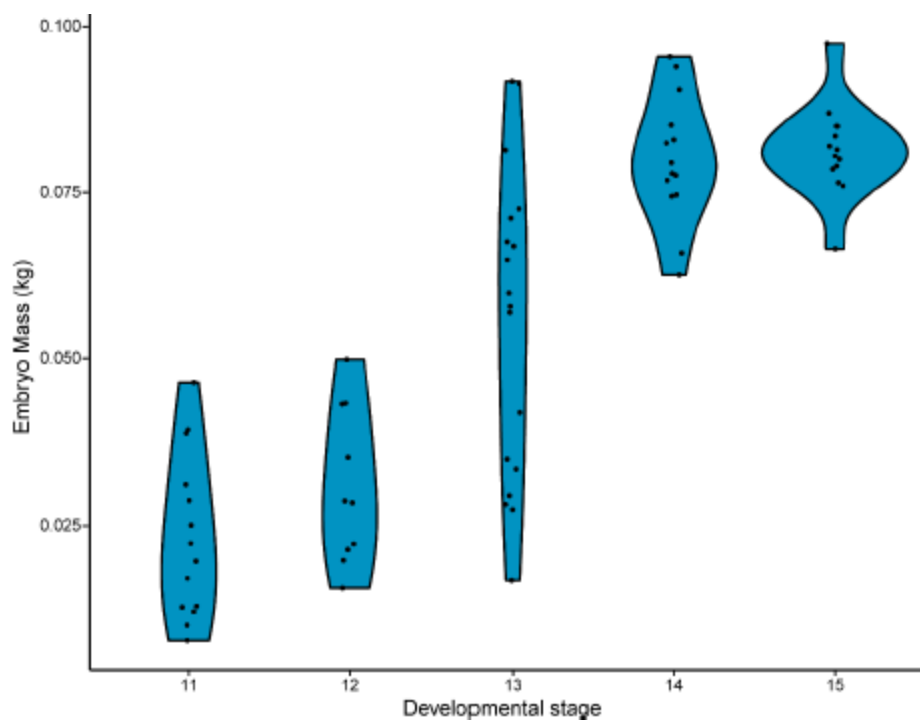


Fig. S1. Violin plots depict the embryo mass (excluding external yolk source) for Port Jackson sharks ($n = 14$) across developmental stages (see Rodda and Seymour 2008).

Table S1. Top linear mixed model (LMM) model selections

The top-ranked model is in bold and was determined by the lowest AIC score (Akaike's information criterion). k is the number of model parameters and ΔAIC is the difference between the current model and the top-ranked model. All models (except where specifically stated) include Individual and Tank as a random effect

Model	k	AIC	ΔAIC
Oxygen Uptake Rate [Gaussian distribution (identity link)]			
~Cue × Developmental Stage	7	1083	0
~Cue	5	1103	19.3
~1 (Intercept-only)	3	1111	28
~Stage	5	1112	28.5
~CUE × Developmental Stage (No Random effects)	4	1158	75.1

Table S2. Oxygen uptake rates ($\dot{M}O_{2Rest}$, mg O₂ kg^{-0.86} h⁻¹) over embryonic development

Mean oxygen uptake values (\pm s.e.m.) are provided in bold. Tukey *post hoc* analyses indicate pairwise comparisons between developmental stages. Asterisks (*) denote significant differences

Stage	11	12	13	14	15
11	44.46 ± 3.12				
12	$P < 0.001^*$ $z = 5.11$	64.21 ± 3.44			
13	$P = 0.75$ $z = 7.73$	$P < 0.001$ $z = -3.90$	48.62 ± 3.05		
14	$P < 0.01^*$ $z = -3.30$	$P < 0.001^*$ $z = -8.41$	$P < 0.001$ $z = -4.51$	34.90 ± 1.69	
15	$P = 0.82$ $z = 1.07$	$P = 0.001^*$ $z = -4.04$	$P = 0.99$ $z = -0.14$	$P < 0.001^*$ $z = 4.38$	47.84 ± 2.35

Reference

Rodda, K. R., and Seymour, R. S. (2008). Functional morphology of embryonic development in the Port Jackson shark *Heterodontus portusjacksoni* (Meyer). *Journal of Fish Biology* **72**(4), 961–984. [doi:10.1111/j.1095-8649.2007.01777.x](https://doi.org/10.1111/j.1095-8649.2007.01777.x)