

Fig. S1. A schematic diagram of each combination of life histories used in the factorial mating design adopted for the study. Note: 1SW= 1 year spent in sea water; 2SW= 2 years spent in sea water; Parr= males that matured in FW and spent 0 years in sea water; 1FW= 1 year spent in freshwater; 2 FW= 2 years spent in fresh water. See text for more details.

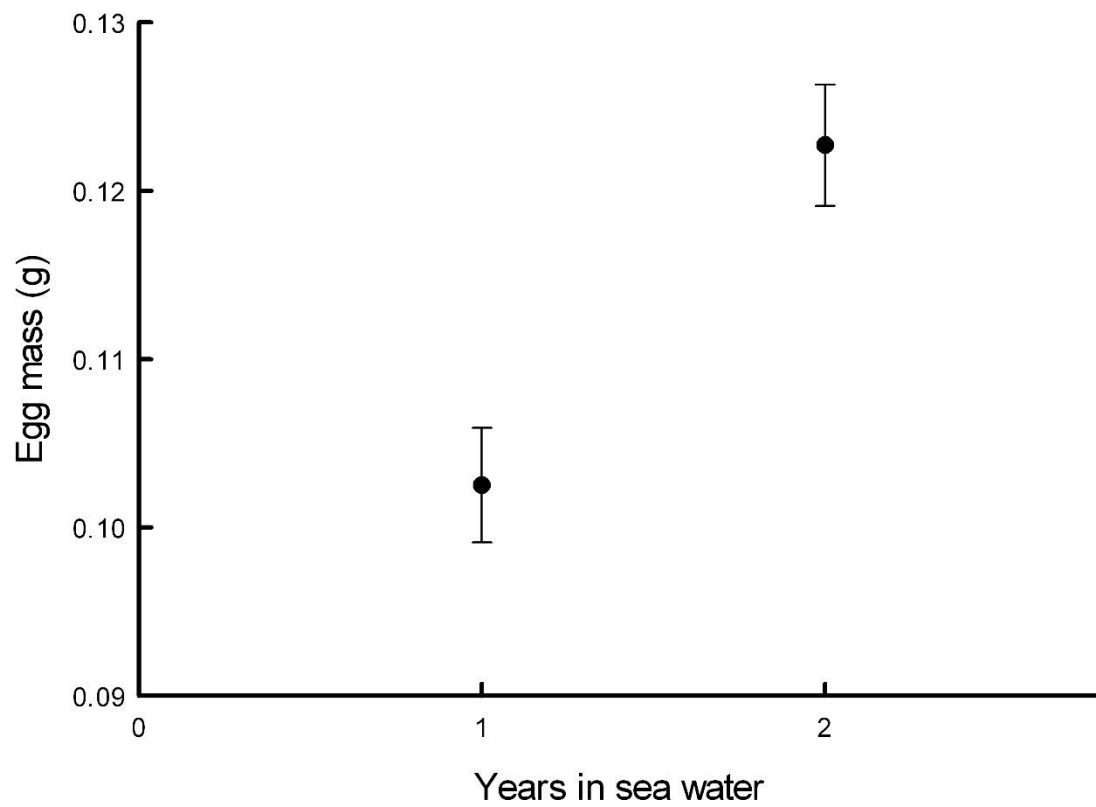


Fig. S2. The relationship between the time mothers had spent at sea (1 or 2 years) and egg mass. Error bars represent 95% confidence intervals. See text for statistical analysis.

Table S1. The sample size (number of pairs) for each combination of life histories used in the factorial mating design adopted for the study

Parental type (Maternal: Paternal)	# of pairs
1SW1SW	8
1SW2SW	7
1SWParr	6
2SW1SW	9
2SW2SW	8
2SWParr	7
2FW1FW	2
2FW2FW	5
2FW3FW	5
3FW1FW	5
3FW2FW	19
3FW3FW	9

Note: 1SW= 1 year spent in sea water; 2SW= 2 years spent in sea water; Parr= males that matured in FW and spent 0 years in sea water; 1FW= 1 year spent in freshwater; 2 FW= 2 years spent in fresh water. See text for more details.

Table S2. The sample size and average metabolic rate (g^{-1}) for offspring from each combination of life histories used in the factorial mating design adopted for the study.

Parental type (Maternal:Paternal)	Sample size (# of families)	SMR ($\mu\text{mol/g/hr}$) \pm SD	MMR($\mu\text{mol/g/hr}$) \pm SD	AS ($\mu\text{mol/g/hr}$) \pm SD
1SW1SW	47 (8)	7.71 \pm 2.31	25.25 \pm 6.63	17.54 \pm 7.36
1SW2SW	59 (7)	6.85 \pm 2.65	23.64 \pm 6.64	16.8 \pm 7.49
1SWParr	56 (6)	7.58 \pm 2.15	25.23 \pm 5.87	17.65 \pm 6.32
2SW1SW	95 (9)	7.17 \pm 2.24	25.84 \pm 6.07	18.67 \pm 5.93
2SW2SW	67 (8)	7.90 \pm 2.27	24.50 \pm 5.95	16.60 \pm 6.05
2SWParr	67 (7)	7.57 \pm 2.66	25.14 \pm 6.84	17.57 \pm 7.38
2FW1FW	10 (2)	6.49 \pm 2.50	28.14 \pm 9.46	21.65 \pm 10.48
2FW2FW	43 (5)	7.56 \pm 2.01	26.35 \pm 6.06	18.79 \pm 6.11
2FW3FW	47 (5)	7.27 \pm 2.18	25.63 \pm 6.43	18.36 \pm 6.64
3FW1FW	49 (5)	7.51 \pm 2.22	24.21 \pm 5.10	16.70 \pm 5.49
3FW2FW	170 (19)	7.44 \pm 2.73	23.69 \pm 5.91	16.39 \pm 6.16
3FW3FW	73 (9)	7.53 \pm 1.97	26.61 \pm 7.52	19.07 \pm 7.78

Note: SMR= standard metabolic rate; MMR= maximal metabolic rate; AS= aerobic scope; 1SW= 1 year spent in sea water; 2SW= 2 years spent in sea water; Parr= males that matured in FW and spent 0 years in sea water; 1FW= 1 year spent in freshwater; 2 FW= 2 years spent in fresh water. See text for more details.

Table S3.

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