

Fig. S1. Stellwagen Bank National Marine Sanctuary (SBNMS) in Massachusetts Bay in the southern Gulf of Maine, where Northern sand lance are keystone forage fish. Spawning adults were sampled in November 2018 and 2020 on the southern portion of the bank (red circle).

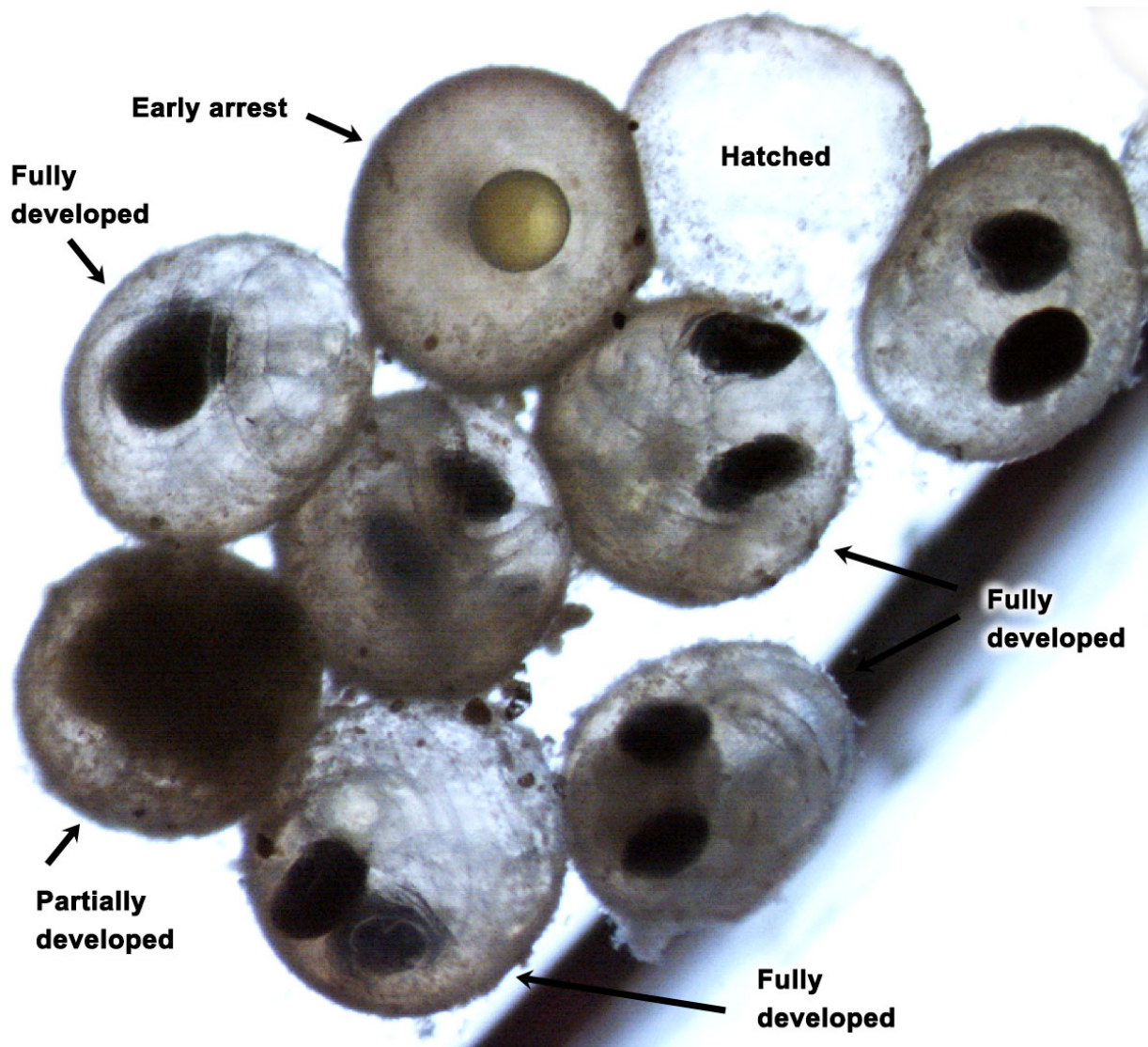


Fig. S2. Microphotograph of *Ammodytes dubius* embryos at the conclusion of E1. We distinguished embryos that (a) had arrested early in development, (b) were partially developed, or (c) appeared to have fully developed but did not hatch.

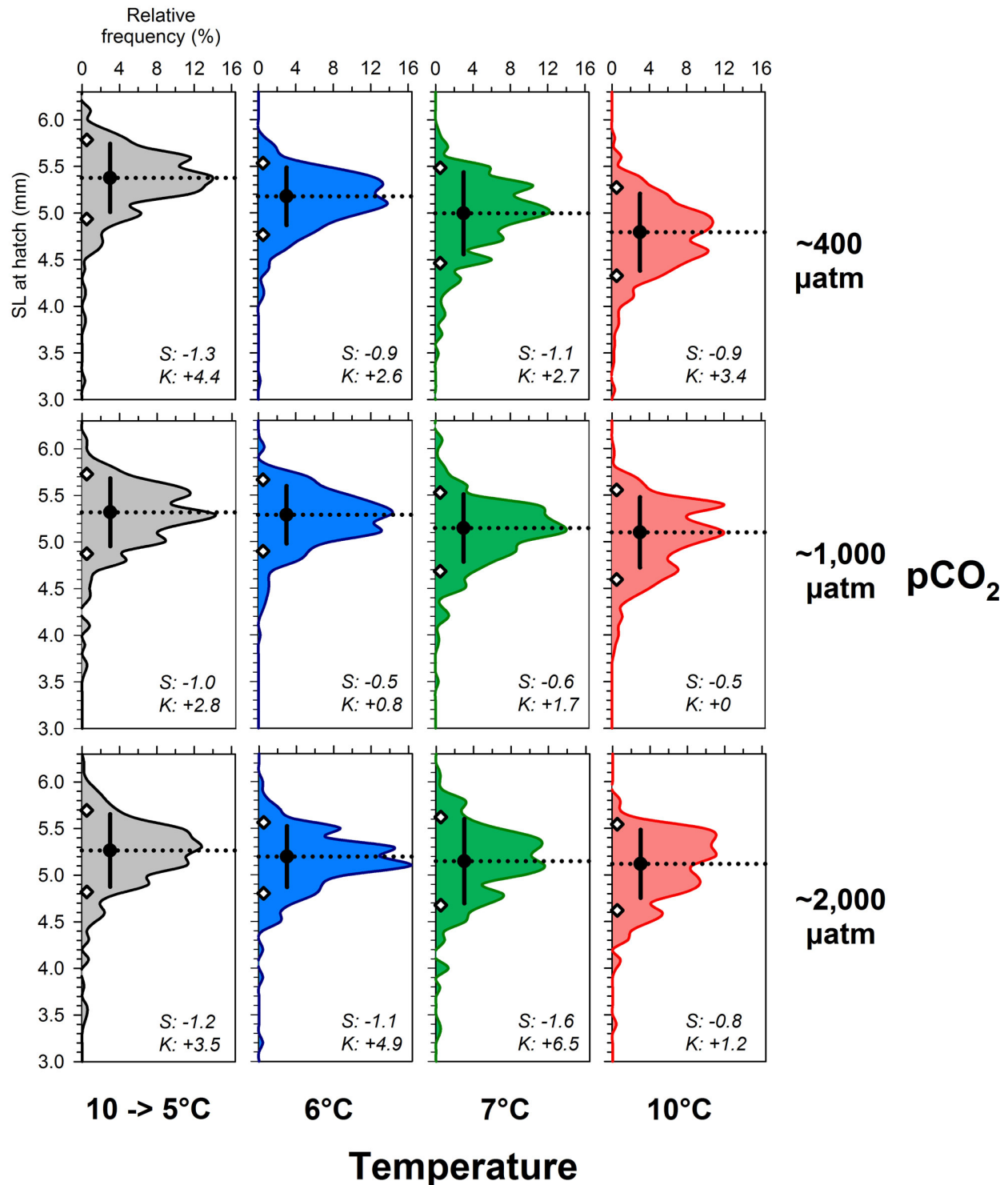


Fig. S3. Distributions of *Ammodytes dubius* hatchling standard length (SL, mm) during experiments E1 (6°C, blue; 10°C, red) and E2 (7°C, green; 10→5°C, grey) at three pCO₂ levels (~400; 1,000; ~2,000 μatm). Dotted line and black circles depict the mean SD, small numbers in each panel refer to measured N. S: Skewness; K: Kurtosis