

Supplement – Figures



Fig. S1. Location of the sampling sites of *E. directus* (shells 1, 2, 3 and 4) and of the sites where water temperature and salinity were measured. Reproduced with permission of Google Earth™ mapping service (image © Aerodata International Surveys).

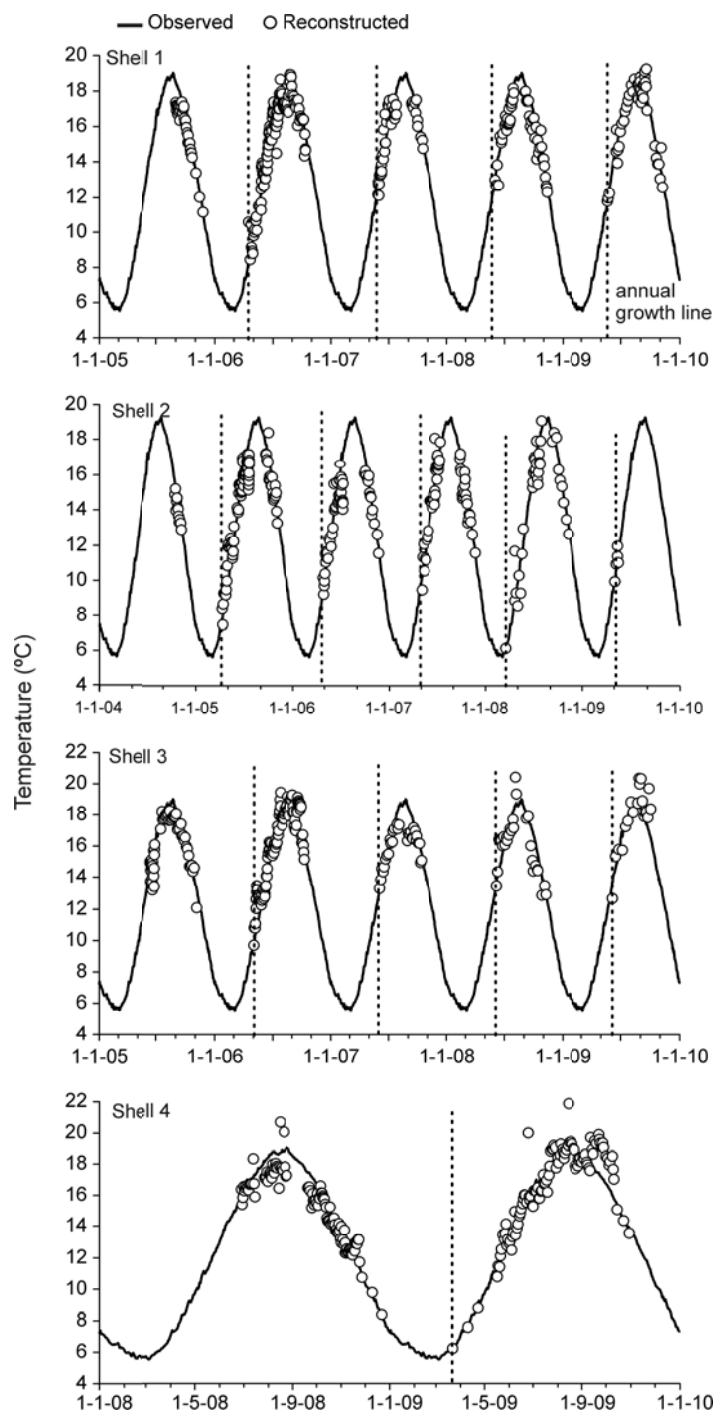


Fig. S2. Comparison of observed and reconstructed water temperatures experienced by *E. directus* during growth. Open circles represent reconstructed temperatures from measured $\delta^{18}\text{O}$ values using Eq. [5] (see text), line represents observed temperatures in the field (from <http://live.waterbase.nl/waterbase>). Vertical dotted lines represent annual growth lines observed on the surface of the shell and in the acetate peels.

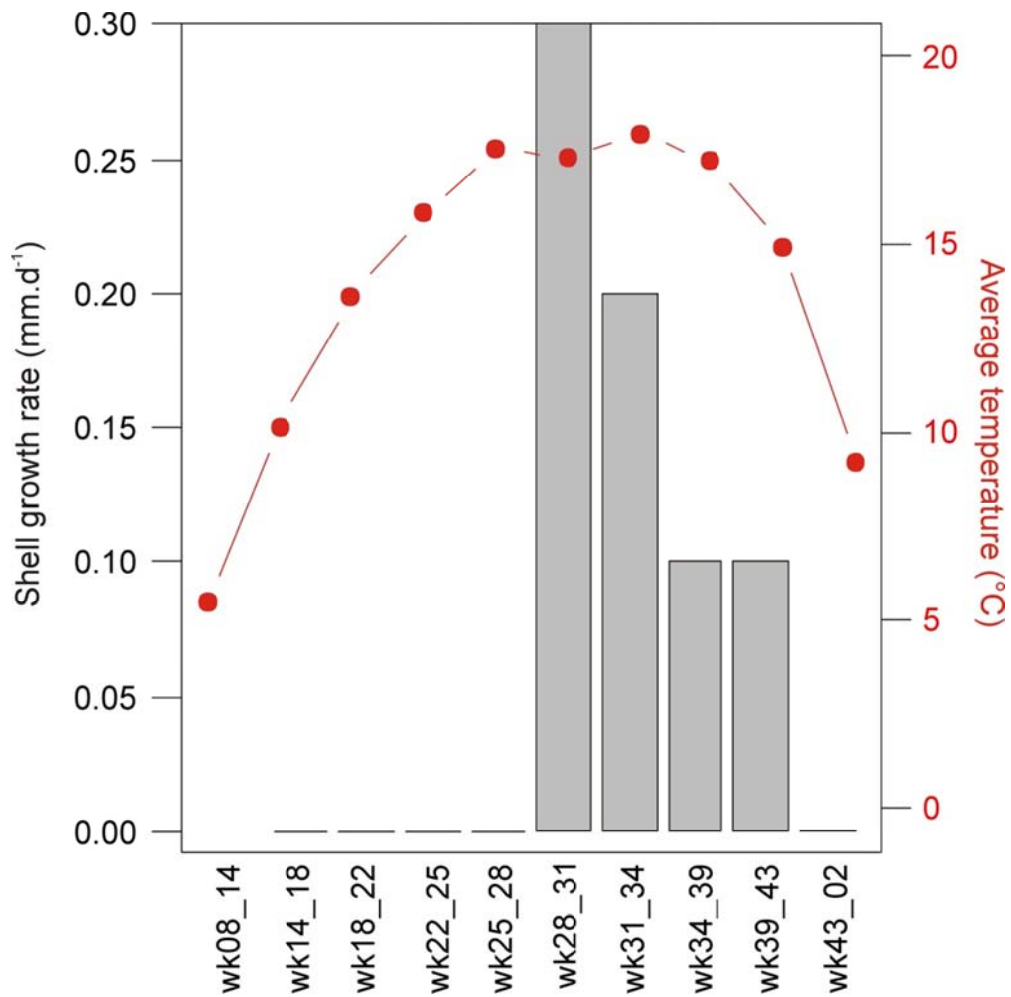


Fig. S3. Shell growth (mm.d⁻¹) and water temperature (°C) measured in the field in 2011 (wk08_14: 22-02 to 07-04; wk14_18: 07-04 to 03-05; wk18_22: 03 to 31-05; wk22_25: 31-05 to 24-06; wk25_28: 24-06 to 12-07; wk28_31: 12-07 to 02-08; wk31_34: 02-08 to 23-08; wk34_39: 23-08 to 27-09; wk39_43: 27-09 to 25-10; wk43_02: 25-10 to 11-01-2012) (adapted from Witbaard et al., 2012).