

Fig. S1. *Cerastoderma edule*. Details of shell length histograms for each cohort, from 1998 to 2019, and growth curve as calculated using the Bhattacharya method. Each cohort was monitored from May to April (when still detectable) of the next year. Dashed lines: “L”, low-mortality years; solid lines: “H”, high-mortality years.

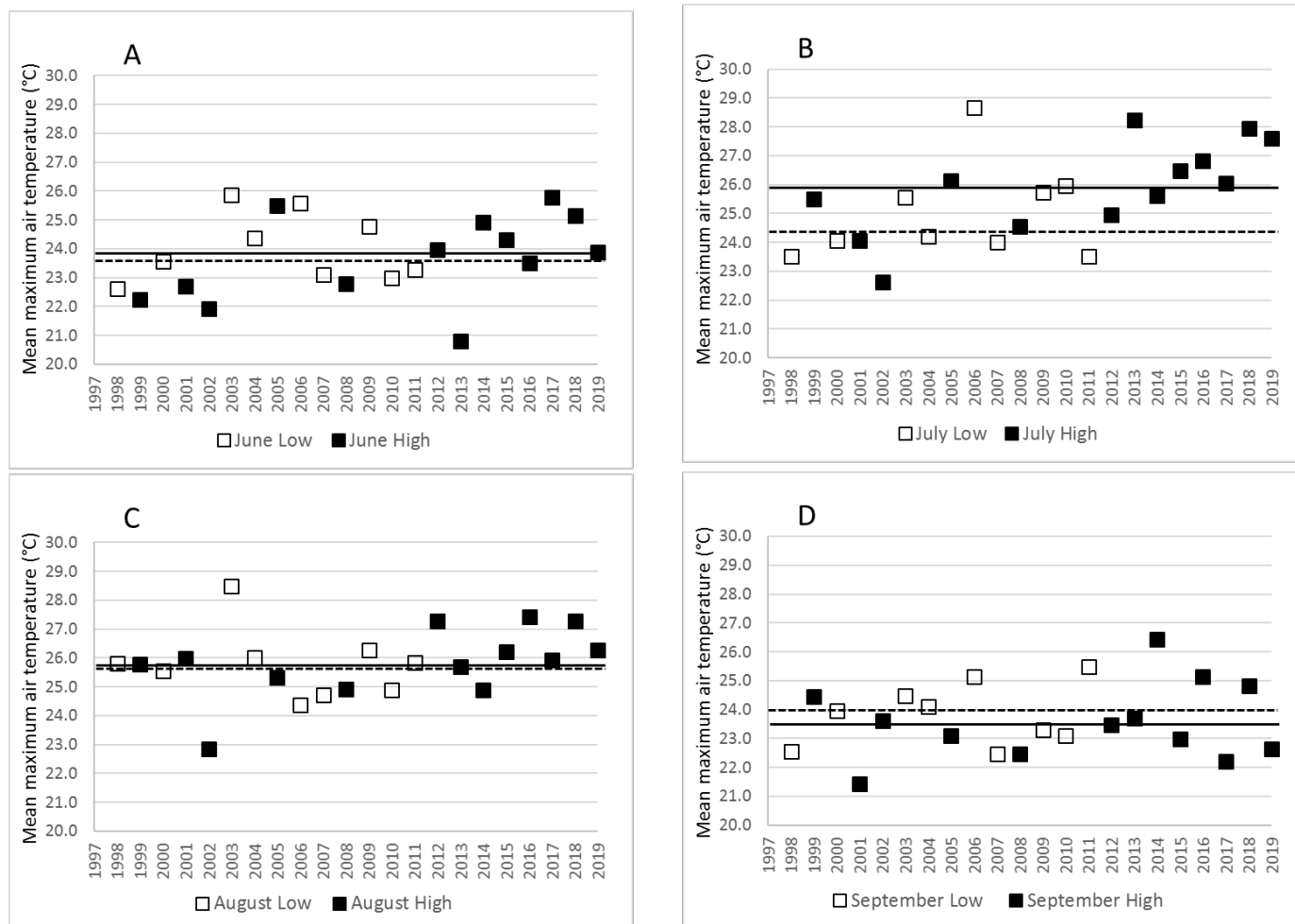


Fig. S2. Maximum air temperature (°C) per month observed in Banc d’Arguin, from 1997 to 2019, separating “Low” and “High” mortality years. Dashed line: median value of all low-mortality years; solid line: median value of all high-mortality years. A: June; B: July; C: August; D: September.

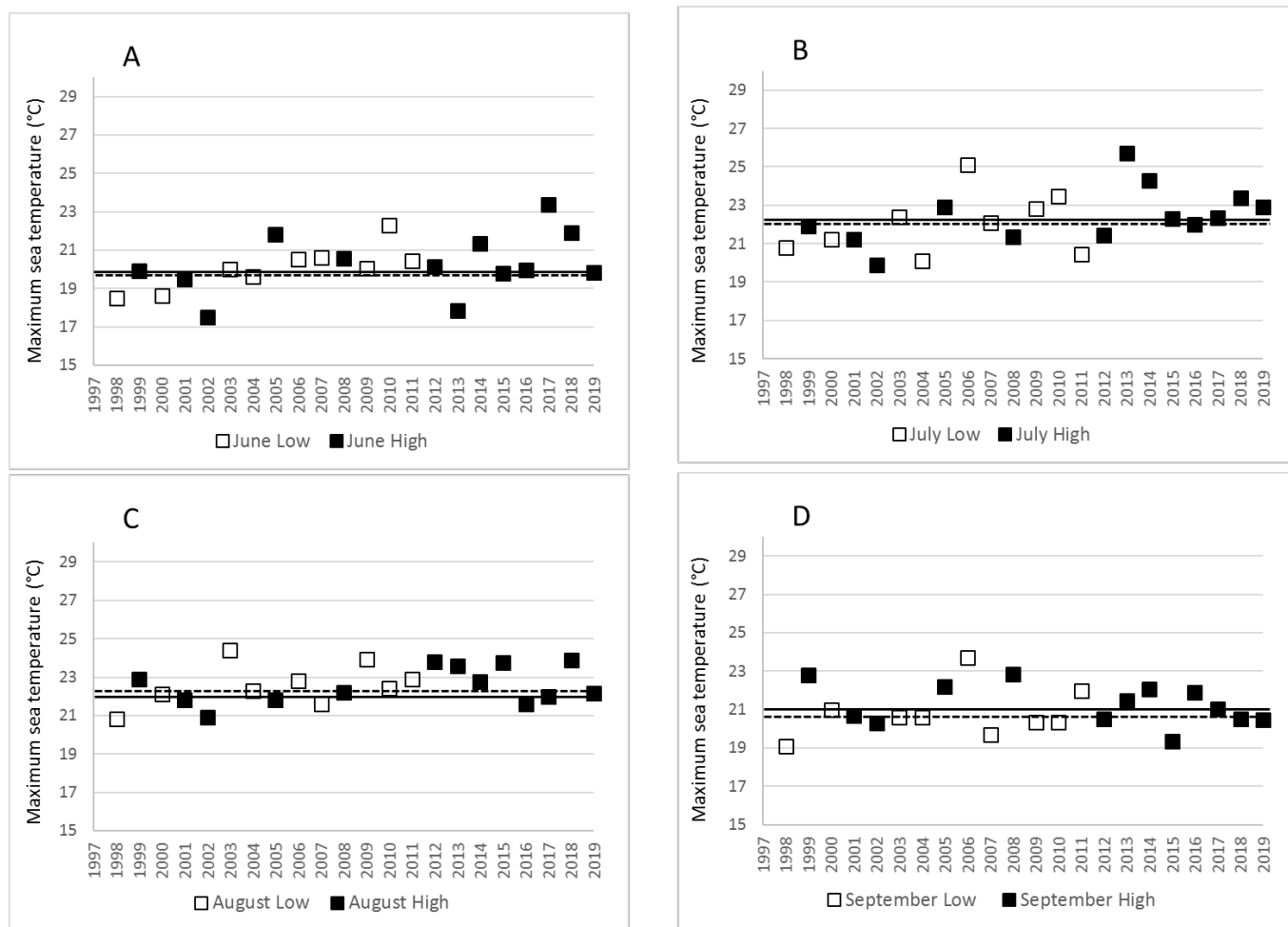


Fig. S3. Maximum sea temperature (°C) per month observed in Banc d’Arguin, from 1997 to 2019, separating “Low” and “High” mortality years. Dashed line: median value of all low-mortality years; solid line: median value of all high-mortality years. A: June; B: July; C: August; D: September.

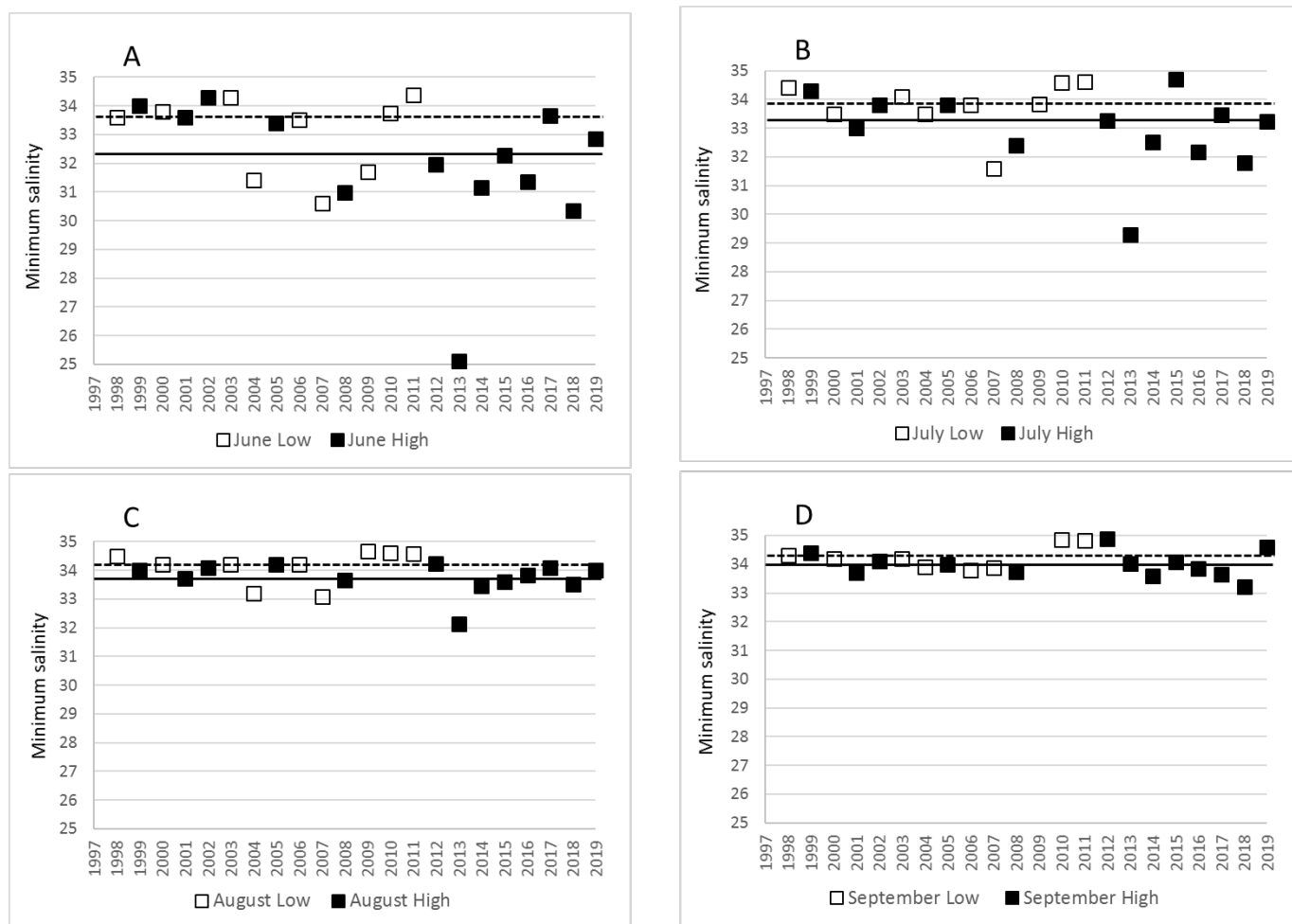


Fig. S4. Minimum salinity per month observed in Banc d’Arguin, from 1997 to 2019, separating “Low” and “High” mortality years. Dashed line: median value of all low-mortality years; solid line: median value of all high-mortality years. A: June; B: July; C: August; D: September.

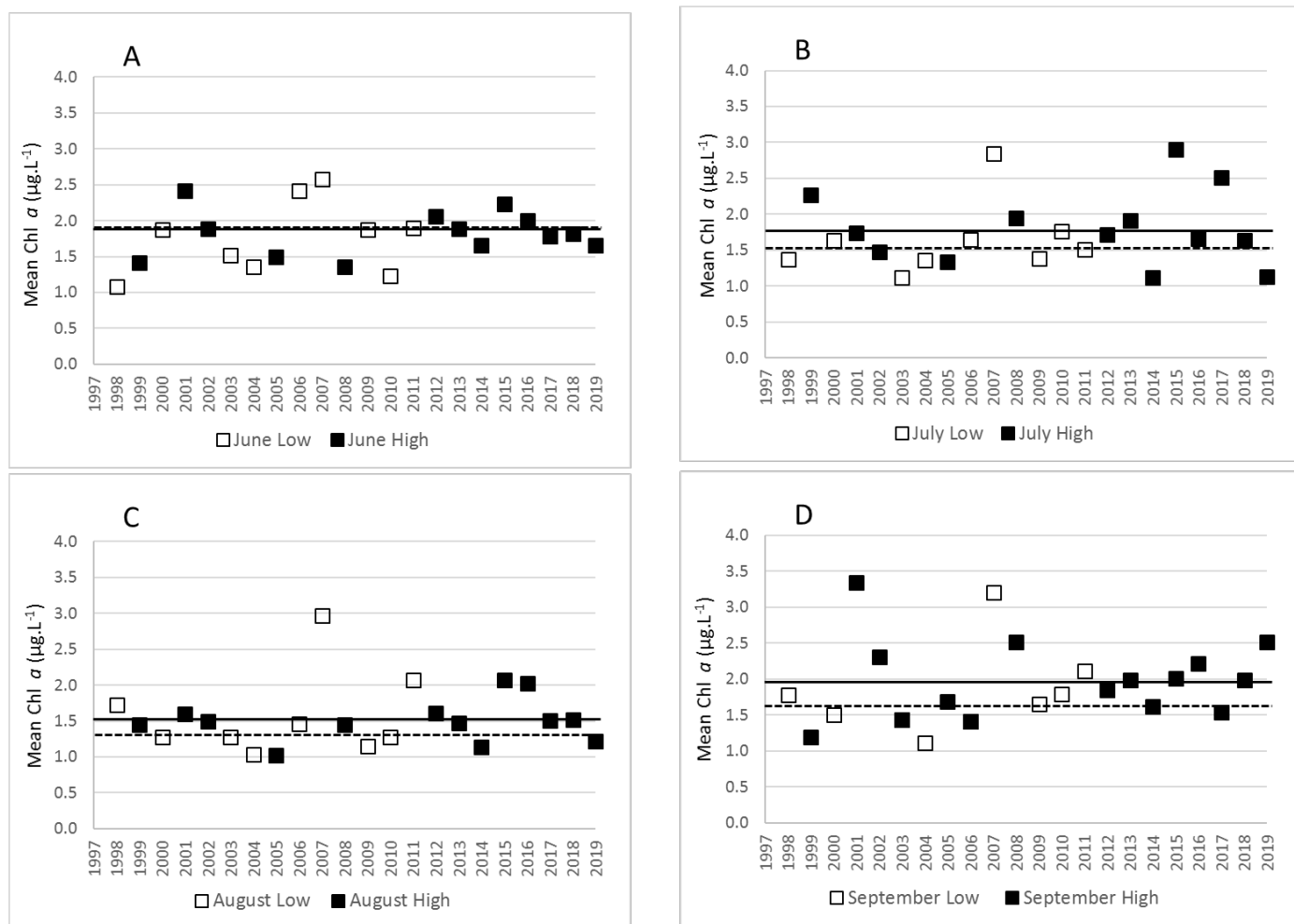


Fig. S5. Mean Chl *a* concentration (µg.L⁻¹) per month observed in Banc d’Arguin, from 1997 to 2019, separating “Low” and “High” mortality years. Dashed line: median value of all low-mortality years; solid line: median value of all high-mortality years. A: June; B: July; C: August; D: September.

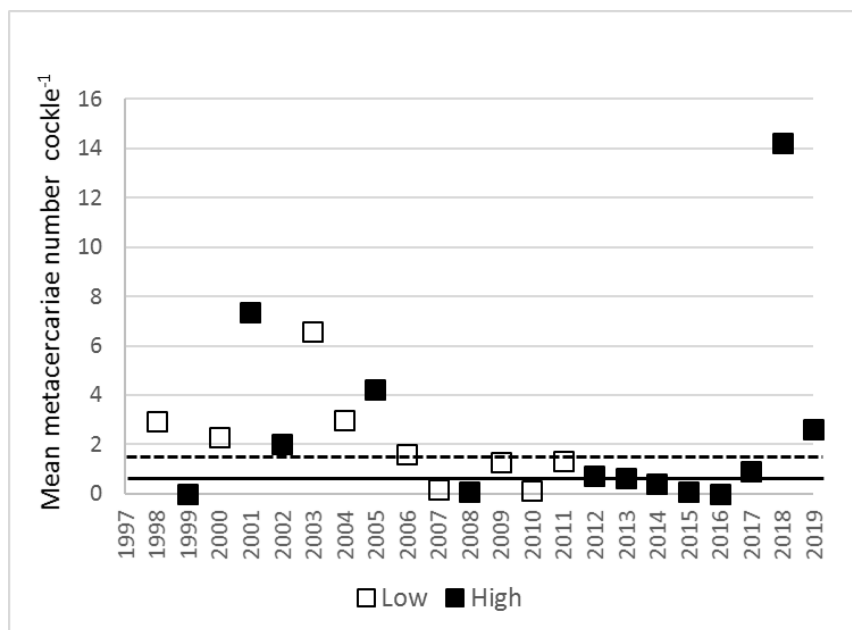


Fig. S6. Mean number of trematode metacercariae (ind.cockle⁻¹) observed in Banc d'Arguin in July, from 1997 to 2019, separating "Low" and "High" mortality years. Dashed line: median value of all low-mortality years; solid line: median value of all high-mortality years.

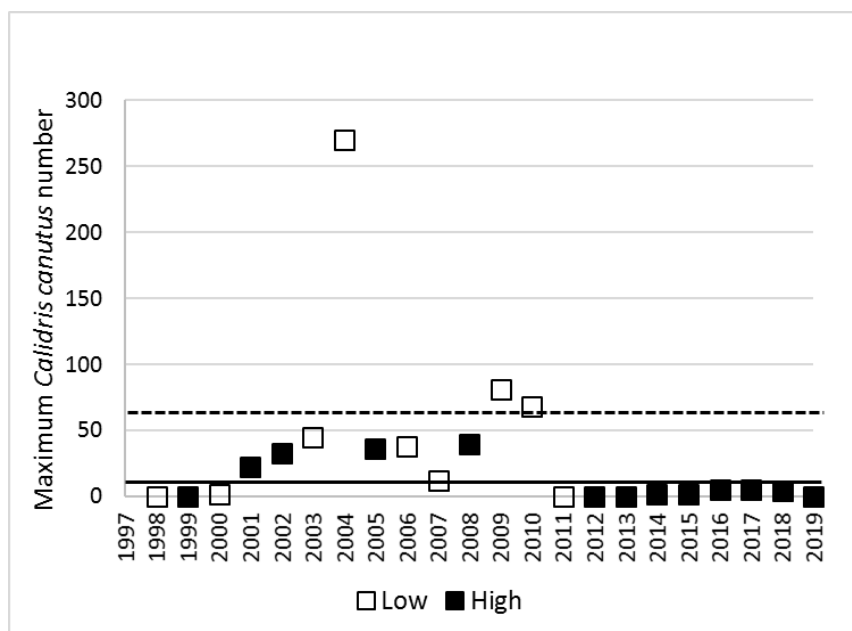


Fig. S7. Maximum number of sandpipers (*Calidris canutus*) observed in Banc d'Arguin in June, from 1997 to 2019, separating "Low" and "High" mortality years. Dashed line: median value of all low-mortality years; solid line: median value of all high-mortality years.