## **Appendix**

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- 3 Impacts of ocean acidification and warming on post-larval growth and
- 4 metabolism in two populations of the great scallop (Pecten maximus L.)

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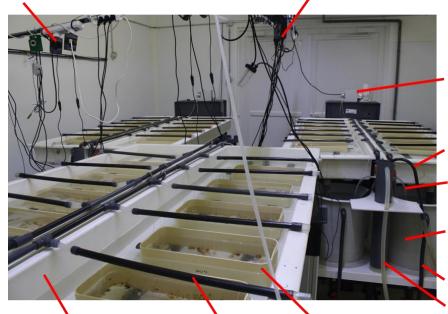
## Figure A1

Temperature control connected to resistance heaters in header tanks for 16 and 19 °C systems.

- One resistance per header tank
- 4 total

 ${\rm CO_2}$  control connected to  ${\rm CO_2}$  cannister at ground level and  ${\rm CO_2}$  reactor in reduced pH header tank.

- One control/cannister/reactor per reduced pH system
- 3 total



Peristaltic pump (pumping algae from 10 L bottle to header tank)

- One pump and bottle per system pair
- 3 total

In-flow (system pair)

In-flow (header tank)

Header tank (30 L) containing submerged pump

6 total

Header tank overflow

System pair overflow

Raceway tank (100 L)

• 6 total

PVC pipes with 6 small holes on underside (distribution of water from header tanks to trays) Mesh bottomed trays containing French or Norwegian spat

- 3 French + 3 Norwegian replicates per system (treatment)
- 36 total

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- Fig. A1. Experimental set up for climate controlled common garden experiment. Water was
- 9 supplied at 12 °C and air temperature was maintained at 15 °C during the experimental treatment
- 10 phase (days 0-31). Temperature treatments were generated with electric resistance heaters in
- 11 header tanks, and CO2 treatments were attained through CO2 reactors in header tanks.

Figure A2

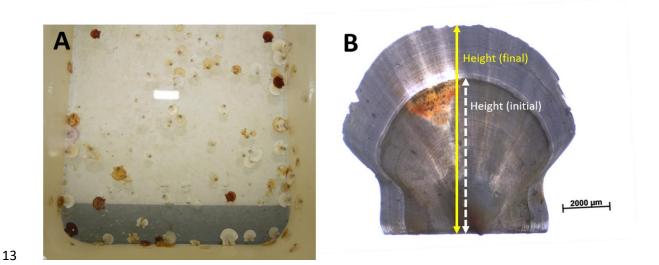


Fig. A2. Photographic images used for measuring survival and shell height. A) For survival analyses,
 three overlapping photographs of each tray were stitched together, and all shells were counted. B)
 Final height can be precisely measured for the end of the experiment (day 31) and initial height
 (following transport) can be estimated based on clear delineation in the patterns of calcification.

18 Figure A3

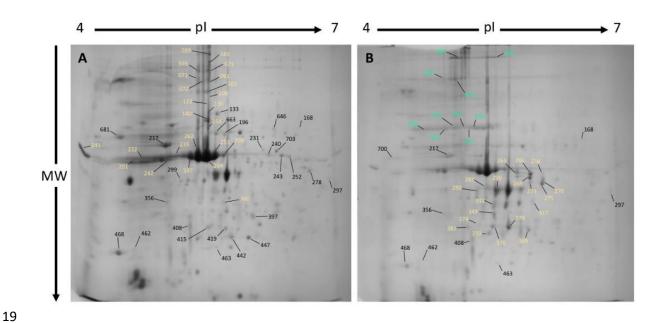


Fig. A3. Representative annotated 2-DE gel images of juvenile proteomes at 19°C and pH 8.0. for French (A) and Norwegian (B) spat highlighting actin, myosin and paromysoin. Proteins that were more abundant in French scallops appear in A; proteins that were more abundant in Norwegian scallops appear in B (proteins with temperature dependent expression appear in both). Actin isoforms are labelled in light yellow text (A and B); myosin and paramyosin spots are labelled in pale green text (B only).