Effect of ocean acidification on the structure and fatty acid composition of a natural plankton community in the Baltic Sea

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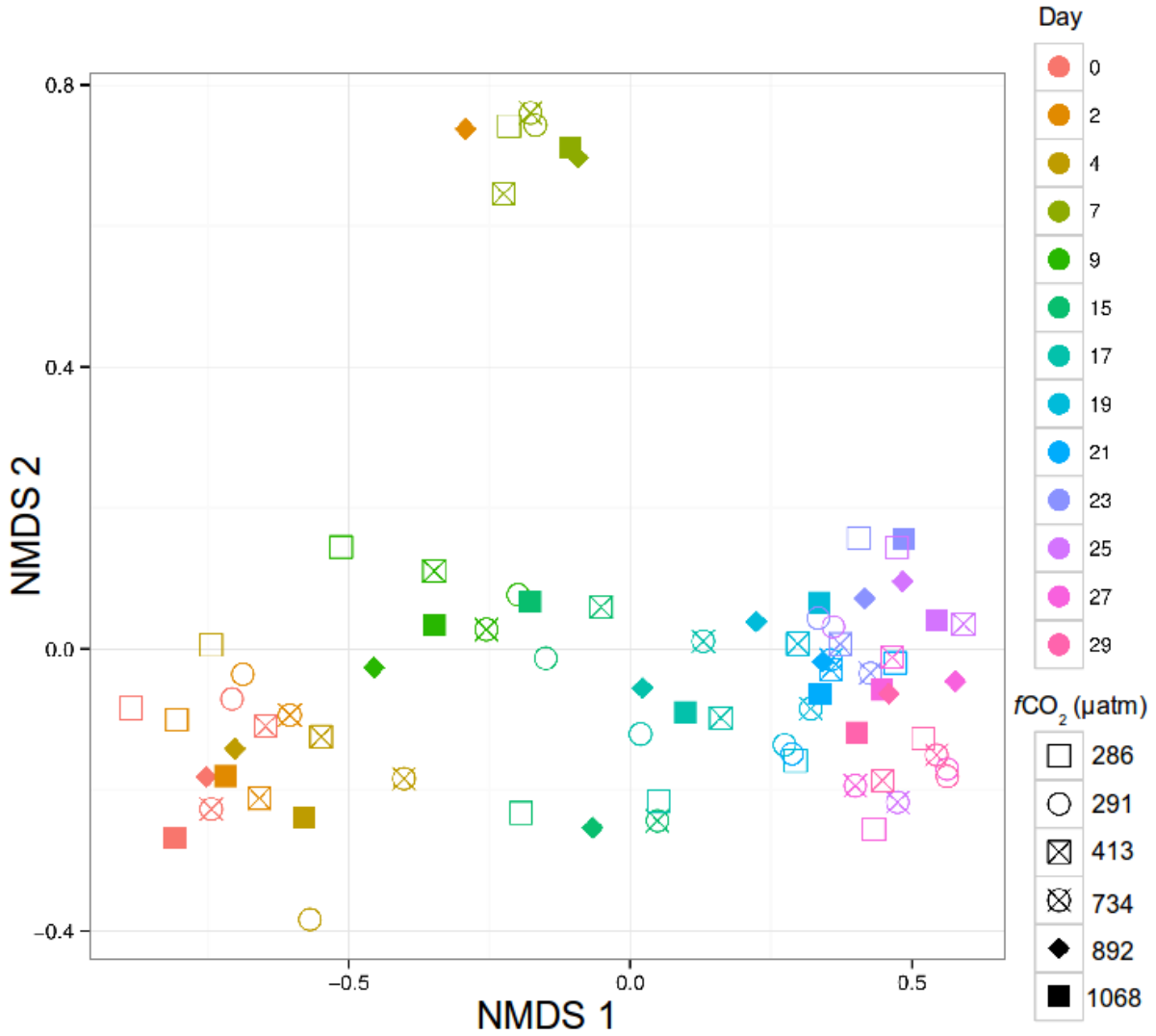
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Figure S1. Non Metrical Multidimensional Scaling (NMDS) of the plankton community composition in terms of calculated biomass change through sampling days and CO_2 treatment. The NMDS 1 axis show that the phytoplankton communities diverge through time while the NMDS 2 axis show that the communities do not differ with CO_2 treatment levels.
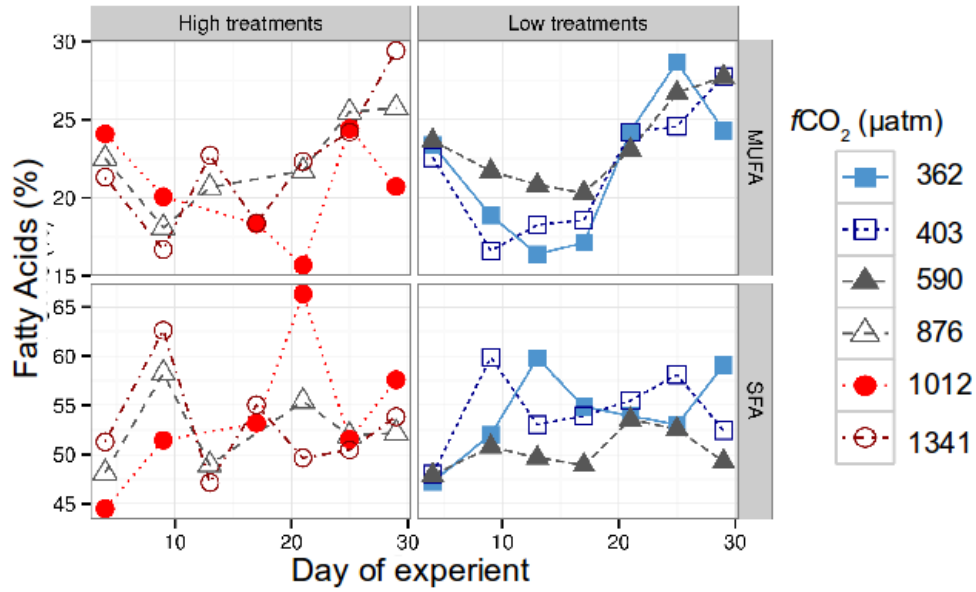
Figure S2. Relative seston MUFA and SFA content over experimental duration across the CO_2 treatments. The MUFA and SFA of all CO_2 treatments showed an increase, although the relation of both with time is weak (Linear regression, R^2= 0.12, t= 2.88, p= 0.005 and R^2= 0.15, t= 3.26, p= 0.001 respectively.
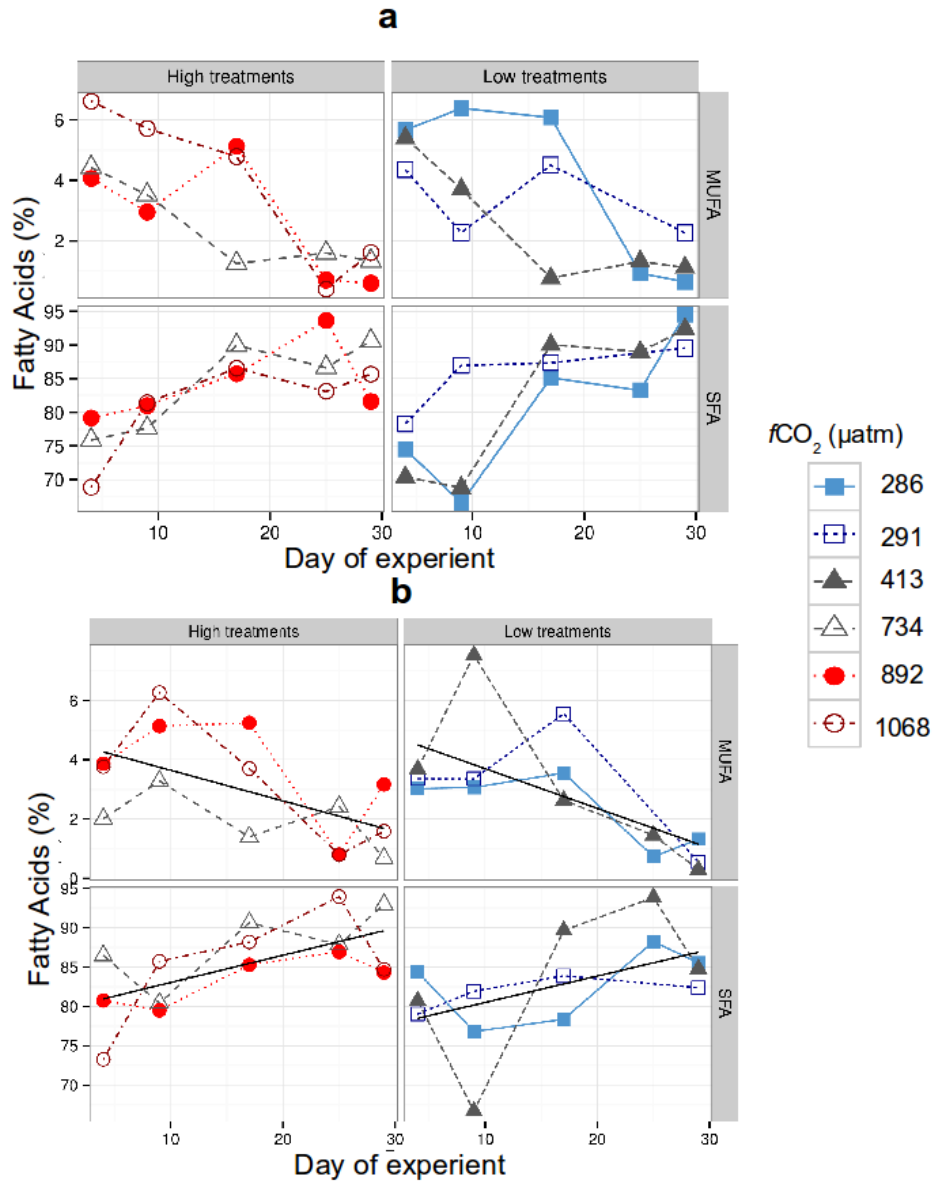
Figure S3. Relative MUFA and SFA content of the copepod (a) *Acartia bifilosa* and (b) *Eurytemora affinis* across the CO₂ treatments. The MUFA and SFA of all CO₂ treatments showed a significant increase over time.
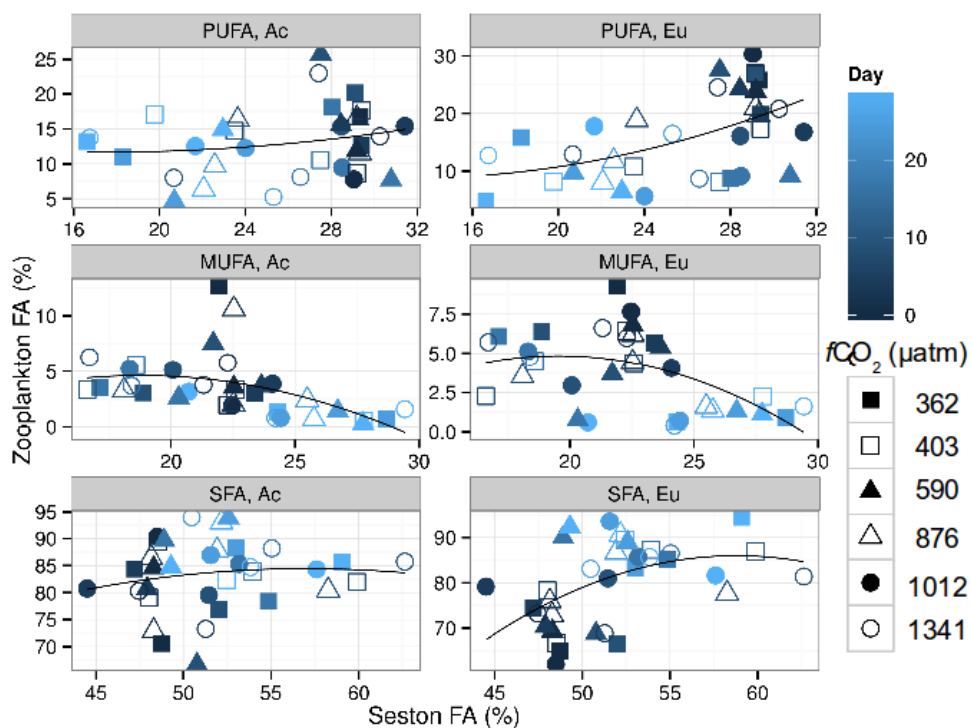
Figure S4. Relative PUFA, MUFA and SFA content of the copepods *Acartia bifilosa* (Ac) and *Eurytemora affinis* (Eu) in relation to the respective seston FA across the CO_2 treatments. (Linear regression, *E. affinis*: R^2= 0.18, t= 2.818, p= 0.008, PUFA; R^2= 0.10, t= -2.37, p= 0.02, MUFA; R^2= 0.16, t= 2.91, p= 0.005, SFA; *A bifilosa*: p= 0.2 PUFA; R^2= 0.18, t= -2.97, p= 0.005, MUFA; p= 0.5, SFA)