

How does the ocean acidification effect the early life survival of Northern cod species?

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To investigate how the recruitment success of Northern cod species are affected by environmental changes, we looked at the survival of juveniles according to different CO₂ conditions done by two previous studies.

The first study² looked at Atlantic cod, *Gadus morhua* from the Western Baltic- and the Barents Sea stocks.

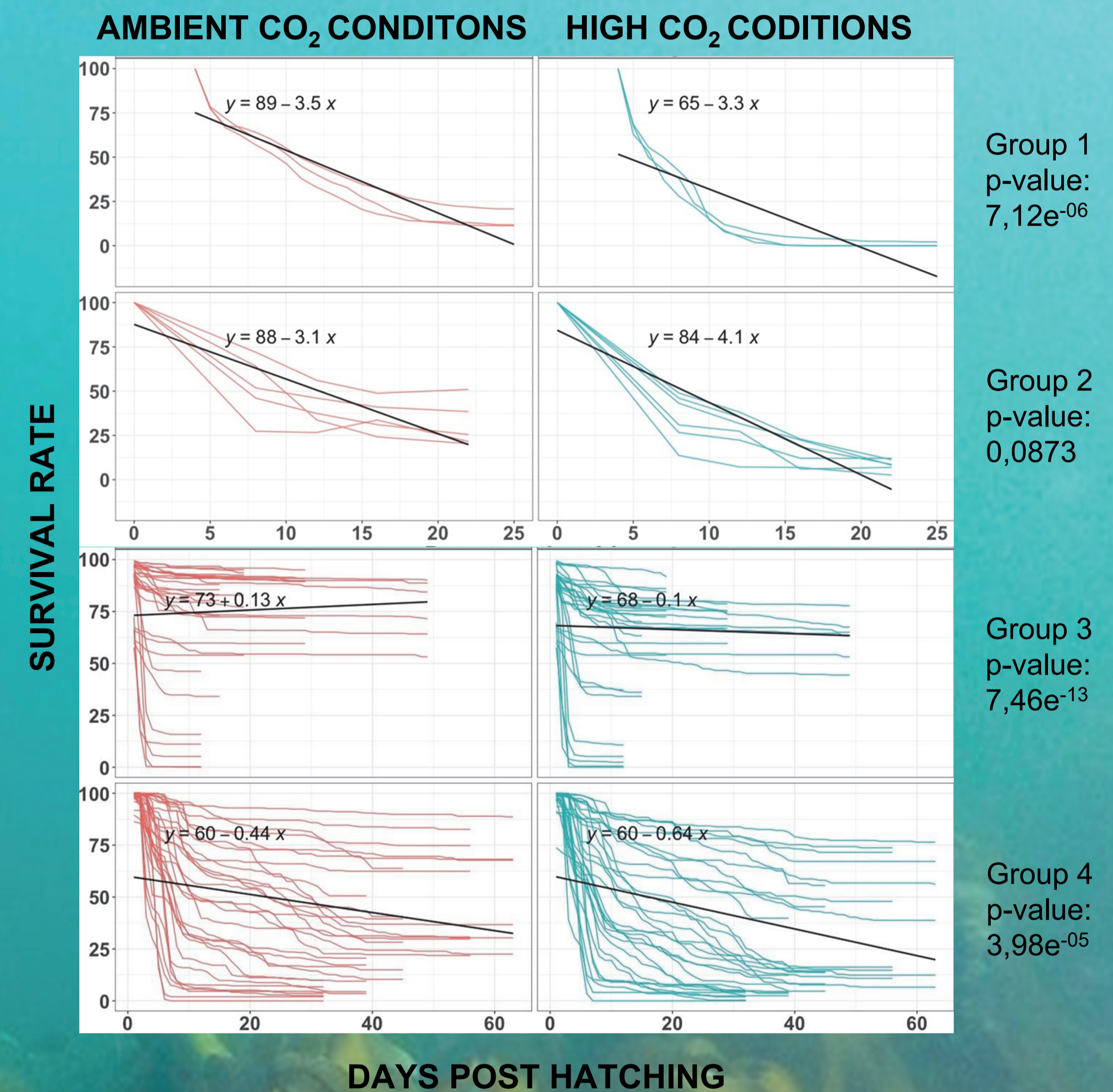
The second study¹ used Atlantic cod from the Barents sea and Polar cod, *Boreogadus saida* from Svalbard. Both studies exposed the early life stage for high amount of CO₂ levels in the water.

To test statistical significance between the ambient and high CO₂ levels an ANOVA test was performed for each fish group.

Results

Three out of four groups showed a statistical significant difference in survival rate in ambient vs. high CO₂ conditions.

This leads to the conclusion that **global warming has a negative effect on early life survival of Northern cod species.**



References

- Dahlke et al.(2016)
<https://doi.org/10.1594/PANGAEA.868126>
- Stiasny et al.(2016)
<https://doi.org/10.1371/journal.pone.0155448>
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