Arctic Ocean acidification

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Arctic Ocean Acidification assessment

Content of the AOA assessment (chapters)

1. **Why this assessment**
2. **The carbon biogeochemical system in the Arctic**
3. **Biological responses to ocean acidification**
4. **Economic and social impact of ocean acidification**
5. **The way forward: approaches and strategies for Arctic ocean acidification research**
6. **Conclusions**

Arctic Ocean Acidification assessment

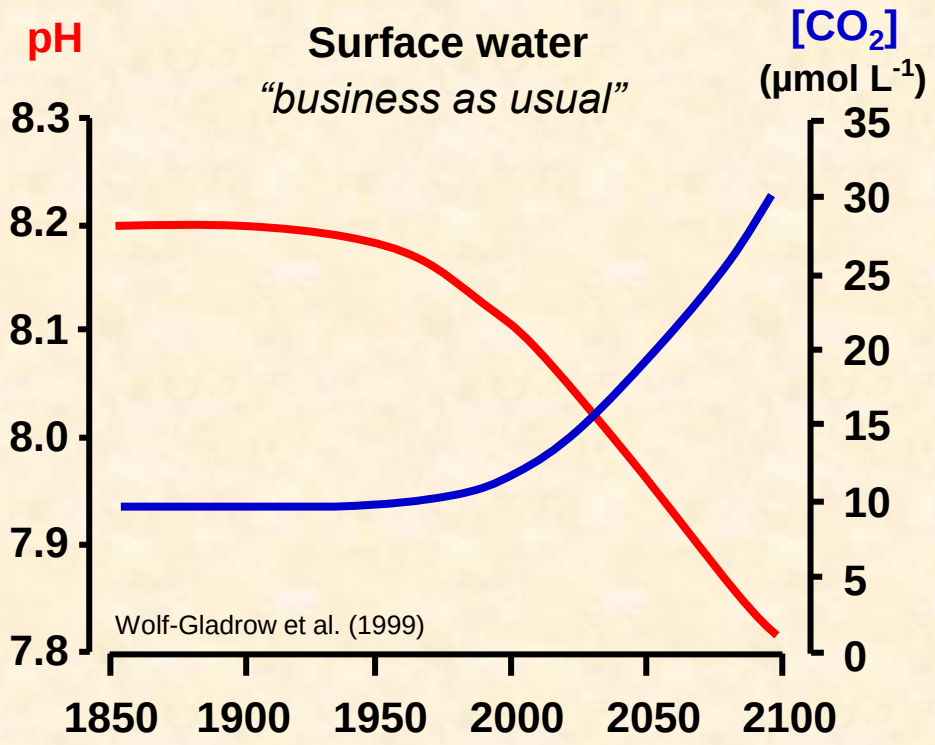
Draft time schedule for the Arctic Ocean Acidification Assessment (AOAA)

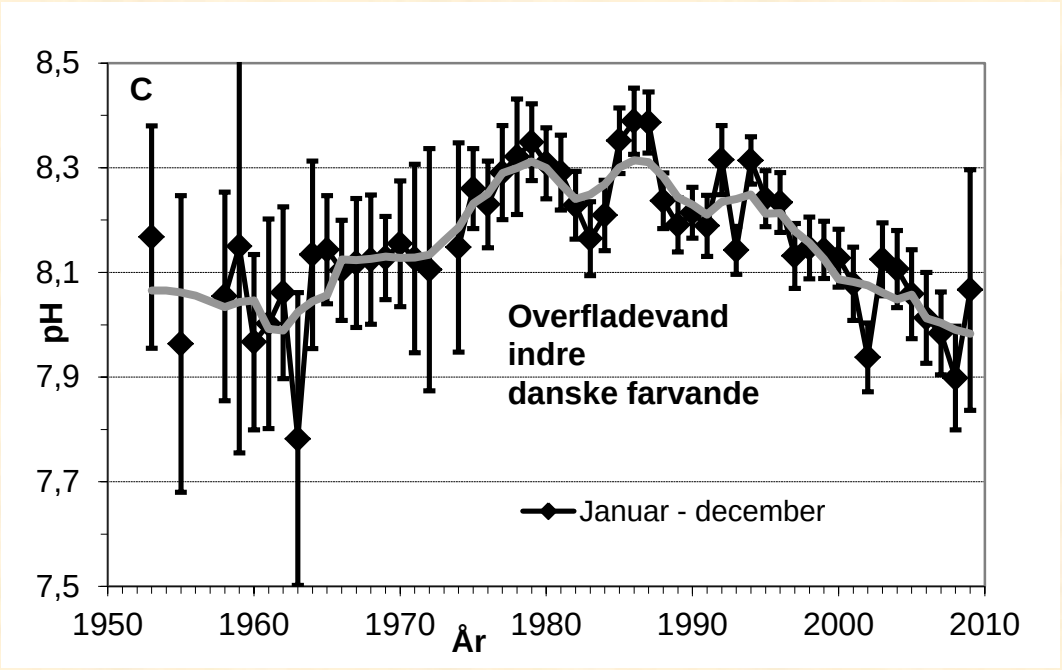
Started January 1st 2012

August 31	**Review back**
Sept-Oct	**Final scientific editing and response to comments**
Nov 1	**Final draft handed over to technical and linguistic editing**
Nov – Jan:	**Editing, Graphical production, Layout**
2013 Feb. 1	**The Science report ready for printing**
April	**AMAP AOA science meeting, Bergen**
May	**Presentation of the assessment to the Arctic Ministerial meeting in Sweden**

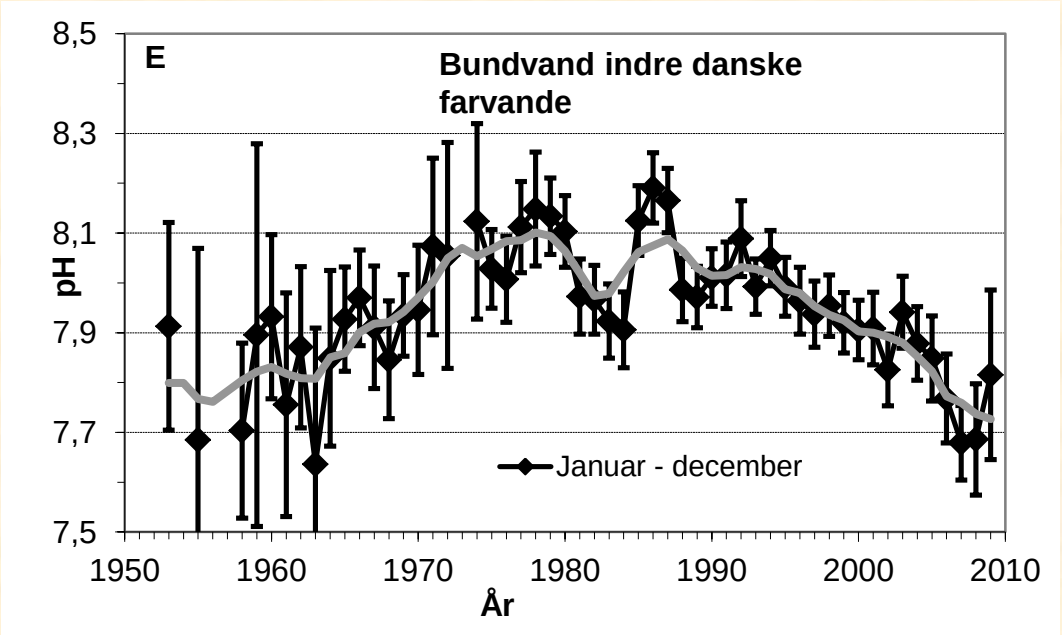
Faglige/videnskabelige prioriteter

Modellering af de forventelige pH/DIC ændringer over de næste 100 år for det område man vil studere.



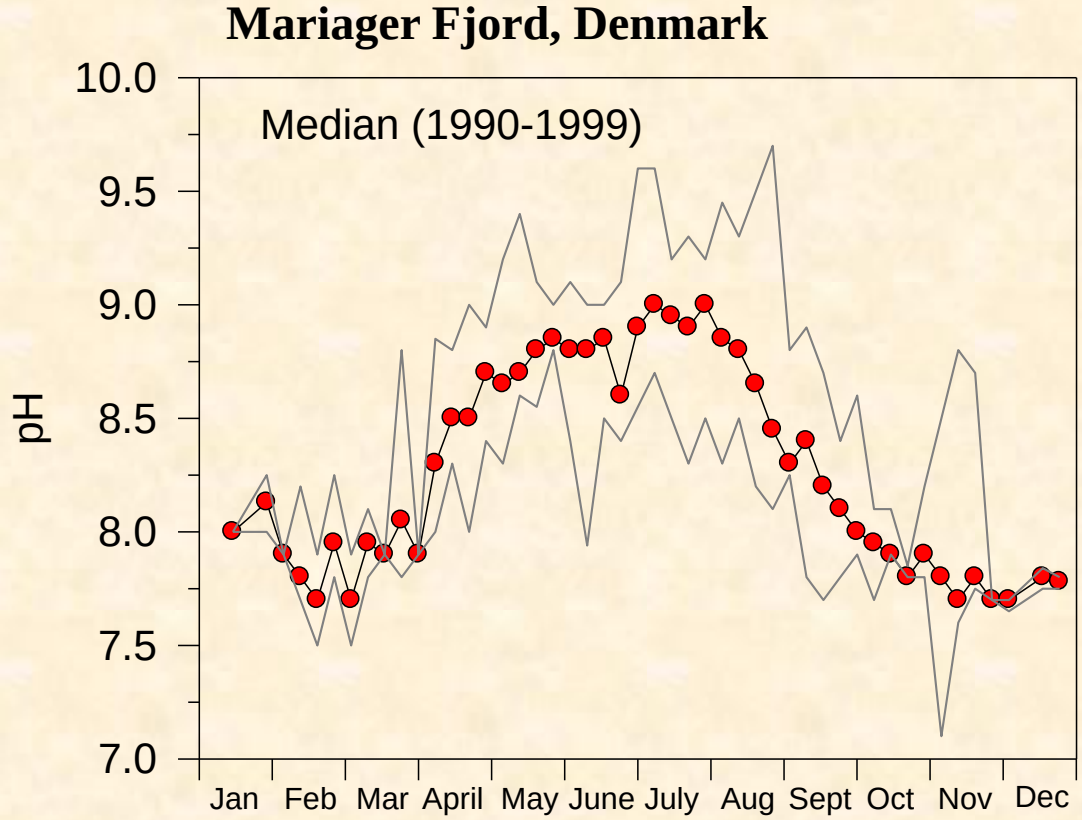


Variationer i havvandets pH i indre danske farvande



Data fra
Niels Jacob Carstensen,
Dept. of Biosciences, AU

pH variationerne er store i fjorde pga kraftige algeopblomstringer



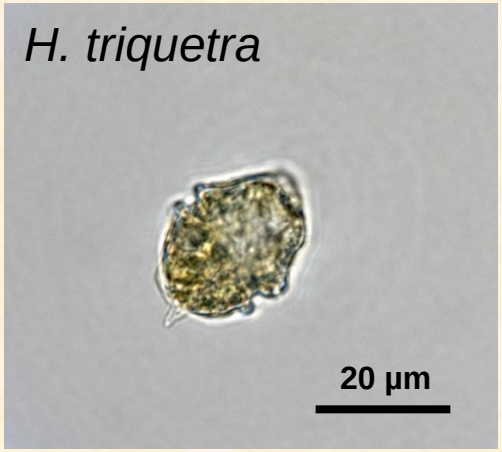
Hansen 2002

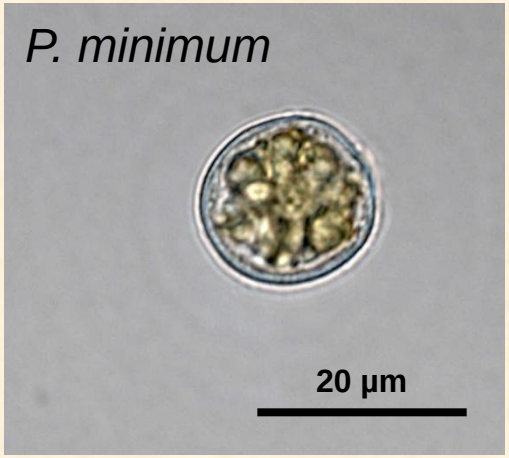
Faglige/videnskabelige prioriteter

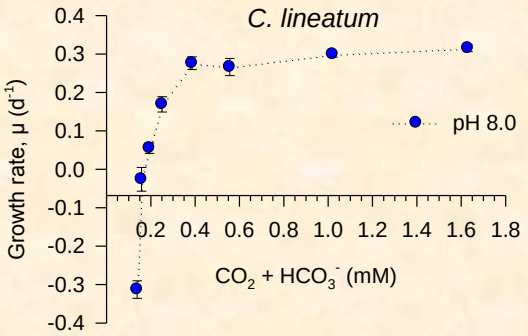
Hvordan påvirker pH organismerne (fotosyntese, vækst, kalkskalsdannelse, ekskretion)

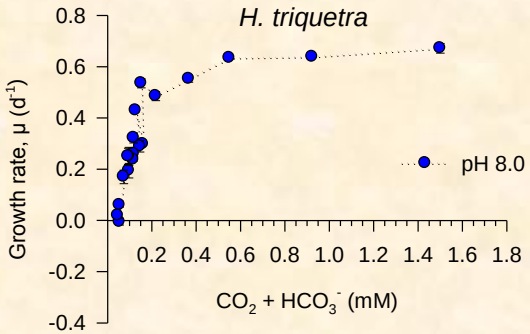
Er der tale om direkte eller indirekte effekter af pH?

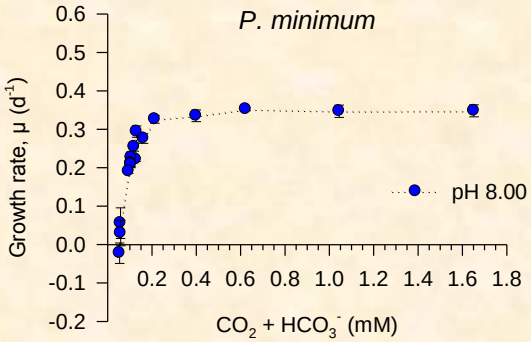
Kan væksten hos marint fytoplankton være kulstof begrænset?







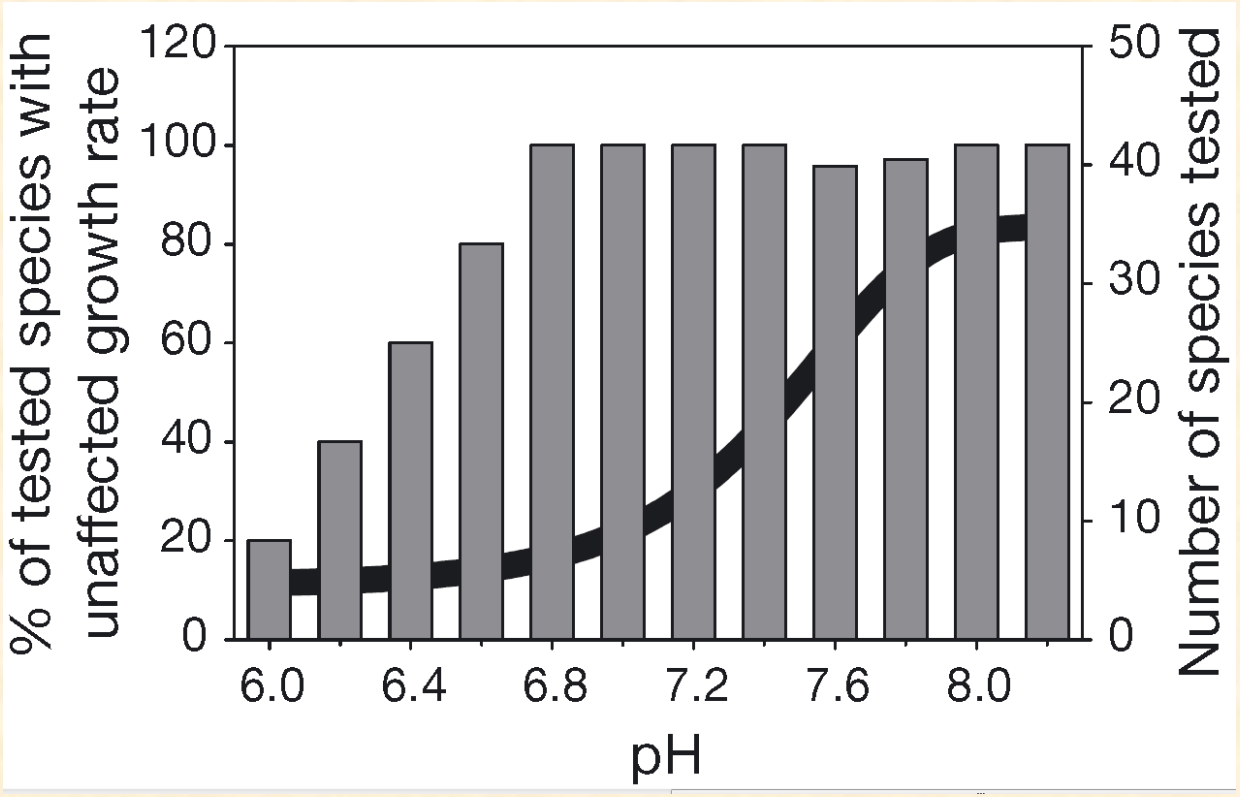




Hansen et al 2007

Faglige/videnskabelige prioriteter

Phytoplanktons følsomhed overfor forsuring



Eksisterende data er hovedsagelig på organismer fra tempererede områder. Der er et behov for at studere arktiske arter

Berge et al 2010

Faglige/videnskabelige prioriteter

Et af de helt åbne emner er genetisk/fænotypisk variation indenfor en art og muligheden for genetisk adaptation

23 strains of *Heterocapsa triquetra*

Maximum pH tolerated: 8.5 – 9.5

Berge et al 2012