

Hårde konstruktioner (vindmøller, moler, høfder) som kunstige rev. Betydning for fisk

Claus Stenberg

Med bidrag fra Karsten Dahl (Århus Universitet), Kamilla Hansen, Louise D. Kristensen, Claus Sparrevohn, Peter Rask Møller (Københavns Universitet), Simon B. Leonhard (Orbicon) & Josianne Støttrup

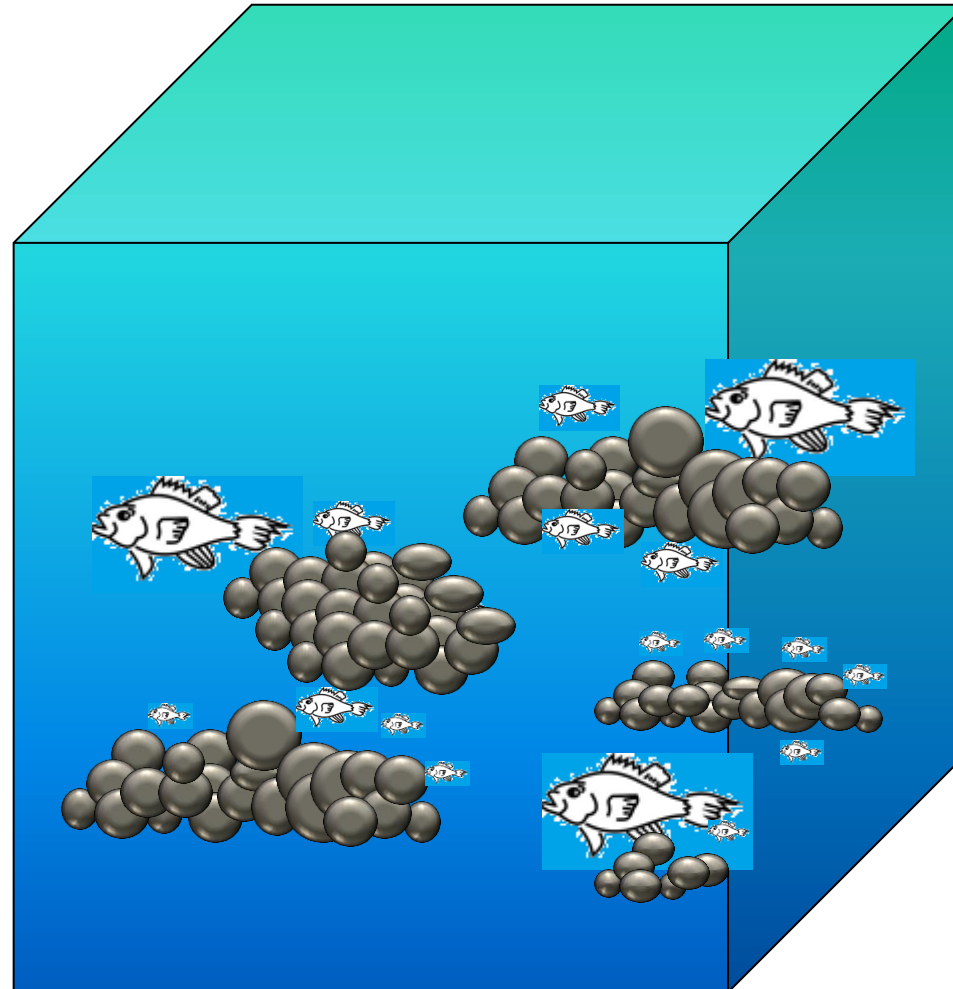


Stenrevene som røg oven vande....

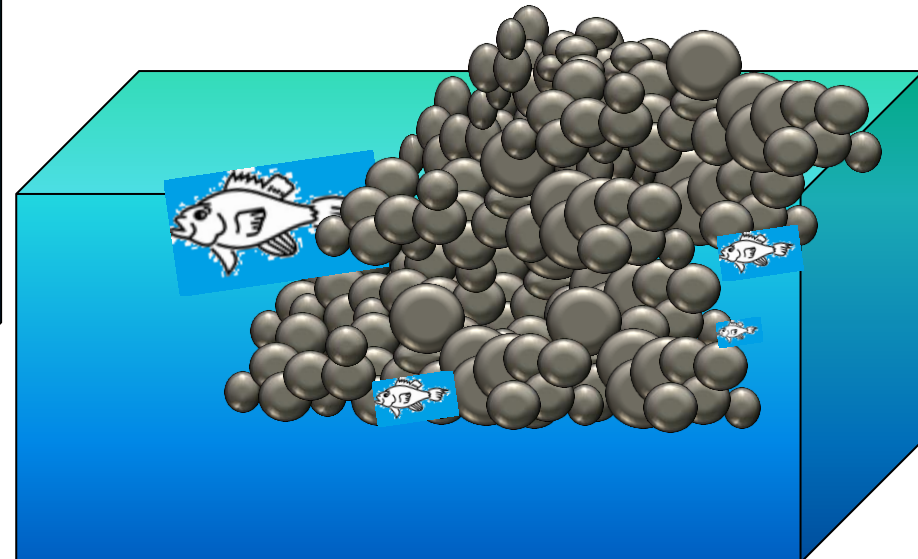
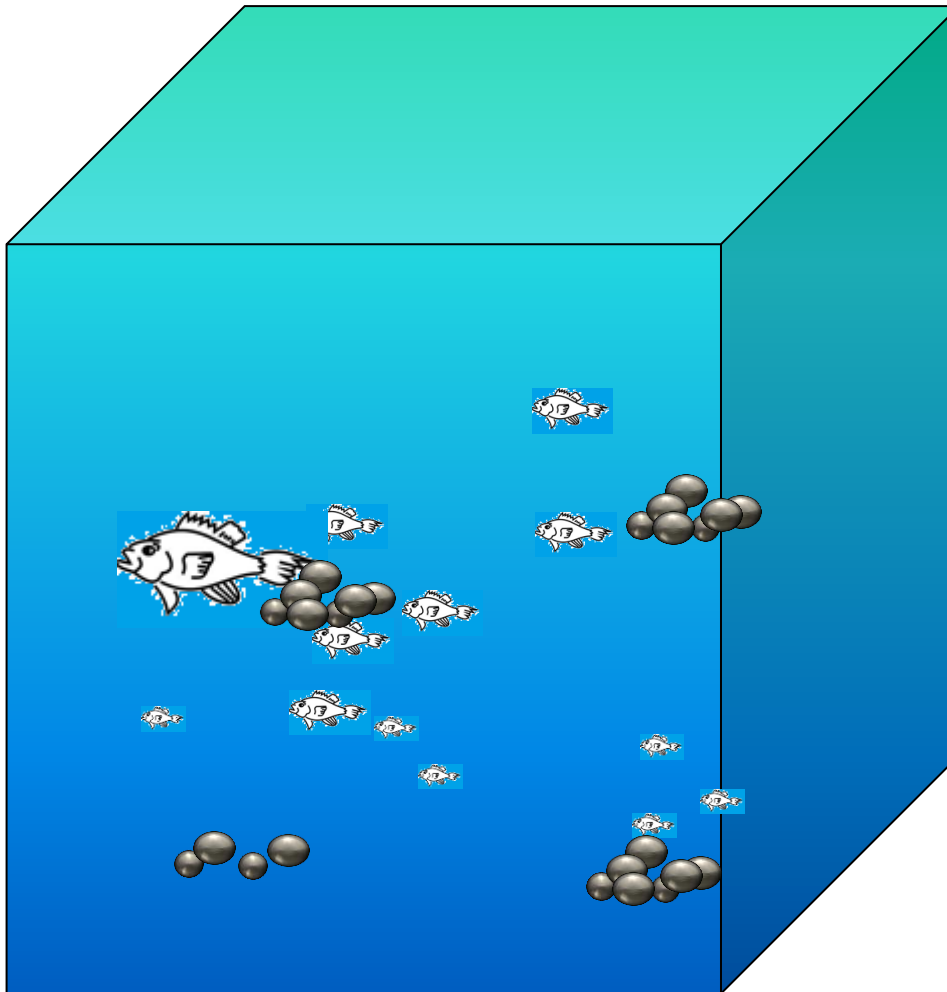


Bock, G. M., Thiermann, F., Rumohr, H. &Karez, R. (2003).Ausmaß der Steinfischerei an der schleswig-holsteinischen Ostseeküste. In Jahresbericht Landesamt für Natur und Umwelt des Landes Schleswig-Holstein, 111-116.

Strukturen som forsvandt og kun delvist genopstod.....

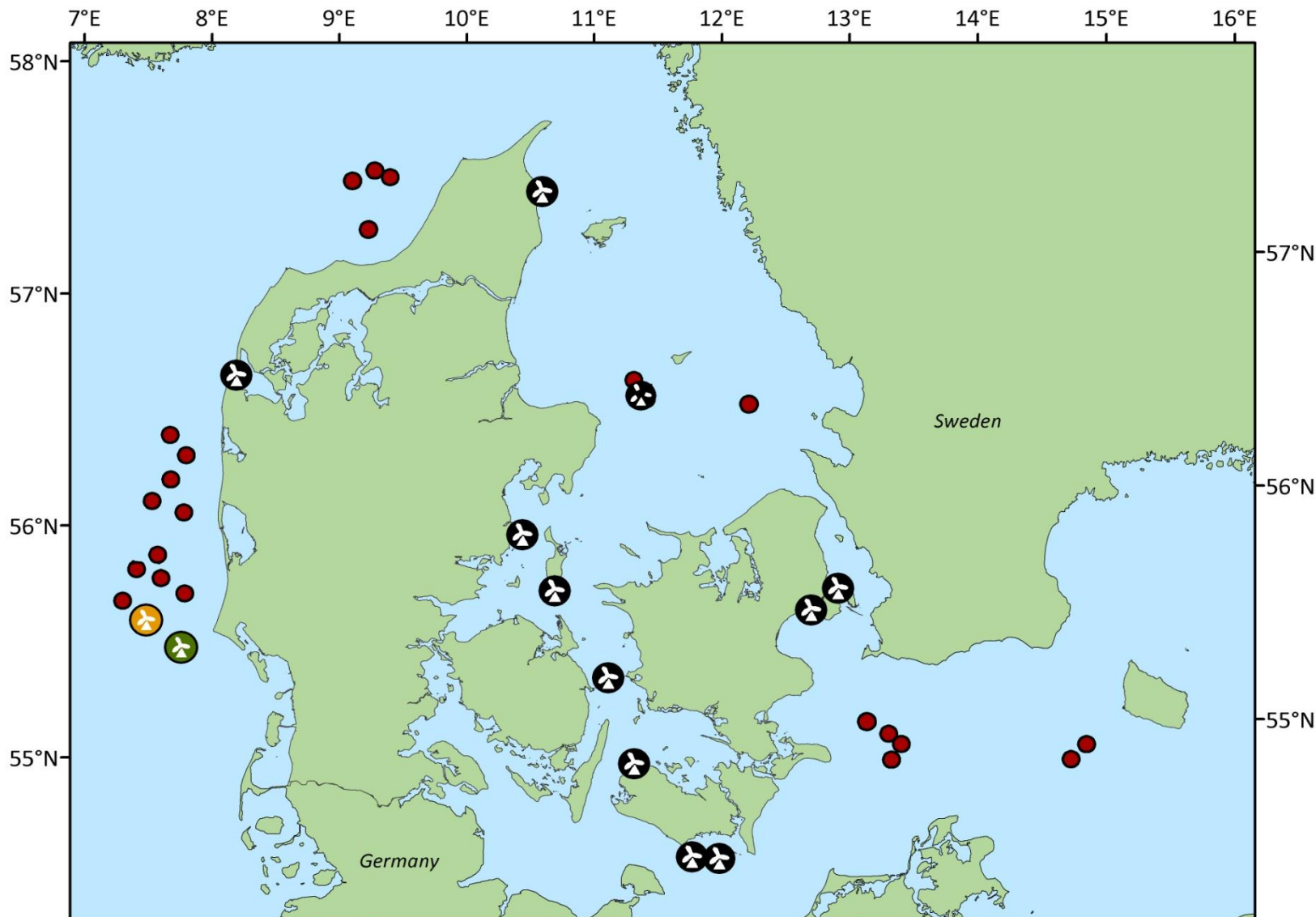


Strukturen som forsvandt og kun delvist genopstod.....



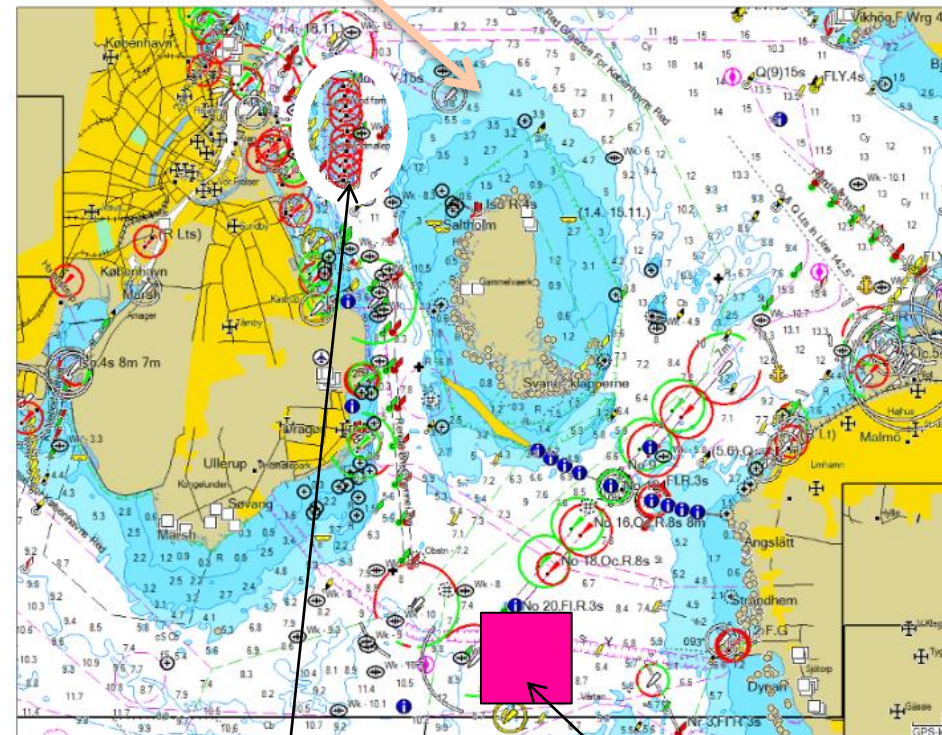
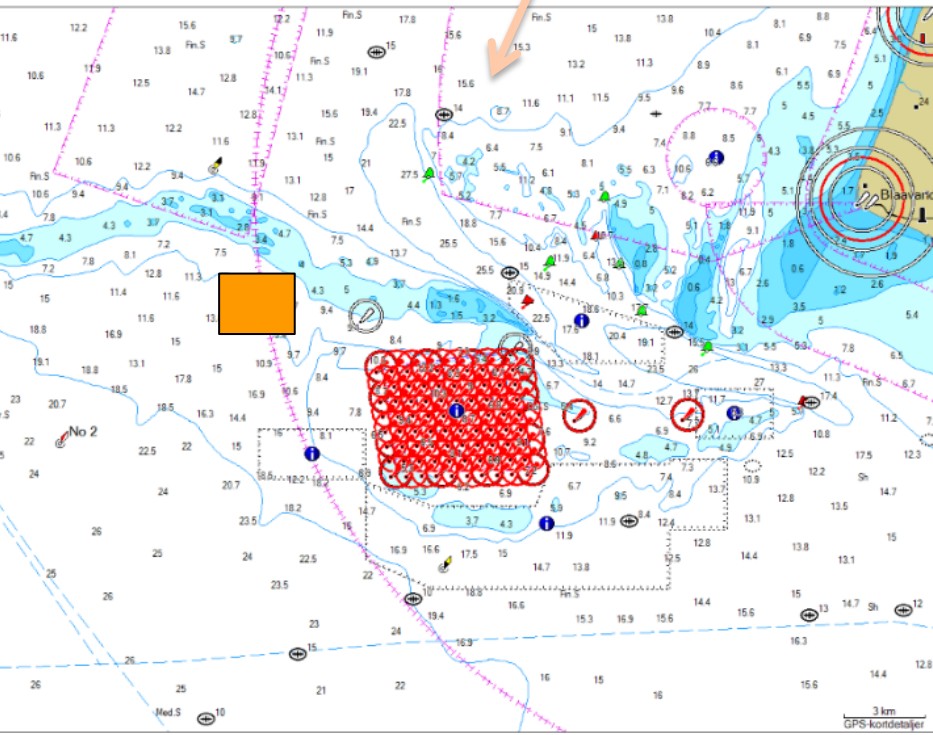
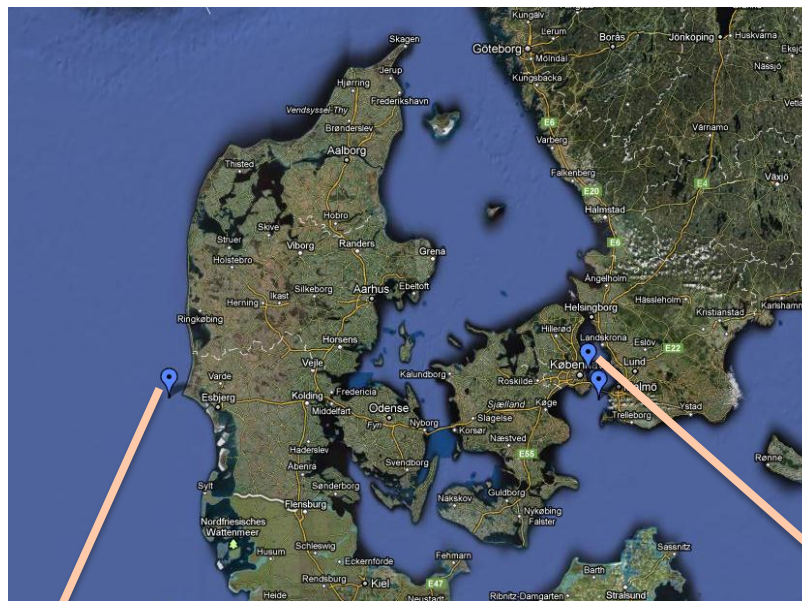
Stenrevene som kom med vinden.....





-  Offshore Windmill Farm
-  Horns Reef 1
-  Horns Reef 2
-  Under Construction (2012)
-  Location Proposal

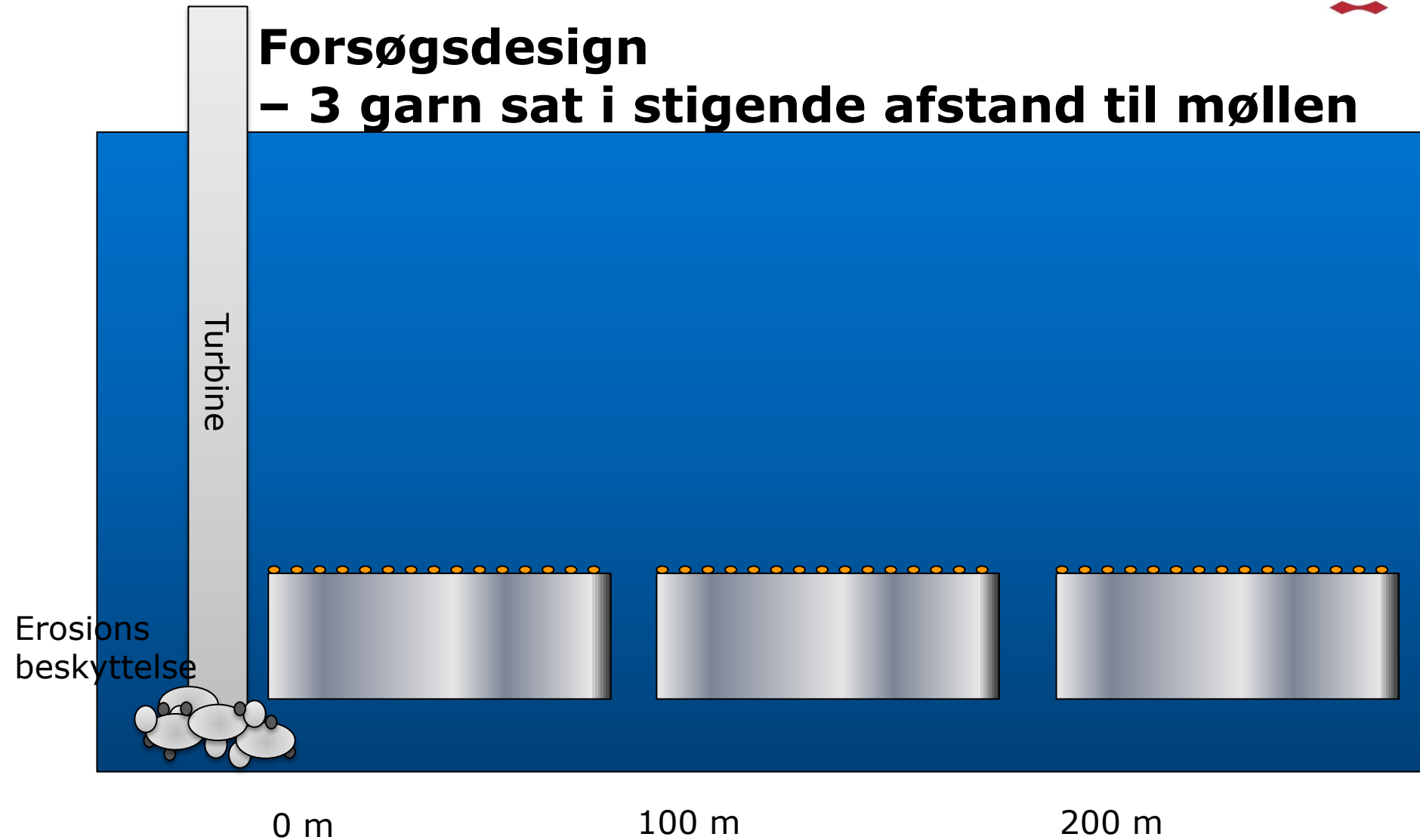
0 50 100
Kilometers



Horn Rev 1 OWF

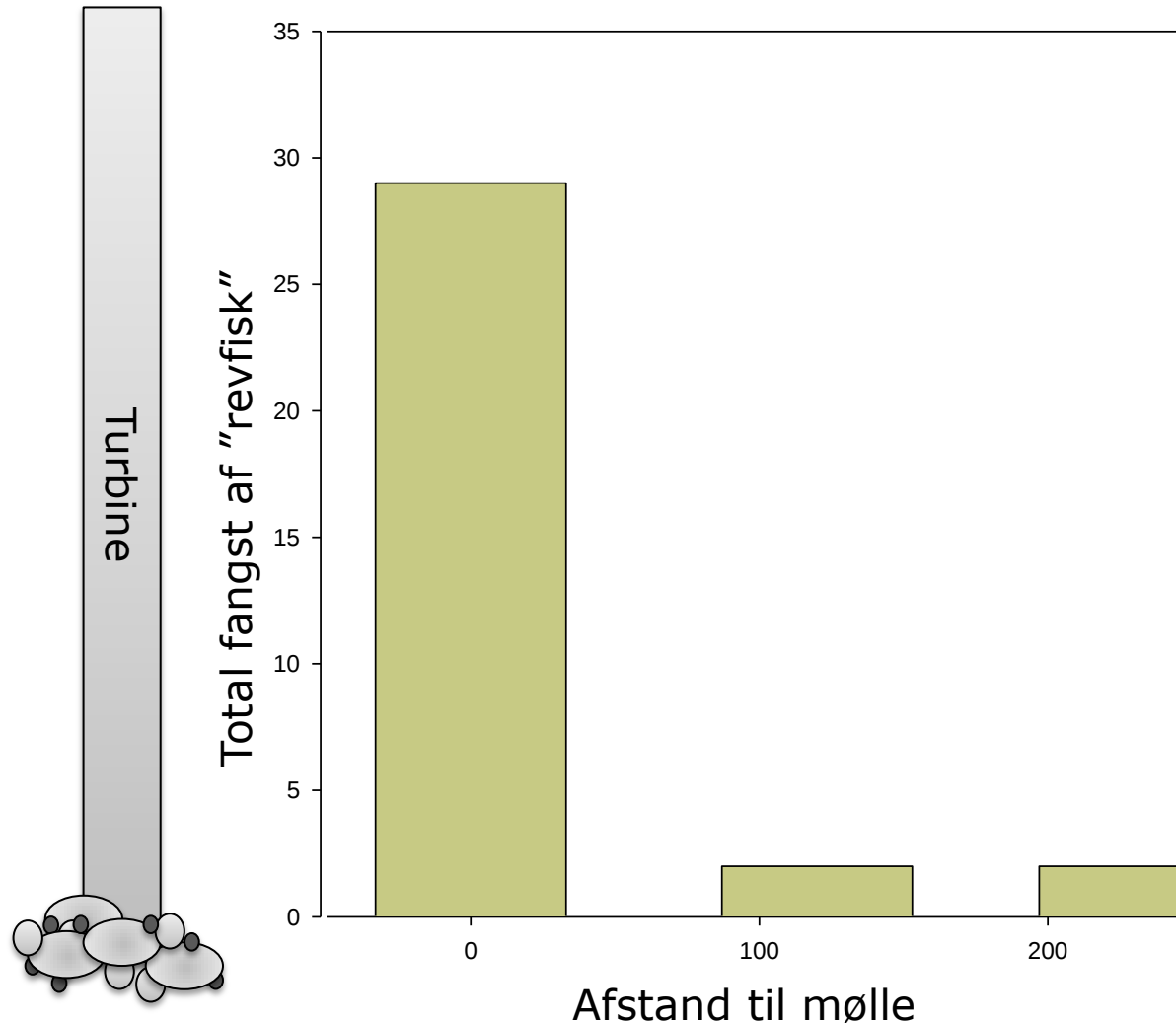
Forsøgsdesign

– 3 garn sat i stigende afstand til møllen

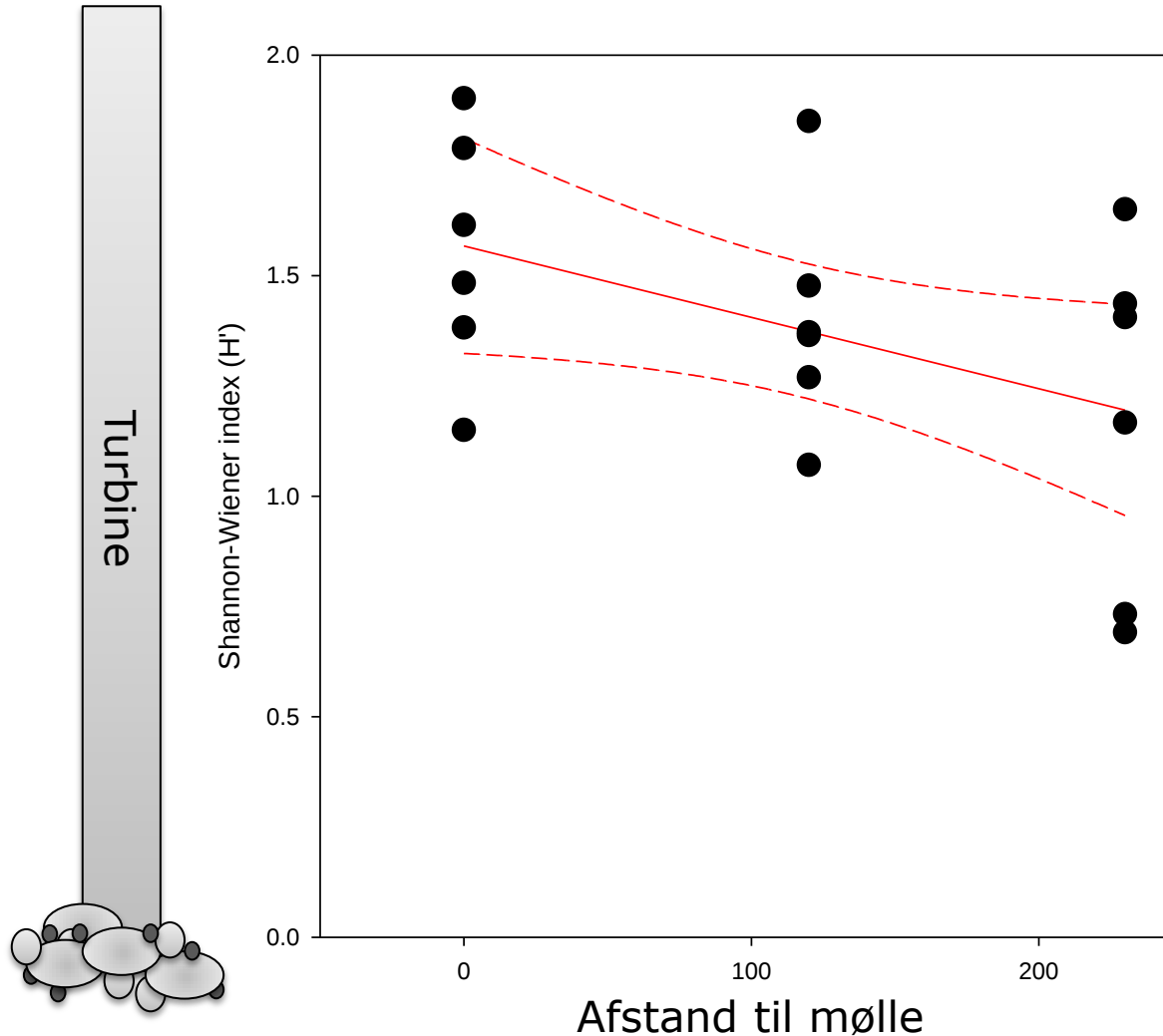


Horn Rev 1 OWF

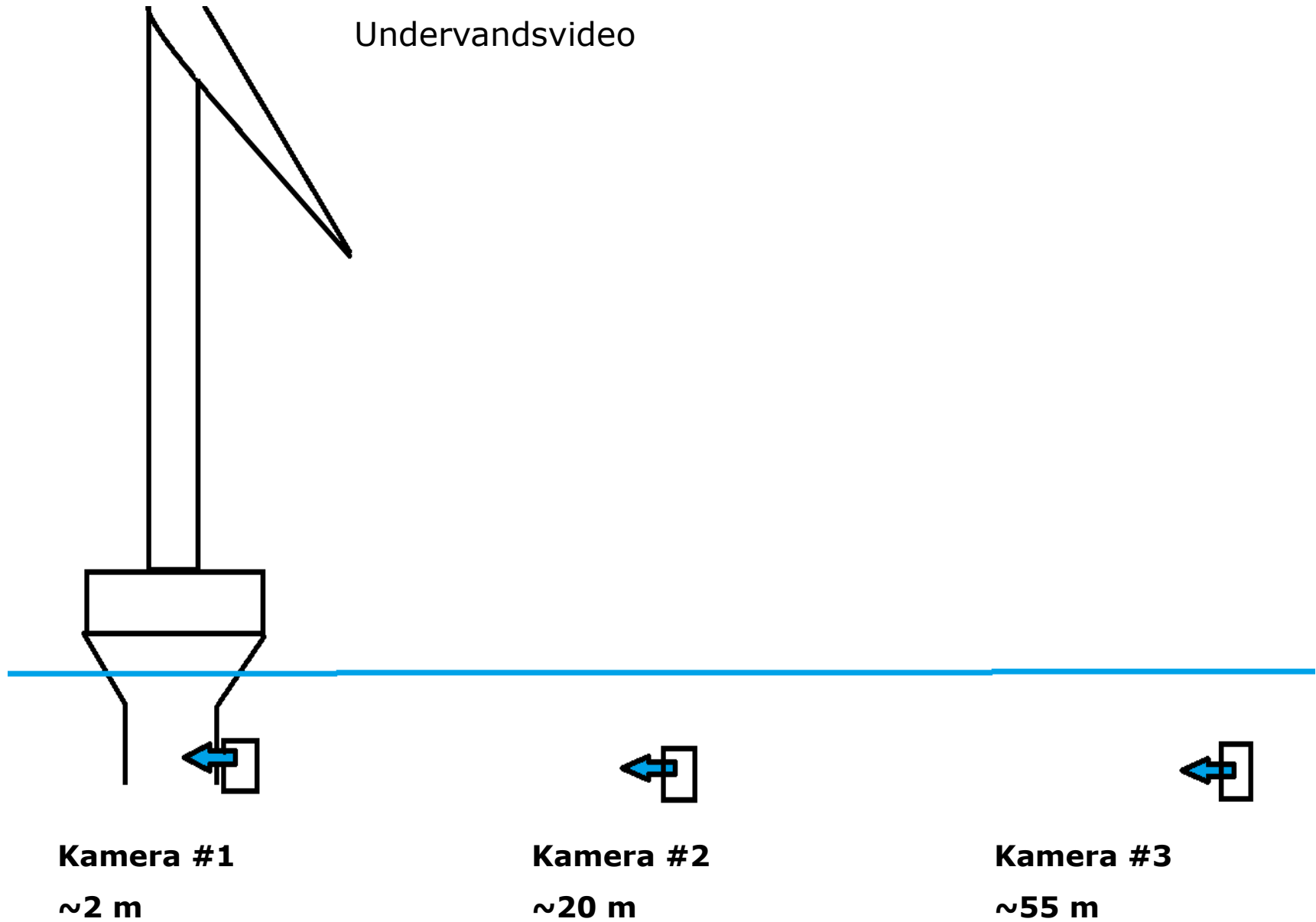
Distribution of "Reef habitat fish group" in relation to distance to turbine



Fiskeartsdiversitet (Shannon-Wiener index)

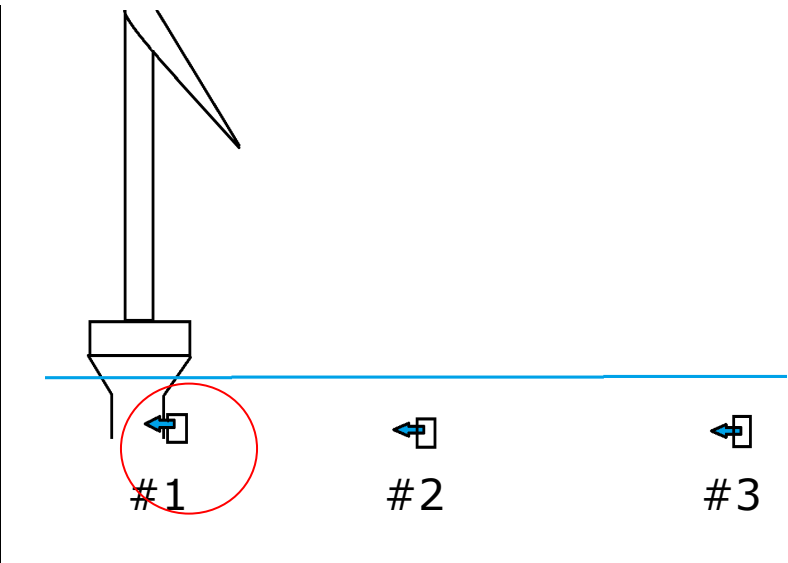


Undervandsvideo

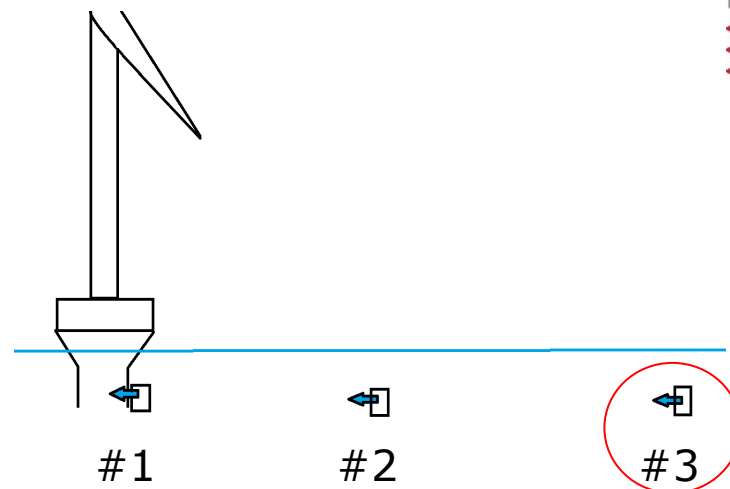




Kamera #1
Middelgrund



Kamera
#1
Lillgrund

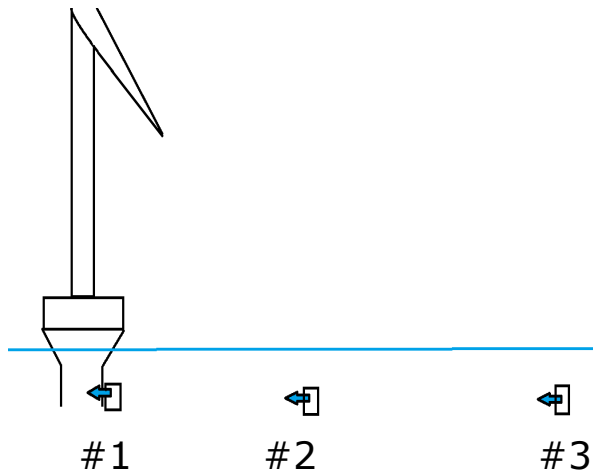
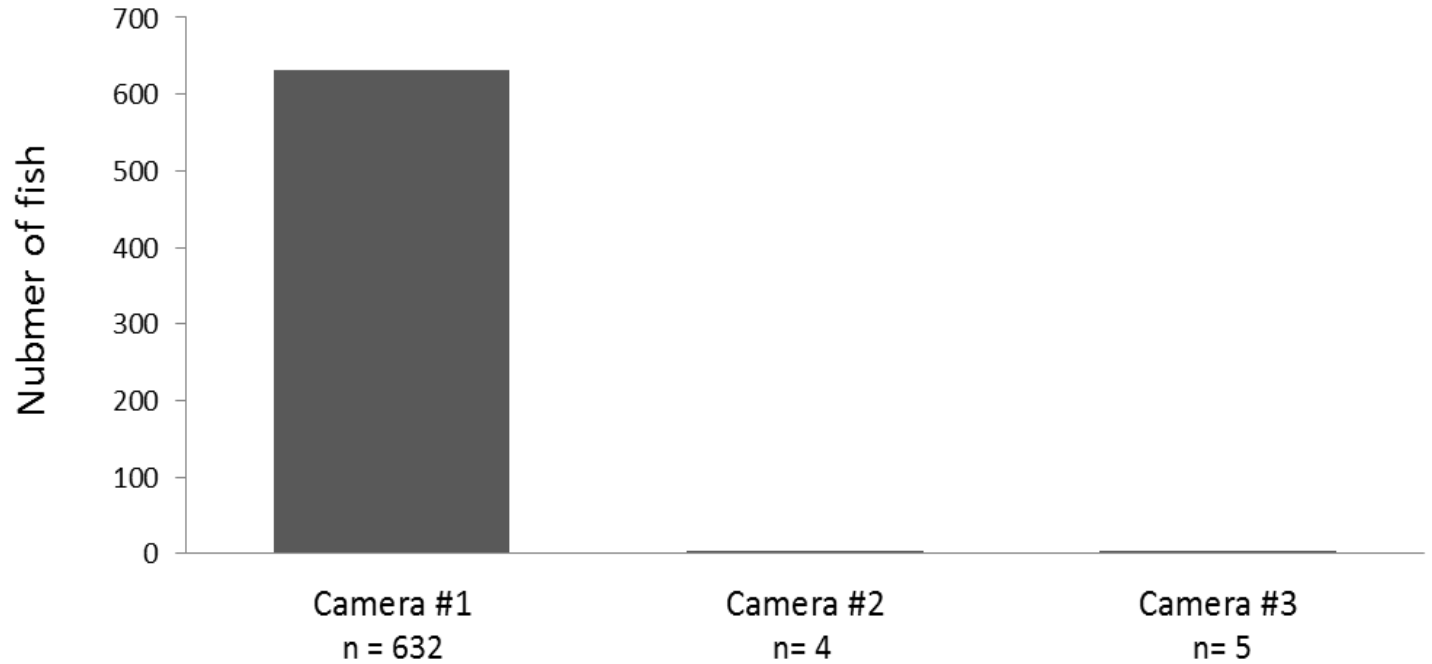


**Kamera #3 Middelgrund,
55 m. fra mølle**

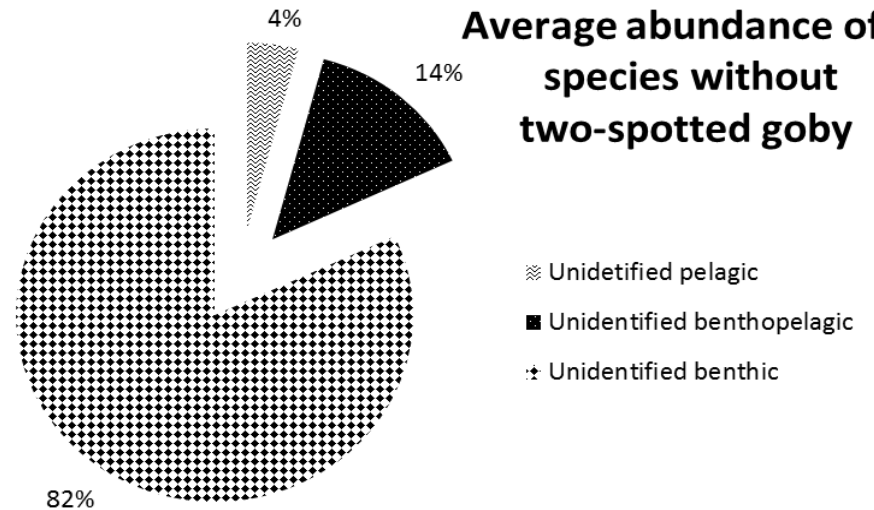
**Kamera #3 Lillgrund,
55 m. fra mølle**

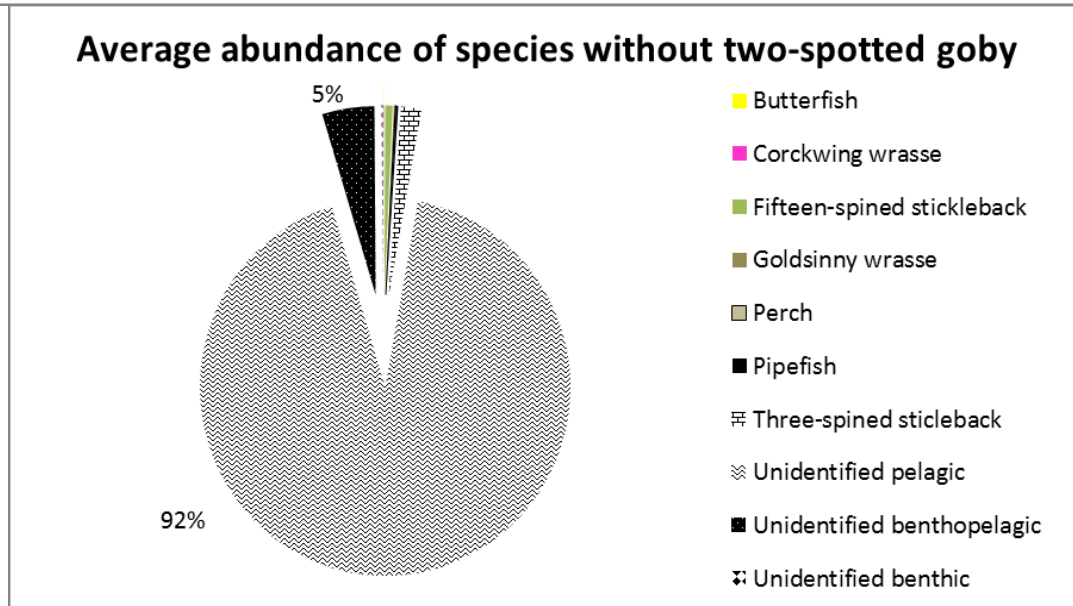
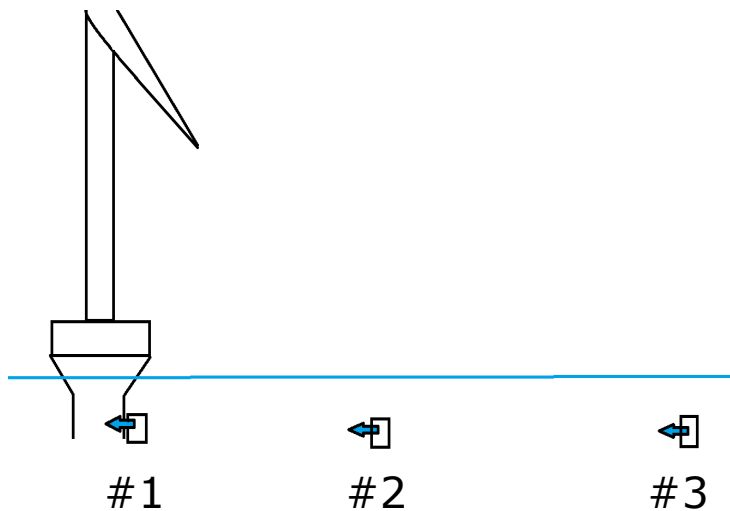
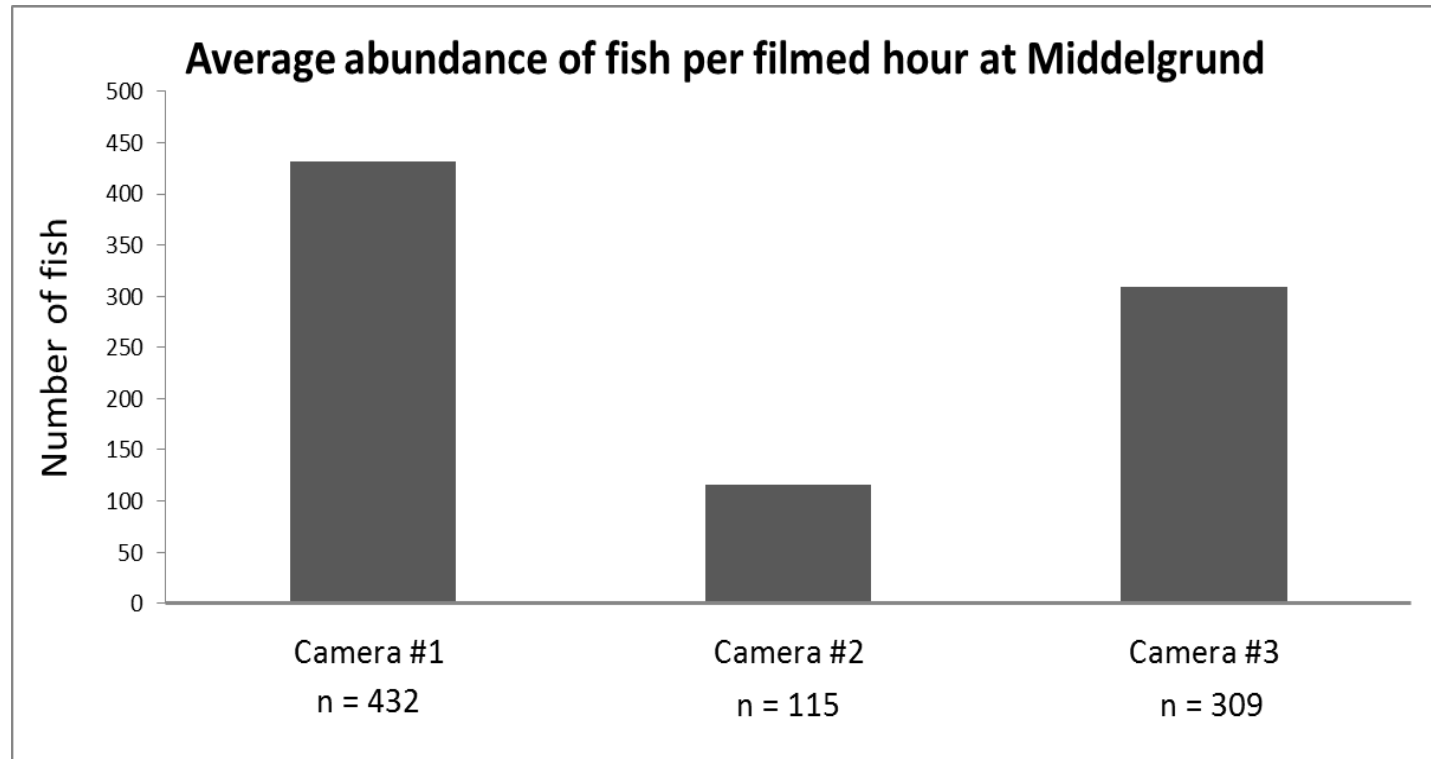


Average abundance of fish per filmed hour at Lillgrund



Average abundance of species without two-spotted goby





Konklusion hav-vindmølleparker som kunstige rev

- Strukturerne i en vindmøllepark virker som kunstigt rev.
- "Rev-effekten" er dog begrænset til nærmiljøet omkring den enkelte mølle
- Ingen negativ påvirkning på andre arter
- Kan fremtiden vindmøllefundamenter og andre stukturer udformes så de i endnu højere grad fungerer som kunstige rev?

