

Effects of ocean acidification on the growth and development of North Sea cod (*Gadus morhua*)

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In a large, land-based mesocosm experiment (March to May 2010) at the marine facilities of the University of Bergen in Espesgrend, Norway, the impact of CO₂ on the development of North Sea cod (*Gadus morhua*) eggs and larvae was tested. Newly fertilized eggs were reared for two months in twelve 2500L tanks in a flow-through system with natural seawater taken directly from the Bergen Fjord. Natural conditions such as light, temperature and salinity were maintained while the larvae were fed with natural zooplankton filtered from the fjord. Using a pH-controlled computer system, CO₂ was bubbled into the tanks at three different treatment levels (860, 1400 and 4000ppm) plus control. Larvae were sampled once a week, photographed for size and frozen for further biochemical analyses. First results on growth performance of the cod larvae will be presented.