

# Seasonal variation in population dynamics of Calanus finmarchicus in the south western Norwegian Sea

Kristiansen, Inga; Gaard, Eilif; Hatun, H.; Jonasdottir, Sigrun

Publication date: 2015

Document Version Publisher's PDF, also known as Version of record

### Link back to DTU Orbit

Citation (APA):

Kristiansen, I., Gaard, E., Hatun, H., & Jonasdottir, S. (2015). Seasonal variation in population dynamics of Calanus finmarchicus in the south western Norwegian Sea. Abstract from ICES Annual Science Conference 2015, Copenhagen, Denmark.

#### **General rights**

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

• Users may download and print one copy of any publication from the public portal for the purpose of private study or research.

- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

# Seasonal variation in population dynamics of *Calanus finmarchicus* in the south western Norwegian Sea

## Inga Kristiansen<sup>1</sup>, Eilif Gaard<sup>1</sup>, Hjálmar Hátún<sup>1</sup> and Sigrún Jónasdóttir<sup>2</sup>

<sup>1</sup>*Faroe Marine Research Institute, Torshavn, Faroe Islands* <sup>2</sup>*National Institute for Aquatic Resources, Technical University of Denmark, Charlottenlund, Denmark* 

Contact author: Inga Kristiansen, E-mail: ingak@hav.fo

The south-western Norwegian Sea is characterized by an inflow of warm and saline Atlantic Water from the southwest, whereas cold and less saline East Icelandic Current Water, of Arctic origin, flows in from the northwest. These two water masses meet and form the dynamic Iceland Faroe Front. In this region, the copepod *Calanus finmarchicus* is the dominant zooplankton species and the key link between the higher and lower trophic levels. From July 2013 to July 2014 seasonal variations in vertical migration, reproduction, ingestion and growth rates were investigated on 7 cruises which were distributed throughout the years. These observations are linked to the oceanic environment, which may be affected by future climate change.

Keywords: *Calanus finmarchicus*, seasonal vertical migration, egg production, ingestion, growth, south-western Norwegian Sea, Atlantic Water, East Icelandic Water