
Dissertations

Mesozooplankton distribution in the epipelagial of the Norwegian-Barents Seas boundary in summer

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The thesis presents data collected from the upper 200 m of the NE Norwegian Sea in July 1987, 1988 and 1989. The aim of the study was to describe the zooplankton assemblages and to demonstrate the scale of the interannual variability in their occurrence.

34 mesozooplankton elements (species and developmental stages) were analysed using multidimensional scaling and clustering techniques. Twelve zooplankton assemblages were distinguished, which indicated both hydrological heterogeneity and seasonal differences in the water bodies examined.

The samples from 1987 showed the multiyear average distribution of zooplankton, while in 1988 the advance of Norwegian Coastal waters to the north and of cold Barents Sea waters to the south was indicated. In 1989 an increase in the inflow of warm Atlantic waters was observed, accompanied by the presence of a second generation of *Calanus finmarchicus* in the area.

The dissertation is a useful tool in the analysis of interannual ecosystem variability and large-scale environmental changes.

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