Bottom fish assemblages at the shelf and continental slope off East Greenland

During 2006 and 2008 two bottom trawl surveys were conducted at East Greenland to 72°N covering depths down to 1500 m. In the 149 trawl hauls in total 113 fish species were recorded of which 37 were considered pelagic and excluded from the analyses. As a first step the abundance data for the 76 benthic species were used for analyses of the fish fauna diversity and fish assemblages. Nine assemblages were found by a standard type of cluster analysis. A Bayesian multinomial logit model was then applied to calculate vectors of probabilities defining the likelihood of each haul belonging to each of the nine clusters. By means of a geostatistical tool the spatial distribution of the conditional probabilities for each cluster (assemblage) was mapped. Each of the nine assemblages was further defined by indicator species, depth and temperature. The assemblages were well defined regarding geographical distribution, species composition, temperature and depth. Three of the assemblages were located in the cold Iceland Sea while six were found in the somewhat warmer Irminger Sea.

General information
Publication status: Published
Organisations: National Institute of Aquatic Resources, Section for Ecosystem based Marine Management, Institute of Marine Research, University of Copenhagen
Contributors: Jørgensen, O. A., Hvingel, C., Møller, P.
Pages: 37-55
Publication date: 2015
Peer-reviewed: Yes

Publication information
Journal: Journal of Northwest Atlantic Fishery Science
Volume: 47
ISSN (Print): 0250-6408
Ratings:
BFI (2015): BFI-level 1
Scopus rating (2015): CiteScore 1.33 SJR 0.882 SNIP 1.669
Web of Science (2015): Indexed yes
Original language: English
Electronic versions:
Publishers_version
DOIs:
10.2960/J.v47.m706
Research output: Contribution to journal › Journal article – Annual report year: 2015 › Research › peer-review