

Cumaceans (Crustacea) in Icelandic waters

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Icelandic waters are very interesting in regard to biogeography. One of the main characteristics of the area is the diverse composition of water masses. The submarine ridge that extends from Greenland to Iceland and the Faeroe Islands shapes the area greatly. The saddle depth of the Ridge is around 830-860 m and it separates basins that are >4000 m deep. Several studies have shown that the Ridge shapes the distribution of many groups of animals and numerous species have their northern- or southern distribution limits at the Ridge.

Cumaceans are small order within the Malacostraca (Crustacea). The order has a world wide distribution and currently about 1300 species of cumaceans have been described. Only 30 species of cumaceans have been reported from Icelandic waters. Most of these (21 species) are known from shallow waters (<500 m). It is clear that this low number of species is an underestimate. Prior information of the distribution of cumaceans in Icelandic waters extends from the *Ingolf*-expedition in 1895 to 1896.

The aim of this study is to explore the species diversity and zoogeography of cumaceans in Icelandic waters. Over 14.000 individuals of cumaceans have been collected in 19 cruises during the BIOICE project (Benthic Invertebrates of Icelandic Waters) in the years 1991 to 2004.

One genus and numerous species have been identified, which are new to the Icelandic fauna. It is likely that among these are previously undescribed species. The Greenland-Iceland-Faeroe Ridge apparently shapes the distribution of the cumaceans, with many species restricted to either side of the Ridge. This research will contribute to the knowledge of species diversity and the distribution of cumaceans in Icelandic waters.