

Report on the sampling of the benthic fauna of Surtsey 1977 and 1980

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In the years 1977 and 1980 the benthic fauna at Surtsey was sampled by SCUBA-divers. Both years the sampling was carried out from the research vessel Árni Friðriksson.

In 1977 the three main traverses off the E-, S- and W-coasts of Surtsey were worked at 5 to 40, 9 to 20 and 10 to 30 meters respectively. Many underwater photographs were taken. Further sampling was prevented by bad weather.

Most of the 1977 samples have been worked up.

In 1980 the same three main traverses were worked. Due to surf at the S-coast the divers could not work in shallower water than 15 m. Some extra stations were taken at the W- and SW-coast.

Besides the sampling of benthos a quantitative underwater photogrammetric method, described by Lundälv (1971), was used.

The 1980 samples of benthos are being analysed.

The littoral zone of Surtsey is still so unstable that the invertebrates have not been able to

colonize it. In 1977 and 1980 the only animals found living there were 0-group barnacles, *Balanus balanoides* (L.) Bruguière. As yet the barnacles have been unable to survive the violent changes in the tidal zone caused by the enormous oceanic waves in the wintertime.

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Reference:

Lundälv, T., 1971: Quantitative studies on rocky-bottom biocoenoses by underwater photogrammetry. A methodological study. *Thalassia Jugoslovica* 7 (1): 201-208.