Aequipecten opercularis grounds

The queen scallop *Aequipecten opercularis* (L., 1758) is common all over the Faroe area, in waters outside the islands at depth of 50 – 200 m, and occasionally in the fjords (Høpner Petersen 1968) (Figure 1). Most of the information on the distribution of queen scallop in the Faroes is available from about 100 stations worked in 1903-1954 (Ursin 1956). Finds were concentrated at moderate depth in the shore region off the northern islands at 57 – 128 m. Queen scallops were most often caught in the interval 75-99 m, although a single find occurred at 173 m on the Faroe Bank (Ursin 1956).

Two areas of particularly large concentrations occur on the Faroe plateau, one to the north of the northern islands and the other east of the central islands. Together these two areas make up a total of about 400 km^2 (Figure 1). The beds are found at 60 – 110 m on sandy, rocky or soft bottom (Nicolajsen 1997).

The southernmost ground has been fished regularly for approximately 30 years. The northern ground was fished for several months in 1989 and 1990, but has not been fished by scallop trawlers since late 1990 when the factory trawler fishing the area was sold. Due to protests from longline fishermen the exploitation of scallops in the area was never restarted even though many vessels applied for the fishing rights (Nicolajsen 1997).

In recent years the question has been opened again whether to fish scallops in the northern area, and finances were granted to investigate how much change the scallop fishing does to the area, as longliners argue that their fishing grounds are destroyed. This investigation is currently going on at the Fisheries Research Institute in Tórshavn, the Faroe Islands.

The area inhabited by the queen scallops is much the same as that covered by the horse mussel *Modiolus*. Rapid water renewal seems to be advantageous, particularly for the development of dense beds. The bottom slope off the southern island is steeper than farther northwards and *Modiolus* is restricted to a narrow zone and queen scallops have not been found in this area (Ursin 1956).

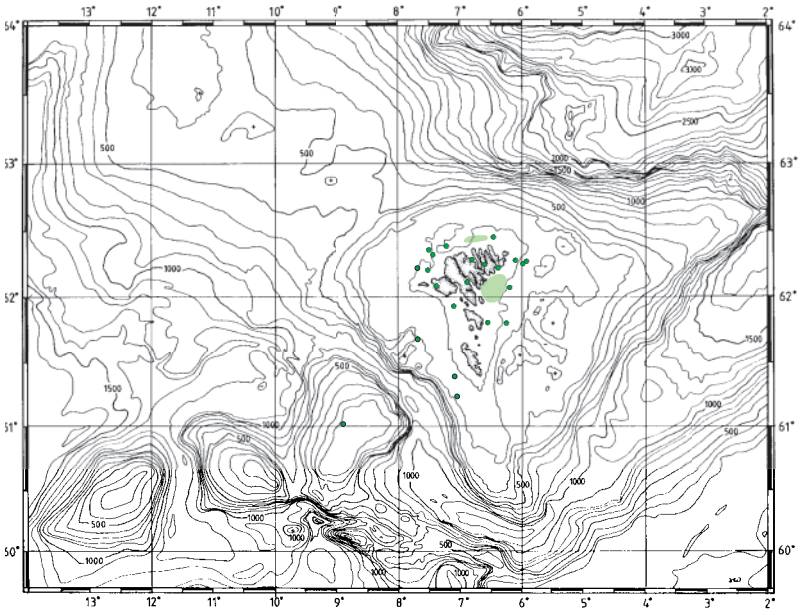

Figure 1.
Distribution of the queen scallop, *Aequipecten opercularis* in Faroese waters. Dots indicate single stations. Hatched areas indicate large quantities.

The dominant cohabitants in the scallop field north-east of Nolsoy are all common species such as the whelks *Buccinum undatum* L., 1758 and *Neptunea despecta* (L., 1758), the mussels *Tridonta elliptica* (Brown, 1827), *Clausinella fasciata* (da Costa, 1778), *Acanthocardium echinata* (L., 1758), *Modiolus modiolus* (L., 1758), *Arctica islandica* (L., 1767), and *Venerupis rhomboides* (Pennant, 1777), the starfish *Asterias rubens* L., 1758, *Henricia* sp. and *Hippasterias phrygiana* (Parelius, 1768), the brittlestar *Ophiothrix fragilis* (Abildgaard, 1789), the seaurchins *Strongylocentrotus droebachiensis* (O. F. Müller, 1776) and *Echinus esculentus* L., 1758, the seaanemone *Urticina felina* (L., 1761), the hydroids *Abietinaria abietina* (L., 1758) and *Hydrallmannia falcata* (L., 1758) and the hermit crab *Pagurus bernhardus* (L., 1758) (Nicolajsen 1997). The associated species from the northern ground are being worked up, and data are at this moment not available.

References

Høpner Petersen, G., 1968. Marine Lamellibranchiata. In: Spärck, R., S.L. Tuxen (eds). Zoology of the Faroes. 3(1), 80 pp.

Nicolajsen, Á., 1997. The history of the Queen Scallop Fishery of the Faroe Islands. – NOAA Technical Report NMFS 129: 49-56.

Ursin, E., 1956. Distribution and growth of the Queen, Clamys opercularis (Lamellibranchiata), in Danish and Faroese Waters. – Meddelelser fra Danmarks Fiskeri- og Havundersøgelser. Ny serie 1(13), 32 pp.