

HAFRANNSÓKNASTOFNUNIN

ICELAND SEA ECOSYSTEM PROJECT

Survey report

Ship : RV Árni Friðriksson, RE 200

Cruise Number : A11-2008

Cruise Period : 6 – 27 August 2008

Port of departure : Reykjavík

Port of return : Reykjavík

Responsible Institute : Marine Research Institute, Reykjavík

Chief Scientist : Dr. Ólafur K. Pálsson

Scientific objective

The survey is a part of a larger project dealing with the structure and function of the Iceland Sea ecosystem with particular reference to life history and survival of capelin (*Mallotus villosus*). The project has been carried out since 2006.

Survey area and data collection

In this survey a total of 216 stations were worked in the Iceland Sea, and in continental shelf waters of Iceland. Data were collected for hydrographic properties (CTD), nutrient concentrations, chlorophyll a and zooplankton biomass and species composition, as well as food chain studies (analysis of fatty acids and stable isotopes) on 161 environmental stations, (Fig. 1, Table 1). Furthermore, 55 pelagic trawl station were worked for the identification and analysis of capelin and other fish species (Fig. 2).

Preliminary results indicate summer conditions with respect to environmental factors, along similar lines as observed in August 2007. Adult (age 2+) and juvenile (age 1) capelin were recorded in limited quantities and mainly along the continental shelf off East Greenland. 0-group capelin was recorded in relatively large numbers along the deep continental shelf edge north of Iceland, and up north to 69°N in the Iceland Sea.

Fig.1. Location of environmental stations, August 2008.

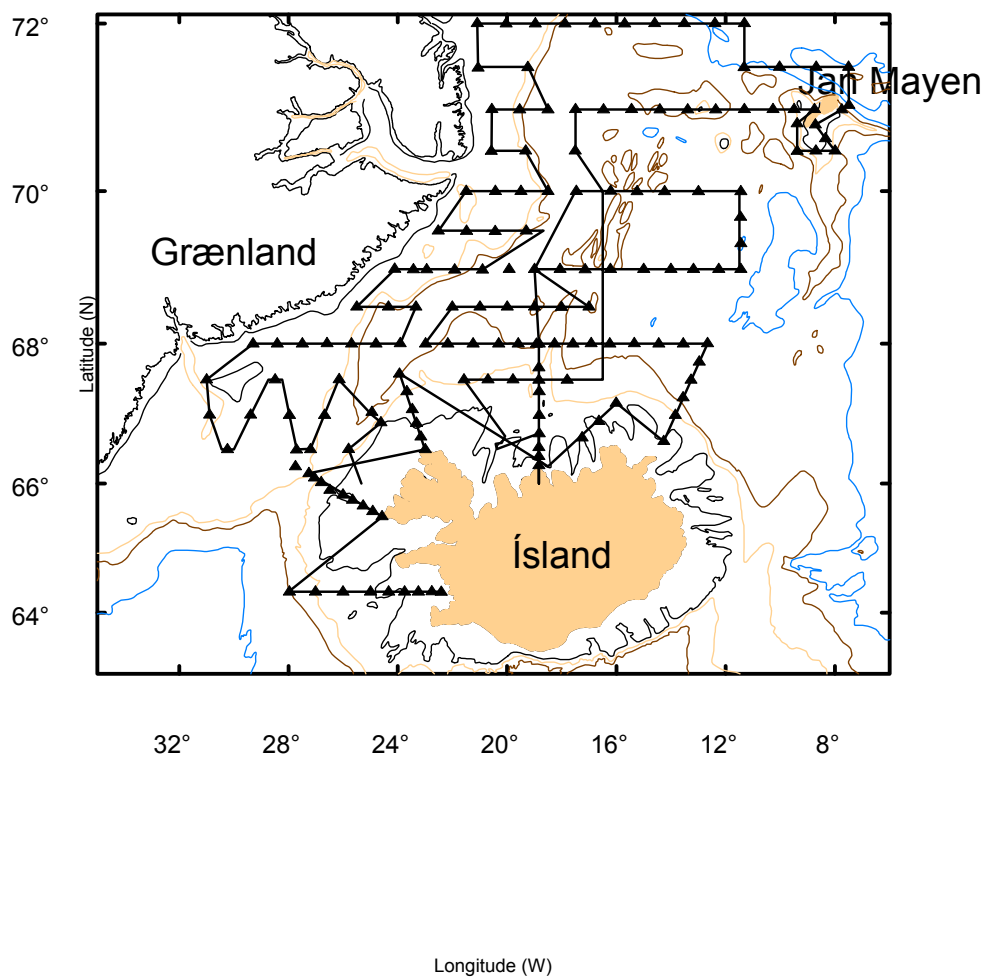


Fig.2. Location of pelagic trawl stations, August 2008.

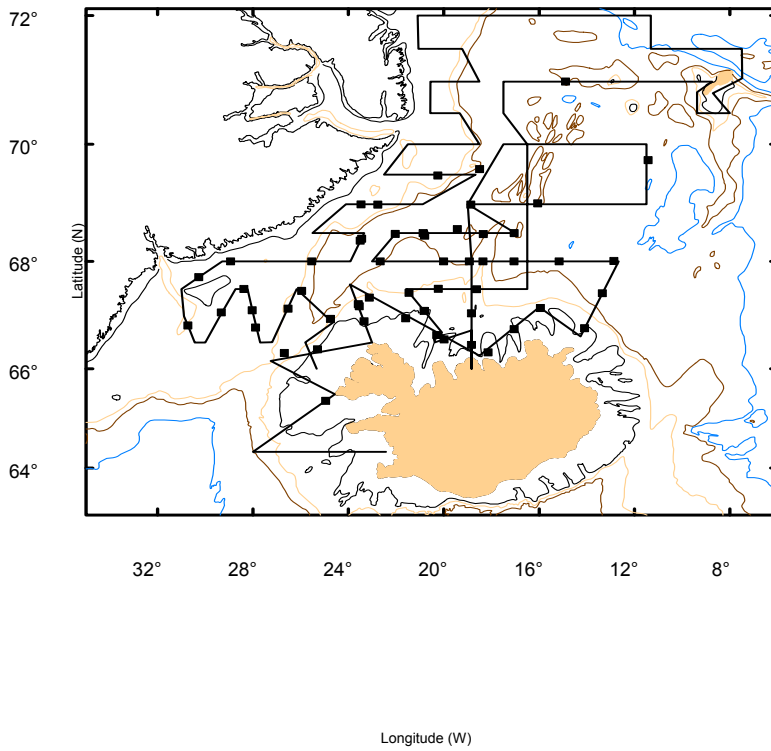


Table 1. Data collection on stations, August 2008.

Oceanography			Phytoplankton			Zooplankton			Fish			Food chains
CTD	Nutrients	Carbon	Chloroph.	Prim.prod	Species	WP2	Tucker	VPR	Life hist.	Food	Fat	
160	141	11	156	32	131	131	15	13	41	13	1	38

VPR=Video Plankton Recorder