

FRV WALTHER HERWIG III

Cruise 319: IBTS 2009 (I)

23.01. – 18.02.2009

REPORT

Scientist in charge: Dr. G. Wegner

Objective

Participation in the ICES co-ordinated 'International Bottom Trawl Survey' 2009, 1st quarter, in the North Sea.

The objective of the survey is to estimate the strength of the upcoming year classes of the demersal fish species cod, haddock, whiting and Norway Pout, to some degree also pelagic species like herring, sprat and mackerel. In addition, the distribution and abundance of herring larvae are to be investigated. Temperature, salinity, and nutrients in the area of investigation are monitored.

Narrative

Time schedule

23.01.2009 (19:30)	Departure Bremerhaven,
24.01. – 05.05.	Sampling / fishing (German Bight, central and north-western North Sea)
05.02. (09:00) – 06.02. (13:00)	Break in Aberdeen, Scotland)
06.02. – 17.02	Sampling / fishing (northern North Sea and German Bight)
18.02.2009 (08:00)	Arrival Bremerhaven

The IBTS is an ICES program coordinated by the Netherlands' Institute for Marine Resources and Ecosystem Studies (IMARES). The rectangles assigned to Germany in the northern and central North Sea were to be fished by means of the ICES standard bottom trawl GOV during daytime and the standard plankton MIK (Methot-Isaac-Kidd) net during nighttime. Additionally, in each rectangle temperature and salinity measurements as well as nutrient samples were to be taken. Due to very suitable weather conditions, WALTHER HERWIG III was able to fish in 73 rectangles of the assigned 77 (Fig 1). Four squares were dropped in consequence of bad ground. In total, 146 MIK and 72 valid GOV hauls as well as 73 CTD profiles were conducted.

Results

Total catches of the GOV hauls were between 3 and 1414 kg, in mean 233 kg, about 10 kg less than during the year before. Compared with the previous year, less juvenile haddock, whiting, and mackerel were caught by “Walther Herwig III”. Catches of cod were a little above last years catches, sprat and herring were moderately more abundant than last year, and of Norway pout catches substantially exceeded the catches of last year.

The number of herring larvae from the MIK net hauls was two to four times higher compared to that the previous years. The larvae were relatively wide spread, but found in larger concentration in central and northern parts of the North Sea.

Only very few young snake pipefish were caught with the MIK. Some juveniles of species living normally in deeper Atlantic waters were found in the MIK hauls. They may indicate an increased inflow of Atlantic water into the northern North Sea areas during this winter season.

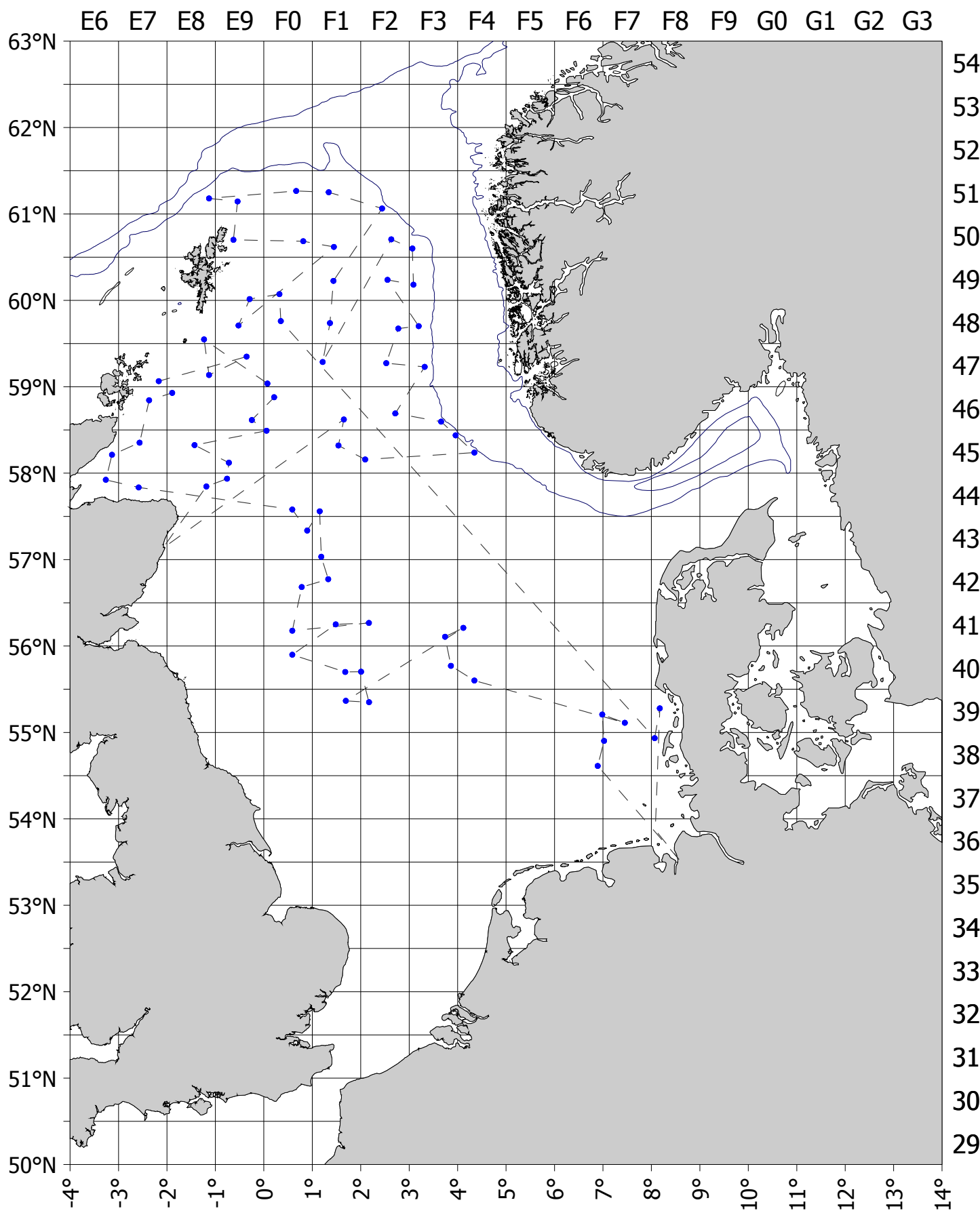
This is supported by partly increased salinities. Sea surface temperatures in the investigation area were between 2.1 to 8.4°C, predominantly between 6.5 and 8°C. Perhaps originating from the increased Atlantic water inflow, some slight thermal and haline stratification was found in the northern squares. In general, the water column was totally mixed. Thus, oxygen saturation was found in all depths.

Participants

Peter Bombka	vTI, Institute for Baltic Sea Fisheries, Rostock
Annika Elsheimer	vTI, Institute for Sea Fisheries, Hamburg (SF)
Gudrun Gentschow	vTI, SF
Thomas Groß	vTI, SF
Gitta Hemken	vTI, SF
Dr. Matthias Kloppmann	vTI, SF
Wolfgang Lange	Voluntary helper, Hamburg
Marion Mehl	vTI, Fish Information Centre
Daniel Oesterwind	vTI; SF / IFM-GEOMAR, Kiel
Sergej Schachray	vTI, SF
Dr. Gerd Wegner	vTI, SF



Dr. Gerd Wegner



IBTS 1st quarter 2009
Track of cruise 319 of FRV "Walther Herwig III"