

In Confidence - not to be quoted without reference to the Laboratory 7ER79

FRV EXPLORER

Cruise 7/79

REPORT

6-25 July 1979

Objectives

- a To undertake a Faroe pre-recruit demersal fish survey with the 48' Aberdeen trawl.
- b To undertake comparative fishing using the standard 48' Aberdeen trawl and the GOV trawl.

Narrative

EXPLORER sailed from Aberdeen at 2000 hours on the 6 July and steamed directly to the survey area. Trawling commenced on the 8 July on the Faroe Bank and after work was completed in this area EXPLORER moved to stations to the SW of Sydero. However, strong SW winds combined with a heavy swell caused EXPLORER to stop work in this area and to proceed to grounds off NE Faroe. Work continued until 16 July when EXPLORER put into Thorshavn. EXPLORER left port on the 17th and proceeded to the west side of the Faroe Islands and all stations in the routine survey were completed by the 19th July.

In order to carry out the comparative fishing part of the cruise an area was selected off the north coast of the Faroes and EXPLORER worked there for the following two days. However, deteriorating weather conditions forced EXPLORER to change fishing grounds and further comparisons were made on grounds 7' east of Sando and 8' east of Svino. Trawling was completed on the 23 July and EXPLORER proceeded to Leith where she docked at 2100 hours on 25 July.

Results

a Routine Trawling

Faroe Bank Fishing on this ground was poor. The number of baskets per haul varied from 2 to 10. The majority of the catch was cod although 2 baskets of large haddock were taken on the NE edge of the Bank.

SW Sydero Grounds Catch/hour showed an improvement over the Faroe Bank figures, on one occasion 20 baskets were caught. However, the catch composition was very similar with the majority of fish caught being cod, in addition 4 baskets of large haddock were caught as well as 3 baskets of saithe.

Fuglo Grounds Fishing at the NE corner of Faroe was mixed. One haul yielded 74 baskets of industrial fish (7 of A. silus and 7 of S. viviparus) whilst another haul yielded 8 baskets of lemon sole and 5 of plaice. Cod were scarce in this region and although a few baskets of haddock were caught, again these tended to be large; the bulk were in excess of 30 cms. There was little sign of the 1978 year class.

Sando Bank Catch rates ranged from 6 to 25 baskets/hour. The catch composition was almost entirely industrial, the main species being M. poutassou, T. esmarkii and S. viviparus. One haul produced 10 baskets of large saithe, there were no significant numbers of haddock.

Nolso Bank Fishing was mixed and the yield/hour varied from 3 to 10 baskets. The catch was fairly evenly split between cod, haddock and flatfish. One haul produced a number of the 1978 year class haddock.

West Bay Again the fishing was mixed with low catch rates. Haddock was the dominant species although only 1 haul showed any signs of the 1978 year class. Cod, various flatfish, T. esmarkii and S. viviparus made up the bulk of the rest of the catch.

Myling Head The catch rate ranged from 2 to 10 baskets/hour. The catch composition was mainly haddock (all fish were greater than 27 cms), lemon sole and T. esmarkii. This area also yielded 3 or 4 baskets of large whiting and several baskets of squid.

b Comparative Fishing

Seventeen hauls of one hour duration were made to compare the fishing efficiency of the 48' Aberdeen trawl with the Grande Ouverture Verticale (GOV) trawl. The hauls were made on 3 separate grounds and an analysis carried out for each area.

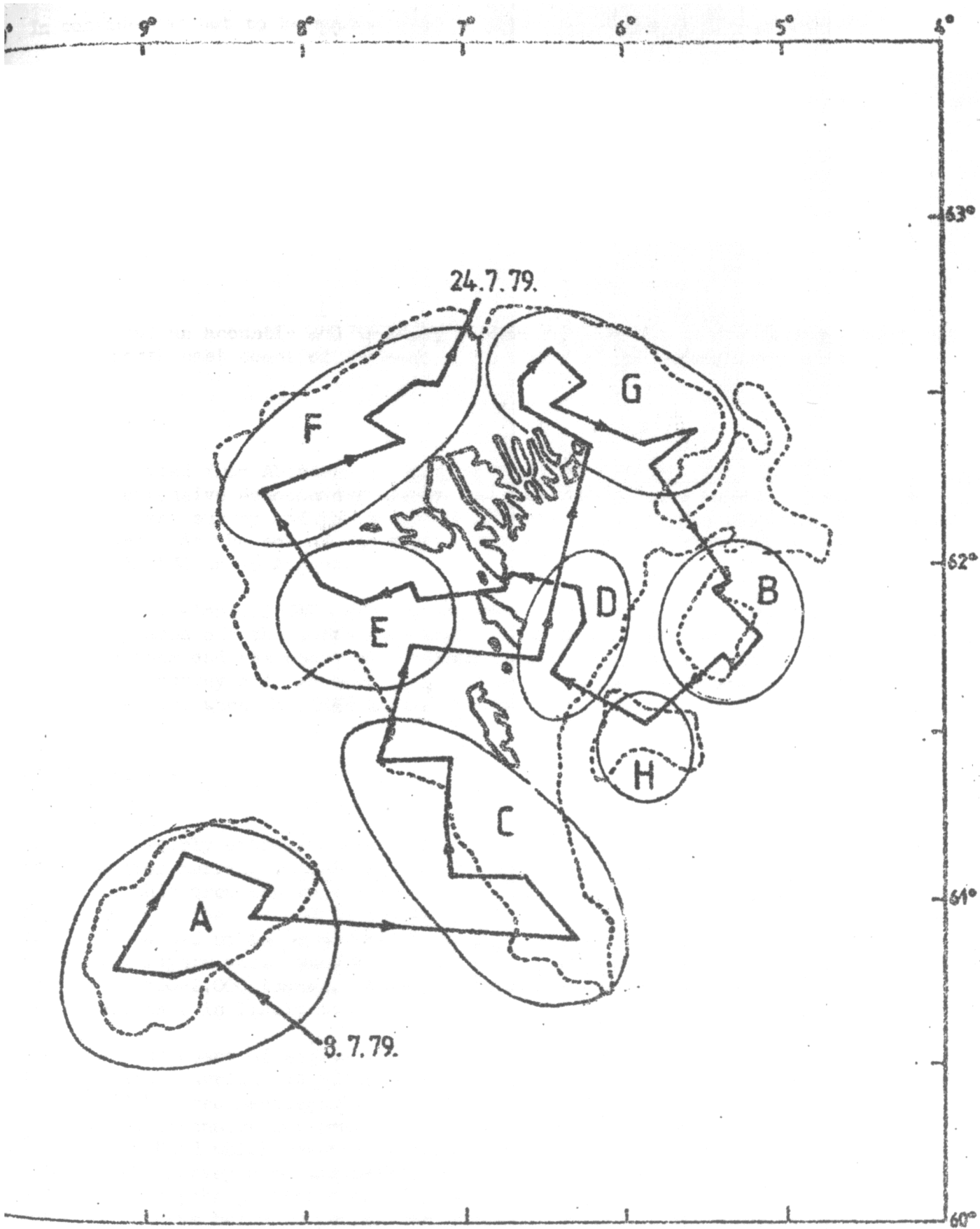
The analyses were done on haddock, combined catches of whiting and cod, combined flatfish and T. esmarkii.

The overall results from the 3 grounds tended to suggest that there was no significant difference between the catch rates of the two gears for haddock and cod and whiting. On one ground the Aberdeen trawl was outfishing the GOV for flatfish by a ratio of 2.24 : 1, although on the other grounds no significant difference was detected. In the case of T. esmarkii the GOV trawl consistently outfished the Aberdeen trawl by a factor of approximately 10 : 1. This feature is probably due to the fact that the GOV has a higher headline height.

Seen in draft J W Gillon

A W Newton

23 April 1980



Explorer

8.7.- 24.7.79.

7EP79