MINISTRY OF AGRICULTURE, FISHERIES AND FOOD FISHERIES LABORATORY, LOWESTOFT, SUFFOLK, ENGLAND

The company of the constraint of the

grapher of the state of the state of the state of 1978 RESEARCH VESSEL PROGRAMME

REPORT: RV CORELLA: CRUISE: 9

(PROVISIONAL: Not to be quoted without prior reference to the author)

and the transfer of the contract of the contra

100 miles

STAFF:

M J Holden
I L Davies
T Watson
Y Agyei-Dua (Sandwich course student) o di sami di salah s Salah sa

## DURATION:

Left Lowestoft 1055 h, 12 June

Arrived Lowestoft 0300 h, 27 June

# LOCALITY:

North Sea

# AIMS:

- 1. To participate in the international North Sea 0-group gadoid survey.
- 2. To collect by-catch data.
- 3. To record macroplankton (Marine Laboratory, Aberdeen).
- To collect deep frozen 0-group cod (Mr Child). 4.

#### NARRATIVE

The ship started work north of Flamborough Head at 0556 h/13 and from there surveyed northwards along the east coasts of England and Scotland. The ship berthed at Kirkwall at 1011 h/20 for fuel and water and sailed again at 0705 h/21. Six stations were then worked north and west of the Orkney Islands before making a passage through the Pentland Firth to survey three stations between 57 and 58°N and OO-2OE. The coastal stations south of 56ON were then re-surveyed. The English part of the survey was completed at 1054 h/26 and passage was then made for Lowestoft.

Daily radio contact was made with RVs TRIDENS and JOHAN HJORT, who were also participating in the survey, and information on catches of 0-group gadoids exchanged.

#### RESULTS

A total of 47 stations was worked. Each haul consisted of a one-hour tow with the international young gadoid pelagic trawl, 20 minutes near bottom, 20 minutes midwater or at the thermocline (identified before each haul with a bathythermograph cast) and 20 minutes near surface; hauls were made at the centre of ICES statistical squares.

South of 56<sup>0</sup>30'N 0-group gadoids were very scarce, only 14 cod being caught in 24 hauls. The total absence of 0-group whiting from this area was in marked

contrast to previous years. Only in the northern half of the Moray Firth and around the Orkney Islands were whiting found in numbers greater than 10/1 h haul (both TRIDENS and JCHAN HJORT caught very few whiting in their parts of the survey area). In the northern half of the survey area both cod and haddock were less abundant than in previous years, with the greatest abundance of both species being in the same area as for whiting. Although the full results of the whole survey are not yet available, a first assessment suggests that the 1978 year-classes of cod, haddock and Norway pout are much smaller than in previous years (with the exception of cod off the Danish coast) and that that of whiting is very small.

A record, including length measurements, of all other species caught was maintained (Aim 2) as well as of macroplankton (Aim 3). Compared with 1977, all species of jellyfish, especially Cyanea lamarcki and C. capillata, were much scarcer while larval Nephrops norvegicus were recorded for the first time (at stations 14 and 15, where they were abundant). Four samples of O-group cod were deep-frozen for immunogenetic studies by Mr Child (Aim 4) as well as 14 samples of sandeels (Dr Pawson), ten of sprats (Dr Johnson) and three of herring (Mr Wood).

1987年 - 1988年 -

And the second of the second o

and the state of the control of the first season of the state of the control of the control of the state of t

or the factor of the contraction of the contraction

long of the control of the second section of the control of the co

and the state of the control of the state of 

The English of the second of the second of

M J Holden 6 July 1978

Sometimes and the second of th

to be to exalt on firms.

. A intend

arried of the

 $\mathcal{F}_{1}^{n} \subseteq z_{1}$ 

SF: And A

SEEN IN DRAFT: JEMB

RCN

INITIALLED: AJL

DISTRIBUTION:

Basic List

Mr Child

Dr Pawson

Dr Johnson

Mr Wood

Mr Parmell

Mr Holden

Mr I L Davies

Mr T Watson

Mr Y Agyei-Dua (1) Dept. So the second of th Mr Y Agyei-Dua

