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MINISTRY OF AGRICULTURE, FISHERIES AND FOOD FISHERIES LABORATORY, LOWESTOFT, SUFFOLK, ENGLAND	
1982 RESEARCH VESSEL PROGRAMME	Andreas and a second
REPORT: RV G A REAY: CRUISE 11 (PROVISIONAL: Not to be quoted withour prior reference	to the author)
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DURATION	$S_{i} = S_{i} \sum_{j \in \mathcal{I}_{i}} (S_{j} - S_{j}) \sum_{j \in \mathcal{I}_{i}} $
Left Aberdeen 1500 h 5 October Arrived Aberdeen 0500 h 24 October All times are Greenwich Mean Time	a an
LOCALITY	· .
Northern North See	
AIMS	1997 - 19
1. To describe the distribution of gadoids within the Norway pout fishery area using the semi-pelagic high headline travl with codend liner.	
2. To study the interactions between species by examining feeding preferences in relation to bottom type and depth of water.	
3. To collect fish samples for the fish identification course.	
4. To collect mackerel and herring samples.	
5. To record temperature/depth profiles.	
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NARRATIVE

Fishing commonced at 1650 h on 5 October at the southern end of the grid and work continued northwards until 2200 h on 16 October when the vessel put into Lerwick for water. Bad weather delayed sailing until 2100 h on 18 October and the grid was resumed east of Muckle Flugga at 0630 h on 19 October. However, bad weather again intervened and shelter was sought in Burra Firth between 0900 h and 2230 h on 19 October. The main grid was completed at 0730 h on 23 October and with impending westerly gales ruling out work off the Norwegian coast, the ship steamed for Aberdeen.

RESULTS

1. A total of 48 trawl stations were completed, comprising all those in the main grid. All tows were valid and net damage was negligible. Length measurements were made of all species occurring in significant numbers and otoliths were taken from cod, haddock, whiting, saithe and Norway pout.

- 2. Stomachs were collected at alternate stations from cod, haddock, whiting and Norway pout. In addition saithe and mackerel stomachs were sampled at all stations when caught, as part of the ICES-coordinated scheme.
- 3. Samples of mixed gadoids, mixed flatfish and miscellaneous species were frozen for the fish identification course.
- 4. The following samples were frozen: mackerel (3), herring (2), sced (1).
- 5. Vertical profiles of temperature were taken from surface to bottom on all but 4 of the stations, the latter being precluded by weather conditions.

C T Macer 5 November 1982

SEEN IN DRAFT: PM (Master)

INITIALLED: DJG

DISTRIBUTION:

Basic List C T Macer J Dann T W Boon M W Easey P A Large A Hunter

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