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

1982 RESEARCH VESSEL PROGRAMME A TO A CONTROL OF THE SECOND OF

REPORT: RV CIROLANA: CRUISE 2

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. The secondary of the contract of To participate in the ICES international young fish survey for 1-group herring and gadoids. For the State with the area to be the second of the second

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- To sample post-larval herring using the Isaacs Kidd midwater trawl.
- To take surface and bottom temperature and salinity readings on each trawl station.

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## NARRATIVE:

CIROLANA sailed from Grimsby at 1812 h 27 January and steamed north to ICES rectangle 39 E8 (see attached chart) to start the fishing survey. The survey consisted of a pre-determined number of 30 minute tows with the GOV trawl and two tows with the Isaacs Kidd trawl within each of the ICES statistical rectangles allocated to England by the survey co-ordinator. Fishing commenced at 0827 h 28 January but was interrupted at 1800 h 29 January when a westerly gale forced the ship to dodge until 1230 h 30 January. The survey was then contimued uninterrupted and completed by 1400 h-12 February. The way we was deafter the second of the second will be a second will be a second of the second of

As very few cod had been found in the rectangles fished by CIROLANA, an additional aim was inserted into the programme - to find areas where sufficient numbers of 1- and 2-group cod might be available to support a tagging programme on the forthcoming cruise of CLIONE. Information from the survey co-ordinator indicated that the only area where cod had been taken on the survey so far was around Texel. After a short steam to the area which was reached early on the morning of 13 February, six tows were made both inshore and offshore before fishing was terminated at 1104 h 14 February. CIROLANA then steamed for Grimsby where she docked at 1003 h 15 February. . . . . . .

## RESULTS:

Fifty GOV trawl hauls were made in 34 of the 35 ICES rectangles allocated to 1. England. In the one rectangle not worked, 37 E9, the bottom was regarded as presenting an unacceptable hazard to the gear.

On each station all species both commercial and non-commercial were weighed and measured. Otoliths were taken from cod, haddock, whiting, norway pout and herring at levels previously agreed by the International Young Herring and Gadoid Survey Working Groups and data were collected on meristic characters of herring. Samples of sprats were deep frozen for otolith extraction later in the laboratory. Age determination was carried out on cod, haddock, norway pout and herring, and data presented in the form required by the survey co-ordinator.

Catches generally on the survey were low but it is not possible to draw any conclusions about incoming year-class size until data from all the countries involved in the survey has been collated.

2. Sixty eight tows were made with the Isaacs Kidd trawl during the hours of darkness. For the first time the gear was shot over the starboard side instead of down the ramp and worked well apart from a few initial teething troubles mainly associated with getting the lead for the cable right. After 52 tows however the depth recorder fixed to the net failed and the remaining stations were worked using a warp-out - depth relationship.

Herring larvae were caught in every rectangle fished, highest catches being taken in rectangles 40 E8 and 40 F1. Sprats were taken in greatest abundance in 33 F2 and 33 F1. None were taken off the north-east coast.

- Nansen bottles were used to take bottom and surface temperature readings 3. and salinity samples on each GOV trawl station. MATE:
- Samples of small flatfish and gadoids were deep frozen for the fish identi-4. fication course. (Dr. Johnson)
- Bags of small gadoids were deep frozen for FCU. 5•
- Extra gadoid otoliths were collected from roundfish area 6 to supplement 6. the market sampling programme. (Mr. Bedford)
- Six GOV trawl hauls were made off the Dutch coast in rectangles 33, 34, 35 7. F4 to determine whether cod were present in sufficiently large numbers to tag. Cod with a length range of 16-31 cm were found close inshore in 22 m in 33 F4 (75 per 30 minute tow) while further north in 34 F4 but again close in larger fish with a length range of 14-80 cm were present (90 per 30 minute tow). The information that both these ereas would provide workable quantities of fish to tag was passed on to the SIC of GLIONE cruise 3. Fish traces were abundant over most of the area worked along the Dutch coast and one tow of 30 minutes in 34 F4 produced 55 baskets of mainly recovering spent herring. The spent of the s

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E W Pearson - Fishing Skipper of Att 1 and 1 and

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