

Miss Howard

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

1971 RESEARCH VESSEL PROGRAMME

REPORT: RV CIROLANA: CRUISE 3

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

STAFF

J G K Harris

V J Bye

P Bromley

B C Mumford

R A Hurst (Fleetwood)

A King (Lowestoft)

D H Cushing (8-13 April)

B K Clarke (8-13 April)

W Wood (BUT) [13-15 April]

H Vilhjalmsson (Marine Research Institute, Reykjavik) [14-18 April]

J Bridger (15-22 April)

DURATION

Left Grimsby 1630 hours 8 April 1971

Arrived Grimsby 0630 hours 26 April 1971

All times are British Standard Time

LOCALITY

South and West coasts of Iceland

AIMS

1. To use the ARL Scanner aboard RV CLIONE to investigate reactions of cod to CIROLANA's trawl.
2. To compare the fishing shapes of Granton and modified French trawls.
3. To collect live halibut and testis material for Dr Purdom.
4. To collect cod blood for Dr Jamieson.
5. To collect length distributions and otoliths of plaice for Mr Bannister.
6. To collect deep frozen small gadoids (less than 20 cm: food for stock turbot) for Dr A Jones.
7. To collect a sample of mature females of both cod and haddock for fertility studies for Mr Blacker.

NARRATIVE

- 8 April: Sailed from Grimsby at 1630 hours.
- 9-10 April: Precision Depth Recorder was used over deep water between the Orkneys and Iceland.
- 11 April: Commenced work 13 m SW of Surtsey, fishing outside the 12 mile limit for cod to enable blood samples to be despatched by air from Reykjavik. Only small catches of cod were obtained.
- 12 April: Moved overnight to Eldeyjar Bank, still working outside the limit where in two hauls the required blood samples were completed. Steamed to Reykjavik, arriving 2155 hours, transferring two WFA electronic engineers from the stern trawler C S FORESTER to Reykjavik.
- 13 April: A fishing permit enabling CIROLANA to operate inside Icelandic territorial waters was collected from the Marine Research Institute, Reykjavik. A reception was held on board CIROLANA in honour of the staff of the Marine Research Institute, Reykjavik. Scientific staff and ship's officers from both CIROLANA and CLIONE were present at the reception. Mr Wood of BUT and Mr Viljhalmsson of Marine Research Institute, Reykjavik joined the ship in Reykjavik.
- 14-16 April: Sailed from Reykjavik at 0910 hours in the company of CLIONE. Worked with CLIONE on Selvogsground (SW Iceland) until 1230 hours 16 April. A series of trawl hauls and an all-night echo-survey failed to detect cod in sufficient concentrations for recognition by the ARL Scanner. On 15 April, Mr Wood transferred to CLIONE being replaced by Mr Bridger.
- 16-18 April: Extended the search from cod by trawl and echo-survey to Snaefellsjokull Grounds at the Northern limit of Faxa Bay. Cod were again not found in sufficient quantity and, after a period of laying and dodging during which Mr Viljhalmsson was transferred to RV BJARNI SAEMUNDSSON, CIROLANA sailed for the Westmann Islands.
- 19 April: Steaming east past the Westmann Islands large concentrations of fish were detected on the echo-sounder. A trawl haul showed them to be Norway Pout in large numbers. CLIONE being several hours steaming behind, CIROLANA continued trawling and surveying alone through the day.
- 20 April: Commenced working with CLIONE just east of the Westmann Islands. Bad weather during the night had dispersed the fish and no Pout and only a small quantity of haddock were caught. CIROLANA therefore set sail east again towards Ingolshfdhi Ground (The Hoof) with CLIONE following at her reduced speed.
- 21 April: Commenced fishing at 0825 hours at The Hoof. One haul produced 25 baskets of large cod, but bad weather prevented any further work. Dodged until joined by CLIONE. A combination of bad weather, poor cod catches and an urgent commitment for CLIONE in the Irish Sea caused all further work on the cruise to be abandoned. Both vessels steamed for the Westmann Islands to interchange personnel.

- 22 April: Arrived at the Westmann Islands several hours ahead of CLIONE. Proceeded to Solvogsground (W of the Islands) in an attempt to complete Aim 3 and catch live halibut for return to Lowestoft. Gear came fast on hauling. No damage but all halibut caught were dead on reaching the deck. Returned to the Westmann Islands to rendezvous with CLIONE. Transferred Mr Bridger to CLIONE and sailed for Grimsby at 1600 hours.
- 23-25 April: On passage between Iceland and Grimsby. The Precision Depth Recorder was again operated over deep water between Iceland and the Orkneys.
- 26 April: Docked in Grimsby at 0630 hours.

#### RESULTS

- Aim 1: Despite a search extending from Snaefellsjokull on the West coast to Ingolfshofdhi in the south-east, cod were generally not found in sufficient concentrations to enable fish reactions to the trawl to be investigated.
- Aim 2: In view of the lack of success of Aim 1, and the premature end of the cruise this Aim was abandoned.
- Aim 3: No mature male halibut were caught and therefore no testis material was preserved. Preserving live halibut was left to the end of the cruise to help keep them alive. Bad weather, the premature end of the cruise and finally the trawl coming fast while fishing primarily for halibut prevented any live fish from being retained.
- Aim 4: 100 cod blood samples were despatched by air from Reykjavik. A second 100 cod blood samples were taken at the Hoof and carried back to Lowestoft aboard CIROLANA.
- Aim 5: Length distributions and otolith samples of plaice were taken whenever plaice were obtained in any quantity. Samples were taken on Solvogsground (Stations 10, 13 and 25) and at the Hoof (Station 24).
- Aim 6: Four baskets of Norway Pout were deep frozen for return to Lowestoft as food for stock turbot.
- Aim 7: All mature female cod captured had commenced spawning and were not considered suitable for fertility studies. A full representative sample of different sizes of mature female haddock were frozen for return to Lowestoft.

#### MISCELLANEOUS

1. The Precision Depth Recorder was run over deep water on passage to and from Iceland.
2. When weather conditions permitted hydrographic observations were taken at 30 mile intervals while in Icelandic continental shelf waters. Five stations were taken in all.
3. Selected ship observations were made for the Meteorological Office.

4. 60-70 cod heads were preserved for pineal studies by Mr V Bye.

J G K Harris

27 April 1971

SEEN IN DRAFT     AEB  
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INITIALLED        AJL

DISTRIBUTION

Basic List

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P Bromley

B C Mumford

R A Hurst (Fleetwood)

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