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

1982 RESEARCH VESSEL PROGRAMME

REPORT: RV CLIONE: CRUISE 15b

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

STAFF

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A M Watson
L Cox
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DURATION

Left Lowestoft 0930 h 16 November
Arrived Lowestoft 1700 h 26 November
(All times are Greenwich Mean Time)

LOCALITY

Southern North Sea and eastern English Channel

AIMS

1. To make acoustic surveys of herring concentrations using a transducer mounted in a towed body in conjunction with the echo integrators.
2. To obtain samples of adult herring for age and fecundity analysis.

NARRATIVE

CLIONE sailed from Lowestoft 0930 h, 16 November. Fairing was fitted to the towing cable and the towed body was launched at 1130 h off Southwold. CLIONE then steamed southwards and calibrations of the acoustic survey equipment were made in the vicinity of the Shipwash Light Vessel 1800-1915 h. A fault however was discovered in the system which necessitated recovering the towed body. As the weather conditions were unsuitable CLIONE steamed towards the coast and anchored off Aldeburgh at 2330 h. The towed body was then recovered and the fault traced to the transducer. The spare towed body was rigged and launched 0045 h 17 November. The performance of the modified system was checked and appeared to be satisfactory. It was calibrated 0845-1200 h and CLIONE then weighed anchor. The acoustic survey was started at 1321 h off Aldeburgh and a line run to a position just east of the Outer Gabbard. Weather conditions rapidly deteriorated during the late afternoon and it was necessary to return to the shelter of the land. With no prospect of any improvement in the weather CLIONE again anchored off Aldeburgh at 2040 h 17 November. The wind continued at gale force strength, from the southwest, next day so an acoustic survey was carried out within the Thames Estuary covering the East Swin, Middle Deep and Wallet, 1000-2000 h. With wind storm force 10 forecast CLIONE anchored at the sheltered southern end of the Wallet 2005 h 18 November. Weather conditions remained much the same the following day so CLIONE again surveyed within the Thames Estuary, covering the East Swin, Barrow Deep, Oaze Deep and Princes Channel. CLIONE anchored under the shelter of the land near Deal 2145 h 19 November.

The opportunity was taken next morning, whilst still at anchor, to recalibrate the acoustic equipment and check the performance of the faulty transducer. CLIONE weighed anchor at 1230 h and commenced an acoustic survey at 1325 h off Dover. A line was run in a southwesterly direction to a position approx. 21 miles southwest of Beachy Head and then southwards. The weather steadily deteriorated during the night 20/21 November and wind increased to gale force from a southerly direction. CLIONE was forced to dodge until 1438 h when the acoustic survey was continued to the east. Although strong gale force winds continued without respite a grid covering the most important areas of the eastern Channel was carried out. Further work here, had, however, to be abandoned at 2200 h 23 November when strands of wire in the protective outer covering of the towed body cable started to part in severe weather conditions.

Course was set for the Southern Bight and the area around the Hinder Banks was surveyed before the wind again increased to severe gale force from a southerly direction during the evening 24 November. Course was set through the Westpit and Middeldiep, then northeast to Ijmuiden where CLIONE docked at 1036 h 25 November. Final calibrations were made of the acoustic survey equipment and the towed body recovered in the safety of Ijmuiden harbour. A high-speed plankton sampler was borrowed from the Netherlands Fisheries Research Institute at Ijmuiden and discussions held on the coordination of the 1982/83 surveys of herring larvae in the Southern Bight and eastern Channel with Dutch scientists. CLIONE sailed from Ijmuiden 1740 h. The weather was unsuitable for deployment of the towed body but an echo survey was commenced 1830 h using the hull transducer. An area to the east of the Galloper and Outer Gabbard was surveyed before CLIONE returned to Lowestoft, docking 1700 h 26 November.

RESULTS

Aim 1. This aim was seriously restricted by the very adverse weather conditions which persisted throughout the cruise. This resulted in an incomplete acoustic coverage of both the eastern Channel and Southern Bight. Scattered small fish echo traces were detected, chiefly in French and Dutch coastal waters but the biomass appeared to be low. Two dense concentrations of fish traces were located off Beach Head. One with centre some 27 miles to the southwest was identified by the commercial trawler ST PATRICK as horse mackerel. The other some 14 miles to the south-east was not identified but at least some of the fish here were thought to be herring because of their extended vertical distribution. An area of small plume type echo traces was located some 12 miles east by south of the Outer Gabbard Light Vessel on the final day of the cruise.

Aim 2. No fishing was possible because of unsuitable weather conditions for practically the whole of this cruise.

Miscellaneous:

Valuable information on the whereabouts of fishing vessels both in the Southern Bight and eastern Channel was provided during this cruise by coastal aerial surveillance aircraft Watchdog Bravo.

R J Wood

8 December 1982

SEEN IN DRAFT: J R French - Master
R F Graham - Skipper

INITIALLED: DJG

DISTRIBUTION

Basic List

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