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

1975 RESEARCH VESSEL PROGRAMME

REPORT: RV CLIONE: CRUISE 7

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

STAFF

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DURATION

Left Lowestoft 1720 h, 6 May.

Arrived Lowestoft 0900 h, 15 May.

LOCALITY

Western English Channel

AIMS

To investigate the nature of sea bed obstructions and hazards to trawling in inshore waters.

NARRATIVE

CLIONE left Lowestoft at 1720 h, 6 May and, after stopping for diving boat training in the lee of the Isle of Wight, arrived at Plymouth at 0530 h, 8 May. There the scanner dome was attached and local trawling information received before CLIONE sailed again at 0930 h, 8 May. Over the 6-day period 8-13 May inclusive, by working each day in the lee of the land from at first north-westerly and later south to south-westerly winds, scanner and divers' observations were made on a variety of grounds and trawling obstructions between Whitesand Bay to the west and Portland to the east. CLIONE entered Plymouth at 2230 h, 13 May, the dome was taken off and she sailed again at 2330 h, 13 May, reaching Lowestoft at 0900 h, 15 May.

RESULTS

A range of sea bed types from rock to sandy mud at depths from 15 to 28 m was inspected by scanner and by diver. On the scanner, some of these appeared featureless and some as strongly marked configurations; it was not always possible to distinguish rock sand and mud from each other when the grounds were superficially rather featureless. The detail in flat grounds distinguished on the scanner and the likelihood of correct interpretation of bottom type depended to some extent upon not only the surface of the sea bed but also upon viewing aspect and the relative strengths of the returned signal and the

overall noise and interference pattern on the scanner display screen. Some charted wrecks and some uncharted trawl 'fasteners' were also inspected. The technique generally used was to anchor the ship near to the target seen on the scanner, to mark it with a buoy dropped directly on to it from the rubber boat guided from the scanner, and then for the divers to go down to identify it. Visibility at the bottom was fair for the place and time of year, ranging from about 2-3 m off river mouths to at best 6-7 m.

The tracks of trawl otter boards were seen in the firm muddy sand off Sidmouth when no trawlers were in the area. Other targets which appeared on the scanner as bright or otherwise distinctive marks were identified by the divers as including rocks, 2 patches of small arms ammunition (all pointing upwards), a complete army tank draped with a trawl net, an aircraft propellor (which we lifted), a half-embedded rectangular metal water tank, a tree and a ship's anchor. The army tank was particularly interesting because it was acting as an artificial reef for a big shoal of small gadoid fish which swam all over and around it at slack water, at times completely obliterating its signal, and dropped into the lee of it when the tide ran.

An unusual feature noticed in Start Bay was that, with a strong southerly wind against the tide, the noise on the scanner from sea surface and swell seemed to be disproportionately great for the sea-state and extended down so far as to make detailed bottom discrimination in 15-20 m impossible.

Escallops, some of them very large, seemed to be plentiful in the fairly extensive areas of ground which was of rock outcrops with sandy patches between - ground which could not be worked by conventional dredges or trawls and which thus acts as a haven for them.

I would like to acknowledge assistance rendered in the form of local information by Plymouth and Brixham fishermen and particularly thank Skipper J Piper of Brixham for the loan of his personal fishing charts.

A R Margetts
21 May 1975

SEEN IN DRAFT: JRF, GFL

INITIALLED: AJL

DISTRIBUTION:

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