Provisional: Not to be quoted without reference to the writer

R. V. CORELLA

Report of Cruise 4/1967

Staff: T. D. Iles Duration: 1230 hrs 21st August -J. P. Bridger 0600 hrs 31st August T. Boon G. Bensley T. Winslade

Aims

1. Trial fishing with the purse seine for herring off the north-east coast.

2. Cooperating with WILLEM BEUKELSZ in a herring tagging programme.

Narrative

CORELLA sailed at 13.30 on the 21st August and after picking up the representative of Submarine Cables at Yarmouth steamed to Flamborough Head. Surveying began at 05.30 on the 22nd. Trace was found near Flamborough where about twelve Dutch trawlers were operating but the first signs of large concentrations of fish were recorded off Skinningrove in an area being worked by German stern trawlers using, mostly, 2000 mesh mid-water Engels gear. A shot with the purse-seine at 18.30 produced no catch. The WILLEM BEUKELSZ was contacted at 22.00 hrs; she was working north-east of Flamborough.

Searching up and down the coast continued on the 23rd and a fleet of small Scottish boats off Skinningrove were found to be having reasonable success. A report that herring were being caught at Seahouses led to a search of that area where Banff and Peterhead boats were fishing large concentrations in 15-20 fathoms but the area was too shallow and too congested to attempt a shot. CORELLA steamed out at 17.30 and shot blind around a buff at 18.30. The brakes held, as they had on the earlier occasion, but the net was carried under the ship and was regained, eventually, after being torn. Arrangements were made with Mr. Bridge, Fisheries Officer at North Shields, to use the Type Commissioners Quay and on the 24th CORELLA arrived at the Albert Edward Dock where the net was examined, and 48 ft of net was removed near the bunt. Commander Liddicoat, D.I. North Shields, was visited and gave information that ring netters had ceased operations along the north-east coast so that it was not possible to make alternative arrangements to catch herring for tagging.

On the 25th CORELLA returned to sea at 06.30 and steamed to Seahouses where no fishing activity and no traces were found. The ship moved off to the Farne Deep where several shoals were hunted with the Asdic but all were below 25 fathoms, too deep for fishing with the purse seine. During the course of the night some shoals were contacted nearer the surface and one shot was made during darkness. By this time it had been realised that it was necessary to have the small boat CARANX in the water before a shot was made so that CORELLA could be pulled clear of the net as it was being hauled, but on this occasion only a few sprats and whiting were caught, although many fish escaped.

CORELLA steamed to Whitby arriving at 0430 on the 26th where a grid was surveyed. A good trace was found and the net shot to surround part at least of the shoal, but a warp parted during hauling which was therefore delayed. A few herring were caught and more than 8 baskets of cod. Some of these had recently eaten herring indicating that the herring shoal had escaped.

Searching off Whitby on the 27th was continued without real success and the staff went across to the nearby WILLEM BEUKELSZ to help, if necessary. in tagging from her drift net catch and to discuss further plans. Her catch was disappointing and no taggable herring were found.

On the 28th a good trace was found off the south cheeck of Robin Hood's Bay during the day and evening, but none was found during the night nearer the surface and at nidnight CORELLA steamed towards Bayman's Hole, returning when at 03.00 on the 29th WILLEM BEUKELSZ reported heavy traces in her area. The purse seine was shot at 05.10 on a good trace of a descending shoal but no fish were caught.

On the evening of the 29th CORELLA lay off Robin Hood's Bay and shot on a heavy trace which rose at about 21.00 hours. The shoal was marked with a flashing light and the net shot accurately, but herring were seen escaping under the boat both visually and on the sounder. Twenty-two herring were caught, nost being caught in the fold of the net and the others being mixed with large quantities of jellyfish, but none were fit for tagging. WILLEM BEUKELSZ recorded a poor catch for that night and on the 30th CORELLA steamed between Robin Hood's Bay and Whitby without finding trace. The survey area was left at 16.00 hours and CORELLA berthed at Lowestoft at 06.00 on the 31st.

Results

For obvious reasons no herring were tagged from CORELLA.

The winch brakes gave no trouble with the purse seine. This net does not impose as great a load as does trawling gear so that a final opinion as to their reliability is not yet possible.

It was concluded that the strops to the lead-line of the purse seine are too long, allowing a considerable gap between boat and net through which herring can and did escape. It is also thought that the 30 fathon net is too shallow for its length. There is too much loose netting at the surface which can easily get into the continuously turning propeller.

Purse seining in shallow water presents its own problems. In particular, genuine fish shoals are very difficult to distinguish from echoes from hard ridges on the bottom and can be identified only at distances too short for homing action on the part of the ship. In addition the occurrence of trawlers and drifters in the area made it necessary to keep to clear areas where trace was less likely to be found. Finally, in spawning areas fish appear to rise to a depth suitable for capture only at night and only then for a relatively short period.

T. D. Iles

Intlid! A. J. L.

Seen in draft: W. C.

Distribution:

Dr. Cole Mr. Lee Capt. Aldiss Dr. Cushing Mr. Burd Mr. Hill	Miss Conolly General Lab. Lab. Registry	Director, NIO Dr. Peachey Mr. Shelbourne W.F.A. Director, IJmuiden Mr. Boon
Mr. Garrod		Mr. Bensley
Mr. Bolster	Mr. Whiting	Mr. Winslade
Mr. Cattley	Mr. Simpson	
Mr. Corlett	Dr. Reynolds	
Dr. Harden Jones	Chief Inspector	
Mr. Margetts	All District Inspectors	
Mr. Trout	Fisheries Registry	
Mr. Iles	Captain Craig	
Mr. Holden	Mr. Revell	
Dr. Jamieson	Skipper Button	
· ·	Mr. Wollaston	
Mr. Bridger	Mr. Baird, DAFS	
Mr. Mitson	Director, Dublin	
Mr. Tungate	Mr. Glover	
Mr. Williams	Hydrographic Dept.	
Mr. Wood	Dr. Lucas	