

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

1973 RESEARCH VESSEL PROGRAMME

REPORT: RV CORELLA: CRUISE 6

STAFF

P R Winslade
P D Wallace
Mrs J E Howlett
T W Boon
Mlle Y Aldebert (ISTPM, France)

DURATION

Left Lowestoft 0855h 2 April
Arrived Lowestoft 1630h 13 April
All times are Greenwich Mean Time

LOCALITY

Western English Channel

AIMS

1. To make an echo/sonar survey of the Western English Channel for pelagic fish shoals.
2. To make a TTN/hydrographic survey of the Western English Channel for pilchard and mackerel spawning.
3. To freeze mackerel larvae, if any are located, for immunogenic work.
4. To attempt trace identification by use of a towed underwater camera.
5. To make a fishing survey of any areas of pelagic fish trace located by Aim 1.
6. To collect dinoflagellates from near Lowestoft for Dr Dodge (London University).

NARRATIVE

CORELLA left Lowestoft at 0855h 2 April and set course for Boulogne but strong winds delayed her passage and the ship had to anchor for the night in the lee of Dover Cliffs. The wind had moderated sufficiently by the morning to enable CORELLA to enter Boulogne and collect Mlle Aldebert. The ship then proceeded to St. 1, S.W. of Portland Bill, carrying out TTN calibrations on the way. The echo/sonar/TTN/hydrographic grid was started at 0250h 4 April and work continued during the day, but by evening the wind had freshened from the west and shelter was sought for the night in Torbay. By morning conditions were suitable for resumption of work and the grid was continued with CORELLA gradually working westward during 5, 6, 7 and 8 April. By the morning of 8 April conditions had once again deteriorated due to strong northerly winds and CORELLA sought a lee to the South of St Agnes, Scilly Isles, where she lay during the day. By evening, conditions had still not improved and so the ship moved across to the lee of Mounts Bay and Plymouth Bay to use the towed underwater camera. Only light trace was encountered and on the second tow serious damage to the camera prevented any further work with it. By the morning of 9 April conditions were

still unfavourable for TTN work and, in view of the poor forecast, it was decided to abandon the remaining stations to the west of the Scilly Isles and change to midwater trawling gear to start the fishing survey in the lee of Plymouth and Mounts Bay, where pelagic fish trace had been encountered in the echo/sonar survey. One haul was made at nightfall in the area WSW of the Eddystone Light and another shot was made at 0700h 10 April in Mounts Bay. CORELLA then proceeded to an area about 40 n. mi. South of Plymouth where light trace had been encountered in the first part of the cruise. An echo/sonar search revealed very little trace and so the ship moved back to the area 5-10' south of Start Point and the trawl was shot at 0245h 11 April. A further shot was made on trace in Start Bay at 0615h and then the ship moved offshore to an area about 40' SE of Start Point and the trawl was shot again on trace at 1925h 11 April and at 0400h 12 April. A final echo survey was then made between Portland Bill and the Isle of Wight and CORELLA set course for Lowestoft at 1745h 12 April, docking at 1630h 13 April.

RESULTS

1. An echo/sonar/TTN/hydrographic survey (Aims 1 & 2) was made of the Western English Channel between Portland Bill and the Scilly Isles. A grid of 41 TTN stations was completed but 12 stations to the west of the Scilly Isles had to be abandoned owing to poor weather conditions.
2. Pilchard eggs were fairly widespread with the main concentration in the area about 40 n. mi. South of Plymouth. Small numbers of mackerel eggs were located in the extreme southwesterly stations.
3. No mackerel larvae were located and so Aim 3 was not completed.
4. Damage to the underwater camera was sustained during the second tow, preventing any further work on Aim 4.
5. A fishing survey was made of the areas of pelagic fish trace encountered in Aim 1. Samples of mackerel (2) horse mackerel (2), pilchard (2), sprat (5) and anchovy (1) were collected and deep frozen.
6. Dinoflagellates from near Lowestoft were collected for Dr Dodge.
7. Samples of mackerel liver and muscle for immunogenetical work were deep frozen for Mr P Smith.
8. Samples of Calanus from the Western English Channel and North Sea were collected for Mrs J Howlett and transported alive back to the laboratory.

Peter Winslade
26 April 1973

Seen in Draft: J E Balfour (Master)

C A Snowling (Fishing Skipper)

Initialled: AJL

DISTRIBUTION

Basic List	Mr Blacker
P D Wallace	Mr Smith
P R Winslade	Mrs A Houghton
Mrs J E Howlett	Dr Dodge, Birbeck College, London
T W Boon	Mr W Williams, DI Plymouth
Mlle Y Aldebert, ISTPM-Sete	Mr G Buchanan-Wollaston, FO Newlyn
	Mr L Ross, SO Brixham