

McBride

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

1975 RESEARCH VESSEL PROGRAMME

REPORT: RV CORELLA: CRUISE 1

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

STAFF

- R R Dickson
- I C White
- R S Millner
- P Ayres
- Mrs F Franklin

DURATION

Left Lowestoft 1145h 2 January

Arrived Lowestoft 1830h 9 January

All times Greenwich Mean Time

LOCALITY

Southern North Sea (Southwold-Thorpness test site and Brown Ridges)

AIMS

1. To continue the benthos survey in the Southwold-Thorpness dredging grounds.
2. Sampling of gut contents of demersal fish species.
3. Investigations of near-bottom velocity shear.
4. Collection of live sandeels.
5. Dinoflagellate sampling for Dr Dodge (London University).

NARRATIVE

CORELLA sailed at 1145h 2 January and after compass correction in Corton Roads proceeded to anchor off Dunwich at 2139h. The shear velocity current meter was then used to investigate the near bottom velocity profile over the peak of the southgoing tide with a DRCM at 9m depth providing a simultaneous record of near bottom current.

On 3 January, the programme of benthic sampling began in and around the dredging grounds off Southwold; between 0847 and 1612h, 14 stations were occupied with up to 5 grab samples at each. CORELLA then proceeded to anchor at 1800h and at 2210h a second series of near bottom velocity measurements began. These were subsequently abandoned at 2335h due to an apparent leakage in the underwater cable. Between 0835 and 0855h 4 January the damaged Selco marker buoy in Area 211 was recovered before completing the benthic sampling

programme. By 1520h a further 10 grab stations were worked as before, and from 1544h until 1836h, the epibenthos was sampled at four stations using the 2m beam trawl. Between 0915h and 1129h 5 January, a further 5 stations were worked using the beam trawl followed by 4 tows with the Granton trawl until 1853h. The gut contents of demersal fish species were sampled from the trawl catch at each station. From 0906h until 1242h 6 January a further three tows were completed with the Granton trawl and between 1345 and 1512h in worsening weather the programme of beam trawling was resumed. A further two stations were successfully completed but the beam trawl was lost on the third through parting of the corlene bridles. Deteriorating weather conditions made further work impossible and CORELLA proceeded to the Shipwash area to await an improvement.

At 0630h 7 January with no moderation in prospect, CORELLA proceeded to the Barrow Deep-Thames area where between 0908h and 1329h in sheltered conditions 10 grab stations (2 samples at each) were worked for Dr White, to complete an existing survey of the area by the Burnham Laboratory. With a forecast of moderating weather conditions CORELLA then proceeded to the Brown Ridges overnight making one trawl haul for live cod at the Gabbard en route. Between 0820h, 8 January and 1202h, 9 January a total of ten hauls with the Granton trawl were completed in an attempt to obtain live sandeels. CORELLA then proceeded to Lowestoft, taking a dinoflagellate sample for Dr Dodge en route at 1500h before docking at 1830h.

RESULTS

1. The benthic survey of the Southwold-Thorpness dredging grounds was successfully completed. A total of 123 samples were taken at 24 stations using the Day Grab and 12 stations were worked using the 2m beam trawl. (11 successful). Samples for sediment analysis were retained at each grab station.
2. From the 7 hauls using the Granton trawl on the Southwold dredging grounds the gut contents of 329 fish were removed and preserved. The fish species concerned were mainly cod and whiting but a few flounders, dabs, plaice and rays were sampled in addition.
3. Measurements of near bottom velocity shear were made during the southgoing tide at one station during spring tides (Station Decca position Red 9.20J Green 36.550).
4. The 10 Granton trawl hauls at the Brown Ridges yielded only 4 fish (all dead). However, 15 live cod and a number of dabs were obtained for Mr Scholes and Mr Itun-Ilan.
5. 18 grab samples at 9 stations were obtained in the area of the Barrow Deep-Thames sewage sludge dumping ground for Dr White.
6. A 15 minute tow of the 200 mpi net yielded a dinoflagellate sample for Dr Dodge.
7. 2 cod were frozen whole for Mr Emerson.

8. One flounder with lymphocystis was kept alive for culturing at the Fish Diseases Laboratory, Weymouth.

Robert R. Dickson
24 January 1975

SEEN IN DRAFT

G S
E J

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AJL

DISTRIBUTION

Basic List plus

R R Dickson

R S Millner

I C White

P Ayres

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} Burnham-on-Crouch
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