

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

1993 RESEARCH VESSEL PROGRAMME

REPORT: RV CORYSTES: CRUISE 5a

STAFF: Dr J Brown Mr D S Kirkwood
 Mr N Faber Mr R Rycroft
 Ms T Brooks Mr S Jones
 Dr A Rendell (UEA)

DURATION (all times GMT)

Left Lowestoft 1845h 4 May
Arrived Lowestoft 1200h 10 May

LOCALITY: North Sea, Wash and Humber

AIMS:

1. To identify and quantify the fate of river-borne nutrients entering the Wash and Humber estuary, examining nutrient distributions and critical processes from the river inputs through to the North Sea in subtidal sediments and overlying waters.
2. To measure factors affecting benthic nutrient recycling in subtidal sediments along transect across the North Sea.

NARRATIVE (all times GMT):

After departing Lowestoft, Corystes made for the northern most of the planned stations (HOS11) (see Fig. 1), with work commencing immediately after breakfast (5/5). Stations were occupied south to OS12 at the mouth of the Wash, with a combination of CTD and surface water samples. Some problems were encountered with the rosette, with bottles failing to fire at times and firing at others without a confirmation on the deck unit. The problem persisted throughout the cruise. The ship proceeded to anchor at WG9 (2300 5/5) in the central Wash in order to test the newly installed ADCP (acoustic Doppler current profiler) and trial the S4 current meter, the latter deployed from the coring winch.

On completion of the anchor station (0630h 6/5), a survey of the JoNuS Wash grid was undertaken, missing out two stations (WG22 and WG16) as the water depth was regarded as too shallow. Upon completion at approximately 2045h, work was halted whilst contaminated hydraulic fluid in the CTD gantry was replaced. This was undertaken at anchor, with 6 hours lost from the scientific programme.

Work recommenced at approximately 0300h (7/5) and the North Sea transect started. On the eastward leg the weather deteriorated, with winds exceeding 30 knots from the north east on arrival in Dutch coastal waters (stations NS8 - 10). Fortunately, work was not unduly hampered and by the following morning conditions had moderated (wind 20 knots).

Station positions for *Corystes* 5a/93

SHOWING :
STATION POSITION
COASTLINE

