

**CENTRE FOR ENVIRONMENT, FISHERIES & AQUACULTURE SCIENCE  
LOWESTOFT LABORATORY, LOWESTOFT, SUFFOLK, ENGLAND**

**2002 RESEARCH VESSEL PROGRAMME**

REPORT: RV CORYSTES: CRUISE 13x/02

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DURATION: Left Lowestoft 0907h 10 October.  
Arrived Lowestoft 1742h 17 October.

LOCALITY: North Sea (English NE Coast)

AIMS:

1. To conduct a standard underwater TV survey of *Nephrops* burrow densities on the Farn Deeps grounds, 55° 35' - 54° 45' N and 1° 30' - 0° 40' W, to evaluate *Nephrops* abundance for comparison with previous years.
2. To characterise sediment features at TV survey stations using a remote acoustic seabed discrimination system (QTC).

NARRATIVE:

CORYSTES sailed from Lowestoft at 0907h on 10 October, nearly 2 hours before high tide, straight into a south easterly gale. She travelled north to the southern end of the survey area. The gale persisted but work commenced the following morning at 0545h at one of the inshore stations. The gear was safely deployed but the visibility was poor probably as a direct result of the weather. The station was abandoned and more northerly and more offshore stations were attempted. Although the visibility improved dramatically, the weather deteriorated and the gear became increasingly difficult to handle. Work was abandoned at 1304h because of the concern for the safety of staff and gear. Worst gales were forecast so CORYSTES sailed north to shelter in the lee of the Farne Islands.

By 2315h on the 12 October the weather showed signs of moderating so CORYSTES sailed east to the most northerly stations. Work commenced at 0200h on 13 October. The swell left by the gales continued to moderate and work continued steadily until the two lights on the sledge tripped. As the junction box had recently been overhauled and tested, the fault was diagnosed as being a short in the umbilical cable. Further testing and possible repair was going to take over 24 hours to complete. Whilst repair of the cable was being investigated the second aim became the focus of the survey. Using Transas, the ships navigation system, grids of transects were plotted over the 10 station clusters of the March 2002 *Nephrops* survey. It may still be valid to compare the QTC indices with the population indices calculated from the March survey (*Nephrops* would not have been fished heavily over the summer months). CORYSTES started following these grids from 1700h on 13 October.

Fortunately the fault in the cable was found to be in the termination lead from the umbilical to the junction box on the sledge. So this was removed and replaced with the spare termination. Before the new joint was potted up (fixed in resin) it was tested



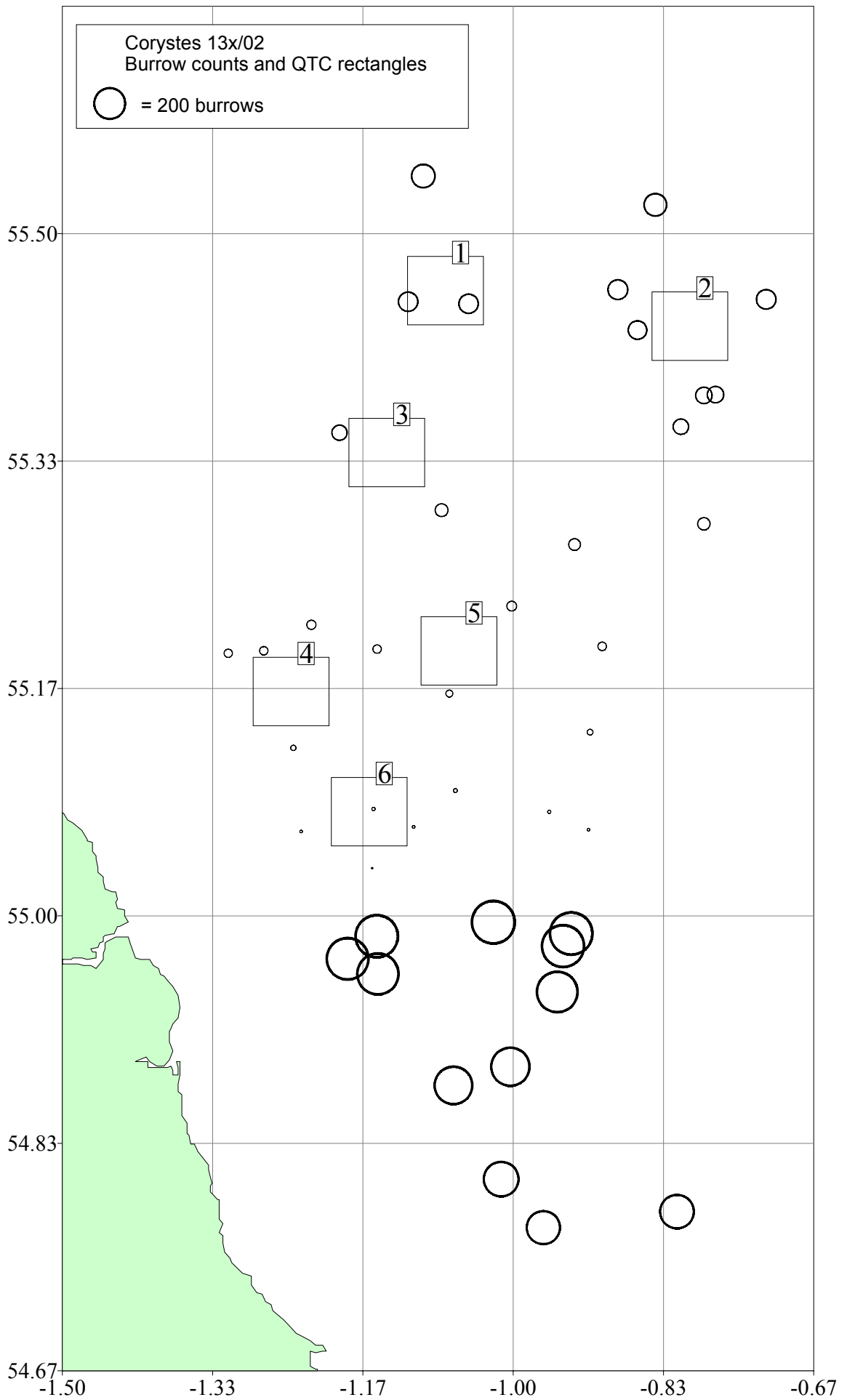


Figure 1