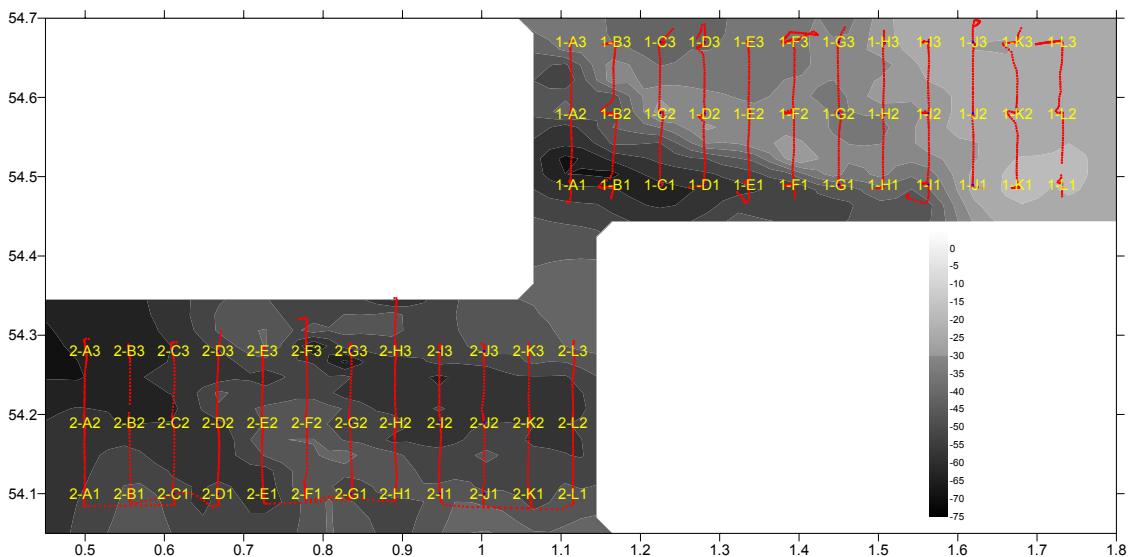


Topography:

Data from the 38khz acoustic sounder were used to profile the topography of the study sites. The map below gives depth in metres, the cruise path and the station positions. Grid 1 (upper right grid) is typically shallow, the eastern most section being on top of the Dogger Bank, while another shallow ridge runs at about 30° across legs A-H. Grid 2 (lower left grid) is generally much deeper but with shallower ridges running across the centre of the grid.

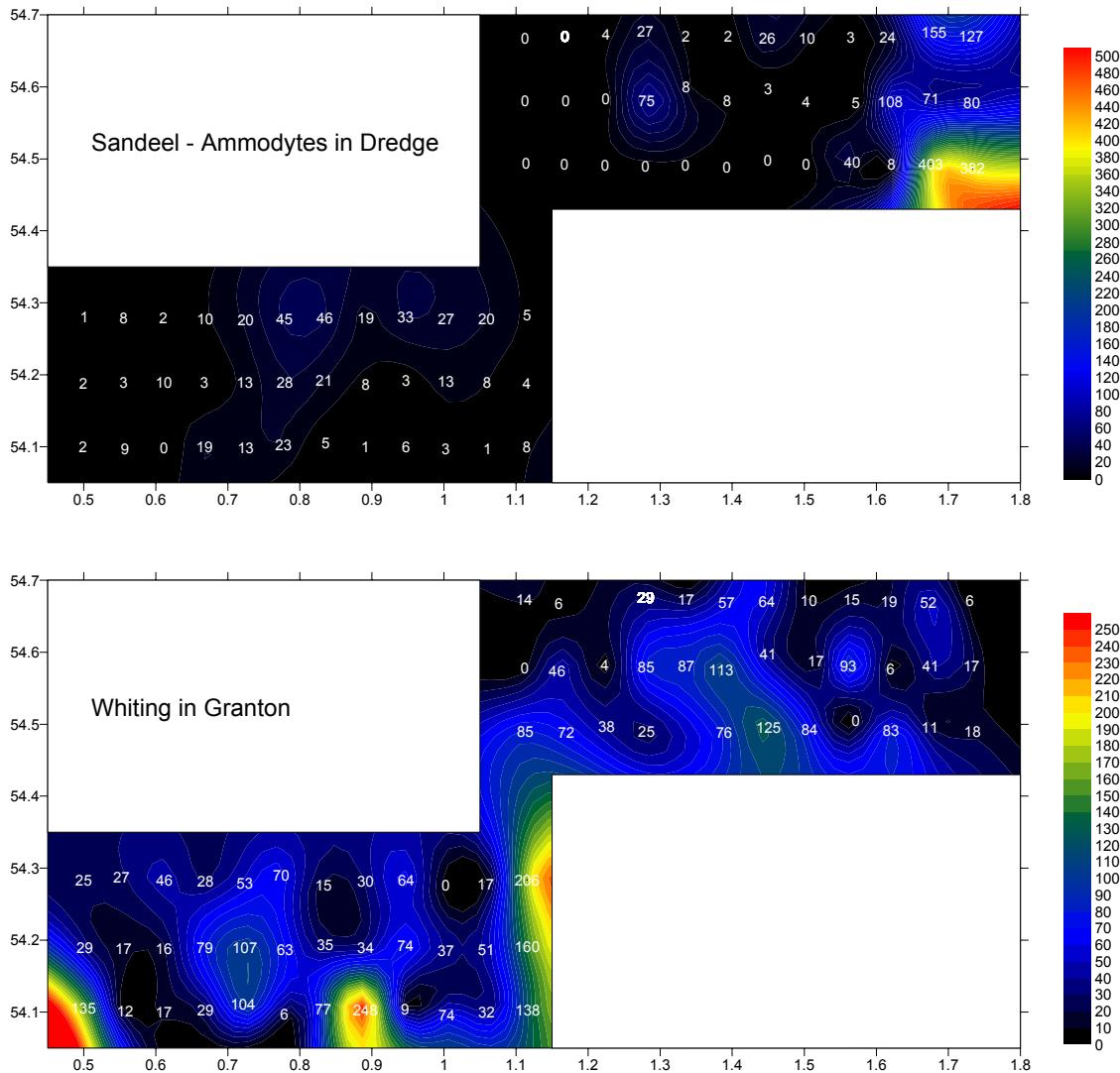


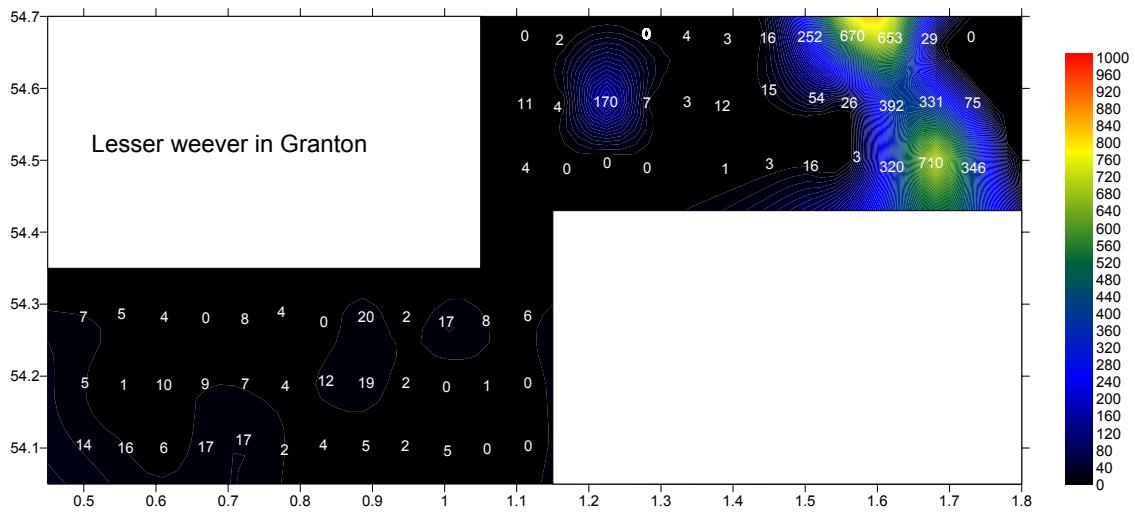
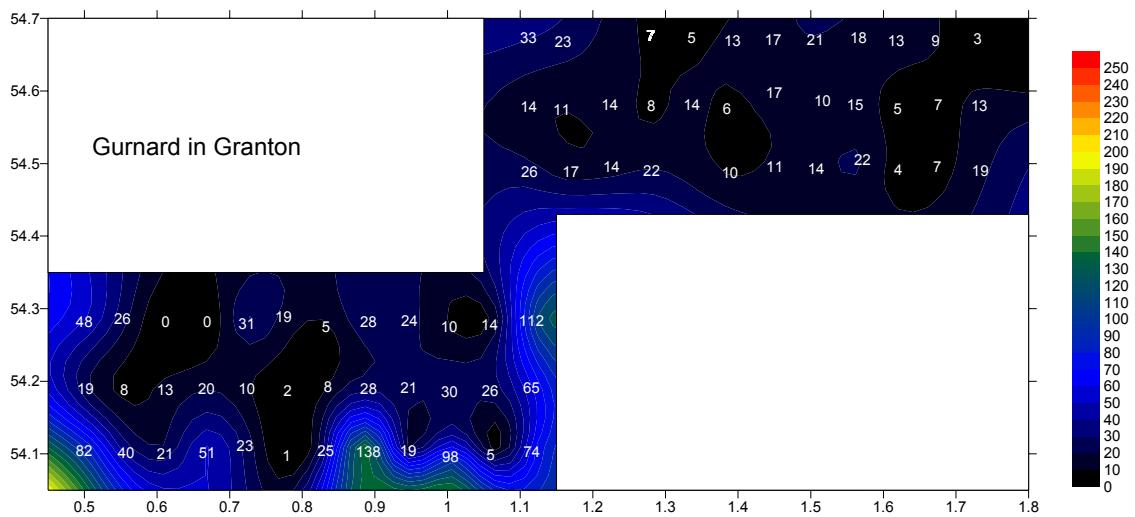
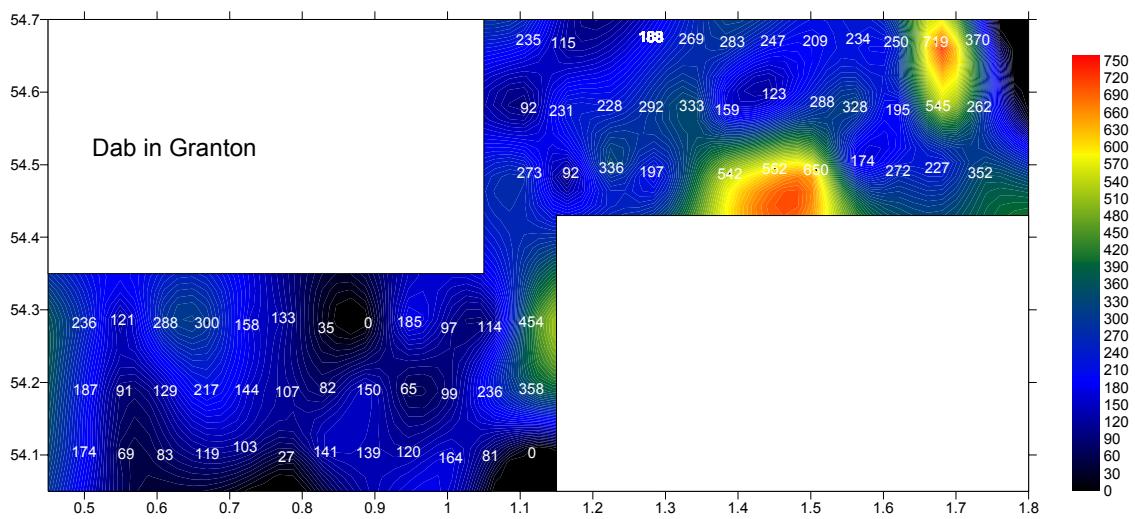
Spatial distribution of abundance by species:

The following table (1) gives the number of individuals caught within each grid by species.

	Grid 1	Grid 2	<i>total</i>
Dab	9246	5206	14452
Lesser weever	4131	239	4370
Whiting	1385	2184	3569
Gurnard	443	1144	1587
Sprat	231	459	690
Solenette	563	17	580
Plaice	214	355	569
Lemon sole	287	18	305
Haddock	120	111	231
Herring	3	191	194
Poor cod	73	52	125
scaldfish	52	19	71
Cod	27	11	38
Dragonets	17	7	24
Long rough dab	18	2	20

The following extended figure shows the spatial distribution of catch rates (numbers per standard 20 minute trawl). Species and gear type is given in each plot, note that the contouring has been given different scales depending on overall abundance.





Length Frequency:

The following figures give the length frequencies by species, subdivided by site. The species codes are given in the legend. Several species, (including cod, herring, lemon sole, poor cod, solonette, sprat and lesser weaver) have too few measurements for meaningful comparisons. There is little difference in the length distribution of dab, plaice and whiting, but some differences in gurnard and sandeel. Changes to the length frequency will be monitored on future cruises.

