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Chartered Fishing Vessel *Zenith* (BCK 106)

Cruise 1102H (Part I)

14-21 October 2002

## REPORT

### Personnel

D J Bova                   (In charge)  
G I Sangster  
K Summerbell  
J Mair

### Objectives

1. To compare the *Nephrops* catches of 80 mm square mesh and 100 mm diamond cod-ends and small mesh, by using the twin trawl method.
2. To obtain selectivity data from each cod-end for *Nephrops* and if possible round fish.
3. To film sequences of working operations during trip.

**Out-turn days per project:** MF06q-8 days

### Narrative

*Zenith* departed from Fraserburgh on 14 October and after a passage of ten hours arrived at the Fladen ground in the vicinity of the Ivanhoe oil field on the morning of 15 October. Fishing operations commenced using the 80 mm square mesh test cod-end attached to the starboard net and the small 40 mm diamond mesh (total population) cod-end on the port side net. After each haul the test cod-end and total population cod-end were changed from side to side to minimise bias. Initially, fishing duration was 3 hours but was reduced to 2 hours to limit the amount of bulk in the small mesh cod-end.

On the second haul, the small mesh (40 mm cod-end) caught a large industrial paint tin, which contaminated the catch; this was regarded as a foul haul and has not been included in the results.

Work continued uninterrupted with 3 hauls per day until the 17 October when fishing operations were suspended for 12 hours due to poor weather conditions. On the evening of 20 October *Zenith* sailed for Fraserburgh - docking early on Monday morning to land the catch and change crew. Unfortunately the weather conditions deteriorated rapidly and, with the forecast bad for the next 4 days, it was mutually agreed that the remaining 7 days charter would be taken early in 2003.

## Results

Overall 17 hauls were made, 16 of which were valid hauls. A total of 40,549 *Nephrops* were measured. Further statistical analysis of the data will be required to obtain selectivity parameters.

A summary of the catch by species and weight is presented, discards composed of non-commercial species and benthic animals in the table below:

Test Cod-end 80 mm Square Mesh	Catch in kg		Test Cod-end 100 mm Diamond Mesh	Catch in kg	
Hauls 1 to 9	Total Population	Test	Hauls 10 to 18	Total Population	Test
Nephrops	1677	663	Nephrops	1854	1138
Cod	17	9	Cod	0	0
Haddock	275	179	Haddock	200	186
Whiting	118	39	Whiting	139	129
Saithe	14	21	Saithe	0	0
Flatfish	16	3	Flatfish	0	0
Ling	0	8	Ling	0	0
Monkfish	36	13	Monkfish	0	0
Discards	2077	85	Discards	1967	715
Mixed	55	14	Mixed	104	92

Some short sequences of video film were recorded of the gear being hauled and the catch sorting process.

D J Bova  
8 January 2003