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Not to be cited without prior reference to FRS Marine Laboratory, Aberdeen

Charter Fishing Vessel *Zenith* (BF106)

Cruise 0907H

## **PROGRAMME**

3-17 December 2007

### **Ports**

Loading: Fraserburgh  
Port Call: Fraserburgh (9 or 10 December)  
Unloading: Fraserburgh

**\*In setting the cruise programme and specific objectives, etc the Scientist-in-Charge needs to be aware of the restrictions on working hours and the need to build in adequate rest days and rest breaks as set out in FRS' Working Time Policy (which is published on the Intranet). In addition, the Scientist-in-Charge must formally review the risk assessments for the cruise with staff on-board before work is commenced.**

**In the interest of efficient data management it is now mandatory to return the Cruise Report, to John Morrison and the Cruise Summary Report (old ROSCOP) form) to Dougal Lichtman, within four weeks of a cruise ending. In the case of the Cruise Summary Report a nil return is required, if appropriate.**

### **Personnel**

R J Kynoch (In charge)  
D Bova  
E Armstrong

### **Objectives**

1. To measure during day and night fishing the selectivity of a 95mm diamond mesh codend with a 120mm square mesh panel (SMP) positioned at 4-9m from the codline.
2. To measure during day fishing the selectivity of a 95mm diamond mesh codend with a 120mm SMP positioned at 9-14m from the codline.
3. To observe fish behaviour when encountering the SMP's using self-recording ccd cameras with/without infrared lights.

### **Procedure**

Staff and equipment will join *Zenith* (BF106) at Fraserburgh on 3 December 2007. Staff will then commence rigging the test configurations to the vessels *Nephrops* trawls and install the Scanmar/TV equipment aboard the vessel in Fraserburgh harbour. During the setup period fish and *Nephrops* measuring stations will be setup on the fish deck.

The vessel will sail during the evening of 3 December to commercial fishing grounds called the 'NE Holes' in the Fladdens area (ICES Area IVa). If the prevailing weather conditions prevent working these grounds then an alternative area will be selected in consultation with the vessels skipper. From 3 December until the end of the charter trials selectivity data will be collected for the two different test codend configurations. Both SMP positions will be fished in daylight but the 4-9m position will also be fished in dark conditions to obtain additional data on its performance during night fishing. Selectivity will be measured for haddock, cod, whiting and *Nephrops* as available. The twin trawl method will be used in which two similar nets are towed by the one vessel. One trawl, the control, will sample the population of fish and *Nephrops* available on the grounds using 40 mm small mesh codends. The other net will have the three experimental configurations attached to it.

The intention is to change the test configurations each day to allow for any variation in catch composition over the experimental period. However this will be dictated by the need to obtain sufficient night hauls with the 4-9m position and therefore this protocol may be altered somewhat during the cruise. A scientific derogation has been obtained to fish with 5mm double twine and 40 mm diamond mesh codends.

Ship's accommodation will be used throughout the fishing trials. A port call will be made into Fraserburgh on 9 or 10 December to land any marketable fish/*Nephrops*. The cruise will end at Fraserburgh on 17 December when staff and equipment will return to Aberdeen. Normal contacts will be maintained with the Laboratory. Contact number for Zenith is through the vessel's agents Denholm Fishselling Ltd, Buckie 01542 840330.

J A Morrison  
20 November 2007