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Not to be cited without prior reference to FRS Marine Laboratory

## **PROGRAMME**

Cruise 0808H - Charter Fishing Vessel Zenith (BF106)

14-28 April 2008

### **Ports**

Loading: Fraserburgh  
Port call: Fraserburgh (21 or 22 April)  
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 the selectivity of an 80mm diamond mesh codend with a 110mm square mesh panel (SMP) rigged into the trawls tapered section and positioned 15-18m from the codline.
2. To measure the selectivity of an 80mm diamond mesh codend with a 120mm square mesh panel (SMP) rigged into the trawls tapered section and positioned 15-18m from the codline.
3. To measure the selectivity of a 90mm diamond mesh codend with a 110mm square mesh panel (SMP) rigged into the trawls tapered section and positioned 15-18m from the codline.
4. If time allows to measure the selectivity of a 90mm diamond mesh codend but with less open meshes in the circumference and with the same SMP configuration as Objective 3.

## Procedure

Staff and equipment will join Zenith (BF106) at Fraserburgh on 14 April 2008. Staff will then commence rigging the test configurations to the vessels *Nephrops* trawls and set up fish and *Nephrops* measuring stations aboard the vessel in Fraserburgh harbour.

The vessel will sail during the evening of 14 April to commercial fishing grounds either in the Fladdens area or Bressay grounds (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. Thereafter selectivity data will be collected for the different codend/SMP test configurations. The main target species will be cod, haddock, whiting and *Nephrops*. 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 a 40 mm small mesh cod-end. The other net will have the various experimental configurations attached to it.

All the experimental codends used for Objectives 1 to 3 will be constructed from 4mm single PE twine and have 120 open meshes in their circumference. The 90mm codend used for objective 4 will also be constructed from 4mm single PE twine but will only have 100 open meshes in its circumference. All codends will be rigged with a lifting bag or cover. The 110mm and 120mm SMPs will be constructed from 4mm single knotted PE twine and be 3.1m long and inserted into the end of the trawls tapered section at 15-18m from the codline.

The intention is to change the test configurations each day to allow for any variation in catch composition over the experimental period. After sufficient hauls have been obtained for Objectives 1-3 then hauls will be made for Objective 4. A scientific derogation has been obtained to fish with the 90mm codend with 120 open meshes in the circumference and the 40 mm diamond mesh control codend.

Ship's accommodation will be used throughout the fishing trials. A port call will be made into Fraserburgh on 21 or 22 April to land any marketable fish/*Nephrops*. The cruise will end at Fraserburgh on 28 April 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  
1 April 2008