

P17/8

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

Charter Fishing Vessel *Osprey III*, BF500

Cruise 0404H

## **PROGRAMME**

20 September to 11 October 2004

### **Port**

**Loading:** MacDuff

**Unloading:** Buckie

**Halflanding:** Buckie 2-3 October

**\*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.**

### **Personnel**

\*R J Kynoch (In charge)

I Penny

### **Objective**

1. To measure the selectivity of an 80 mm Nephrops trawl rigged with a 160 mm diamond mesh headline panel, 90 mm square mesh panel and 80 mm (nominal) diamond mesh codend using the twin trawl technique.
2. As objective 1 but with a 94 mm (nominal) diamond mesh codend.
3. To measure the effect on whitefish selectivity by extending the length of the headline panel from 15 to 30 meshes.

### **Procedure**

Fishing gear will be loaded at Macduff on 20 September 2004. Messers Kynoch and Penny will travel to Macduff on the same day, where fishing gear and instrumentation will be set up. The vessel will depart from harbour during the afternoon and steam to suitable fishing grounds close to Macduff. Thereafter gear trials will commence to ensure that the twin trawl system is fishing correctly using Scanmar instrumentation. On completion of gear trials the vessel will move to Nephrops fishing grounds off Buckie and carry out Nephrops/fish selectivity trials for the remainder of the cruise.

Selectivity will be measured for Nephrops, haddock and whiting as available. The twin trawl method will be used in which one vessel tows two similar nets side by side. One net will sample the population of Nephrops/fish available on the grounds using a 40 mm small mesh cod-end. The other net will have the experimental headline panel, square mesh panel and cod-ends attached to it.

The experimental 80 mm and 94 mm codends will have 120 open meshes round the circumference and constructed from 4 mm diameter single PE twine. Both codends will be rigged with lifting bags. The total extension/codend length for both cases will be 150 meshes. The 160 mm diamond mesh headline panel will be inserted 3 meshes back from the headline and initially be 15 meshes long. The length of this panels will be increased from 15 meshes to 30 meshes for Objective 3. The 90 mm square mesh panel will be constructed from 4 mm diameter single knotless PE netting. The panel will be inserted into the trawl with its leading edge 15 m from the codline.

A scientific derogation has been obtained to allow for the use of the 40 mm small mesh cod-end.

A combination of ship and shore accommodation will be used throughout the trials. There will be a halflanding into Buckie to allow for two rest days during which staff will return to Aberdeen. The cruise will end at Buckie on 11 October when staff and equipment will return to Aberdeen. Normal contacts will be maintained with the Laboratory. Contact numbers for Vessel: 07765 231352 and R Kynoch: 07713 401837.

J A Morrison  
8 September 2004