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

# PROGRAMME

# Scottish Industry/Science Partnership (SISP 006/08)

Cruise 0908H - Charter Fishing Vessel Ocean Trust (OB38) 1008H - Charter Fishing Vessel Margaret Anne (OB198)

9 - 14 June 2008 part 1

23 - 28 June 2008 part 2

Ports

Loading: Mallaig 9 June (Part 1) Mallaig 23 June (Part 2)

Port call: Mallaig (14 June)

Unloading: Mallaig (28 June).

\*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

D J Bova (In charge) J Drewery J Mair K Summerbell

### Objectives

To compare the selectivity of a small horsepower single rigged Nephrops trawler and a larger horsepower twin rigged Nephrops trawler using 80mm and 100mm diamond mesh codends fitted with a 120 mm, 160mm, 200mm mesh panel (SMP).

## Procedure

Staff and equipment will join Vessels 1 & 2 on 9 June 2008 at Mallaig. Staff will then commence rigging the test SMPs in the *Nephrops* trawls of both vessels. Fish and Nephrops measuring stations will also be set up aboard the vessels in Mallaig harbour. The test SMP's will be rigged into the tapered sections of the trawls and positioned 15-18m from

the codline. However, rigging of the SMP position may be fine tuned with respect to observations during the charter.

Both vessels will sail during the evening of 9 June to commercial fishing grounds in the vicinity of Mallaig (ICES Area VIa). If the prevailing weather conditions prevent working these grounds then an alternative area will be selected in consultation with the vessel skippers. 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 by the large horsepower Nephrops trawler – with one of the test SMPs and codend configurations nets being towed at the same time as the total population control net.

The lower powered Nephrops trawler will simultaneously tow a parallel track (at a safe working distance) with the same test codend and SMP as the large vessel. Catches from both vessels will then be taken aboard, sorted by species and then weighed and measured.

The 80 mm codends will be constructed from 4mm single PE twine to have 120 open meshes in their circumference. The 100 mm codend will be constructed from 5 mm double Brezline with 100 open meshes in its circumference. All codends will be rigged with a lifting bag. The 120 mm, 160 mm and 200 mm SMPs will be constructed from 4 mm single knotted olivine diamond mesh turned on the square. They will be 3.1m long and inserted into the end of the trawls tapered section at 15 -18 m 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. A scientific derogation has been obtained to fish with the 40 mm diamond mesh control codend.

Ship's accommodation will be used throughout the fishing trials on board the larger horsepower vessel. Port calls will be made into Mallaig to land any marketable fish/*Nephrops* and also at the 14 June the cruise will then be suspended until restart on the 23 of June in order to avoid any strong tidal effect on the fishing operations as requested by the fishermen. The charter will end at Mallaig on 28 June when staff and equipment will return to Aberdeen. Normal contacts will be maintained with the Laboratory. Contact number for the vessels areas follows:-

Ocean Trust: 07788 976865 Margaret Anne: 07769 655366

*J A Morrison* 3 June 2008