Not to be cited without prior reference to Marine Scotland, Marine Laboratory, Aberdeen.

MRV *Alba na Mara*

Survey 1312A

PROGRAMME

28 July – 11 August 2012

Ports

Loading: Fraserburgh, 25 July 2012
Sailing: Fraserburgh, 28 July 2012
Unloading: Leith, 11 August 2012

In setting the survey 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 Marine Scotland's Working Time Policy (Lab Notice 34/03). In addition, the Scientist-in-Charge must formally review the risk assessments for the survey with staff on-board before work is commenced.

In the interest of efficient data management it is now mandatory to return the Survey Report, to I Gibb and the Survey Summary Report (old ROSCOP form) to M Geldart, within four weeks of a cruise ending. In the case of the Survey Summary Report a nil return is required, if appropriate

Personnel

A Weetman (SIC)
C Shand
M Inglis

Estimated days by project: 15 days, RV1208, 20092

Gear

50 mm prawn trawl BT 201.
2 x Day grabs and 1 x sieving table
Towed TV sledge, 600m umbilical towing cable and cameras (plus backup)
TV drop frame (large version)

Objectives

- To obtain estimates of the distribution and abundance of *Nephrops* burrows at the Firth of Forth, Moray Firth grounds and off Arbroath, using underwater cameras.

- To use the TV footage to record the occurrence of other benthic fauna and evidence of commercial trawling activity.

- To collect trawl caught samples of *Nephrops* for comparison of reproductive condition and morphometrics in each of the different survey areas.

- To collect samples of *Nephrops* stomachs for evidence of the parasite (*Stichocotyle nephropis*).

Procedure

Where possible, a random stratified approach will be adopted to investigate *Nephrops* burrow density in different regions of the study areas.
A list of proposed stations for the survey will be made available to the ship's complement prior to the cruise.

1. TV Observations:

At each station a video camera mounted on a sledge will be towed across the seabed for approximately 10 minutes at approximately 1 knot. *Nephrops* burrows abundance, other benthic fauna and signs of anthropogenic activity will be recorded on to DVD. Distance traveled by the sledge, the depth at which the sledge is at and camera height from the seabed will be monitored and recorded using a range finder mounted on the sledge.

2. Trawling:

Fishing trawls of approximately 30 minutes duration will be made on each sediment type within each survey area. A range of biological data will be collected on *Nephrops* and other shellfish contained in the catch. Up to 1000 *Nephrops* stomachs will be collected and preserved in ethanol and returned to Marine Scotland Science for analysis after the survey. All COSHH paperwork will be available prior to sailing.

3. Drop Frame:

The drop frame will be used where conditions are not suitable for using the TV sledge, recording similar data as to that of the TV sledge.

General

TV work will normally take place during daylight hours.
There will be a requirement for some trawling to take place in the evening. On days where trawling will take place, work patterns will be arranged so not to exceed WTD recommendations.
It is proposed that work will commence in the Moray Firth.

Normal contact will be maintained with the laboratory.

Submitted:
A Weetman
21 June 2012

Approved:
I Gibb
12 July 2012