

MRV *Alba na Mara*

Survey 1417A

PROGRAMME

12-28 August 2017

Ports

Loading: Fraserburgh, 9 August 2017

Sailing: Fraserburgh, 12 August 2017

Half landing: Fraserburgh, 19 August 2017 (date TBC)

Unloading: Fraserburgh, 28 August 2017

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 Iain Gibb and the Survey Summary Report (old ROSCOP form) to Matt Geldart, within four weeks of a survey ending. In the case of the Survey Summary Report a nil return is required, if appropriate.

Personnel

A Weetman (SIC)
M Inglis (Part 1)
M Watson (Part 1)
N Collie (Part 2)
K Boyle (Part 2)

Project: RV1712, 20441

Gear

80 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)
Lasers and large bracket for drop frame
Prawn sorting table
Go Pro housing

Objectives

- To obtain estimates of the distribution and abundance of *Nephrops* burrows in the Firth of Forth and the Moray Firth 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.
- If time permits, deployments of the sledge followed by the drop frame will be carried out on the same ground to compare *Nephrops* burrow density estimates obtained by using the two different methods.

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 prior to sailing.

1. TV Observations:

At each station a video camera mounted on the TV sledge will be towed across the seabed, into the tide and for approximately ten minutes at approximately one knot. *Nephrops* burrow 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 automatically.

2. Trawling:

Fishing trawls of approximately 60 minutes duration will be made within each sediment type and within each survey area. A range of biological and morphometric data will be collected on *Nephrops* caught.

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.

4. Comparative work:

Following on from work carried on previous surveys, on known *Nephrops* grounds the sledge will be towed along parallel tracks approximately 200m in length (10 minutes towing time) and 100m apart. Video footage and all observed data will be recorded as usual. Following this, the drop frame will then be drifted across the same area at 90° to the sledge tracks. The frequency of this operation will depend on the weather and available time.

General

TV work will normally take place during daylight hours.

There will be a requirement for trawling to take place in the evening. On days where trawling will take place, work patterns will be arranged so not to exceed WTR recommendations.

It is proposed that work will initially commence in the Firth of Forth and then the Moray Firth. The exact date of the half landing will be weather, location and work dependent.

Normal contact will be maintained with the Laboratory.

Submitted:
A Weetman
30 June 2017

Approved:
I Gibb
10 August 2017