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

MRV Alba na Mara

Survey 1414A

## PROGRAMME

8 – 22 Aug 2014

## Ports

Loading: Ullapool, 5 August 2014 Depart: Ullapool, 8 August 2014 Unloading: Fraserburgh, 22 August 2014

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 survey ending. In the case of the Survey Summary Report a nil return is required, if appropriate.

#### Personnel

P Boulcott	SIC
J Hunter	
L Kamphausen	SNH
K Frake	SNH

## Sampling Gear& Equipment

- Drop camera/video frame
- 2 X Day Grab and table
- Sandeel dredge

## Estimated Days per Project: 15 days, SP004

#### Overview

Cruise 1414A serves work carried out by Scottish Natural Heritage investigating the distribution and quality of benthic biotopes around Scotland. The data are required to underpin designation and management of the new suit of marine protected areas. The survey aims in particular to study the outer margins of several possible MPAs where information currently held is thin and to sample potential carbonate sands around Shetland.

# Objectives

- 1. To investigate areas that may provide potentially suitable habitats for priority marine species using the drop-camera frame.
- 2. To collect seabed samples using the day grab for sediment size classification, infaunal analysis and carbonate content analysis. Collected infaunal samples will be stored in 4% formalin. If possible a hammon grab will be used to sample the horse mussel bed in Noss Head.
- 3. To carry out dredging for sandeels in the Mousa to Boddam and North-East Lewis areas.

Figure 1 provides an overview of the areas targeted for survey, and details of sampling stations in each area are given in Figures 2 - 6. Finalisation of sampling stations in the Fair Isle area are pending discussion with the Fair Isle community.

Anticipated duration of work in each area is provided in Table 1. If sandeel dredging is possible, the Southern Trench and/or Moray Firth work will be shortened or dropped to make up the time.

	planned days	video stations	grabs
Wester Ross	1	22	4
Mousa to Boddam	0.5	5	5
Fetlar to Haroldswick	1.5	23	11
Fair Isle	1.5	~20	~10
Noss Head	1	13	8
Moray Firth	2	~10	
Southern Trench	1.5	21	6
totals	9 +transits of ~540 M which at 8 knots	~109	~44
	are 67 h, so 5.6 days of 12 h = 14.6 days		

Table 1

## Procedure

Scientific equipment will be loaded onto *Alba na Mara* on 5 August 2014. Scientists will join the vessel on Friday 8 August, with the vessel proceeding to the first sample station at the earliest opportunity. Daily scientific sampling will occur between 06:00 and 18:00 hrs (all times UTC). Sample stations and the operations to be used are indicated in Figures 1 - 6. The vessel will require to dock overnight at a suitable location to top up on fresh water prior to returning to Fraserburgh.

Scientific operations will cease on the afternoon of 20 or 21 August, to allow sufficient time for the vessel to transit to Fraserburgh. Unloading will occur in Fraserburgh harbour on the morning of 22 August.

Normal contacts will be maintained with the Marine Laboratory.

Submitted: P Boulcott, 18 July 2014.

Approved: I Gibb 31 July 2014







Figure 2







Figure 4



Figure 5



Figure 6