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MRV *Alba na Mara*

Survey 1714A

## **PROGRAMME**

26 September - 14 October 2014

**Loading:** Fraserburgh, 24 September 2014

**Unloading:** Greenock, 14 October 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.

P Boulcott                    SIC  
J Clarke  
D Stirling                    Aberdeen University  
C Greathead  
J Hunter

**Project:** 19 days, SP0040

## **Gear**

Pyramid frame and underwater video camera kit.  
Pyramid frame calibration mesh (2 x wire panels)  
Large, dual bongo + counterweight + 200 µm net and cod ends  
Large plastic fish tank (white) + grey fish tanks  
Scanmar depth units (x2)

## Objectives

### Benthic Survey of Burrowed Mud Habitats

1714A will survey the waters around the Marine Protected Area (MPA) sited at the island of Canna (Figure 1). Video surveys of the seabed will be carried out during this work in addition to the collection of RoxAnn sediment data. It is the primary objective of this cruise to survey monitoring sites previously surveyed in 2012 and 2013 that support Scotland's Priority Marine Features. Work from these surveys will be used to determine the effect of MPAs established in Scottish waters. A secondary objective will be to survey additional sites in the area surrounding the Small Isles and another to the north of the Isle of Skye that could provide suitable substrate for the tall sea pen, *Funiculina quadrangularis*, and for the fan mussel, *Atrina fragilis*. These data, in conjunction with data gathered from less suitable sites, will be used to refine habitat suitability models for these species. Species type, species densities and substrate type will be recorded during the survey. Further post survey analysis will be conducted on this data.

### Larval Dispersal

1714A will sample plankton from the water around Canna. The programme of work follows on from plankton surveys conducted in June 2012 (survey 1012A), and September 2013 (1213A). Sampling will be conducted using the large (1 m diameter) dual bongo net.

Further to this work, 1714A will also retrieve a spat collecting mooring from Canna which was deployed from the *MV Spanish John II* on the 29 April 2014. Candidate *A. fragilis* spat found on the spat collectors will be measured, weighed and placed in holding tanks for further cultivation in the laboratory.

Both work streams underpin work package four of the research ROAME SP004.

### General

Weather permitting *Alba na Mara* will depart Fraserburgh at 10:00 hrs on 26 September heading for the west coast. If the weather is suitable the vessel will continue her passage down to Gruinard Bay where she will begin operations. During this time the vessel will conduct a video survey in the waters surrounding Skye (Figure 1) and, as the survey proceeds south, the Small Isles (Figure 2).

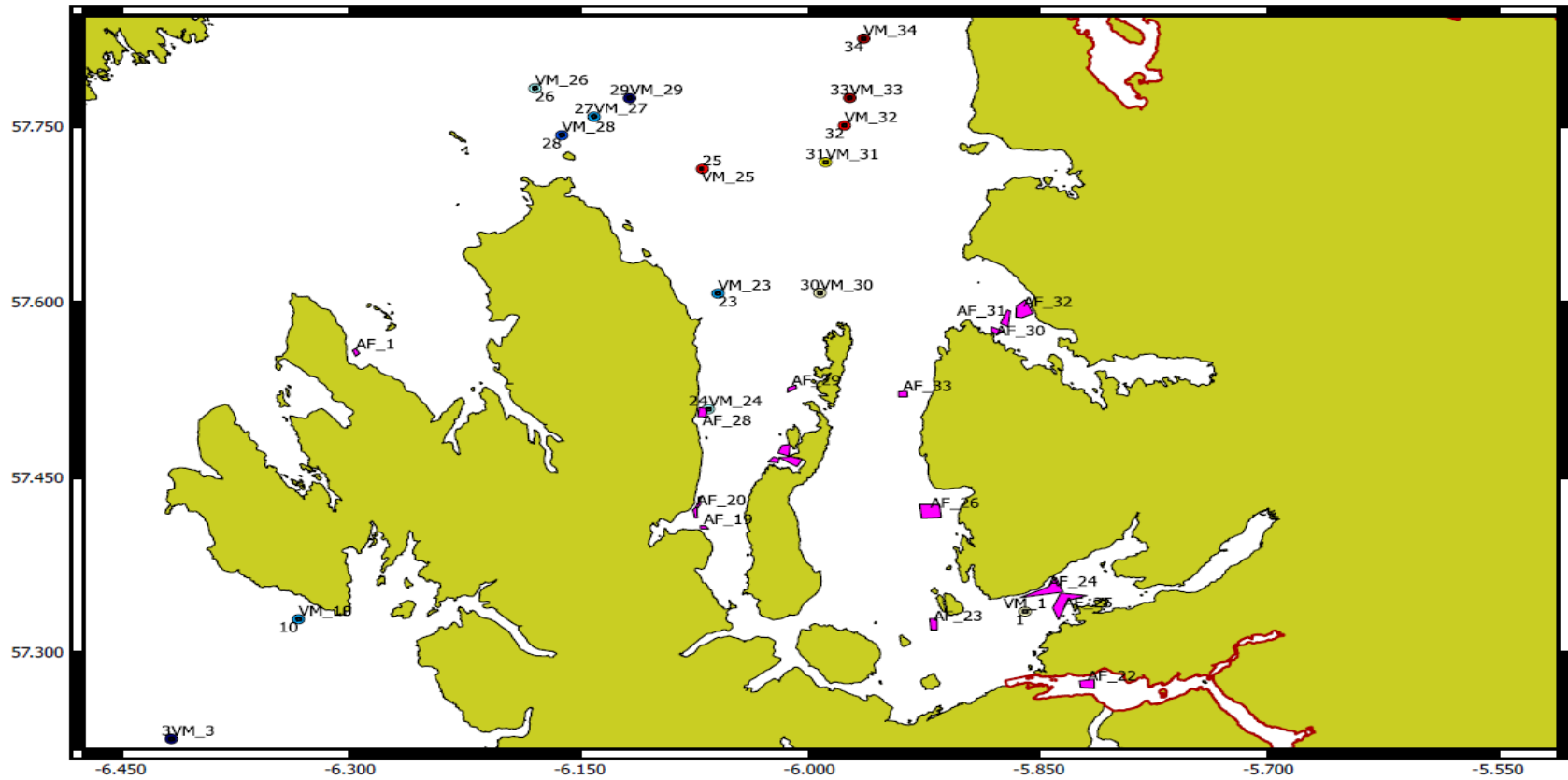
Passage will be made for Mallaig for the purposes of a half landing and to disembark scientific staff on 6 or 7 September (provisional). The vessel will return to Canna after the half landing to resume survey work.

Normal contact will be maintained with the Laboratory.

Submitted:  
P Boulcott  
15 September 2014

Approved:  
I Gibb  
17 September 2014.

**Figure 1:** Map of the study area in the waters around the Isle of Skye.



**Figure 2:** Map of the study area in the waters surrounding the Small Isles.

