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MRV Alba na Mara

Survey 0818A

PROGRAMME

8 - 14 June 2018

Boarding: Ullapool, 07 June 2018. **Loading:** Ullapool, 05 June 2018. **Unloading:** Ullapool, 14 June 2018

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, MSS
N. Collie	MSS
L. Kamphausen	SNH
M. Fenton	SNH

Project: 7 days, SP02Q / 20113

Gear (loaded on for 0618a)

Seatronics drop frame (to be loaded 05.06.18) – SNH hire Seatronics lights (to be loaded 05.06.18) – SNH hire HD TV system + lights (5 plastic cages) Armoured cable + spare + axle stands & bar Day grab + table + 2 x sieve drawers

Background and Objectives

Survey 0818A serves work carried out by Scottish Natural Heritage and Marine Scotland Science investigating the distribution and quality of benthic biotopes in inshore waters around Scotland. The resultant data are required to underpin the management of the new suite of Marine Protected

Areas (MPA), to meet commitments prescribed by the Scottish MPA Monitoring Strategy, and to identify Priority Marine Features (PMFs) outside the Scottish MPAs network. The 0818A survey aims in particular to establish the current status of benthic habitats within the Sound of Barra Special Area of Conservation (SAC), adding upon survey work conducted during 0717A.

- 1. To establish the current status of benthic habitat protected features within the Sound of Barra SAC, or contingency sites, using quantitative drop-camera sampling and grab methods.
- 2. To collect seabed samples using the day grab for sediment size classification and for infaunal analysis. Collected infaunal samples will be stored in 4% formalin.

Embarkation

MMS staff will join the vessel on 07 June around 12:00 to setup the drop camera frame system. Staff from SNH will arrive on evening of the 07 June. Weather permitting *Alba na Mara* will depart Ullapool (am) on 08 June, heading for the first survey site at the Sound of Barra.

Benthic survey

0818A will conduct a benthic survey of the seabed at various sites within the Sound of Barra. This survey will utilise the *Alba's* standard drop-camera system and umbilical winch deployed from the aft of the vessel. The camera system will be fitted with two line lasers to allow species densities to be estimated. A subset of the survey boxes shown (Fig. 1) will be surveyed during 0818A, time allowing. The camera frame will be landed at regular intervals during 10-40 min video tows to allow still photographs to be taken. Shorter five minute video tows will be collected from stations across the Sound of Barra SAC to fill remaining gaps in the seabed biotope map. Species type, density and substrate type (assessed visually) will be classified for each video transect post-survey.

Grab samples will be collected using a standard day grab and will be processed on deck using a 1mm sieve prior to their storage in formalin.

Contingency sites

Alternative survey sites in the event of poor weather at Barra Sound have been identified at a variety of locations all along the Scottish west coast, and can be chosen depending on weather conditions (Fig. 2), e.g around the Sound of Mull, Wester Ross, the Inner Sound and the Sound of Jura. Additional areas where 'gap filling' work could usefully improve the existing knowledge-base have also been identified to the east of Skye (which may also serve as contingency en route from Wester Ross).

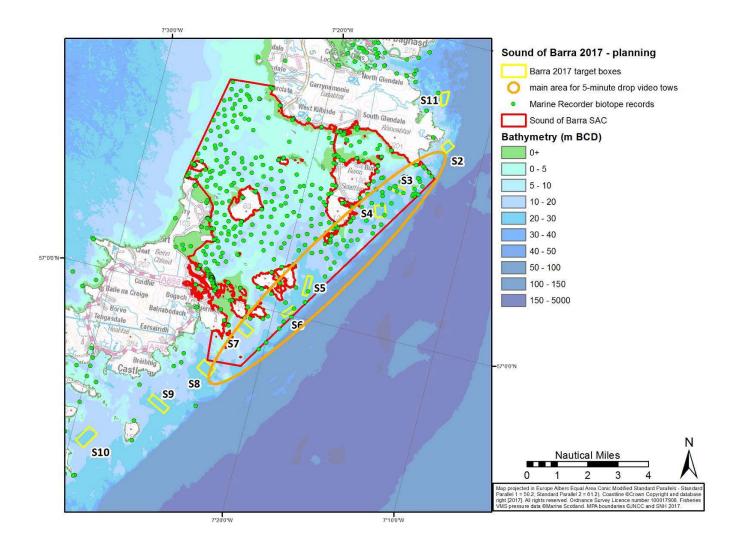
Operations

Survey operations will take place between the hours of 07:00 and 19:00 (all times BST). Work will cease on the afternoon or evening of 12 June to allow sufficient time for the vessel to travel to Ullapool. Unloading will occur on Thursday 14 June. All MSS and SNH scientists will disembark at this time.

Normal contact will be maintained with the Laboratory. Submitted:

P. Boulcott, 23 May 2018

Approved: I. Gibb 04 June 2018 Figure 1: Sound of Barra SAC 2018 sampling boxes.



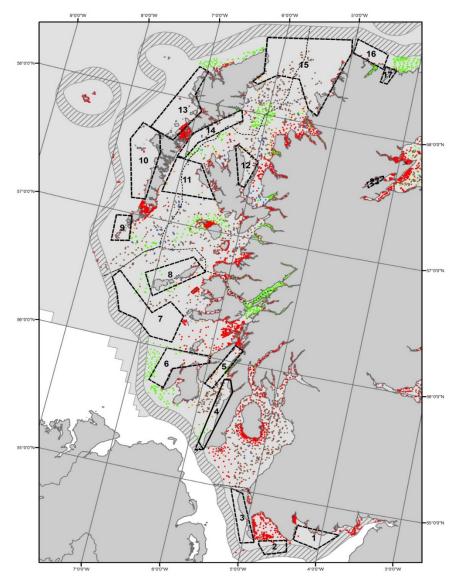


Figure 1. Possible Contingency survey areas