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MRV *Alba na Mara*

Survey 0321A

PROGRAMME

16 February – 09 March 2021

Ports
Loading: Fraserburgh, 15 February 2021
Departure: Fraserburgh, 16 February 2021
Port Call: Fraserburgh, 20 February 2021
Unloading: Fraserburgh, 09 March 2021

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.

Estimated Days Per Project: 22 days – 20626, OP06MA

Sampling Gear:

- Day Grabs
- Corer (TBC)
- GoPro Mounted TV Frame

Objectives

1. To collect blue carbon data as part of a collaboration through MASTS with Marine Scotland Science, the University of St. Andrews and Herriot Watt Orkney.

2. To obtain benthic samples through the use of a day grab in the Firth of Forth, Moray Firth and Sullom Voe.

3. To obtain benthic samples though the use of a corer in the Moray Firth.

4. To obtain seabed footage using a GoPro mounted frame around Orkney.

Procedures

Loading of all scientific gear will take place on 15 February. After all drills have been completed, the vessel will sail on the morning of 16 February. An operational daily survey plan will be formulated by the SIC subsequent to meetings with the captain. Plans are likely to change throughout the duration of the survey and these will be discussed between the SIC, captain, and colleagues ashore.

The order by which sampling all areas will be undertaken is weather dependent.

Sediment Sampling

1) Day Grab

Day grabs will be performed in the Firth of Forth, Moray Firth and Sullom Voe. Alternative stations have been provided in the case that an original site is unsuitable for sampling. These alternates may also be sampled as additional stations to increase the scientific value of the trip, if time permits. See Figure 1, Figure 2 and Figure 3.

2) Corer (TBC)

Sediment cores will be performed along the South Moray Firth. Acoustic information may be used to infer if the ground type is suitable for coring without damaging the tubing. The day grab may be used to test the suitability of the seabed. See Figure 4.

GoPro Filming

A steel frame mounted with a GoPro and diving lights will be lowered to the seabed by a winch, where it will record for ~30 seconds before being hauled back on board where the footage is then downloaded. See Figure 5, Figure 6 and Figure 7.

Once all survey locations have been sampled, the vessel will return to port for unloading.

Normal contacts will be maintained with the laboratory.

Submitted:
F Armstrong
09/02/2021

Approved:
I Gibb
12/02/2021

Figure 1: Proposed day grab stations in the Firth of Forth.

Figure 2: Proposed day grab in the Inner Moray Firth (note: Stations here are overlapping with core sampling stations along the South Moray First , SMF_X_P etc.).

Figure 3: Proposed day grab stations in Sullom Voe.

Figure 4: Proposed coring stations along the South Moray Firth. (Note: “P” at the end of the station name indicates it as a priority station).

Figure 5: Proposed GoPro filming locations in Scapa Flow. Red = high, orange = medium , yellow = low priority.

Figure 6: Proposed GoPro filming locations in mid-west Orkney. Red = high, orange = medium , yellow = low priority.

Figure 7: Proposed GoPro filming locations in East Orkney. Red = high, orange = medium , yellow = low priority.