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MRV Scotia

Survey 0821S

PROGRAMME

22 June – 03 July 2021

Ports: Aberdeen

Loading: Aberdeen, 19 June 2021

Unloading: Aberdeen, 03 July 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 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.

Estimated Days per Project: 12 days – RE02A0, 20365

Equipment:

- Day grab and grab table
- Multicorer
- Multibeam
- EK 60 sounder
- Drop frame camera
- Small video landers

Objectives:

1. Sampling long time-series oil and gas sites using day grabs and multicorer.
2. Multibeam surveying, TV inspection around three decommissioned oil and gas platforms east of Shetland to obtain baseline information for a future AUV deployment.
3. Grabbing and coring samples for blue carbon studies at decommissioned Oil and gas sites.
4. Water column investigation using the EK60 around decommissioned oil and gas platforms. Small camera footage collection for fish species visual ID.

Secondary objectives

1. Multibeam surveying, TV inspection around the Braemar pockmark MPA.

Procedure

All equipment will be loaded on *Scotia* when the previous survey returns to Aberdeen harbour. Marine Scotland personnel will set up equipment and prepare the vessel for surveying in the days leading up to 22 June.

All personnel will join the vessel on 21 June. The survey will start on 22 June, *Scotia* will transit towards oil and gas block 21/12-2b where, weather permitting and in consultation with ship officers, grabbing and coring operations will begin.

The survey will continue north to block 16/27b-4z and the Miller decommissioned oil and gas platform. The survey will then transit north to the Don and Hutton decommissioned platforms and continue sampling. The trace from the EK60 will also be recorded for later analysis at these locations.

Once the northern sampling locations are completed *Scotia* will return south towards block 14/11-1 and complete the surveying and sampling at this location and return to Aberdeen harbour to dock for unloading on 3 July.

Should inclement weather deter offshore operations an alternative plan has been formulated to sample MPA sites around Shetland's voes.

A detailed survey plan will be provided to the bridge every evening before the next day's sampling containing all the sampling positions and sampling gear to be deployed.

Objectives:

The map below (Figure 1) shows the sampling stations that will be surveyed.

Sediment surveying using the day grabs and the multicorer will be performed at blocks 14/11-1, 16/27b-4z and 21/12-2b.

The Don, Miller and NW Hutton locations will be surveyed using the multibeam (200KHz band), grab sediment sampling, multicorer and EK60 sounder at all frequencies available.

The TV drop frame will be deployed at these decommissioned platform sites to gather locational information prior to surveying at them.

EK60 sounder traces on all available frequencies will be used to identify fish assemblages associated with the decommissioned platforms. Small camera landers will be deployed where fish assemblages are located to allow fish species identification.

If time allows multibeam surveying will be done at the Braemar pockmarks.

Expected outcomes

The scientific staff will work in eight hour shifts through 24 hours to complete the survey schedule.

The trip's expected outputs will include up to 185 grabs and nine multicores and to complete at least 5 km² of multibeam data collection at NW Hutton and at least 1 Km² at the Don and Miller decommissioned platform sites.

EK60 data will be collected at predetermined transects around decommissioned platforms. TV runs will be undertaken where possible at decommissioned platform sites also.

Time will be scheduled, if possible, to calibrate (patch test) the multibeam equipment.

Normal contact will be maintained with the laboratory

Submitted:
R Watret
10 June 2021

Approved:
. Gibb
11 June 2021

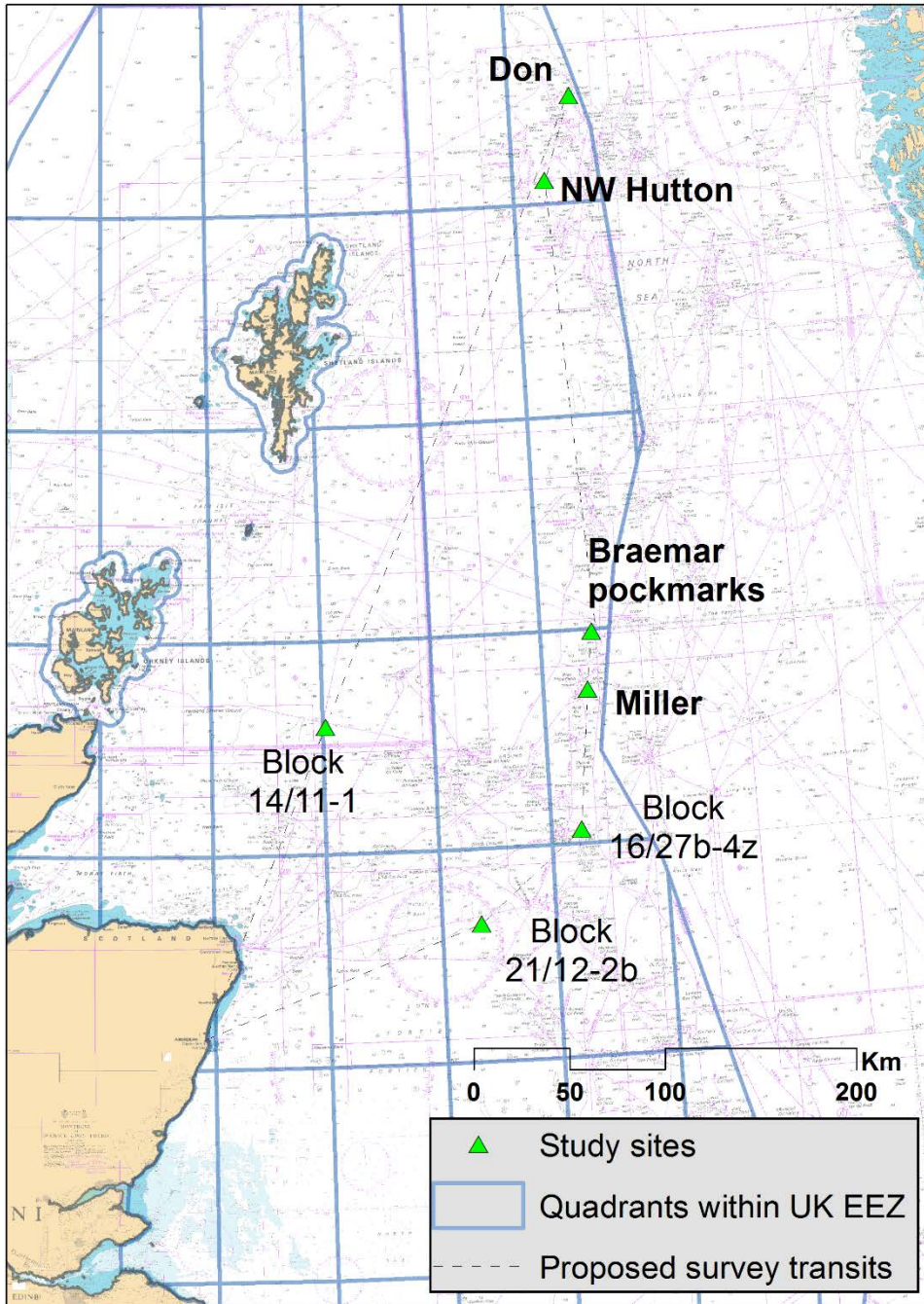


Figure 1: Map of locations to be sampled and surveyed.