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

MRV Alba na Mara

Survey 0418A

PROGRAMME

25 March - 11 April 2018

Ports

Loading: Fraserburgh, 22 March 2018 **Unloading:** Fraserburgh, 11 April 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

E Edwards (SIC)

P Stainer R Watret

R Main (25 Mar – 27 Mar) R O'Hara-Murray (25 Mar – 01 Apr)

Project: 20231, 18 days

Gear:

Subsurface passive acoustic moorings (incl. cetacean detectors and sound recorders)
Subsurface VEMCO VR2 salmon tag detector moorings
Subsurface Acoustic Doppler Current Profiler (ADCP) mooring

Objectives:

- 1. To deploy 95 moorings with VR2 salmon detectors between Ythan Estuary and Findon Ness ("outer array"; Figure 1.)
- 2. To deploy 40 moorings with VR2 salmon detectors between River Don mouth and Nigg Bay ("inner array"; Figure 1).
- 3. To deploy one ADCP in Aberdeen Bay (in association with the outer array of salmon detectors).
- 4. To deploy 30 moorings at ECOMMAS marine mammal/noise monitoring locations (20 with C-PODs cetacean click detectors; 10 with C-PODs and SM2M sound recorders; Figure 2).
- 5. To recover two ECOMMAS moorings at Helmsdale 15 and Arbroath 10 sites that were deployed in November 2017.
- 6. To deploy a mooring with C-POD and sound recorder at an offshore noise monitoring location (as part of the JOMOPANS project).

Preliminary Itinerary:

22/3: load half of "outer array" moorings and ADCP in Fraserburgh
*25/3: sail south from Fraserburgh, deploy ADCP, deploy "outer array", night in Aberdeen
*26/3: reload 2nd batch "outer array" moorings, deploy "outer array", night in Aberdeen
*27/3: load "inner array" moorings, deploy "inner array", night in Aberdeen, load ECOMMAS
End of March: deploy east coast ECOMMAS moorings (St Abbs – Cruden Bay)
Early April: deploy Moray Firth ECOMMAS moorings (Fraserburgh – Latheron) and
JOMOPANS mooring

Vessel capability, weather conditions and water depth will dictate whether inshore deployment locations are operational possible.

A Notice to Mariners has been issued for all mooring locations. Any updates or location changes will be issued if required.

*N.B. timings may vary with weather and deployment progress.

Normal contacts will be maintained with the laboratory.

Submitted: E Edwards 19 March 2018

Approved: I Gibb 19 March 2018

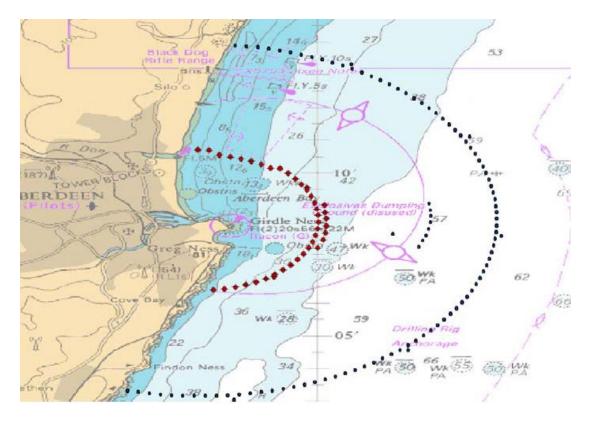


Figure 1: Locations of the salmon detector moorings to be deployed on this 0418A. A table of locations will be supplied separately. Locations marked in blue are the outer array; the inner array are marked in red.

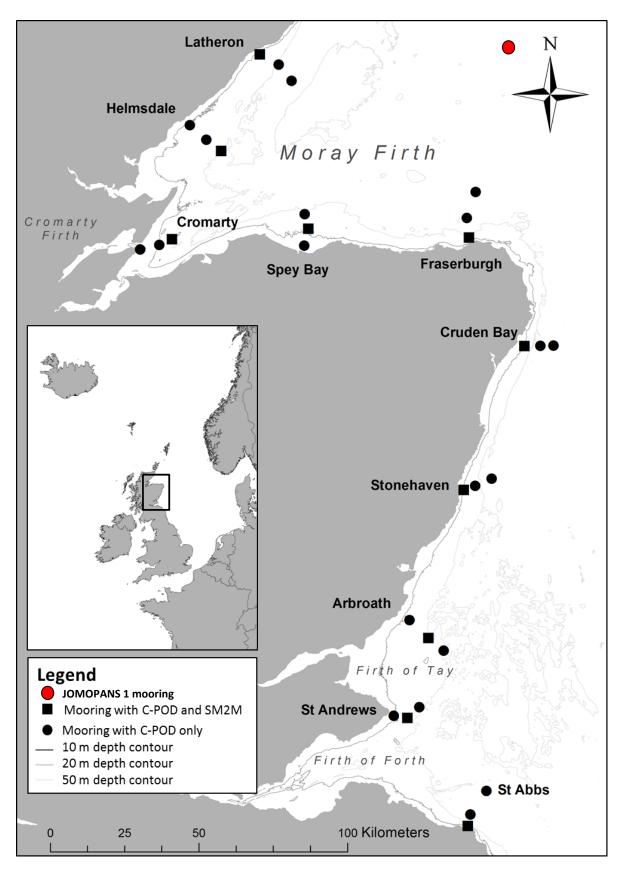


Figure 2: Locations of the ECOMMAS and JOMOPANS moorings deployed on this trip. Locations are detailed in Table 1 below.

Table 1: ID, name and geographic position of all 30 ECOMMAS and JOMOPANS moorings to be deployed during 0418A. All moorings are to be subsurface for either acoustic release (AR) or ROV recovery.

Location	Latitude	Longitude	Sound recorder?	Recovery method
JOMOPANS 1	58.57487	-2.119471	Y	AR
Fraserburgh 15	57.849141	-2.089825		AR
Fraserburgh 10	57.770775	-2.141328		AR
Fraserburgh 5	57.711263	-2.130103	Y	AR
Spey Bay 15	57.786933	-3.064216		ROV
Spey Bay 10	57.74146	-3.038821	Y	ROV
Spey Bay 5	57.69018	-3.062381		ROV
Cromarty 15	57.706651	-3.81065	Y	ROV
Cromarty 10	57.68915	-3.881785		ROV
Cromarty 5	57.6749	-3.98828		ROV
Helmsdale 15	57.975698	-3.535645	Y	ROV
Helmsdale 10	58.00505	-3.610723		ROV
Helmsdale 5	58.05338	-3.715275		ROV
Latheron 10	58.229323	-3.205925		ROV
Latheron 15	58.186686	-3.135715		ROV
Latheron 5	58.269341	-3.318166	Y	ROV
Cruden Bay 5	57.380185	-1.828393	Y	AR
Cruden Bay 10	57.380146	-1.738071		AR
Cruden Bay 15	57.376868	-1.61793		AR
Stonehaven 15	56.98059	-2.021736		AR
Stonehaven 10	56.959511	-2.113503		AR
Stonehaven 5	56.947156	-2.177253	Y	AR
Arbroath 5	56.554018	-2.483356		AR
Arbroath 10	56.499815	-2.37981	Y	AR
Arbroath 15	56.459636	-2.29853		AR
St Andrews 15	56.29004	-2.433171		AR
St Andrews 5	56.265265	-2.571761		AR
St Andrews 10	56.258365	-2.501598	Y	AR
St Abbs 15	56.033338	-2.075373		AR
St Abbs 10	55.963473	-2.161845		AR
St Abbs 5	55.92919	-2.177058	Y	AR