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

MRV Alba na Mara

## Survey 0421A

### **PROGRAMME**

12 March - 02 April 2021

#### **Ports**

**Loading:** Fraserburgh, 10 March 2021 **Unloading:** Fraserburgh, 02 April 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.

Projects: 20231 16 days, 20332 4 days, 20593 1 day, 20594 1 day

## Gear:

- Subsurface passive acoustic moorings (incl. cetacean detectors and sound recorders).
- Subsurface VEMCO VR2 salmon tag detector moorings.
- Aanderaa ADCP.

# **Objectives:**

- 1. To deploy 39 moorings at ECOMMASS, Seagreen and NNG marine mammal/noise monitoring locations (20 with C-PODs cetacean click detectors; 19 with C-PODs and sound recorders (Figure 1, 3).
- 2. To recover two ECOMMAS moorings at Helmsdale 15 and Arbroath 10 sites that were deployed in November 2020.
- 3. To deploy 1 mooring near Wick/Duncansby Head.
- 4. To deploy 130 moorings with VR2 salmon detectors and an ADCP in Aberdeen Bay (Figure 2.)

Weather conditions will dictate the order in which mooring works will be undertaken and will be decided on a daily basis by the master and SIC.

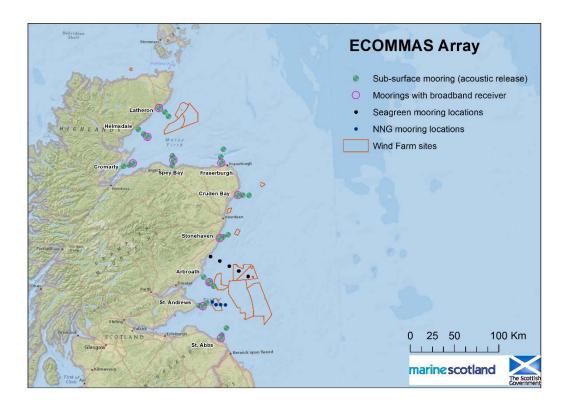
The Seagreen and NNG moorings will be targeted between 19-23 March to align with favorable Montrose tides.

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

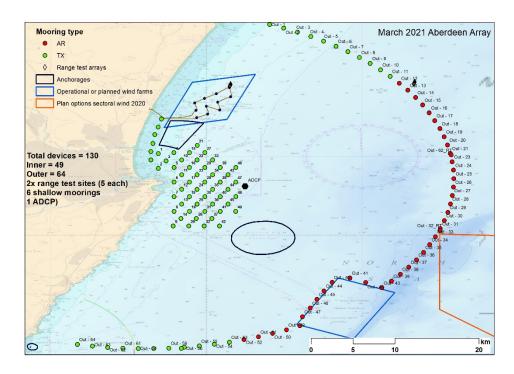
Normal contacts will be maintained with the laboratory.

Submitted: P Stainer 05 March 2021

Approved: I Gibb 09 March 2021



**Figure 1:** Locations of the ECOMMAS, Seagreen and NNG moorings deployed on this trip. Locations are detailed in Table 1 below, Moorings at Arbroath and Helmsdale to be recovered.



**Figure 2:** Locations of the salmon detector moorings and ADCP to be deployed during 0421A. A table of locations will be supplied separately.



Figure 3. Duncansby Head mooring to be deployed.

**Table 1:** ID, name and geographic position of all 30 ECOMMAS and Duncansby Head moorings to be deployed during 0421a. All moorings are to be subsurface for either acoustic release recovery.

Location	Latitude	Longitude	Sound recorder?	Recovery method
Duncansby Head	58.37 578	-3.02040	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		AR
Spey Bay 10	57.74146	-3.038821	Y	AR
Spey Bay 5	57.69018	-3.062381		AR
Cromarty 15	57.706651	-3.81065	Y	AR
Cromarty 10	57.68915	-3.881785		AR
Cromarty 5	57.6749	-3.98828		AR
Helmsdale 15	57.975698	-3.535645	Y	AR
Helmsdale 10	58.00505	-3.610723		AR
Helmsdale 5	58.05338	-3.715275		AR
Latheron 10	58.229323	-3.205925		AR
Latheron 15	58.186686	-3.135715		AR
Latheron 5	58.269341	-3.318166	Y	AR
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
Arproath 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

**Table 2.** The locations and depths of the wind farm monitoring moorings to be recovered and redeployed.

Name of location	Sound Recorder	Latitude	Longitude	Depth
Seagreen 1	Y	56.76225	-2.354467	22
Seagreen 2	Y	56.7158	-2.182667	59
Seagreen 3	Y	56.66112	-2.009233	62
Seagreen 4	Y	56.60992	-1.836117	Approx. 55
Seagreen 5	Y	56.55457	-1.66785	Approx. 60
NNG 1	Y	56.29797	2.3192	55
NNG 2	Y	56.25197	2.253783	51
NNG 3	Y	56.27247	2.166783	57
NNG 4	Υ	56.27258	2.090567	54