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

Vessel: MV *Waterfall* (Moray First Marine)

Survey 0622H

PROGRAMME

14-24 July 2022

Ports:
Loading: Buckie, 14 July 2022
Unloading: Buckie, 24 July 2022
Mid-survey load / unload (if needed): Aberdeen TBC

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 (7 days), 20593 (1 day), 20594 (1 day), 20402 (2 days)

Gear: Subsurface passive acoustic moorings (incl. cetacean detectors and sound recorders).

Objectives:

1. To retrieve and redeploy 30 moorings at ECOMMAS marine mammal/noise monitoring locations (all with C-POD/F-POD cetacean click detectors; ten with PODs and sound recorders. See Figure 1 and Table 1 for deployment locations.

2. To retrieve and re-deploy five subsurface moorings comprising acoustic release systems and the acoustic recording devices attached to them (five POD detectors and five sound recorders) as part of marine mammal monitoring for the SEAGREEN offshore wind development. See Figure 1 and Table 3 for deployment locations.

3. To retrieve and re-deploy four subsurface moorings comprising acoustic release systems and the acoustic recording devices attached to them (four POD detectors and four sound recorders) as part of marine mammal monitoring for the Neart na Gaoithe (NNG) offshore wind development. See Figure 1 and Table 4 for deployment locations.

The vessel will work a 12 hour day, with MSS staff boarding the vessel each morning and departing each evening.

Vessel capability, weather conditions and water depth will dictate whether inshore deployment locations are operationally possible. A daily programme of work will be agreed between the SIC and vessel master.

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

Daily notifications to both Seagreen and NNG will be undertaken from the vessel when operating within their designated areas.

Normal contacts will be maintained with the laboratory.

Submitted:
J Lucas
12 July 2022

Approved:
I Gibb
13 July 2022

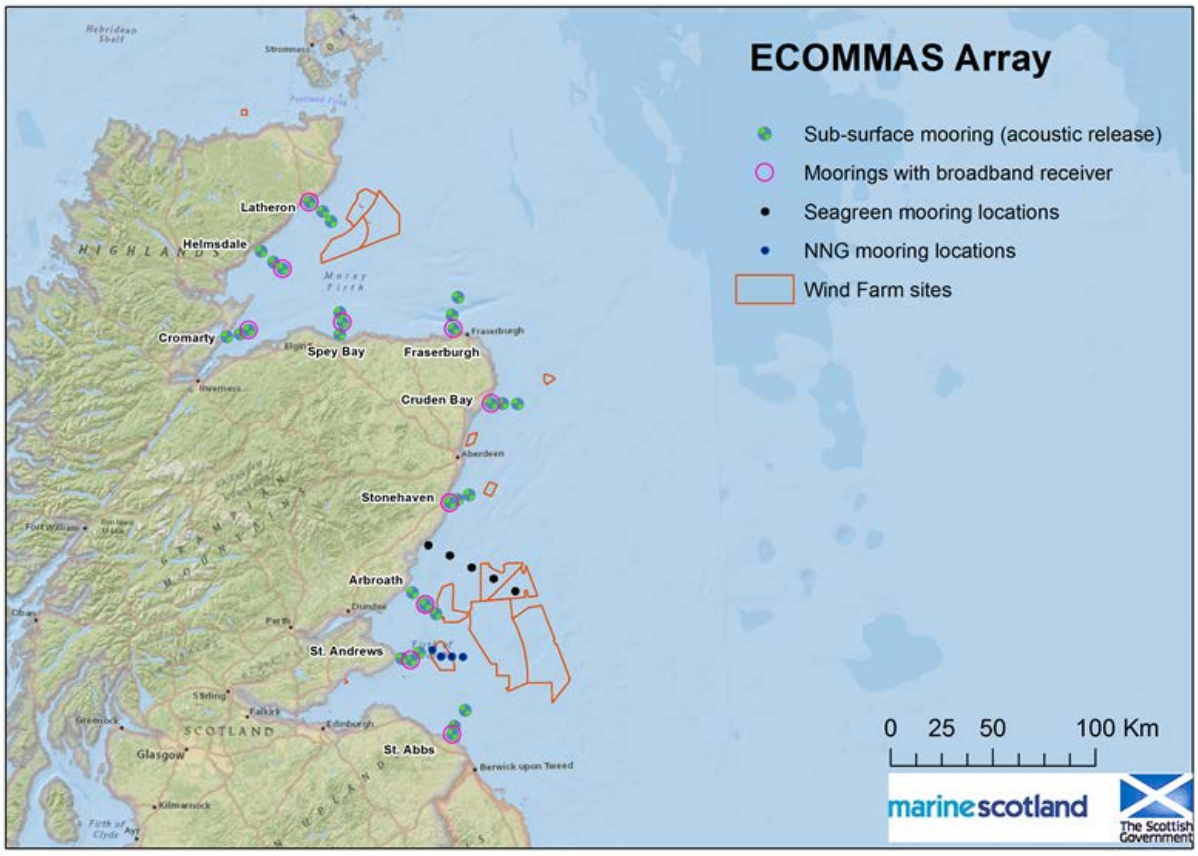

Figure 1: Locations of the ECOMMAS, Seagreen and NNG moorings deployed on this trip. Locations are detailed in Table 1 below, Moorings at Arbroath ten and Helmsdale 15 to be recovered.

Table 1: ID, name and geographic position of all 30 ECOMMAS moorings and 9 wind farm moorings to be deployed during the survey.

Location	Latitude	Longitude	Sound recorder?	Recovery method
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
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

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	Y	56.27258	2.090567	54