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

MRV Alba na Mara

Survey 0716A

PROGRAMME

28 April - 07 May 2016

Ports
Loading: Fraserburgh, 25 April 2016
Unloading: Fraserburgh, 07 May 2016

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

P Stainer
R Watret
E Edwards
R Main

Project: 20231, 10 days

Gear: Surface and subsurface PAM moorings

Objectives:

1. To deploy a series of moorings comprising dhan buoys (eight surface marked moorings) and acoustic release systems (22 subsurface moorings) with attached acoustic recording devices (30 C-POD and 10 SM2M) as part of the east coast marine mammal monitoring programme (see Table 1 and Figure 1).

Procedure:

Loading of all equipment will be carried out on 25 April, *Alba na Mara* will sail from Fraserburgh on the morning of 28 April and make for the first mooring position. The ultimate order in which the moorings are deployed will be dictated by the current weather forecast and the likely shelter that can be provided by the east coast. Accurate position records will be kept detailing where the moorings are eventually placed as this may differ from the planned position. If all the moorings have been deployed before the scheduled end of the trip *Alba na Mara* will head to

the Moray Firth to allow scientific staff to test a range of acoustic salmon tags using a small hydrophone system.

Normal contacts will be maintained with the Marine Laboratory

Submitted:
P Stainer
21 April 2016

Approved:
I Gibb
26 April 2016

Location ID	Location name	Lat (dec deg)	Long (dec deg)	Lat_Deg	Lat_Min	Long_Deg	Long_Min
1	Latheron 5	58.26933342	-3.318194357	58	16.16	-3	19.09166
2	Latheron 10	58.22935008	-3.206416108	58	13.761	-3	12.38497
3	Latheron 15	58.1867398	-3.135924249	58	11.204	-3	8.155452
4	Helmsdale 5	58.05337965	-3.715252062	58	3.2028	-3	42.91512
5	Helmsdale 10	58.00506013	-3.610836766	58	0.3036	-3	36.6502
6	Helmsdale 15	57.97570306	-3.53583982	57	58.542	-3	32.15039
7	Cromarty 5	57.67490165	-3.988206964	57	40.494	-3	59.29241
8	Cromarty 10	57.68918509	-3.881753732	57	41.351	-3	52.90522
9	Cromarty 15	57.70668324	-3.81071818	57	42.401	-3	48.64309
10	Spey Bay 5	57.69019362	-3.062474319	57	41.412	-3	3.748458
11	Spey Bay 10	57.74148223	-3.03881625	57	44.489	-3	2.328972
12	Spey Bay 15	57.78697678	-3.06426294	57	47.219	-3	3.855774
13	Fraserburgh 5	57.71134639	-2.130122221	57	42.681	-2	7.807332
14	Fraserburgh 10	57.77115213	-2.140425971	57	46.269	-2	8.425554
15	Fraserburgh 15	57.84919262	-2.089807226	57	50.952	-2	5.388432
16	Cruden Bay 5	57.38019025	-1.828363841	57	22.811	-1	49.70183
17	Cruden Bay 10	57.38020934	-1.738092926	57	22.813	-1	44.28557
18	Cruden Bay 15	57.37728186	-1.618086241	57	22.637	-1	37.08517
19	Stonehaven 5	56.9469442	-2.176712707	56	56.817	-2	10.60276
21	Stonehaven 10	56.95941541	-2.113387606	56	57.565	-2	6.803256
20	Stonehaven 15	56.98063991	-2.021741646	56	58.838	-2	1.304496
22	Arbroath 5	56.55404985	-2.483319612	56	33.243	-2	28.99918
23	Arbroath 10	56.49979842	-2.379894724	56	29.988	-2	22.79368
24	Arbroath 15	56.45966466	-2.298626297	56	27.58	-2	17.91757
25	St Andrews 5	56.26497763	-2.572059026	56	15.899	-2	34.32354
26	St Andrews 10	56.2578941	-2.499311904	56	15.474	-2	29.95871
27	St Andrews 15	56.29005936	-2.433061696	56	17.404	-2	25.9837
28	St Abbs 5	55.92919788	-2.177105101	55	55.752	-2	10.62631
29	St Abbs 10	55.96348597	-2.161847177	55	57.809	-2	9.710826
30	St Abbs 15	56.0333531	-2.075411206	56	2.0012	-2	4.524672

Table 1: ID, name and geographic position of all 30 moorings to be deployed in April 2016. Potential surface positions highlighted in grey.

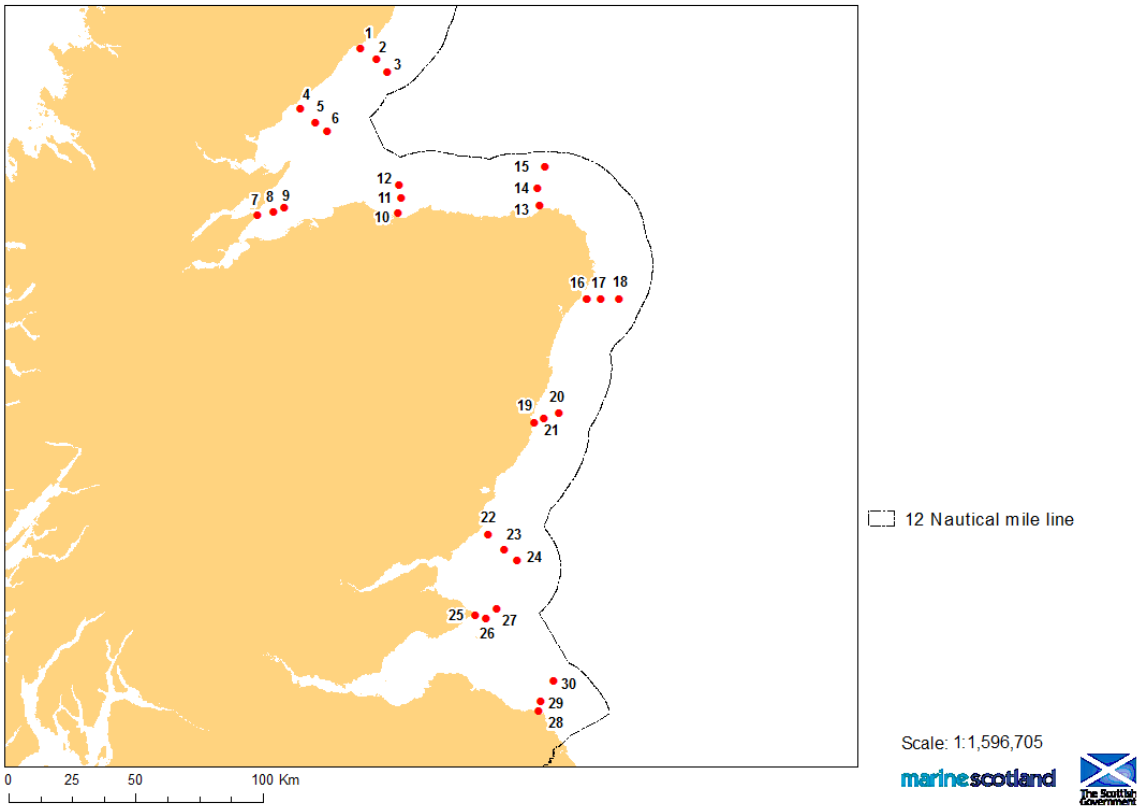

Figure 1: Positions of all 30 moorings to be deployed during cruise 0716a.