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

Charter: NLV Pole Star

Survey 0113PS

## PROGRAMME

24 November – 04 December 2013

Ports

Sailing: Oban, 24 November 2013 Loading: Peterhead, 25 November 2013 Unloading: Peterhead (TBC), Oban 4 December 2013

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:

W. Watret	MSS
W. Ruck	Moray First Marine
A. N. Other	Moray First Marine

**Project:** 20231, 11 days

Gear: Grapple, ROV, acoustic release control unit

### **Objectives:**

- 1. To locate and recover where possible surface and subsurface moorings with attached recording devices laid during the summer of 2013 as part of the east coast marine mammal monitoring programme.
- 2. To locate and retrieve a mooring in the Sound of Canna.
- 3. To locate and retrieve an ADCP and frame from a position to the west of Orkney (TBC).

### **Procedure:**

NLV Pole Star will sail from Oban on 24 November and make for Peterhead Harbour where all staff will join the vessel and where the grapple and ROV hardware will also be loaded. It is estimated that the vessel will arrive at Peterhead around midday on 25 November. Pole Star will then sail for the Fraserburgh mooring sites, recover equipment from these three positions and then continue down the east coast until all the mooring sites have been visited and all possible hardware recovered (see Table 1 and Figure 1). MSS, MFM and NLB staff will decide on the order of mooring recovery and on the time spent attempting to locate missing or unresponsive moorings on a daily basis. On completion of Objective 1, Pole Star will return to Peterhead Harbour and offload all ROV equipment and MFM staff.

If time and weather permit, the vessel may then make for a position in the Bay of Skaill (TBC), to the west of Orkney Mainland, and attempt to recover an ADCP and frame (Objective 3). A decision on whether this task is undertaken will be made as the vessel makes her way North. Further to this a final mooring will be recovered from the vicinity of the Sound of Canna (Objective 2). Positions for both of these moorings will be provided during the survey.

NLV Pole Star will return to Oban and offload MSS equipment and staff on 04 December.

Normal contacts will be maintained with the Marine Laboratory.

Submitted:	Approved:		
M. Robertson	I. Gibb		
18 November 2013	18 November 2013		

# Table 1: Moorings metadata

Location name	Mooring number	Туре	Mooring fate?	Lat (as laid)	Long (as laid)
Latheron 5	1	Acoustic release	Removed	58.26935	-3.31815
Latheron 10	2	Dhan	Removed	58.2386111	-3.21
Latheron 15	3	Dhan	Removed	58.1897222	-3.135
Helmsdale 5	4	Acoustic release	Removed	58.05334	-3.71532
Helmsdale 10	5	Dhan	Removed	58.0097222	-3.62055556
Helmsdale 15	6	Dhan	Removed	57.97575	-3.53607
Cromarty 5	7	Acoustic release	Removed	57.6748833	-3.98823333
Cromarty 10	8	Acoustic release	Removed	57.6891667	-3.88175
Cromarty 15	9	Acoustic release	Removed	57.70665	-3.81065
Spey Bay 5	10	Dhan	Removed	57.6901167	-3.06233333
Spey Bay 10	11	Dhan	Removed	57.74157	-3.03883
Spey Bay 15	12	Dhan	Missing	57.7897222	-3.075
Fraserburgh 5	13	Acoustic release		57.71135	-2.13021667
Fraserburgh 10	14	Dhan		57.7731667	-2.23216667
Fraserburgh 15	15	Dhan		57.8206167	-2.1583
Cruden Bay 5	16	Acoustic release		57.3802	-1.8283
Cruden Bay 10	17	Dhan		57.3825	-1.7385
Cruden Bay 15	18	Dhan		57.3798333	-1.66466667
Stonehaven 5	19	Acoustic release		56.9469333	-2.17676667
Stonehaven 15	21	Dhan		56.9801667	-2.0215
Stonehaven 10	20	Dhan	Removed	56.9628333	-2.1
Arbroath 5	22	Acoustic release		56.55395	-2.48327
Arbroath 10	23	Acoustic release		56.4998667	-2.37975
Arbroath 15	24	Dhan		56.4609	-2.2975
St Andrews 5	25	Acoustic release	Removed	56.2649667	-2.57195
St Andrews 10	26	Acoustic release		56.2578667	-2.49921667
St Andrews 15	27	Dhan		56.29013	-2.433612
St Abbs 5	28	Acoustic release		55.9286167	-2.177
St Abbs 10	29	Acoustic release		55.9635	-2.16185
St Abbs 15	30	Dhan		56.033957	-2.074553

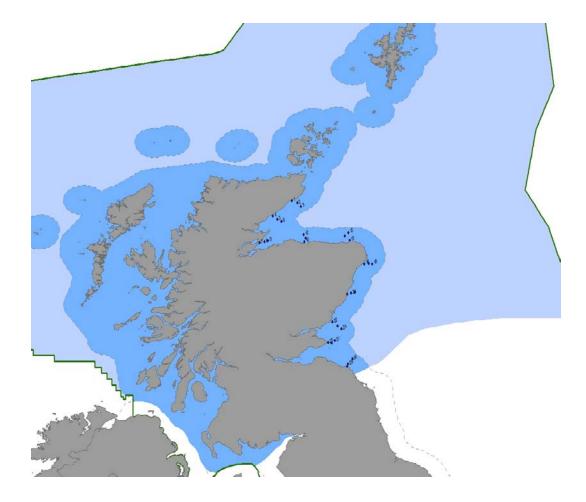


Figure 1: Positions of all 30 moorings as deployed on the east coast during June and July 2013.