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

MRV *Scotia*

Survey 0315S

PROGRAMME

16 February – 09 March 2015

Loading: Aberdeen, 13 February 2015
Half landing: TBA (Flexible)
Unloading: Aberdeen, 09 March 2015

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

J Drewery	SIC
R Gillespie-Mules	
M Kinghorn	
I Busturia-Cerezo	
M Gault	
H Cole	(Part 1)
R Kilburn	(Part 1)
E Jones	(Part 1)
P Clark	(Part 2)
E Armstrong	(Part 2)
J Monhart	(Visitor, Aberdeen University Part 1)
A Kent	(Visitor, Napier University, Part 2)

Out-turn days: 22 - RV1502/20259

Fishing Gear: GOV Trawl (BT 137) fitted with ground gear D.

Objectives

1. Demersal trawling survey of the grounds off the north and west of Scotland in ICES Subarea VIa.

2. To obtain temperature and salinity data from the surface and seabed at each trawling station.

3. Collect additional biological data in connection with the EU Data Collection Framework (DCF).

Procedures

General

Loading of the trawl gear and scientific equipment will take place on 13 February with rigging and testing being completed on the same day. *Scotia* will then sail on the morning of 16 February. A training haul will be undertaken during the passage north to ensure all fishing gear/sensors are working effectively. *Scotia* will then commence fishing operations the next morning on predefined stations off the north Scottish coast and west of 4'W with weather conditions thereafter determining the route taken on the survey.

Trawling

This is a random-stratified survey design with trawl stations being distributed within ten predefined strata covering the sampling area (Figure 1). A total of 64 primary and 45 secondary stations have been generated. The intention is for 64 trawls to be undertaken on suitable ground as near to the specified primary sampling positions (Table 1) as is practicable, and where possible within a radius of 5 nautical miles of the sampling position. In the event that trawling is not possible within 5 nm of any primary station then the nearest appropriate secondary station will be used. Hauls will be of 30 minutes duration and in the main, fishing operations will be restricted to daylight hours between 0700 hours and 1800 hours, though exact start and finish times will vary slightly according to geographical location. The Scanmar system will be used to monitor the headline height, wing spread and door spread for each haul. Bottom contact data from each trawl will also be collected using the NOAA bottom contact sensor which will be mounted on a bar in the centre of the ground-gear. In addition to the routine sampling, biological data will be collected for target species in line with the EU data regulation. All fish will be processed in accordance with Standing Instructions.

Hydrography

A CTD cast will be taken at each trawl station; in addition the thermo-salinograph will run continuously to obtain sea surface temperature and salinity throughout the survey area.

Normal contact will be maintained with the Marine Laboratory.

Submitted:
J Drewery
20 January 2015

Approved:
I Gibb
28 January 2015

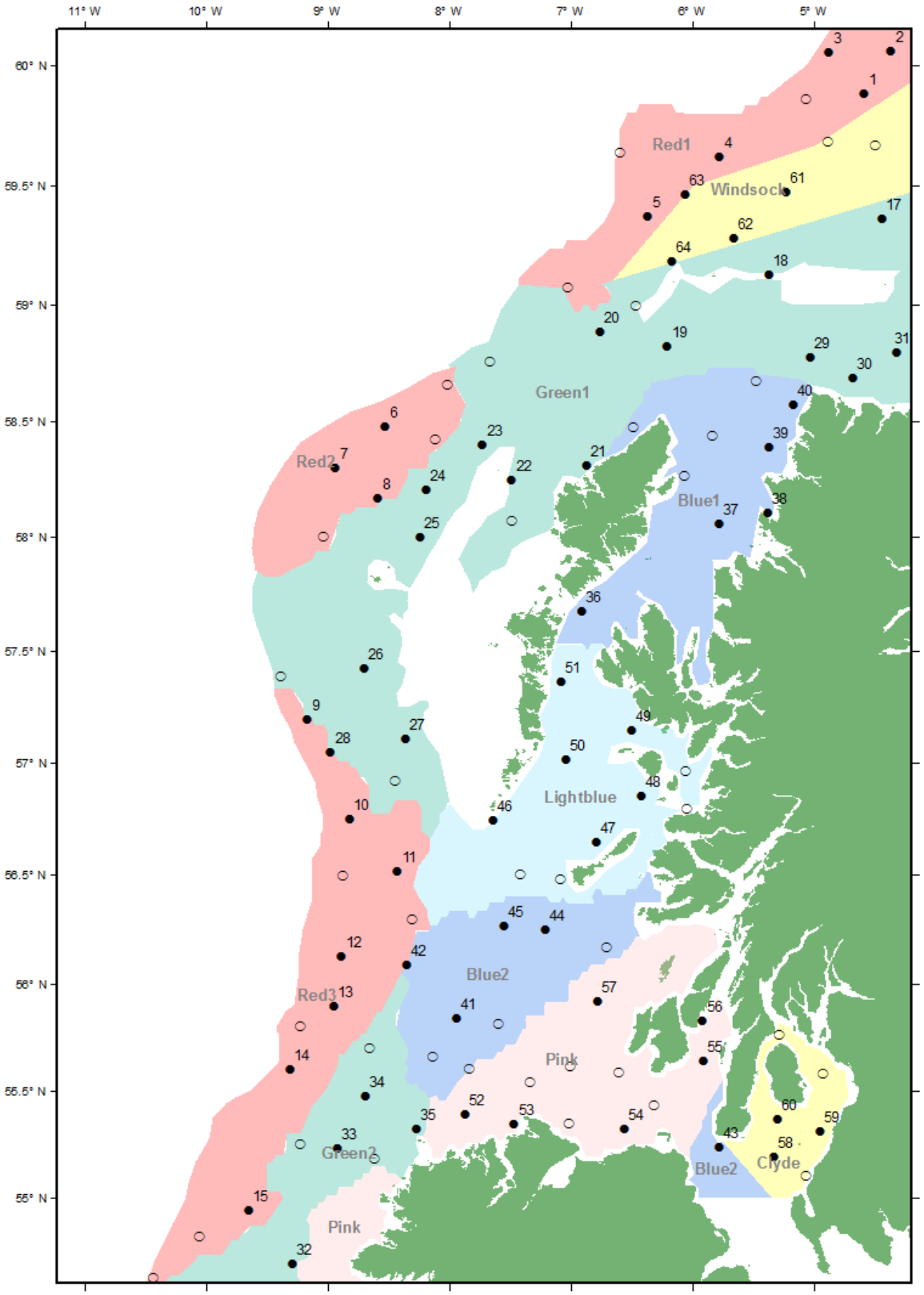

Figure 1: 0315S – 2015 ICES Subarea VIa Survey Strata showing primary (filled circles) and secondary stations (open circles).

Station	Decimal Lat	Decimal Lon	Lat	Lon	Stratum	Station	Decimal Lat	Decimal Lon	Lat	Lon	Stratum
1	59.8810	-4.5822	5952.86N	0434.93W	Red 1	33	55.2357	-8.9216	5514.14N	0855.30W	Green 2
2	60.0565	-4.3653	6003.39N	0421.92W	Red 1	34	55.4778	-8.6908	5528.67N	0841.45W	Green 2
3	60.0554	-4.8778	6003.33N	0452.67W	Red 1	35	55.3237	-8.2679	5519.42N	0816.08W	Green 2
4	59.6187	-5.7752	5937.12N	0546.51W	Red 1	36	57.6778	-6.9059	5740.67N	0654.36W	Blue 1
5	59.3727	-6.3645	5922.36N	0621.87W	Red 1	37	58.0602	-5.7768	5803.61N	0546.61W	Blue 1
6	58.4794	-8.5236	5828.76N	0831.42W	Red 2	38	58.1071	-5.3770	5806.42N	0522.62W	Blue 1
7	58.3031	-8.9389	5818.19N	0856.33W	Red 2	39	58.3897	-5.3707	5823.38N	0522.24W	Blue 1
8	58.1717	-8.5897	5810.30N	0835.38W	Red 2	40	58.5729	-5.1703	5834.37N	0510.22W	Blue 1
9	57.1953	-9.1685	5711.71N	0910.11W	Red 3	41	55.8386	-7.9384	5550.31N	0756.30W	Blue 2
10	56.7517	-8.8188	5645.10N	0849.13W	Red 3	42	56.0851	-8.3501	5605.11N	0821.00W	Blue 2
11	56.5121	-8.4289	5630.73N	0825.74W	Red 3	43	55.2404	-5.7772	5514.42N	0546.63W	Blue 2
12	56.1259	-8.8820	5607.55N	0852.92W	Red 3	44	56.2449	-7.2093	5614.69N	0712.56W	Blue 2
13	55.8978	-8.9477	5553.87N	0856.86W	Red 3	45	56.2621	-7.5491	5615.73N	0732.95W	Blue 2
14	55.6009	-9.3078	5536.05N	0918.47W	Red 3	46	56.7416	-7.6404	5644.50N	0738.42W	Light Blue
15	54.9430	-9.6459	5456.58N	0938.76W	Red 3	47	56.6459	-6.7892	5638.75N	0647.35W	Light Blue
16	59.1116	-4.0319	5906.70N	0401.92W	Green 1	48	56.8522	-6.4213	5651.13N	0625.28W	Light Blue
17	59.3632	-4.4360	5921.79N	0426.16W	Green 1	49	57.1451	-6.5014	5708.70N	0630.09W	Light Blue
18	59.1282	-5.3674	5907.69N	0522.04W	Green 1	50	57.0173	-7.0355	5701.04N	0702.13W	Light Blue
19	58.8227	-6.2024	5849.36N	0612.14W	Green 1	51	57.3618	-7.0793	5721.71N	0704.76W	Light Blue
20	58.8844	-6.7552	5853.06N	0645.31W	Green 1	52	55.3949	-7.8654	5523.69N	0751.92W	Pink
21	58.3122	-6.8657	5818.73N	0651.94W	Green 1	53	55.3497	-7.4618	5520.98N	0727.71W	Pink
22	58.2493	-7.4831	5814.96N	0728.99W	Green 1	54	55.3247	-6.5577	5519.48N	0633.46W	Pink
23	58.3992	-7.7228	5823.95N	0743.37W	Green 1	55	55.6419	-5.9092	5538.52N	0554.55W	Pink
24	58.2074	-8.1892	5812.44N	0811.35W	Green 1	56	55.8299	-5.9131	5549.79N	0554.79W	Pink
25	58.0012	-8.2365	5800.07N	0814.19W	Green 1	57	55.9198	-6.7792	5555.19N	0646.75W	Pink
26	57.4208	-8.6976	5725.25N	0841.85W	Green 1	58	55.1953	-5.3263	5511.72N	0519.58W	Clyde
27	57.1113	-8.3585	5706.68N	0821.51W	Green 1	59	55.3124	-4.9463	5518.74N	0456.78W	Clyde
28	57.0501	-8.9731	5703.01N	0858.39W	Green 1	60	55.3718	-5.2936	5522.31N	0517.62W	Clyde
29	58.7752	-5.0244	5846.51N	0501.46W	Green 1	61	59.4760	-5.2302	5928.56N	0513.81W	Windsock
30	58.6878	-4.6778	5841.27N	0440.67W	Green 1	62	59.2795	-5.6611	5916.77N	0539.67W	Windsock
31	58.7992	-4.3192	5847.95N	0419.15W	Green 1	63	59.4654	-6.0566	5927.92N	0603.40W	Windsock
32	54.6893	-9.2842	5441.36N	0917.05W	Green 2	64	59.1855	-6.1638	5911.13N	0609.83W	Windsock

Table 1: 0315S – Postions of primary sampling stations.