R1/12

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

FRV Scotia

Cruise 1509S

REPORT

6-27 November 2009

Personnel

C G Davis	SIC
M Mathewson	
E Armstrong	
R Watret	
S Buckley	
I Penny	(Part 1)
L Allan	(Part 1)
K Summerbell	(Part 2)
E Guirey	(Part 2)

Out-turn days per project: 22

Fishing Gear

GOV trawl (BT137) with belly lines & ground gear C

Objectives

- 1. To participate in the ICES co-ordinated Western Division Demersal Trawling Survey.
- 2. To obtain temperature and salinity data at each trawling position.
- 3. To collect additional biological data in accordance with the EU Data Directive 1639/2001 and 1581/2004.

Narrative

Scotia sailed from Aberdeen at noon on 6 November and proceeded northwards toward the survey area. Whilst en-route, the opportunity was taken to deploy and check the operation of the trawl gear; in particular to measure the gear dimensions under strain. CTD was also deployed and both hardware and software checked.

Fishing commenced the next day at 0630hrs at the station in rectangle 47E6. The medium term weather forecast was very favourable for this time of year and we took advantage of this to progress westward and then southwards for the next twelve days. *Scotia* docked in Killybegs on Wednesday 18 November at 1400hrs for the scheduled half landing. Scotia sailed from Killybegs at 1500hrs on Thursday 19 November in poor weather and made passage for grounds located on the north coast of Ireland where surveying commenced the following morning. Other than a period of a few hours when *Scotia* had to dodge severe

weather in the North Minch, fishing continued unobstructed up to the 26 November, when *Scotia* made way for Aberdeen. *Scotia* docked alongside Aberdeen at 2315hrs.

Results

Trawling

For the majority of the survey, *Scotia* was fortunate to have reasonable weather conditions for the time of year. As a result, very little time was lost due to weather. This resulted in the trip achieving a total of 78 trawl hauls with the GOV. Of this total, 2 were assigned as foul hauls due to the level of gear damage sustained. Of the remaining 76 hauls, 68 were undertaken in ICES area VI.

The Scanmar gear monitoring system and the NOAA bottom contact sensor were used throughout the survey to observe the gear performance.

The trawl positions are shown on the attached chart.

Table 1 summarises the historical and current survey indices for the major species caught in ICES area VIa.

Length, weight, sex and maturity were collected from all species listed in the EU Data Collection Regulation (EC) No 1639/2001.

Hydrography

The thermosalinograph was run continuously throughout the cruise. The CTD was deployed at each station to obtain temperature and salinity profiles.

Biological sampling

Biological data was recorded for a number of species in accordance with the requirements of the EU Data Regulations.

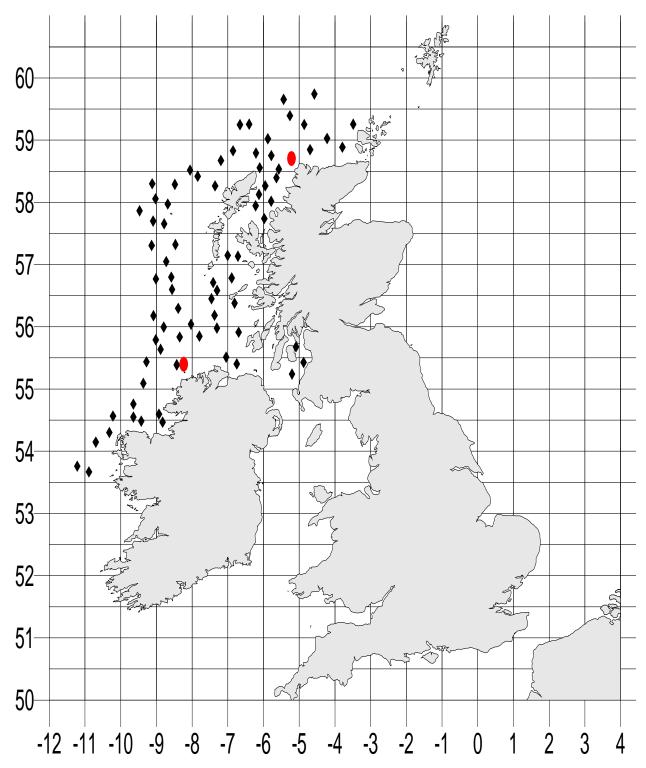
Submitted: *C G Davis* 31 January 2010

Approved: *I Gibb* 19 February 2010.

	Year	Hauls	0	1	2	3	4	5	6
Cod									
	2000 2001	53 58	0 1	16 2	3 9	0 1	0 1	0 0	0 0
	2002	64	1	10	3	7	1	0	0
	2003	63	1	2	11	3	1	0	0
	2004 2005	59 63	0 +	5 2	4 3	0 0	+ 1	0 +	0 0
	2006	58	0	17	6	1	1	0	0
	2007	75	0	12	20	1	1	+	0
	2008 2009	60 68	2 2	8 14	5 4	7 1	1 1	0 0	0 0
	2000	00	-	14	-	•	•	U	Ū
Hadd	lock								
	2000	53	2959	4231	147	191	59	25	5
	2001 2002	58 64	3083 2943	2219 1709	3563 1770	48 2841	138 34	22 50	12 24
	2002	63	2943	2023	965	1470	54 639	28	24 17
	2004	59	542	574	1068	410	649	524	5
	2005	63	286	419	409	410	223	309	87
	2006	58	19	543	233	162	281	79	100
	2007	75	125	69	1392	109	128	90	48
	2008	60	14	117	78	835	74	94	63
	2009	68	335	68	161	343	551	44	35
Whiti	ng								
	2000	53	4434	4055	789	160	9	7	1
	2001	58	9615	1957	1420	155	40	12	2 5
	2002	64 62		1591	621 567	479 229	30	9 27	•
	2003 2004	63 59	9932 5923	3446 1758	567 940	338 83	83 57	27 62	4 1
	2004	63	2297	308	318	76	9	4	1
	2006	58	415	296	140	101	35	8	3
	2007	75	1894	434	326	100	83	48	1
	2008	60	2297	208	78	110	28	24	4
	2009	68	4833	236	178	50	58	12	6

Table 1: West Coast Q4 IBTS Area VIa, Numbers at Age per 10hrs Fishing Effort.

Year Saithe	Hauls	0	1	2	3	4	5	6
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009	53 58 64 63 59 63 58 75 60 68	0 0 0 0 0 0 0 0 0 0	0 + 1 • 0 + 1 3 0 4	1 50 8 25 14 4 10 94 5 30	1 15 6 5 8 6 6 14 5 1	0 2 1 1 3 1 4 1 1 4	0 0 + + 0 3 1 0	0 0 0 0 0 0 1 1 0
N.Pout								
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009	53 58 64 63 59 63 58 75 60 68	34355 59207 10549 5281 3118 4351 7352 7374	5984 2498 5843 7715 4021 455 1119 455 2148 1495	2166 1977 493 2291 1757 143 126 528 590 1035	302 112 355 108 530 117 24 22 390 244	23 0 8 92 0 31 14 10 1 66	0 0 0 0 0 0 1 0 0	0 0 0 0 0 0 0 0 0 0
Herring							-	-
2000 2001 2002 2003 2004 2005 2006 2007 2008 2009	53 58 64 63 59 63 58 75 60 68	153 223 144 95 433 292 102 145 24 123	208 121 94 8861 194 252 23 916 23 56	242 3335 124 5227 807 251 940 701 131 1432	112 1452 230 1124 1717 194 566 503 270 629	333 588 1251 1903 482 423 318 509 663	169 1186 31 111 2806 527 913 617 195 522	15 72 7 19 26 30 660 989 361 203
Mackerel 2000	53	102	98	118	47	9	1	1
2001 2002 2003 2004 2005 2006 2007 2008 2009	58 64 63 59 63 58 75 60 68	720 12045 1244 23476 30446 10040 813 2508	15	58 91 460 8543 730 692 2078 4875 3513	32 154 72 1591 1694 148 1097 1916 2571	17 42 62 262 492 217 322 475 978	1 5 10 108 138 89 70 11 205	1 8 10 6 6 27 1 20



2009 Q4 W.Coast IBTS Trawl Station Locations

(Stations in red are foul / invalid)