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Not to be cited without prior reference to the Laboratory

FRV Scotia

Cruise 0705S

PROGRAMME

7-27 May 2005

Ports

Loading: Aberdeen Half Landing: Lerwick Unloading: Aberdeen

*In setting the cruise 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 FRS' Working Time Policy (which is published on the Intranet). In addition, the Scientist-in-Charge must formally review the risk assessments for the cruise with staff on-board before work is commenced.

In the interest of efficient data management it is now mandatory to return the Cruise Report, to John Morrison and the Cruise Summary Report (old ROSCOP) form) to Dougal Lichtman, within four weeks of a cruise ending. In the case of the Cruise Summary Report a nil return is required, if appropriate.

Personnel

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*G Slesser	In charge	
J Beaton		
T Amundrud	7-18 May	
A Gallego	7-18 May	
M Rose	7-18 May	
N Collie	7-18 May	
J P Lacaze	7-18 May	
W Turrell	19-27 May	
J MacLean	19-27 May	
G MacDonald	19-27 May	
R Shelton	•	Atlan
J C Holst	19-27 May	Institu

Atlantic Salmon Trust

J C Holst 19-27 May Institute for Marine Research, Bergen

C Embling University of St Andrews T Gridley University of Aberdeen

Gear

Sea-Bird CTD's, ADCP and Current Meter Moorings, Towed Hydrophone, Sonobuoys, Thermosalinograph, Recovery Trawl, Smolt Trawl and associated gear.

Objectives

1. To perform hydrographic surveys along the JONSIS standard section in the northern North Sea.

- 2. To perform hydrographic surveys along the standard Faroe Shetland Channel sections.
- 3. To service two ADCP moorings in the Faroe Shetland Channel.
- 4. To recover two current meter moorings east of the Shetland Islands.
- 5. To recover a current meter mooring west of the Shetland Islands.
- 6. To carry out coastal hydrographic surveys.
- 7. To investigate post-smolt migration pathways along the shelf edge.
- 8. To perform ad-hoc CTD surveys in order to describe the environment within which post-smolts are found.
- 9. To undertake a pilot study for the use of synthetic adsorbents in order to assess the concentration of free marine biotoxins and other compounds in the environment.
- 10. To collect 20 carboys of low nutrient seawater for Quasimeme.
- 11. To perform *ad-hoc* towed array acoustic recordings for cetaceans and deployment of sonobuoys.

Procedure

On sailing from Aberdeen the *Scotia* will carry out a trial CTD deployment. Thereafter, passage will be made to the start of the JONSIS standard line which will be surveyed using the CTD/rosette package. At this station the twenty carboys will be filled with low nutrient sea water.

The *Scotia* will then sail to Shetland where three current meter moorings (60°30.0'N 000°41.00'W, 60°30.00'N 000°00.00'W, 60°42.18'N 001°24.90'W) will be recovered. Prior to the recovery of each mooring hydrographic stations will be worked.

The *Scotia* will then proceed with hydrographic survey work in the Faroe-Shetland Channel area. The two standard lines, the Fair Isle - Munken and the Nolso-Flugga sections will be worked. The two NWOCE ADCP moorings, NWSD (60°26.93'N 004°22.13'W) or NWSE (60°16.87'N 004°19.51'W) will be recovered.

Following this, hydrographic sections will be worked along the shelf edge as time allows for the remainder of the first half of the cruise.

A half landing will be made at Lerwick where a change of personnel will take place. During the evening of May 17 staff and students from the North Atlantic Fishery College will be invited on board for a scientific seminar on post-smolt migration.

On leaving Lerwick passage will be made to NWOCE ADCP mooring NWSE position where an ADCP will be redeployed. This will be followed by laying an ADCP at NWOCE ADCP mooring NWSD position.

Following the deployment of these moorings the *Scotia* shall carry out a survey for post-smolt salmon. This will be planned on an ad-hoc basis depending on observed post-smolt distributions. Near-surface trawling and plankton sampling will be performed during the day, with hydrographic sampling at night.

Throughout the cruise, a towed hydrophone will be deployed on passage and between stations.

(NOTE: The survey will take *Scotia* into the Foinaven Development Area. This is now standard practice, and normal on-site communications will be established with the Foinaven co-ordinating officer).

Normal contacts will be maintained with the laboratory.

- J A Morrison
- 4 April 2005

JONSIS Line

	Name	Latitude	Longitude	Depth	Spacing
01	JO 1	59° 17.00' N	02° 14.00' W	75 m	
02	JO 1A	59° 17.00' N	02° 5.00' W	90 m	8.5 km
03	JO 2	59° 17.00' N	01° 56.00' W	100 m	8.5 km
04	JO 3	59° 17.00' N	01° 48.00' W	80 m	7.6 km
05	JO 4	59° 17.00' N	01° 40.00' W	90 m	7.6 km
06	JO 5	59° 17.00' N	01° 30.00' W	95 m	9.5 km
07	JO 6	59 [°] 17.00' N	01° 20.00' W	110 m	9.5 km
08	JO 6A	59° 17.00' N	01° 10.00' W	120 m	9.5 km
09	JO 7	59° 17.00' N	01° 0.00' W	125 m	9.5 km
10	JO 8	9° 17.00' N	00° 40.00' W	120 m	18.9 km
11	JO 9	59° 17.00' N	00° 20.00' W	140 m	18.9 km
12	JO10	59° 17.00' N	00° 0.00' W	135 m	18.9 km
	Totals			1180 m	126.9 km

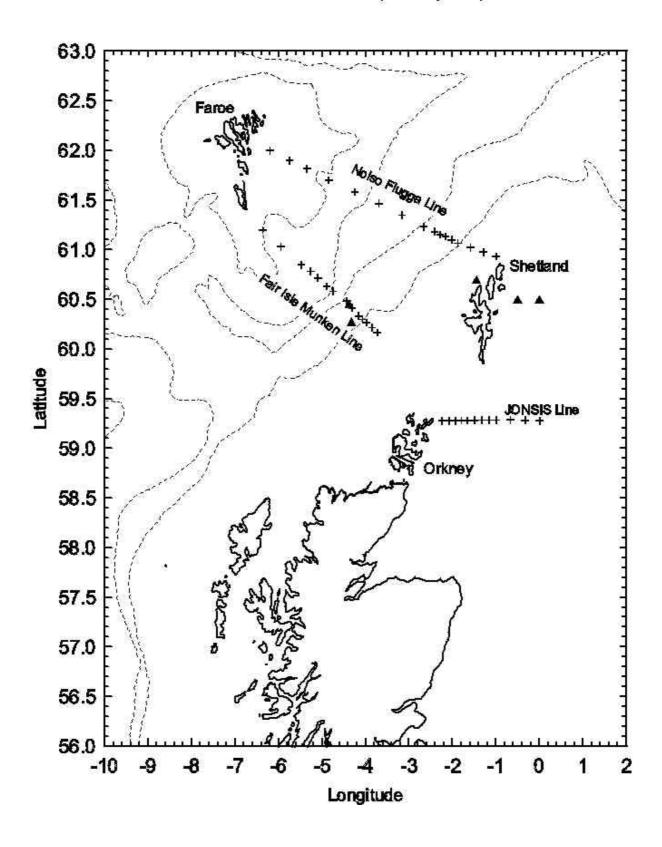
Fair Isle - Munken (Ammended for presence of Foinaven oil platform)

	Name	Latitude	Longitude	Depth	Spacing
01	FIM-01	60° 10.00' N	03° 44.00' W	150 m	
02	SEFOS	60° 13.00' N	03° 51.50' W	170 m	8.9 km
03	FIM-02	60° 16.00' N	03 [°] 59.00' W	200 m	8.9 km
04	SEFOS	60° 18.00' N	04° 04.50' W	330 m	6.3 km
05	FIM-03	60° 20.25' N	04° 09.00' W	390 m	6.3 km
06	FIM-04	60° 25.00' N	04° 19.00' W	655 m	12.4 km
07	FIM-05	60° 29.00' N	04° 26.00' W	995 m	9.8 km
08	FIM-06	60° 35.00' N	04° 45.00' W	1090 m	20.6 km
09	FIM-6a	60° 38.00' N	04° 54.00' W	1030 m	9.9 km
10	FIM-07	60° 43.00' N	05° 06.00' W	915 m	14.3 km
11	FIM-08	60° 47.00' N	05 [°] 16.00' W	830 m	11.7 km
12	FIM-09	60° 51.00' N	05 [°] 29.00' W	600 m	13.9 km
13	FIM-10	61° 02.00' N	05 [°] 57.00' W	280 m	32.4 km
14	FIM-11	61° 12.00' N	06° 22.00' W	240 m	
Totals		7,585.00	155.40		

Nolso-Flugga

	Name	Latitude	Longitude	Depth	Spacing
01	NOL-01	60° 56.00' N	01° 00.00' W	110 m	
02	SEFOS	60° 58.70' N	01° 17.70' W	125 m	16.7 km
03	SEFOS	61° 01.40' N	01° 35.40' W	155 m	16.7 km
04	NOL-02	61° 04.00' N	01° 53.00' W	270 m	16.7 km
05	SEFOS	61° 06.00' N	02° 01.50' W	440 m	8.5 km
06	NOL-03	61° 08.00' N	02° 10.00' W	550 m	8.5 km
07	SEFOS	61° 09.30' N	02 [°] 17.50' W	630 m	7.1 km
08	NOL-3a	61° 11.00' N	02° 25.00' W	730 m	7.4 km
09	NOL-04	61° 14.00' N	02° 40.00' W	1080 m	14.5 km
10	NOL-05	61° 21.00' N	03° 10.00' W	1370 m	29.6 km
11	NOL-06	61° 28.00' N	03° 42.00' W	1235 m	31.2 km
12	NOL-07	61° 35.00' N	04° 15.00' W	990 m	31.9 km
13	NOL-08	61° 42.00' N	04° 51.00' W	235 m	34.2 km
14	NOL-09	61° 49.00' N	05° 21.00' W	180 m	29.3 km
15	NOL-10	61° 54.00' N	05 [°] 45.00' W	290 m	22.9 km
16	NOL-11	62° 00.00' N	06° 12.00' W	125 m	26.0 km
Totals		8250 m	301.20 km		

Scotta Cruise 7 (7-27 May 2005)



Circulation List: Cruise Programmes and Reports

SCOTIA VESSEL

Programmes - Mr J A Morrison for approval. Reports - Mr J A Morrison for approval. Issue two copies of Record of Haul and Station Numbers pro-forma with Scientist-in-Charge's copy of *Scotia* and *Clupea* programmes.

Two xerox copies of track chart for reports to be sent to Dr L Rickards.

PROGRAMMES ONLY

Lab staff Non-lab staff

Mr J T M Hunter Island Cmdr Faroes (Faroes only)
Mr T Reid Flag Officer, Denmark (Danish par

Ir T Reid Flag Officer, Denmark (Danish part of N Sea only)

Mr P J Copland Coastguard Mr J Dunn G Lees Mr A Beaton

Mr G Howard Security

PROGRAMMES AND REPORTS

Lab staff Non-lab staff

Mr J A Morrison Library, Danmarks Fisk (reports only)

Capt R Denholm Mr J Mortensen (Faroes only)
Mr R S T Ferro) Fish Man team Mr A Souplet (Fishing Cruises only)

Mr C Hall) progs only Dr S Ehrich (Entering German Waters) (reports only)

Dr R M Stagg
Dr C Moffat W J McCurdy, Belfast

Mr M R Heath Technical Director, SFIA (J E Tumilty)

Mr A Macdonald Dr L Rickards
D Lichtman (+ additional copy of track chart Dr I Joint

of reports only)

Director – Havfor Inst, Norway

Mrs E Morrison Dr S Ehrich

CO/OIC of Vessel (Scotia) (to be faxed)

Monsieur le Chef du dépt, Nantes

Library (2) Mr J C Brabant
File Mrs van Duyvenvoorde
Dr J G Gordon

Dr J G Gordo G Kane R de Clerck Mr B Stewart

Capt J Cannan (Scotia and Clupea only)

Controller Coastal Ops - A Stewart

Dr P Grieg-Smith Mr H C Boyar Dr R J A Atkinson Mr H i Jákupsstovu

Mr C Bullimore (To be faxed: 01923 846392)

Laboratory Personnel on Vessel

Fishery Officers at

G Slesser W Turrell
J Beaton J MacLean
T Amundrud G MacDonald Lerwick

A Gallego R Shelton c/o G Slesser
M Rose J Holst c/o G Slesser
N Collie C Embling c/o G Slesser
J P Lacaze T Gridley c/o G Slesser