

P17/6

Not to be cited without prior reference to the FRS Marine Laboratory, Aberdeen

FRV *Clupea*

Cruise 0505C

PROGRAMME

1-20 April 2005

Ports

Loading: Fraserburgh

Unloading: Fraserburgh

Personnel Exchange: Kyle of Lochalsh, Ardrossan and/or Rothesay (or suitable alternatives)

Working: Stornoway, Kyle, Rothesay, or suitable alternatives to be agreed with the OIC FRV *Clupea*

***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

*J Mckie	8–20 April (In charge 8-20 April)
P Hayes	1–16 April (In charge 1–8 April)
D Moore	12–20 April
G Rodger	12–16 April
C Shand	1-20 April
A McIntosh	1-06/8 April
M McKenzie	1-06/8 April
E Dalgarno	8-12 April
G Packer	8–12 April

Fishing Gear

BT 158

Sampling Gear

TV sledge, TV drop frame, grabs, sieve table and agassiz trawl.
Liquid nitrogen will be carried. Additional small freezer for lab will be required.

Project Codes

AE02n 20 days

Objectives

1. To collect fish and biota samples for biological effects measurements using bottom trawl and/or beam trawl at the Stornoway dredged material disposal site. Sample preparation and preservation will be undertaken onboard *Clupea*.
2. To undertake Agassiz, underwater television (UWT), grab and RoxAnn surveys of the Skye and Lochinver dredged material disposal sites to assess the condition of the seabed, identify the predominant benthic epifauna species, and the distribution of man-made debris.
3. To undertake Agassiz, underwater television (UWT), grab and RoxAnn surveys at five potential sea disposal sites off Islay.
4. To undertake Agassiz, grab, RoxAnn and underwater television (UWT) surveys at potential fish waste disposal sites in the vicinity of Skye and Kirkcudbright.
5. To undertake water, sediment and biological sampling for the National Marine Monitoring Programme and, to collect water samples as part of the Scottish Coastal Eutrophication Assessment Survey at the Clyde and Solway Firth stations.
6. To undertake Agassiz, grab, RoxAnn and underwater television (UWT) surveys at potential dredged material disposal sites in the vicinity of Whitehills. (Contingency)
7. To undertake grab and underwater television (UWT) surveys at Guillam Bank to complete work started in 2004. (Contingency)
8. The biological effects samples for objective 4 will be measured for EROD, PAH and PCB's, PAH metabolites and Vtg.
9. Sediment samples for Objectives 1, 2, 3, 4, 6 and 7 will be analysed for heavy metals (limited), PCB's (limited), PAH's and TBT. Particle size and organic carbon will also be undertaken.

Procedure

Scientific staff and equipment will be transported to Fraserburgh during the morning of 21 March (provisional), to load the vessel and set-up selected survey equipment. The staff will return to Aberdeen later that day. Cruise personnel will join the vessel at Fraserburgh during the morning of 1 April. The vessel will depart Fraserburgh as soon as possible, and proceed to Guillam Bank or Whitehills (optional depending on weather and tide - prefer to sail direct to Stornoway) to start the work programme outlined in Objectives 6 and 7. Upon completion of the work programmes outlined in Objective 6 or 7 the vessel will proceed to Stornoway to complete the work outlined in Objective 1. On completion of Objective 1 both Alistair McIntosh and Margaret McKenzie may disembark in Stornoway and return to Aberdeen. The rest of the programme will be tackled to suit the weather conditions and scientific crew change requirements, although it is intended to complete Objectives 4 (Kirkcudbright) and 5 before 11 April. The *Clupea* will remain on the west coast until the 16/17 April after then it will return to the east coast to complete Objectives 6 and 7. Cruise personnel will disembark as soon as unloading is completed on the morning of 20 April, to return to Aberdeen.

Due to the overall length of the cruise a half landing is scheduled for the 11/12 April, port to be determined. It may also be necessary because of the Working Time Directive to arrange rest days for certain personnel before and/or after the end of the cruise.

Transfer arrangements will be agreed during the cruise, however, it is thought these will occur on or near 8, 12 and 16 April. Day-to-day operations, including working hours, personnel transfer arrangements and the working and transfer ports, will be agreed with the OIC FRV *Clupea* during the course of the cruise.

J A Morrison
9 March 2005

Circulation List: Cruise Programmes and Reports

CLUPEA 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

Mr J T M Hunter
Mr T Reid
Mr P J Copland
Mr J Dunn
Mr A Beaton
J Petrie
Security

Non-lab staff

~~Island Cmdr Faroes (Faroes only)~~
~~Flag Officer, Denmark (Danish part of N-Sea only)~~
Coastguard
G Lees

PROGRAMMES AND REPORTS

Lab staff

Mr J A Morrison
Capt R Denholm
Mr R S T Ferro) Fish Man team
Mr C Hall) progs only
Dr R M Stagg
Dr C Moffat
Mr M R Heath
Mr A Macdonald
D Lichtman (+ additional copy of track chart
of reports only)
Mrs E Morrison
CO/OIC of Vessel (*Scotia*) (to be faxed)
Library (2)
File

Non-lab staff

~~Library, Danmarks Fisk (reports only)~~
~~Mr J Mortensen (Faroes only)~~
~~Mr A Souplet (Fishing Cruises only)~~
~~Dr S Ehrich (Entering German Waters) (reports only)~~
W J McCurdy, Belfast
Technical Director, SFIA (J E Tumilty)
Dr L Rickards
Dr I Joint
Director – Havfor Inst, Norway
Dr S Ehrich
Monsieur le Chef du dépt, Nantes
Mr J C Brabant
Mrs van Duyvenvoorde
Dr J G Gordon
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

*J Mckie
P Hayes
D Moore
G Rodger
C Shand
A McIntosh
M McKenzie
E Dalgarno
G Packer

Fishery Officers at

Fraseburgh