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FRV *Clupea*

Cruise 1607C

## **PROGRAMME**

20-26 November 2007

### **Ports**

Loading: Fraserburgh  
Unloading: Fraserburgh

### **Personnel**

Matt Gubbins (20-23 November)  
Barry O'Neill (23-26 November)  
Keith Summerbell  
Bob Milne

### **Gear**

Modified TV sledge  
LISST 100X  
Flowmeter  
Acoustic releases  
Ground gear elements, modified trawl door and weights  
Day grab (including table)  
Sholkovitz corer

### **Objectives**

- To determine the extent to which phytoplankton cysts and copepod eggs are re-suspended in the sediment plumes behind objects towed over the sea bed.

### **Procedure**

The *Clupea* will leave Fraserburgh on 20 November and steam towards Buckie. Operations will take place over the following few days in inshore waters between Portsoy and Nairn.

The sediment plumes will be sampled (i) by pup nets, (ii) by plankton nets, and (iii) using a LISST 100X, all of which will be mounted on a modified TV sledge. The opening/closing of the plankton nets and the closing of the water samplers will be triggered by acoustic releases.

The presence of phytoplankton cysts and copepod eggs will be determined on return to the Laboratory.

Sediment samples will be taken using the day grab and/or the corer.

Barry O'Neill will replace Matt Gubbins at Buckie on 23 November and the cruise will finish in Fraserburgh on 26 November.

Normal contact will be maintained with the Laboratory.

*J A Morrison*  
13 November 2007