## R1/3

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

FRV Alba-na-Mara

Cruise 0308A

## **REPORT**

19-28 May 2008

### Personnel

Barry O'Neill (19 May – 23/24 May) Keith Summerbell Mike Robertson Barbara Zarod Bob Milne

#### Gear

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

# **Objectives**

 To collect samples of the sediment plumes behind objects towed over the sea bed using a towed sledge on different sediment types.

Out-turn days per project: MF0709 – 10 days

### **Narrative**

102 tows were carried out using the benthic sledge at sites off Burghead and in Nairn Bay. A number of gear elements were fitted ahead of the sledge. These were a segment of rock hopper ground gear; a segment of small disc ground gear; a length of chain and a trawl door. To obtain baseline readings tows were also carried out using the sledge alone at both locations.

The sediment plumes were sampled (i) by water samplers mounted on the sledge and triggered by acoustic releases and (ii) by the LISST 100X instrument. The sediment plume samples were filtered, sub-sampled and stored on board the Alba. Sediment samples were taken at each site using the day grab.

Analysis of the suspended solids, particle size and nutrient will take place at the Laboratory and comparisons will be made between the sampler bottle data, the day grab data and the LISST 100X data.

B O'Neill 25 August 2008