# R1/6

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

FRV Clupea

Cruise 1205C

# REPORT

19-29 August 2005

### Personnel

Barry O'Neill	
Mike Breen	
Dave Bova	
Keith Summerbell	
Morag Campbell	
Jim Mair	
Martin Burns	
Leonie Robinson	(24–28 August)
Alistair McIntosh	(22–29 August)

### Equipment

BT158 Divers towed underwater vehicle (TUV) Scanmar sensors 5 and 2 tonne load cells Day grab kit (including table) Sieve table

Loading: Fraserburgh Unloading: Ullapool

### Objectives

To develop methodologies to measure the immediate physical, ecological and environmental impact of trawling.

#### Out-turn Days per Project: 11 days MF06s

#### Narrative

*Clupea* set sail for Gairloch and the dive team travelled by road and set up the onshore dive site on arrival. *Clupea* arrived in Gairloch in the morning and the divers 'Towed Underwater Vehicle (TUV) was put on board and rigged.

Divers, using the TUV then surveyed the grounds between Rubha Ban and Rubha Reidh. The only suitable fishing grounds at diveable depth were at the southern end of this range where the sea bed sediment was predominantly shell, coarse sand and merle.

Over the next few days, dives took place on the gear and particular attention was paid to the new Morgere doors with adjustments being made to the door settings to ensure that they were fishing correctly. On subsequent dives a range of operations took place: from filming the gear, taking core samples (on and off the trawl door path) and taking water samples in the sand cloud behind the starboard door (at  $\sim$  3, 10, 15, 30 and 50 m and one control) between the doors. Water samples (bottom and 10 m integrated) and day grab sediment samples were also taken at three positions along the trawl path.

One day was lost to poor weather after which *Clupea* headed for Loch Ewe.

On arrival, a survey of suitable fishing grounds at diveable depth was conducted. Over the following few days a similar range of operations took place. During this time two dives had to be aborted due to equipment failure and poor visibility and on one occasion the trawl became fast and the port wingend was damaged.

Poor weather prevented operations on the morning of 28 August and accordingly *Clupea* headed to Ullapool for off loading.

B O'Neill 13 January 2006