

R1/6

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

FRV *Clupea*

Cruise 1795C

REPORT

1-11 November 1995

Personnel

M R Robertson	HSO	1-11 November (in charge)
E Pinn	Res Asst	1-11 November
E Armstrong	SO	1-4 November
P J Hayes	PhD	4-6 November
G N Grewar	Contract	4-6 November
C W Shand	HSO	6-11 November

Gear: RoxAnn, TV, Day Grab, Gravity corer.

Objectives

1. To undertake intensive RoxAnn and benthic surveys from within the areas delimited by lines drawn between the following positions:

Area 1 57°41.00'N 06°29.30'W, 57°41.00'N 06°38.00'W,
57°46.00'N 06°38.00'W, 57°46.00'N 06°29.30'W and
57°41.00'N 06°29.30'W

Area 2 57°41.00'N 06°43.50'W, 57°41.00'N 06°52.00'W,
57°46.00'N 06°52.00'W, 57°46.00'N 06°43.50'W and
57°41.00'N 06°43.50'W

Area 3 57°41.00'N 06°00.00'W, 57°41.00'N 06°09.05'W,
57°46.00'N 06°09.05'W, 57°46.00'N 06°00.00'W and
57°41.00'N 06°00.00'W

2. To collect core samples from Loch Duich.

Out Turn Days: 11 days BKE1

Narrative

Clupea sailed from Fraserburgh harbour on the afternoon of 1 November and made for the first worksite to the northwest of Skye, arriving there at 1445 hours on 2 November (see Fig. 1). A RoxAnn survey of all experimental areas was then carried out, work being completed by 0100 hours on 4 November. *Clupea* then sailed for Kyle of Lochalsh for a 24 hour half-landing and berthed at 0445 hours. At 0800 hours the following day, the

vessel headed for Loch Duich where a series of gravity cores were collected from within the loch. On completion, *Clupea* returned to Kyle of Lochalsh where she tied up overnight. On the morning of 6 November, the vessel sailed for the worksite to the northeast of Skye arriving on station at 1215. TV tows, employing a towed sledge and drop-frame, were carried out until 2215 hours when the vessel sailed for an anchorage in Aros Bay, Loch Snizort for the night. The following day, *Clupea* returned to the work areas and continued with the TV survey until 2130 hours when the vessel moved to anchor in Staffin Bay on the east coast of Skye. Final TV tows were completed during 8 November from 0900 to 1600 hours *Clupea* then moved to anchor in Loch Rodel on the south east corner of Harris. On the morning of 9 November, *Clupea* again returned to the worksites where a series of grab samples were collected until 1615 hours when the vessel left the area and made for Kyle and Ardrossan, tying up in Ardrossan harbour at 1600 hours on 10 November.

Results

1. Three five-mile by five-mile boxes were surveyed using RoxAnn (see Fig. 1) These data were used as the basis for an intensive TV survey and a grab sampling programme designed to identify and enumerate the benthic communities present. A total of 24 TV tows (eight hours of video) and 18 Day grab samples were collected. The video tapes, sediment and infaunal samples will be examined subsequently in the Laboratory. The RoxAnn data were also used to create 3D images of sediment roughness and hardness overlaid on plots of the local bathymetry.
2. Three gravity cores were collected from Loch Duich, all material was frozen and returned to Aberdeen for analysis.

M R Robertson
6 December 1995

Seen in draft: A Simpson, OIC

Figure 1

