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FRV *Clupea*

Cruise 1700C

REPORT

4-19 December 2000

Personnel

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Objectives

- To obtain estimates of distribution and abundance of *Nephrops* in selected sealochs on the West coast using underwater cameras. If weather permits, the cruise will extend as far south as the Sound of Jura. TV work will also attempt to tie in with sealochs investigated during cruises 0300C and 1500C.
- To collect sediment samples at each station.
- To use trawl caught samples of *Nephrops* to examine biological features at different sites throughout the survey areas.
- The TV survey will also be used to collect data on other potential commercial species.

Estimated Days per Project: 16 Days MF01T

Narrative

Clupea sailed from Fraserburgh at 1245 hours on 4 December 2000, going through the Pentland Firth and around Cape Wrath over night, and anchoring north of Mull on the evening of 5 December 2000. TV operations commenced on the morning of 6 December 2000, when eight stations were completed in the Loch Sunart area. The vessel then sailed for Oban, where a member of crew left the ship on compassionate grounds. On 7 December 2000 nine stations were completed in the Lynn of Morvern area, and the ship returned to Oban to collect the crew replacement. On 9 December 2000 the vessel moved to the Colonsay area, and nine stations were completed, with the ship going to anchor in the Sound of Jura. Weather prevented TV operations in this area on 10 December 2000, and the vessel returned to Oban, sailing to Loch Nevis the following day. Work started in Loch Nevis on 11 December 2000, with six stations completed in this loch, six in Loch Hourn, five in Loch Duich and two in Loch Kishorn in the following days. Work started in the Inner Sound and Sound of Raasay areas on 13 December 2000, but the vessel had to move to work in Loch Torridon due to weather. After completion of the Torridon work, the Inner Sound and Sound of Raasay stations were completed, with the vessel finishing TV operations at 1330 hours on 17 December 2000. The vessel returned to Fraserburgh on the afternoon of 18 December 2000, and was unloaded the following day.

Because of the high numbers of creels in the survey areas, no trawling was attempted.

Results

Preliminary estimates of mean *Nephrops* burrow density for each station are shown in Table 1. The distribution and comparative densities are shown on the charts.

Final analysis of the video tapes will be carried out within the laboratory.

Ian Tuck
5 January 2001

Seen in draft: A Simpson, OIC

Table 1. Preliminary *Nephrops* density for TV survey, 2000

Latitude	Longitude	Density (m-2)		Latitude	Longitude	Density (m-2)
Loch Sunart				Loch Torridon		
56.67	-6.155	0.08		57.547	-5.544	0.30
56.668	-6.124	0.28		57.542	-5.578	0.65
56.672	-6.08	0.53		57.549	-5.577	0.70
56.657	-6.083	0.41		57.55	-5.599	0.61
56.699	-5.77	0.14		57.539	-5.601	0.75
56.673	-5.842	0.04		57.544	-5.624	0.01
56.657	-5.986	0.40		57.548	-5.589	0.72
56.667	-6.018	0.20		57.543	-5.587	0.76
				57.546	-5.564	0.54
Loch Duich				57.543	-5.551	0.18
57.265	-5.597	0.14		57.611	-5.77	0.57
57.228	-5.435	0.09		57.578	-5.754	0.08
57.235	-5.465	0.08		57.541	-5.675	0.02
57.257	-5.496	0.13		57.587	-5.785	0.29
57.261	-5.5	0.04				
				Inner Sound		
Loch Hourn				57.465	-6.091	0.49
57.131	-5.68	0.26		57.493	-6.082	0.45
57.138	-5.646	0.18		57.551	-6.064	0.37
57.131	-5.621	0.34		57.589	-6.037	0.25
57.124	-5.59	0.12		57.621	-6.058	0.44
57.116	-5.566	0.20		57.66	-5.869	0.25
57.11	-5.567	0.29		57.698	-5.89	0.18
				57.69	-5.94	0.69
Colonsay				57.673	-5.978	0.48
56.241	-5.829	0.00		57.628	-6.001	0.38
56.288	-5.91	0.18		57.669	-6.033	0.50
56.249	-5.974	0.55		57.725	-6.092	0.48
56.286	-6.008	0.21		57.762	-6.04	0.54
56.251	-6.078	0.00		57.732	-6.001	0.51
56.208	-6.038	0.46		57.745	-5.946	0.42
56.164	-5.986	0.86		57.731	-5.893	0.73
56.204	-5.926	0.96		57.612	-5.87	0.52
56.108	-5.933	0.97		57.6	-5.89	0.56
				57.615	-5.973	0.03
Morvern				57.649	-5.903	0.44
56.507	-5.569	0.25		57.797	-5.971	0.53
56.523	-5.539	0.18		57.803	-6.03	0.79
56.54	-5.545	0.17		57.834	-5.973	0.55
56.538	-5.508	0.19		57.853	-6.036	0.35
56.555	-5.513	0.10		57.896	-6.032	0.31
56.555	-5.491	0.12				
56.572	-5.496	0.09		Loch Nevis		
56.582	-5.465	0.07		56.987	-5.652	0.28
56.601	-5.453	0.14		56.994	-5.678	0.09
				57.006	-5.69	0.17
Loch Kishorn				57.016	-5.708	0.21
57.381	-5.658	0.35		57.023	-5.698	0.16
57.383	-5.65	0.21		57.027	-5.717	0.29

Clupea cruise 1700C, TV survey sites

