Cruise Report LF004 13-06-04 to 17-06-04 MESH Habitat Mapping

Personnel:

M Service DARD SIC C Brown SAMS A McDougall QUB

Objectives:

To conduct targeted habitat mapping as part of the MESH Programme; Ground truth area surveyed by Celtic Voyager.

Narrative:

The vessel left Belfast at 18:00h on Sunday 13th to steam to Stanton Banks Pinnacle to conduct camera and side scan survey work. However, heavy seas were encountered on during the following morning and the decision was made to return to more sheltered waters and move to the Lacunia Bank station where side scan and video tows were carried out. Overnight the vessel undertook a detailed RoxAnn Survey of the Shamrock Pinnacle area.

Tuesday 15-6-04

A series of side scan runs were made over the Shamrock Pinnacle followed by a camera tow. The vessel then moved west to the Hemptons Turbot Bank. This area was under survey by the Marine Institute Vessel RV Celtic Voyager and a series of camera tows were made to "ground truth" backscatter interpretation provided from their multi beam survey. Overnight a RoxAnn survey was carried out over this area.

Wednesday 16-6-04

The vessel remained on the Hempton's Turbot Bank undertaking a number of side scan lines. On completion of this she then steamed west to Middle Bank where a number of side scan lines were completed. The Lough Foyle then moved to Lacunia Bank where a video tow was completed. Following this ship attempted a video tow from the North Side of the Shamrock Pinnacles. However, due to a strong tide the water depth shoaled rapidly and the camera sledge became snagged and the towing wire parted. (the camera system was recovered the following week using the recovery buoy).

Following this vessel returned to Belfast, docking in the early hours of 17th June.

Despite the loss of the camera system of number objectives were achieved in particular the collaborative work with the RV Celtic Voyager.

M Service SIC

A Niblock Master

Details of Camera Tows

Lacunia Bank 14-6-04

Time	Cable Depth		Longtitude				
	18.01 18.05 18.07 18.12 18.14 18.18 18.2 18.22 18.24	Out 220m	27 26 34	55 55 55 55 55 55 55 55	22.7377 22.7555 22.7839 22.8099 22.8222 22.8419 22.8439 22.851 22.8724	666666666	22.8835 22.9522 coarse gravel 23.6405 soft gravel 23.1661 ripples 23.1986 23.2666 23.2982 23.3158 23.369
Shamroo	18.26 ck Pinn	acle	33	55	22.8951	6	23.3461
15-6-04							
	09:42 09:45 9.5 951 9.52 9.53 10		30 33 30	55 55 55 55 55 55 55	20.789 20.7763 20.7746 20.7839 20.7974 20.7967 20.789 20.819	6 6 6 6 6	24.1859 rippled sand 24.1292 rock 24.0075 23.9443 23.8159 23.7776 spong es 23.6612 23.4106 flat rock
10.14 10:21 10:24				55	20.8336	6	23.3666 octopu
			33	55 55	20.8671 20.8734	6 6	s 23.1449 sandfiilled crevices 23.069 gravel s
	10:26			55	20.8843	6	23.018
Hemptons Turbot Bank 15- 06-04							
30 3 7		Cable (110m	Out 36 36 35	55	27.153 27.0951 27.0924	7	2.8962 coarse sand 2.7303 megaripples 2.69

new tow							
TIEW LOW			55	27.7336	7	3.7192 sand waves with	
					•	stones in trough	
				27.7208		3.6891	
	14.26	4	7	27.6937		3.6094	
	14.33			27.6484		3.5736	
	14.36	4	7	27.6339		3.5027 stones in	
						trough	
		4		27.5976		3.4288	
		4:	5	27.586		3.4144	
	14.53			27.5389		3.306 more stones	
	15.08			27.4325		3.1185	
	15.13			27.3981		3.0648	
new tow	Ç	90m cable					
	15.44	4	1 55	27.0654	6	59.402 Glycimeris shell	
						possible sand veneer	
	15.48		55	27.0495	6	59.3074	
	15.5	3	9	27.0379		59.2356 more gravel	
	40.07			00.000	0	50.7007 smarral	
	16:07		55 55	26.663	6	58.7627 gravel	
			55 55	26.9617	6	58.7235 gravel	
			55 55	26.9507	6 6	58.6708 58.6377	
new tow			55	26.9477	O	58.6377	
TICW LOW	17.4		55	26.6597	6	56.3947 coarse gravel	
	17.47		55	26.688	6	56.5267 cobble	
	17.51		55	26.6694	6	56.5896	
	17.55		55	26.7001	6	56.6669	
	18:00		55	26.6955	6	56.725	
new tow		160m cable					
	18.38		55	26.0164	6	55.0335	
	1842	30	6 55	26.0147	6	55.0995	
	18.51	3	7 55	26.0184	6	55.3175	
		30	6 55	26.0316	6	55.4421 gravel	
	18.57		55	26.0317	6	55.5567	
Lacunia Bank							
		190m cable	55	22.9734	6	23.4067	
	15.34 2	200m		22.9734	6	23.4067	
	15.36	74.3	3	22.9517	6	23.3152	
	15.38			22.9385	6	23.2985	
	15.4			22.9145	6	23.2776	
	15.44			22.8869	6	23.2199	
	15.5	2:	5	22.8449	6	23.1255	
	15.53			22.8216	6	23.1586 red\algae	
	15.56	4:	3	22.8015		22.9637	
	16.03	8	n	22.7393		22.8521	
	16.05	8		22.7321		22.8404 rippled sand with	
	. 5.55	0.	_	, 0_ 1		o to i rippiou suriu with	

16.07	7		22.7199	brittle stars 22.8096 ripplied unconsolidated coarse sand
16.1	1		22.7039	22.7716
16.12	2		22.6927	22.7459 broken shell
16.13	3		22.669	22.6553 rock
16.16	95		22.669	22.6553
Shamrock Pinacle				
17:45	5 30	55	21.1496	23.7662 Camera fouled