

## NOTICE TO MARINERS – Area 2/3

### Detail of Operations

Mariners are advised that Cefas will be carrying out the annual underwater TV survey of *Nephrops norvegicus* at **Farn Deeps grounds** (55° 35' – 54° 45' N and 1° 30' – 0° 40' W) for 8 days, from the **21<sup>st</sup> to 28<sup>th</sup> June**.

The work will be carried out using the RV Cefas Endeavour and will involve 24hr working. There are 110 stations which be visited during the survey, starting at the southern edge of the grid and working north. At each station, two operations will be carried out, a multibeam run (at approximately 5 – 6 knots) followed by the deployment of a camera sledge. The sledge will be deployed from the stern of the vessel and towed along the seabed for a duration of approximately 20 minutes. A speed of between 0.5-1 knot will be maintained whilst towing the sledge.

Each station consists of a circle with a diameter of 400 meters, within which the multibeam run and sledge tow will be carried out.

Operations will be completed by **28<sup>th</sup> June 2016**.

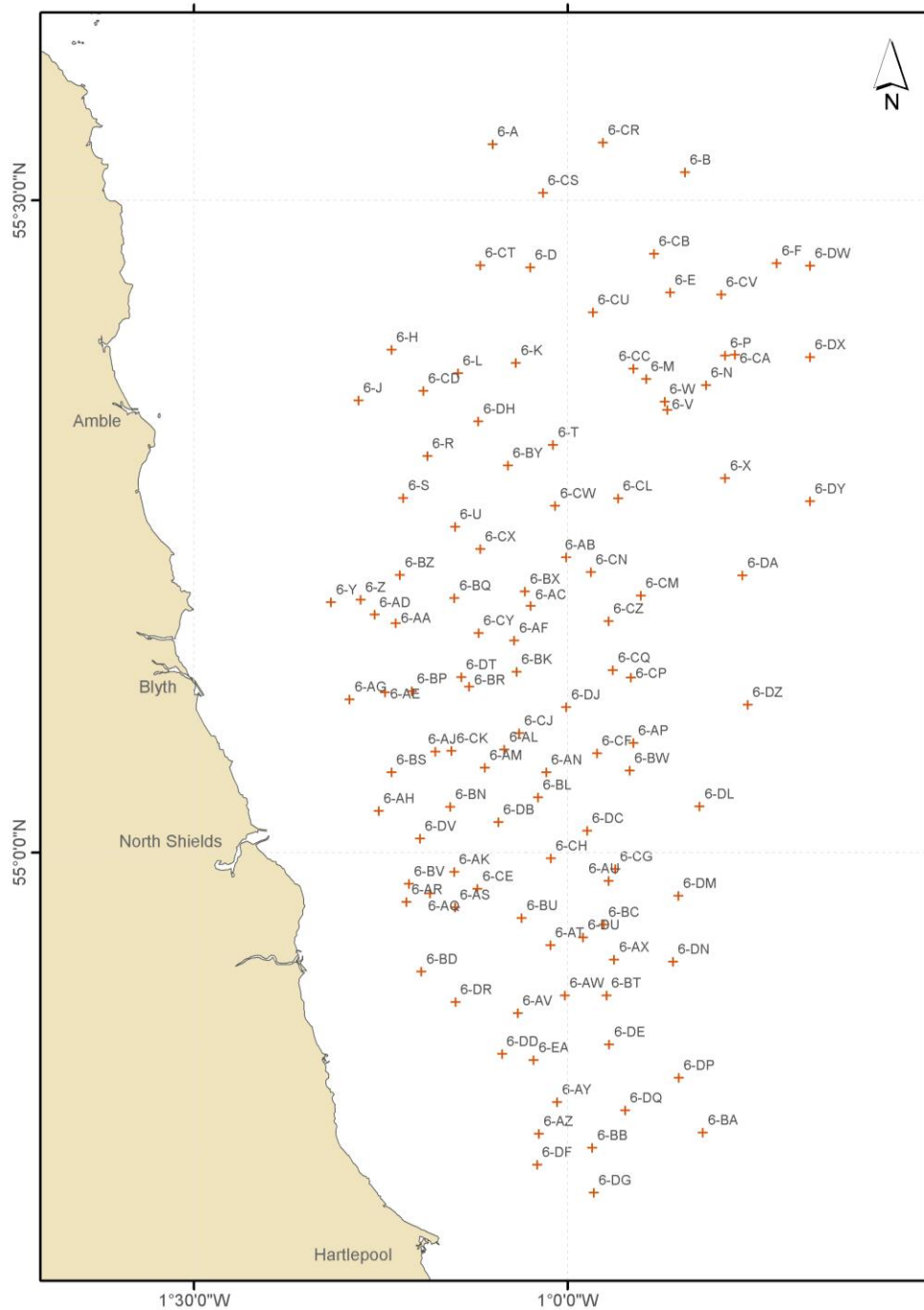
Mariners are advised to give the vessel a wide berth and to operate at slow speeds around the vessel. The vessel will display the required day shapes and night time lights during survey operations (as required).

The station positions and a map of the stations is detailed below for reference:

<b>TVID</b>	<b>LatD</b>	<b>LatM</b>	<b>LongD</b>	<b>LongM</b>	<b>DecLat</b>	<b>DecLong</b>
<b>6-A</b>	55	32.5405	-1	5.9825	55.5423	-1.0997
<b>6-B</b>	55	31.2705	0	50.5360	55.5212	-0.8423
<b>6-D</b>	55	26.9245	-1	2.9665	55.4487	-1.0494
<b>6-E</b>	55	25.7660	0	51.7270	55.4294	-0.8621
<b>6-F</b>	55	27.1150	0	43.1660	55.4519	-0.7194
<b>6-H</b>	55	23.1485	-1	14.1080	55.3858	-1.2351
<b>6-J</b>	55	20.8195	-1	16.7730	55.3470	-1.2795
<b>6-K</b>	55	22.5425	-1	4.1145	55.3757	-1.0686
<b>6-L</b>	55	22.0750	-1	8.7700	55.3679	-1.1462
<b>6-M</b>	55	21.8065	0	53.6600	55.3634	-0.8943
<b>6-N</b>	55	21.5175	0	48.8390	55.3586	-0.8140
<b>6-P</b>	55	22.8875	0	47.3105	55.3815	-0.7885
<b>6-R</b>	55	18.2770	-1	11.2245	55.3046	-1.1871
<b>6-S</b>	55	16.3355	-1	13.1550	55.2723	-1.2193
<b>6-T</b>	55	18.7905	-1	1.1415	55.3132	-1.0190
<b>6-U</b>	55	15.0270	-1	9.0000	55.2504	-1.1500
<b>6-V</b>	55	20.3955	0	51.9600	55.3399	-0.8660
<b>6-W</b>	55	20.7640	0	52.1560	55.3461	-0.8693
<b>6-X</b>	55	17.2445	0	47.3120	55.2874	-0.7885

<b>6-Y</b>	55	11.5520	-1	18.9570	55.1925	-1.3160
<b>6-Z</b>	55	11.6655	-1	16.5930	55.1944	-1.2766
<b>6-AA</b>	55	10.5855	-1	13.7555	55.1764	-1.2293
<b>6-AB</b>	55	13.6265	-1	0.0930	55.2271	-1.0016
<b>6-AC</b>	55	11.3755	-1	2.9350	55.1896	-1.0489
<b>6-AD</b>	55	10.9925	-1	15.4685	55.1832	-1.2578
<b>6-AE</b>	55	7.3930	-1	14.6260	55.1232	-1.2438
<b>6-AF</b>	55	9.7795	-1	4.2470	55.1630	-1.0708
<b>6-AG</b>	55	7.0760	-1	17.4725	55.1179	-1.2912
<b>6-AH</b>	55	1.9165	-1	15.1320	55.0319	-1.2522
<b>6-AJ</b>	55	4.6500	-1	10.5700	55.0775	-1.1762
<b>6-AK</b>	54	59.1040	-1	9.0790	54.9851	-1.1513
<b>6-AL</b>	55	4.7580	-1	5.0480	55.0793	-1.0841
<b>6-AM</b>	55	3.9190	-1	6.6260	55.0653	-1.1104
<b>6-AN</b>	55	3.7155	-1	1.6815	55.0619	-1.0280
<b>6-AP</b>	55	5.0640	0	54.6885	55.0844	-0.9115
<b>6-AQ</b>	54	58.1145	-1	11.0145	54.9686	-1.1836
<b>6-AR</b>	54	57.7100	-1	12.9065	54.9618	-1.2151
<b>6-AS</b>	54	57.4505	-1	9.0015	54.9575	-1.1500
<b>6-AT</b>	54	55.7030	-1	1.3515	54.9284	-1.0225
<b>6-AU</b>	54	58.6765	0	56.6800	54.9779	-0.9447
<b>6-AV</b>	54	52.5465	-1	3.9710	54.8758	-1.0662
<b>6-AW</b>	54	53.3690	-1	0.1850	54.8895	-1.0031
<b>6-AX</b>	54	55.0255	0	56.2345	54.9171	-0.9372
<b>6-AY</b>	54	48.4275	-1	0.8005	54.8071	-1.0133
<b>6-AZ</b>	54	46.9490	-1	2.2800	54.7825	-1.0380
<b>6-BA</b>	54	46.9985	0	49.0960	54.7833	-0.8183
<b>6-BB</b>	54	46.2940	0	57.9900	54.7716	-0.9665
<b>6-BC</b>	54	56.6560	0	57.0660	54.9443	-0.9511
<b>6-BD</b>	54	54.4800	-1	11.7040	54.9080	-1.1951
<b>6-BK</b>	55	8.3505	-1	4.0680	55.1392	-1.0678
<b>6-BL</b>	55	2.5395	-1	2.3485	55.0423	-1.0391
<b>6-BN</b>	55	2.1020	-1	9.3845	55.0350	-1.1564
<b>6-BP</b>	55	7.4605	-1	12.4680	55.1243	-1.2078
<b>6-BQ</b>	55	11.7365	-1	9.0545	55.1956	-1.1509
<b>6-BR</b>	55	7.6645	-1	7.8575	55.1277	-1.1310
<b>6-BS</b>	55	3.7130	-1	14.1035	55.0619	-1.2351
<b>6-BT</b>	54	53.3655	0	56.8425	54.8894	-0.9474
<b>6-BU</b>	54	56.9725	-1	3.6540	54.9495	-1.0609
<b>6-BV</b>	54	58.5370	-1	12.6950	54.9756	-1.2116
<b>6-BW</b>	55	3.7895	0	54.9875	55.0632	-0.9165
<b>6-BX</b>	55	12.0335	-1	3.3930	55.2006	-1.0565
<b>6-BY</b>	55	17.8435	-1	4.7670	55.2974	-1.0794
<b>6-BZ</b>	55	12.8030	-1	13.4300	55.2134	-1.2238
<b>6-CA</b>	55	22.9280	0	46.5375	55.3821	-0.7756
<b>6-CB</b>	55	27.5395	0	53.0340	55.4590	-0.8839
<b>6-CC</b>	55	22.2735	0	54.6865	55.3712	-0.9114
<b>6-CD</b>	55	21.2535	-1	11.5550	55.3542	-1.1926
<b>6-CE</b>	54	58.3090	-1	7.2080	54.9718	-1.1201

6-CF	55	4.5760	0	57.5980	55.0763	-0.9600
6-CG	54	59.2270	0	56.1380	54.9871	-0.9356
6-CH	54	59.7265	-1	1.3170	54.9954	-1.0220
6-CJ	55	5.5165	-1	3.8465	55.0919	-1.0641
6-CK	55	4.7055	-1	9.2940	55.0784	-1.1549
6-CL	55	16.3350	0	55.9150	55.2722	-0.9319
6-CM	55	11.8550	0	54.0750	55.1976	-0.9013
6-CN	55	12.9350	0	58.1000	55.2156	-0.9683
6-CP	55	8.0800	0	54.8800	55.1347	-0.9147
6-CQ	55	8.4150	0	56.3200	55.1402	-0.9387
6-CR	55	32.6215	0	57.1150	55.5437	-0.9519
6-CS	55	30.3300	-1	1.9465	55.5055	-1.0324
6-CT	55	27.0125	-1	6.9910	55.4502	-1.1165
6-CU	55	24.8635	0	57.9310	55.4144	-0.9655
6-CV	55	25.6790	0	47.6245	55.4280	-0.7937
6-CW	55	15.9795	-1	0.9605	55.2663	-1.0160
6-CX	55	14.0000	-1	6.9850	55.2333	-1.1164
6-CY	55	10.1215	-1	7.1140	55.1687	-1.1186
6-CZ	55	10.6740	0	56.6820	55.1779	-0.9447
6-DA	55	12.7935	0	45.9230	55.2132	-0.7654
6-DB	55	1.4035	-1	5.5210	55.0234	-1.0920
6-DC	55	0.9965	0	58.3980	55.0166	-0.9733
6-DD	54	50.6505	-1	5.2015	54.8442	-1.0867
6-DE	54	51.1000	0	56.6280	54.8517	-0.9438
6-DF	54	45.5120	-1	2.4110	54.7585	-1.0402
6-DG	54	44.2030	0	57.8560	54.7367	-0.9643
6-DH	55	19.8625	-1	7.1260	55.3310	-1.1188
6-DJ	55	6.7000	-1	0.0835	55.1117	-1.0014
6-DL	55	2.1165	0	49.3725	55.0353	-0.8229
6-DM	54	57.9890	0	51.0605	54.9665	-0.8510
6-DN	54	54.9440	0	51.4915	54.9157	-0.8582
6-DP	54	49.5390	0	51.0360	54.8257	-0.8506
6-DQ	54	48.0295	0	55.3390	54.8005	-0.9223
6-DR	54	53.0750	-1	8.9700	54.8846	-1.1495
6-DT	55	8.1025	-1	8.5145	55.1350	-1.1419
6-DU	54	56.0585	0	58.7305	54.9343	-0.9788
6-DV	55	0.6380	-1	11.8270	55.0106	-1.1971
6-DW	55	27.0000	0	40.5000	55.4500	-0.675
6-DX	55	22.8000	0	40.5000	55.3800	-0.675
6-DY	55	16.2000	0	40.5000	55.2700	-0.675
6-DZ	55	6.8311	0	45.5009	55.1139	-0.758348
6-EA	54	50.3640	-1	2.6958	54.8394	-1.04493



### Enquiries

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