

**CENTRE FOR ENVIRONMENT, FISHERIES AND AQUACULTURE SCIENCE  
LOWESTOFT LABORATORY, SUFFOLK, NR33 0HT**

**2015 RV Cefas Endeavour Programme: CEND01/15**

**TOTAL DURATION:** 3<sup>rd</sup> January-23<sup>rd</sup> January 2014

**Part A: 3<sup>rd</sup> January-10<sup>th</sup> January 2015**

**STAFF:**

Alex Callaway (SIC) SIC  
Alison Pettafor (Cefas) B1

**Day Shift**

Sue Ware (Cefas) C7  
Matt Eade (Cefas) C1  
Sarah Watts (Cefas) C6  
James Cook (Cefas) C5  
Katie Arnold (EA) C4  
Verity Roberts (NE) C8

**Night Shift**

Paul Whomersley (Cefas) D5  
Bryony Townhill (Cefas) D2  
Peter Randall (Cefas) D3  
Sara Stones (Cefas) D4  
Simon Pearson (Cefas) D6  
Nina Godsell (EA) C2  
Emma Foster (NE) C3

**Part B: 10th January-17th January 2015**

Sue Ware (Cefas) C7  
Matt Eade (Cefas) C1  
Sarah Watts (Cefas) C6  
James Cook (Cefas) C5  
Ben Green (EA/NE) C4  
Nicola Edwards (NE) C8

**Night Shift**

Paul Whomersley (Cefas) D5  
Bryony Townhill (Cefas) D2  
Peter Randall (Cefas) D3  
Sara Stones (Cefas) D4  
Simon Pearson (Cefas) D6  
Miriam Lugg (NE) C2  
Miriam Knollys (NE) C3

**Part C: 17th January-23rd January 2015**

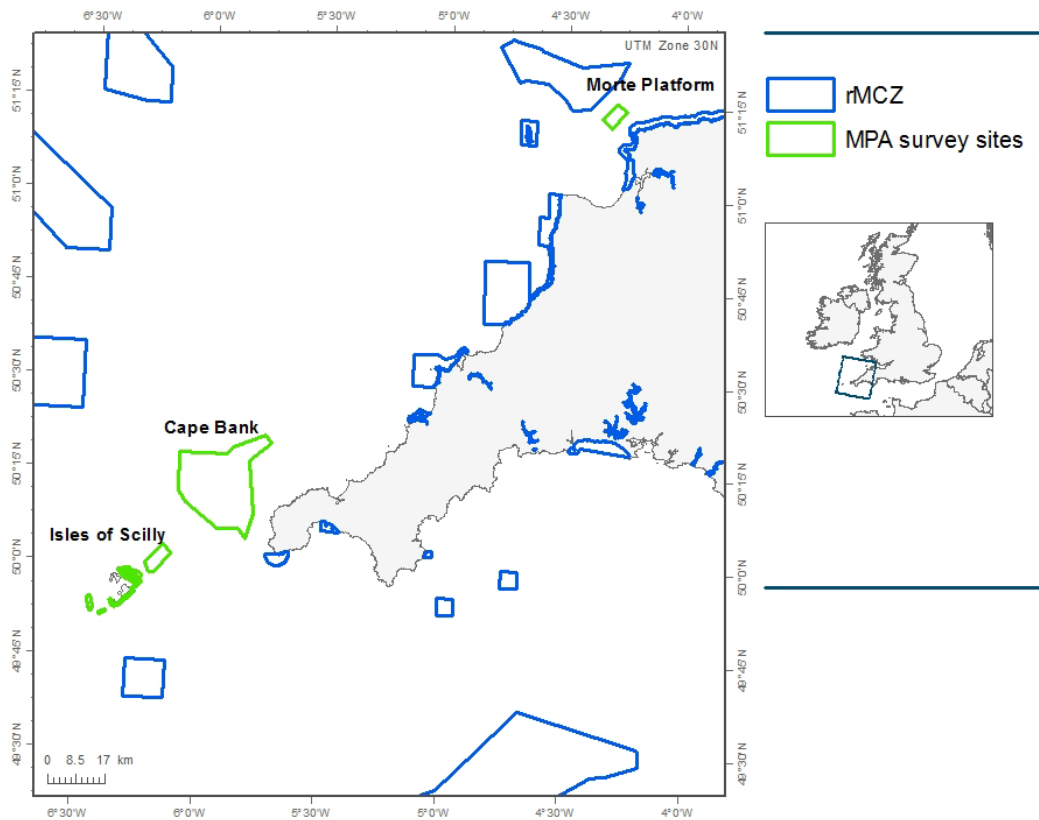
**Day Shift**

Sue Ware (Cefas)	C7
Matt Eade (Cefas)	C1
Sarah Watts (Cefas)	C6
James Cook (Cefas)	C5
+1 NE	C4
+1 NE	C8

**Night Shift**

Paul Whomersley (Cefas)	D5
Bryony Townhill (Cefas)	D2
Peter Randall (Cefas)	D3
Sara Stones (Cefas)	D4
Simon Pearson (Cefas)	D6
+1 NE	C2
+1 NE	C3

## GENERAL LOCATION: Survey Work Remaining from CEND 25/14



**Figure 1. Location of MPA survey areas in the South West (Cape Bank, Scillies)**

Remaining survey work not completed during CEND 25/14 may be carried out during CEND01/15.

This comprises a small block of MBES at Cape Bank along with approximately 15 GT stations (DC and HG). It is estimated that completion of this work will require approximately 3 days of survey.

Completion of the GT survey will also be carried out at the northern IoS iVMS site (DC and HG). It is estimated that this will require approximately 2 days of survey time.

**GENERAL LOCATION: Fishing pressure survey**

**Indicator (IQI) testing and calibration study (proposed approach)**

Location of the fishing pressure survey will be west of Lundy.

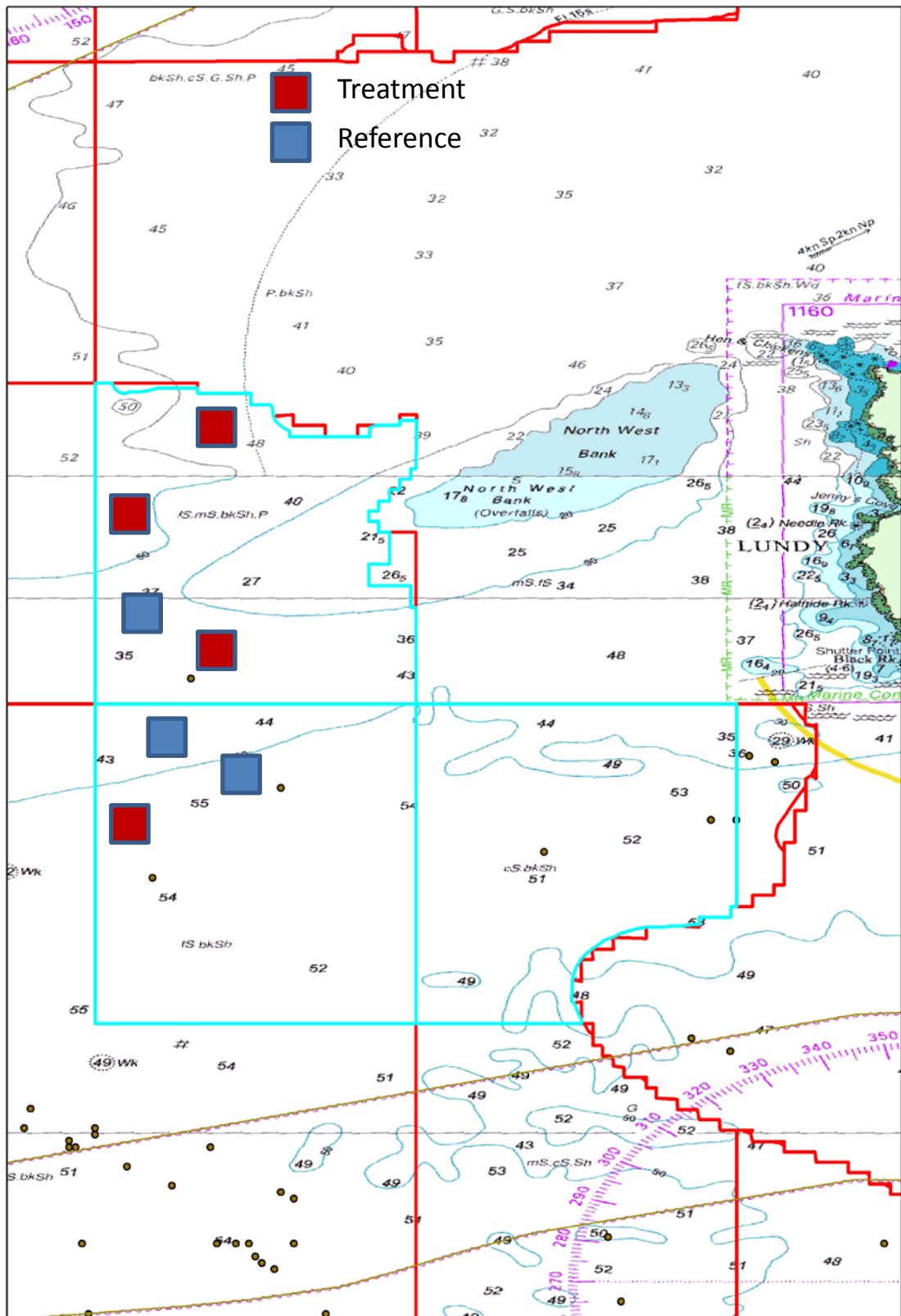


Figure 2. Location of the fishing pressure survey and experimental boxes - west of Lundy site.

The objective of this element of the survey is to design an experimental approach to test and calibrate the Infaunal Quality Index (IQI) indicator. The proposed design will be in one of the highlighted (in blue) cells. The design will include eight 500m<sup>2</sup> survey boxes, four reference boxes and 4 treatment boxes.

**Experimental approach:**

1. To acoustically survey each survey box using multibeam echosounder data.
2. To collect 20 benthic grab samples (10\* Hamon grab and 10\* Day grab) from each of the proposed survey boxes (before impact).
3. To collect epifaunal samples from each survey box using a 2 m scientific beam trawl (before impact).
4. To trawl using 2\*4m beam trawls four of the eight survey boxes (treatment).
5. To collect 20 benthic grab samples (10\* Hamon grab and 10\* Day grab) from each of the proposed survey boxes (immediately after impact)
6. To collect epifaunal samples from each survey box using a 2 m scientific beam trawl (immediately after impact)
7. To collect 20 benthic grab samples (10\* Hamon grab and 10\* Day grab) (March/April 2015) from each of the proposed survey boxes (recovery assessment)
8. To collect epifaunal samples (March/April 2015) from each survey box using a 2 m scientific beam trawl (recovery assessment)

**Table 1. Survey sites, data to be collected (Multibeam MB, Grabs, Camera) and estimated survey time for each task.**

**ALL REMAINING TASKS**

Site	MB	GT (Grabs)	GT (Camera/SPI)	Total survey time (Days)
Cape Bank	1	0.5	0.5	2
Fishing Pressure Study/IQI Indicator development/calibration (Cefas, NE, JNCC, EA, IFCA)	TBC	TBC	TBC	12
IoS (Northern portion)		1	1	2
<i>MortePlatform Control / Hythe Bay (R&amp;D)</i>	0	3	3	6
<i>Transits</i>				5
<i>Crew change</i>				2
<i>Mob/Demob</i>				2
<b>Total</b>				<b>30</b>

**TASKS WITHOUT CAPE BANK, IoS iVMS and HYTHE BAY**

<b>Site</b>	<b>MB</b>	<b>GT (Grabs)</b>	<b>GT (Camera/SPI)</b>	<b>Total survey time (Days)</b>
Fishing Pressure Study/IQI Indicator development/calibration (T0, T1) (Cefas, NE, JNCC, EA, IFCA)	TBC	TBC	TBC	12
<i>Transits</i>				5
<i>Crew change</i>				2
<i>Mob/Demob</i>				2
<b>Total</b>				<b>20</b>