



RESEARCH VESSEL PROGRAMME

RV CEFAS ENDEAVOUR Survey: C END 06 - 2017

STAFF:

Name	Role	Cabin	Shift
Paul McIlwaine	SIC	SIC	07:00- 19:00
Gemma Kiff	Data Manager	SCI 1 (B1)	07:00- 19:00
Bill Meadows	Hydrographer	SCI 2 (B2)	07:00- 19:00
Louise Brown	Day SL	SCI 1 (C1)	12:00- 0:00
Clement Garcia	Benthic ecologist	SCI 2 (C2)	12:00- 0:00
Andrew Bodle	MIST technician	SCI 3 (C3)	12:00- 0:00
Tom Hull	Water scientist	SCI 4 (C4)	12:00- 0:00
Peter Mitchell	Habitat mapper	SCI 5 (C5)	12:00- 0:00
James Albrecht (JNCC)	Evidence assistant	SCI 6 (C6)	12:00- 0:00
Stefan Bolam	Night SL	SCI 7 (C7)	00:00-12:00
Mike Nelson (JNCC)	Evidence lead	SCI 8 (C8)	00:00-12:00
Ben Wood	MIST technician	SCI 2 (D2)	00:00-12:00
Sophie Hare	Water scientist	SCI 3 (D3)	00:00-12:00
David Clare	Benthic ecologist	SCI 4 (D4)	00:00-12:00
Sara Stones	Sedimentologist	SCI 5 (D5)	00:00-12:00
Lauren Molloy (JNCC)	Monitoring team	SCI 6 (D6)	00:00-12:00

DURATION:

Wednesday April 19, 2017 departing from Lowestoft until Thursday May 04, 2017, demobbing in Falmouth.





LOCATION:

Table 1. Position of polygon vertices for Bassurelle Sandbank and Wight-Barfleur Reef.

50.6441	1.122131	Wight-Barfleur Reef	50.37616	-1.04962
50.5703	1.023547		50.29252	-1.03841
50.55278	1		50.20454	-1.04106
50.54989	0.944184		50.1776	-1.18337
50.54817	0.920378		50.15269	-1.47909
50.55276	0.904889		50.15343	-1.65483
50.55706	0.902307		50.23468	-1.78222
50.59234	0.926114		50.23473	-1.84726
50.59951	0.932424		50.25744	-1.94669
50.60066	0.940456		50.33733	-1.95484
50.60066	0.95996		50.37938	-1.82641
50.60037	0.985201		50.39348	-1.67979
50.60611	1.014171		50.36701	-1.31564
50.61615	1.030807			
50.62607	1.051269			
50.6373	1.067972			
50.65008	1.091587			
50.65374	1.101508			
50.66158	1.128296			
50.66532	1.142004			
	50.5703 50.55278 50.54989 50.54817 50.55276 50.55276 50.59234 50.60066 50.60066 50.60037 50.60611 50.61615 50.62607 50.6373 50.65374 50.66158	50.57031.02354750.55278150.549890.94418450.548170.92037850.552760.90488950.557060.90230750.592340.92611450.599510.93242450.600660.94045650.600670.98520150.606111.01417150.616151.03080750.626071.05126950.653741.10150850.661581.128296	50.5703 1.023547 50.55278 1 50.54989 0.944184 50.55276 0.904889 50.55276 0.902307 50.59234 0.926114 50.59951 0.932424 50.60066 0.940456 50.60037 0.985201 50.61615 1.030807 50.62607 1.051269 50.65374 1.101508 50.66158 1.128296	50.5703 1.023547 50.55278 1 50.54989 0.944184 50.54817 0.920378 50.55276 0.904889 50.55706 0.902307 50.59234 0.926114 50.60066 0.932424 50.60066 0.95996 50.60037 0.985201 50.61615 1.030807 50.6373 1.067972 50.65374 1.101508 50.66158 1.128296





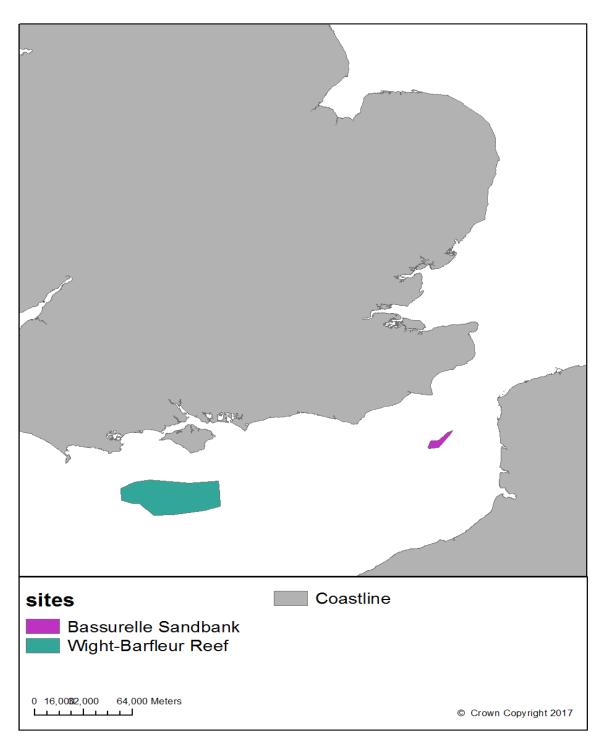


Figure 1. Location of sites to be surveyed during CEND0617





AIMS:

The Joint Nature Conservation Committee (JNCC) and the Centre for Environment, Fisheries and Aquaculture Science (Cefas) will conduct a survey aboard RV Cefas Endeavour (CEND0617) to gather evidence to monitor Wight-Barfleur Reef and Bassurelle Sandbank candidate Special Areas of Conversation / Sites of Community Importance (cSAC/SCI) and inform assessment of condition of the designated features of the sites (Fig 1). The protected features of Wight-Barfleur Reef and Bassurelle Sandbank are Habitats Directive Annex I 'Reef' and 'Sandbanks which are slightly covered by seawater all the time'.

Aims at Bassurelle Sandbank

- 1. Acquire sediment particle size data across the site.
- 2. Acquire quantitative infaunal from grab sampling and epifaunal data from video and 2m scientific beam trawls across the entire site.

Aims at Wight-Barfleur Reef

- 1. Acquire high-resolution acoustic data from wide using multibeam and sidescan.
- 2. Collect groundtruth data using a drop camera system across the site
- 3. Acquire environmental data using ESM2 logger attached to drop camera frame.

PLAN:

Depart from Lowestoft on Wednesday April 19 2017 and transit to the Bassurelle Sandbank site. Begin collecting grab samples at pre-planned stations across the entire site before commencing 2m scientific beam trawls tows to gather data on the epifaunal communities present at the site. At a subset of stations, collect both video data and 2m scientific beam trawl tows to facilitate a comparison of the two gears in sampling the epibenthic communities. It is anticipated this work will take around 5 days.

Continue transit west to reach the Wight-Barfleur Reef site. On arrival, a multibeam calibration will be conducted before the acquisition of multibeam echosounder data and side scan sonar data in corridor blocks. Drop camera frame video data will then be acquired to groundtruth the acoustic signals seen in the newly acquired data. On completion of the survey at Wight-Barfleur Reef (rough 9 days), continue transit west to demobilise the survey in Falmouth.

GEAR:

Mini-Hamon grab, Day grab, 2m scientific beam trawl, ESM2 logger, Drop-Camera, Sidescan Sonar, Multibeam Ecosounder

Paul McIlwaine
Scientist in Charge
20 Mar 17

INITIALLED:	2
DISTRIBUTION:	