

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

**2016 RESEARCH VESSEL PROGRAMME**

**PROGRAMME: RV Cefas Endeavour: Survey CEND1116**

**STAFF:**

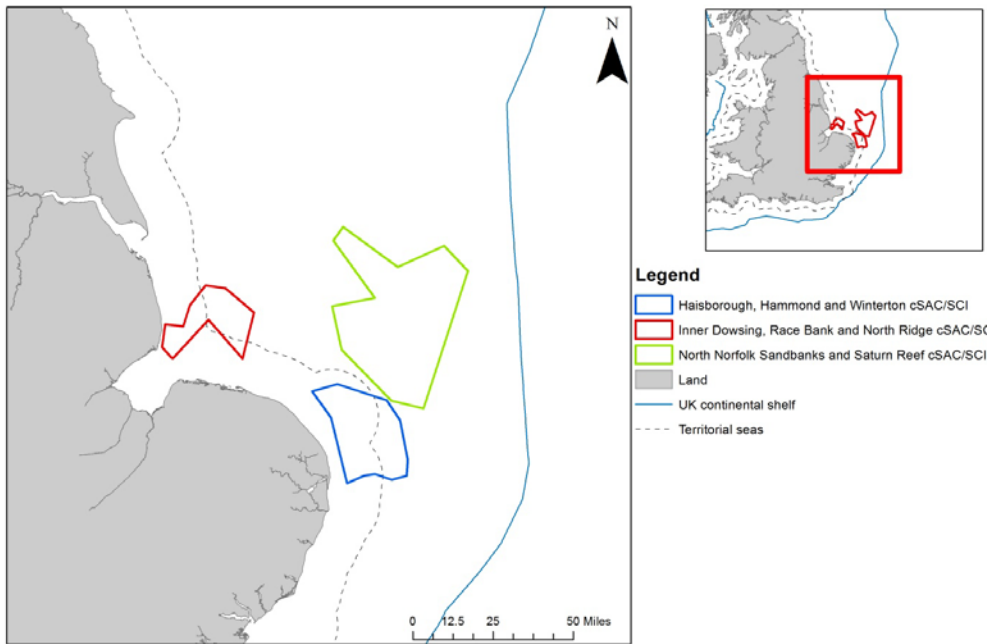
SIC	Paul McIlwaine	
DM	Louise Brown	
Shift lead	Marc Whybrow	
Shift lead	Chris Jenkins	
Benthic ecologist	Sue Ware	
MIST	Neil Needham	
Hydrographer	Bill Meadows	
	Joey O Connor or Laura	
JNCC	Cornick	
JNCC	Louisa Jones	
JNCC	Andy Eggett	
JNCC	Ana Jesus	
JNCC	Yessica Griffiths	
JNCC	Ellen Last	
NE	Nicola Edwards	Small boat transfer: embarking 9 <sup>th</sup> June
NE	Pete Walker	Small boat transfer: embarking 9 <sup>th</sup> June
NE	Phil Ray	Small boat transfer: departing 9 <sup>th</sup> June
NE	Harri Morral	Small boat transfer: departing 9 <sup>th</sup> June

**DURATION:** 20 days (31<sup>st</sup> May – 9<sup>th</sup> June <Small boat transfer> 9<sup>th</sup> June – 19<sup>th</sup> June).

**LOCATION:** *Please provide a detailed map and state longitudes and latitudes*

The aim of this survey is to visit the North Norfolk sandbanks to fulfil monitoring objectives at sandbank features in conjunction with an EA survey vessel.

Approximate survey area: 53.268N 0.493E, 53.715N 0.493E, 53.715N 2.708E, 52.626N 2.708E.



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### AIMS:

Objective 1.1: Monitor how the physical structure (composition) and morphology (shape) of the sandbanks changes over time.

Objective 1.2: Monitor how the structure (composition) and function of biological communities in and around sandbanks changes over time.

Objective 2.1: Monitor temporal changes in the condition and extent of *Sabellaria spinulosa* reef within confirmed areas of reef (closures, core reef and previously surveyed areas).

Objective 2.2: Verify presence and extent of *Sabellaria spinulosa* reef in low confidence areas.

### PLAN:

The vessel will sail from Lowestoft on the 31<sup>st</sup> May at HW 17:37 (BST) and sail approximately 30 nautical miles to commence survey objectives at the sandbank features off the North Norfolk Coast.

Vessel inductions will take place at 13:00 on the 31<sup>st</sup> May for those that have not had one in the last 12 months. Everyone is to be on board by this time. **Hard hats with chin straps, high vis vests and steel toe boots are required on the quay side for embarkation.** Those on night shift will be able to rest and prepare accordingly to get onto their shift pattern.

Dinner will be provided on the vessel at 17:00.

A small boat transfer of Natural England staff is arranged for the 9<sup>th</sup> June (details to be confirmed by transfer company once the TAF has been progressed).

The vessel will return to Lowestoft on evening HW tide of the 19<sup>th</sup> June.

**GEAR:**

MBES, SS, Mini Hamon, 2m beam trawl, Drop camera, Camera sledge.

Paul McIlwaine  
Scientist In Charge  
07835447306

Date

INITIALLED:

DISTRIBUTION:

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DRAFT