

RESEARCH VESSEL PROGRAMME

**RV CEFAS ENDEAVOUR
Survey: C END 14 - 2018**

STAFF:

Name	Role	Cabin	Shift
Elisa Capuzzo	SIC	B1	Day
David Sivyer	2IC / Vattenfall	B2	Day
Eric Fitton	Mooring/Vattenfall	C6	Day
Alfie Howat	Mooring/Vattenfall	C5	Day
Oliver Twigge	Chem	C1	Day
Robin Whiting	Chem	D2	Day
Nathan Merchant	Noise	C2	Day
Andrew Bodle	Mooring/Vattenfall	C3	Day
Isabel Seguro Requejo	UEA	C7	Day
Rhodri Irranca-Davies	Natural Resources Wales	D5	Day

DURATION: 4th August to 7th August 2018

MOBILISE: LOWESTOFT

DEMOBILISE: LOWESTOFT

OPERATION AREAS: North Sea

AIMS:

1. Service SmartBuoys at Dowsing, Warp and West Gabbard2 (SLA25G – 2 day);
2. Vattenfall Norfolk Vanguard: lander service and water sampling (C7311B – 0.5 day);
3. Vattenfall Norfolk Boreas: lander service and water sampling (C7645B – 0.5 day);
4. Service noise landers at Dowsing and Warp (SLA20A – 0.5 day);
5. Collection of zooplankton samples to test presence of microsporidia lineages in copepods;
6. Collection of zooplankton sample at West Gabbard for community composition analysis;
7. Collection of phytoplankton/chlorophyll samples to test for the presence of toxin producing phytoplankton.
8. Collection of large volumes of surface seawater (300-600 L) for DOM (Dissolved Organic Matter) extraction for use in experiments at UEA (part of the REMAIN project).
9. Testing of the Ferrybox software for controlling the water sampler – collection of samples for nutrients and phytoplankton analysis.

PLAN:

The RV Cefas Endeavour will sail at the early hours (*tbc*) of Saturday 4th August 2018 and steam northward to Vattenfall Norfolk Vanguard, where the lander will be serviced. Water sampling will be carried at this site, before and after servicing the lander.

The Endeavour will progress towards the Vattenfall Norfolk Boreas, where the lander will be serviced, in addition to carry out water sampling (Saturday 4th August).

The SmartBuoy and the 'noise lander' at Dowsing will be serviced the following day (Sunday 5th August). The vessel will then steam towards the SmartBuoys at Warp and West Gabbard2 which will be serviced on Monday (6th). The noise lander at Warp will also be serviced.

A zooplankton vertical net sample will be collected at West Gabbard2, Dowsing and Warp. While phytoplankton/chlorophyll samples will be collected off the East Anglia coast from the flow through of the FerryBox, to test for the presence of toxin producing phytoplankton. Furthermore, water samples will be collected with the Rosette sampler at locations along the route for the REMAIN project.

The Endeavour will return to port in Lowestoft on the morning tide (*tbc*), Tuesday 7th August 2018.

Exact order of operations will be determined in consultation with the Master. If the weather is poor the route may be revised.

GEAR:

See Gear List

Elisa Capuzzo
Scientist in Charge
08/07/2018

INITIALLED:

DISTRIBUTION:

BODC
P&O