



RESEARCH VESSEL PROGRAMME

RV CEFAS ENDEAVOUR Survey: CEND 16 - 2018

STAFF:

Part 1
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DURATION: 13 September – 4 October 2018

LOCATION: Irish Sea (VIIa), Bristol Channel & Celtic Sea (VIIfg).

AIMS:

- 1. To carry out a 4m beam-trawl survey of groundfish (Figure 1) to i) obtain fisheries independent data on the distribution and abundance of commercial flatfish species, and ii) derive age compositions of sole, plaice, cod and whiting for use in stock assessments.
- 2. To collect biological data including maturity and weight at age of sole, plaice, lemon sole and other commercially important finfish species as part of CEFAS' requirements under the EU Data Collection Framework.
- 3. To determine the distribution and relative abundance of juvenile and adult sole and plaice.





- 4. To collect surface & bottom temperature/salinity data using CTD and Niskin Bottle.
- 5. To quantify epibenthos using 4m beam trawl by-catch.
- 6. Collect length/weight & maturity information using individual fish measurements, in support of the EU Data Collection Framework.
- 7. To collect surface sea-water samples for processing on return to Lowestoft for the analysis of tritium (AE001) (K Leonard Cefas).
- 8. To collect fish samples in support of other Cefas and non-Cefas projects and training courses.
- 9. To collect samples of demersal fish using a Granton trawl for chemical analysis from the Irish Sea, Celtic Sea and Western English Channel in support of the Clean Seas Environmental Monitoring Programme (CSEMP) (OSPAR Common indicator and UK specific Indicator assessments).
- 10. To collect fish samples at CSEMP sites for fish disease biochemical markers (e.g. EROD and bile metabolites analysis) (UK specific Indicator Assessments).
- 11. To sample representative CSEMP stations using day grab, for polycyclic aromatic hydrocarbons (PAHs), trace metal contaminants, organic contaminants (PCBs, PBDEs and HBCD), sediment particle size analysis (PSA), benthic fauna and marine litter ((OSPAR Common indicator and UK specific Indicator assessments).
- 12. To conduct marine litter surveys (OSPAR Common indicator and UK specific Indicator assessments) by collecting benthic litter information from the trawls and collecting sediment samples for litter analysis.

PLAN:

RV Cefas Endeavour will sail from Lowestoft on the 12th September and will head directly to the first priority sampling 'grid' in the inner Bristol Channel (BCI). Upon completion of the BCI survey grid, RV Cefas Endeavour will then head north fishing stations en-route to the other priority sampling grids in the Irish Sea south and north sectors (ISS/ISN). Once completed, the remaining survey grids of Irish Sea West (ISW), St. Georges Channel (SGC) and Bristol Channel outer (BCO) will be fished.

At the first and last fishing stations of each working day, a CTD profile and associated surface and bottom salinity samples will be collected.

It is anticipated that a mid-survey break (staff changeover) will occur on day thirteen of the survey (24th September with the location likely to be Douglas, IOM). This will allow for a changeover of scientific staff and vessel's officers and crew and for the vessel to take on fresh supplies and water on 24th and 25th September. At the end of the survey, RV Cefas Endeavour will dock in Swansea on the 3rd October and unloading of equipment will be carried out the next day.





During the night, a Granton trawl will be deployed at up to 14 fishing stations through the trip. Sediment samples will also be collected at various trend and spatial stations (max 25 stations), to cover the survey aims 9-12.

S M Shaw 17th May 2018

INITIALLED: IDH

DISTRIBUTION:

Cefas survey staff Fisheries SICs/2ICs Gary Burt (for TRIM) J Maitland (P&O Maritime Services) Master Cefas Endeavour I Holmes S Kupschus P Connolly (Marine Institute, Galway) P J Schon (AFBINI) FCO (for Republic of Ireland) Marine Management Organisation (MMO) – Conservation, Licencing and Derogations. Welsh Government (WG) Natural Resources Wales **Devon & Severn IFCA** Cornwall IFCA Isles of Scilly IFCA North Western IFCA