

**RESEARCH VESSEL PROGRAMME**

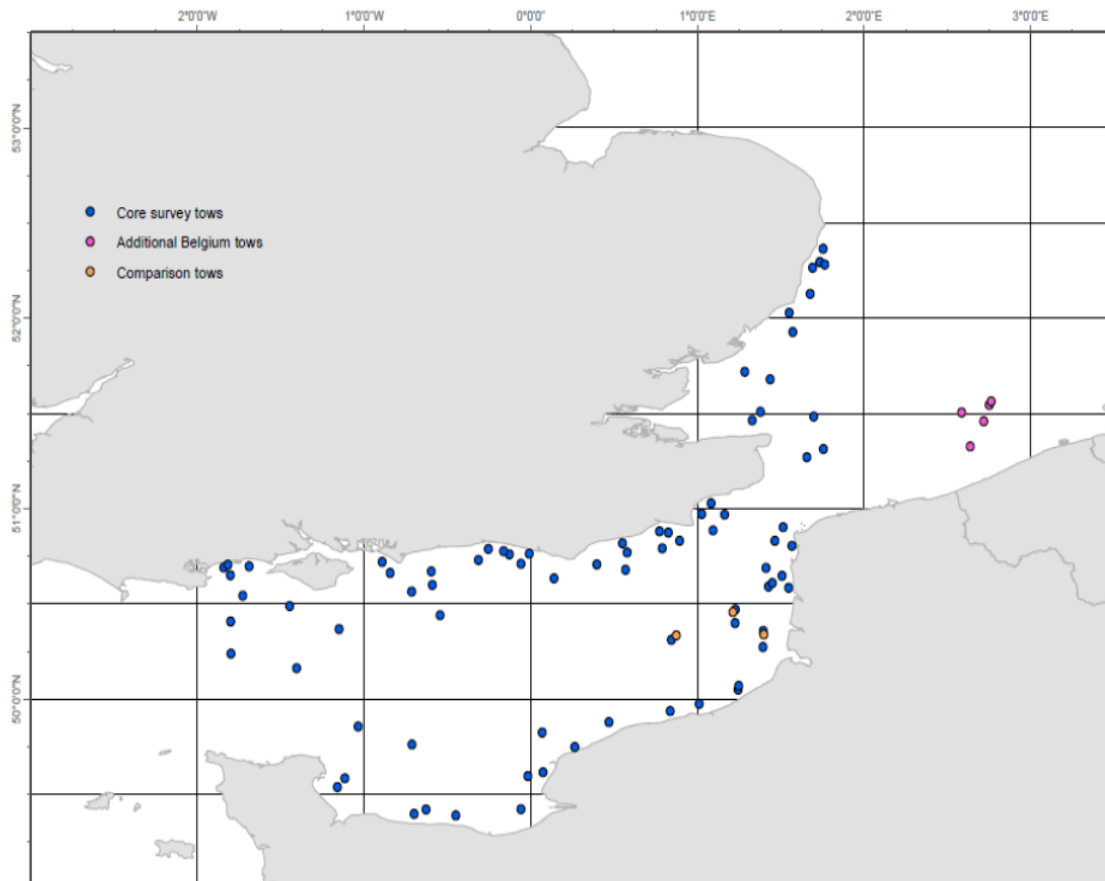
**RV CEFAS ENDEAVOUR**  
**Survey: C END 15 - 2017**

**STAFF:**

Name	Role	Cabin	Shift
Jo Smith	SIC	SIC	
Steve Shaw	2IC	B1	
Mary Brown		B2	
Charlotte Jennings		C8	
Gary Burt		C3	
James Pettigrew		D3	
Jo Ford		C1	
Katherine Maltby		C7	
Coline Lazard		D2	
Yves Verin		D4	
Nicola Everitt		C6	

**DURATION:** 19 July 2017 – 1 August 2017

**LOCATION:** Plot of stations in the 7d beam trawl survey



## **AIMS**

### **PRIMARY AIMS:**

1. To undertake a beam trawl survey in the southern North Sea and eastern Channel as part of an ICES co-ordinated research programme.
2. To obtain fisheries independent data on the distribution and abundance of commercial flatfish species.
3. To collect biological data, including maturity and weight at age of commercial species, to satisfy the requirements of the EU data regulations.
4. To identify the epibenthos by catch taken in the 4-metre beam trawl and to quantify 12 species as agreed at the Beam Trawl Working Group.

### **SECONDARY AIMS:**

5. To collect full depth, conductivity, temperature and depth profiles at each trawl station alongside surface and near-bottom water samples using a Niskin with ESM2 logger.
6. To continuously log sub-surface (3m) salinity, temperature, fluorometry and other environmental data using the 'Ferrybox'.
7. To sample litter caught in the beam trawl on every station

### **OPPORTUNISTIC AIMS:**

8. Carry out additional tows to tag and release sole (*Solea solea*) as part of an Ifremer and Agrocampus Ouest project (SMAC).
9. To tag and release specimens of various commercially exploited skates (*Rajidae*) and other selected elasmobranchs.
10. Collect specimens of selected species for ID purposes as well as length-weight measurements where still required.
11. To collect live and dead hermits in whelks (Vladimir Laptikhovsky)

## **PLAN**

Myself, Steve and Charlotte will join the Cefas Endeavour in Portland on the 17<sup>th</sup> of July to load gear and set up the EDC system in the fishroom. The remaining scientific crew will join the vessel on the afternoon of the 18<sup>th</sup> of July, staying on board overnight. Endeavour will sail from Portland on the 19<sup>th</sup> of July after the gear is loaded, checked and rigged.

Shakedown tows will be carried out before the start of the survey to ensure all systems are working correctly. This will be carried out on a survey station close to Portland, followed by a day fishing in the same area. The vessel will then steam overnight to Dover and fishing will continue westwards, along the English coasts (see Location map), until approximately 24 July. Once the English sector is complete the vessel will proceed, overnight to the western end of the French sector and survey eastwards.

On completion of the survey on or around the 30<sup>th</sup> of July, the North Sea stations will be worked in a northerly direction and if time allows stations off the Belgium coast will be fished. All stations will be fished using a warp ratio of 3.5:1 if practical. The comparison tows, as indicated on the map, will be picked up during the course of the survey, time permitting.

On completion of the survey the vessel will dock in Lowestoft. This is expected to be on the 1<sup>st</sup> of August.

### **GEAR**

Gear list provided

Joanne smith  
Scientist in Charge  
8 May 2017

INITIALLED: **I Holmes**

DISTRIBUTION:

Survey participants  
Cefas fisheries survey SICs/2ICs  
Cefas Trim  
B Salter (P&O Maritime Services)  
Master/Fishing Skipper (Cefas Endeavour)  
Marine Management Organisation (MMO)  
Marine Management Organisation Licencing (MMO)  
Marine Management Organisation Conservation (MMO)  
FCO (for Belgium, Netherlands & France)  
Els Torreele, Belgium  
Sieto Verver, Netherland  
Joel Vigneau, France  
Kent and Essex, Sussex, Southern and Eastern IFCA's