

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

2016 RESEARCH VESSEL PROGRAMME

PROGRAMME: Cefas Endeavour: Survey 16/16

STAFF:

J Smith (SIC)
S Shaw (2IC)
M Brown
G Greenhalgh
G Burt
J Pettigrew
A Milligan
C Lazard (IFREMER)
R Le Bras (IFREMER)
K St John Glew (Southampton University)

DURATION:

17th July – 30th July 2016

LOCATION:

Eastern English Channel (VIId), Southern North Sea (IVc)

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 record details of surface sightings of any marine mammals, sea turtles and large pelagic fish, and record observations on jellyfish aggregations.
8. To sample litter caught in the beam trawl on every station

OPPORTUNISTIC AIMS:

9. Carry out additional tows to tag and release sole (*Solea solea*) as part of an Ifremer and Agrocampus Ouest project (SMAC).
10. To tag and release specimens of various commercially exploited skates (Rajidae) and other select elasmobranches.
11. Collect specimens of selected species for ID purposes as well as length-weight measurements where still required.
12. To collect length and weight measurements of jellyfish caught and in addition, collect jellyfish 'flesh' samples to allow baseline isotopic signature to be determined in order to compare these with the isotopic signatures of higher trophic level species. (K St John Glew – Southampton University)
13. To collect live and dead hermits in whelks (Vladimir Laptikhovsky)

PLAN:

The scientific crew will join the Endeavour in Portland on the afternoon of the 16th of July, staying on board overnight. Endeavour will sail from Portland on the 17th 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 appendix 1), until approximately 22nd of 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 28th 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 additional 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 30th of July.

INITIALLED: I Holmes

J Smith
23/5/2016

DISTRIBUTION:

Survey participants

Cefas fisheries survey SICs/2ICs

Cefas Trim

J Maitland/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)

Marie Savina-Rolland (Ifremer, France)

W Demare, Belgium

Frans v Beek, Netherland

Joel Vigneau, France

Kent and Essex, Sussex, Southern and Eastern IFCA's

Appendix I Plot of stations in the 7d beam trawl survey

