

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

**2012 RESEARCH VESSEL PROGRAMME**

**PROGRAMME: RV CEFAS ENDEAVOUR: Survey01/13X.**

**STAFF:** Koen Vanstaen (SIC)  
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Megan Parry (JNCC)  
Fotios Arafas (NetSurvey)

**DURATION: 14 days**

**LOCATION: Fladen Grounds, Northern North Sea**

**AIMS:**

1. Characterisation of the Fladen Ground MPAs using a combination of acoustic and groundtruthing (camera sledge, grabbing) techniques.
2. Additional characterisation of the Farnes East rMCZ using groundtruthing (drop camera) techniques.

*Weather contingency*

3. *Characterisation of the Noss Head MPAs using a combination of acoustic and groundtruthing (camera sledge, grabbing) techniques.*
4. *Characterisation of the Southern Trench MPAs using a combination of acoustic and groundtruthing (camera sledge, grabbing) techniques.*

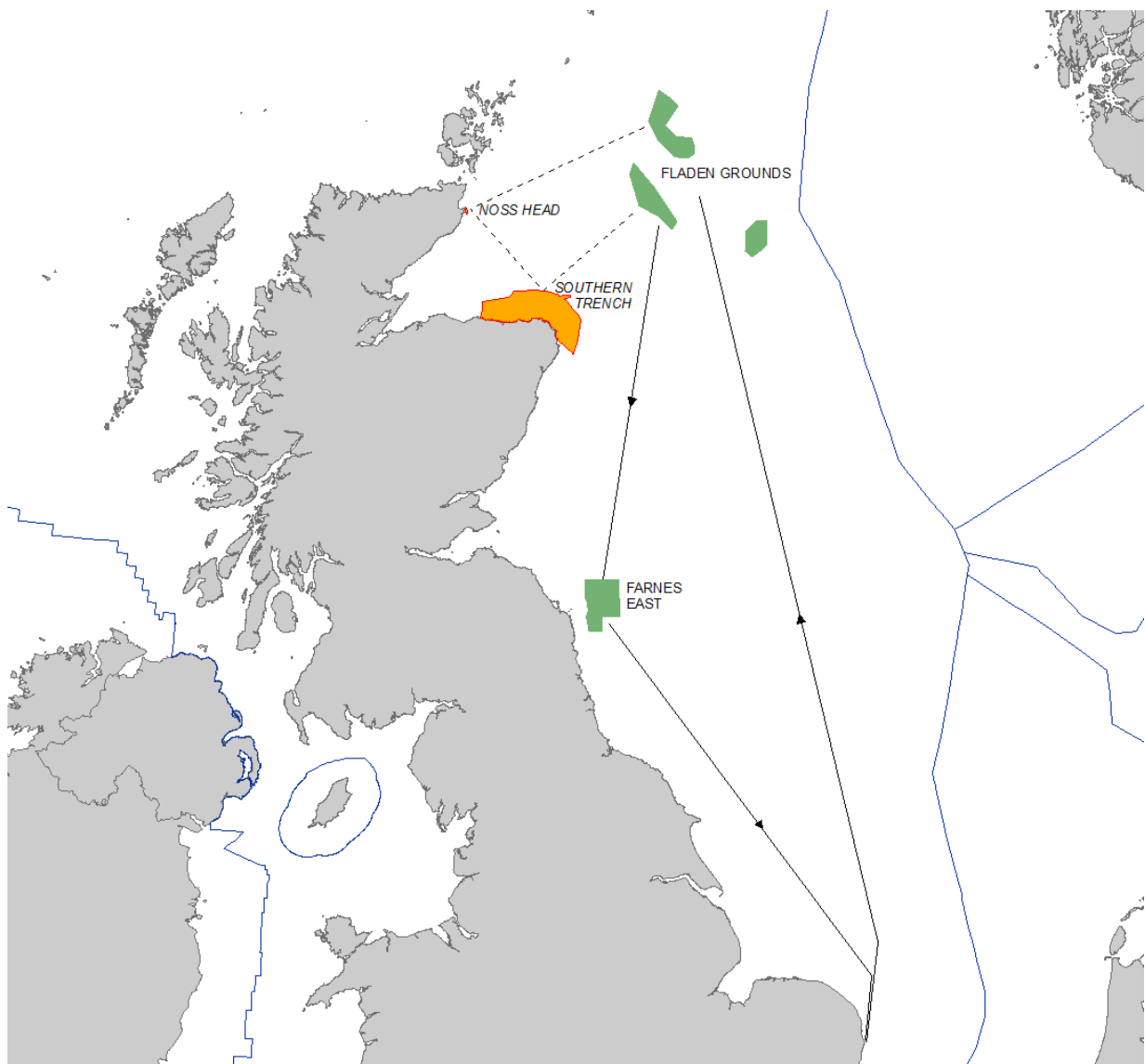
**PLAN:**

RV Cefas Endeavour will be mobilised in Lowestoft on 2nd and 3rd January 2013. The vessel will set sail on the 01:17 tide on Friday 4th January 2013. Following the recent dry-docking of the vessel, a multibeam calibration will be undertaken at a site located 'on route' (to be confirmed) to the first survey site at the Fladen Ground SMPA. A suite of survey tools will be deployed in order to best meet the requirements of the site or based upon the characteristics of the site encountered. It is likely that acoustic survey tools (multibeam and sidescan sonar) will be used to characterise seabed habitats. In addition, a combination of camera and grabbing will be undertaken.

Should weather conditions prevent the work described above to be undertaken, conditions at alternative sites, such as Noss Head and Southern Trench SMPA, will be considered. this work would be undertaken on behalf of SNH. A combination of acoustic and ground-truthing surveys will be undertaken at these sites.

On completion of the work in the Northern North Sea, the vessel will return to Lowestoft. If time permits, the vessel will undertake a small amount of additional work at the Farnes East rMCZ. Here video data will be collected using the drop camera to characterise potential rocky reef areas identified from acoustic data, which have not been validated to date.

RV Cefas Endeavour will dock into Lowestoft on 17th January 2013 where this survey will be completed.



**GEAR:**

Koen Vanstaen  
Scientist In Charge  
12/12/2012

INITIALLED:

DISTRIBUTION:  
Staff  
David Limpenny