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

2014 RESEARCH VESSEL PROGRAMME

PROGRAMME: Cefas Endeavour: Survey CEND 10/14

STAFF:

Suzanne Jane Ware (Cefas SIC)	SIC
Briony Silburn (Cefas Data Manager)	B1
William John Meadows (Cefas MIST)	B2

Day Shift (12:00-24:00)

Julia Rance (Cefas Shift Lead)	C5
James Charles Cook (Cefas MIST)	D2
Dan Wood (Cefas)	D4
Mike Nelson (JNCC)	C8
Hayley Hinchen (JNCC)	C7
1 x Cefas (TBC)	D6

Night Shift (24:00-12:00)

Paul McIlwaine (Cefas Shift Lead)	C1
Buster Rook Bishop (Cefas MIST)	D3
Sara Elizabeth Stones (Cefas)	C2
Fionnuala McBreen (JNCC)	C3
Rebecca ?? (JNCC)	D5
1x Cefas (TBC)	C4

DURATION:

17th May-5th June 2014

LOCATION:

Dogger Bank SAC, North Sea

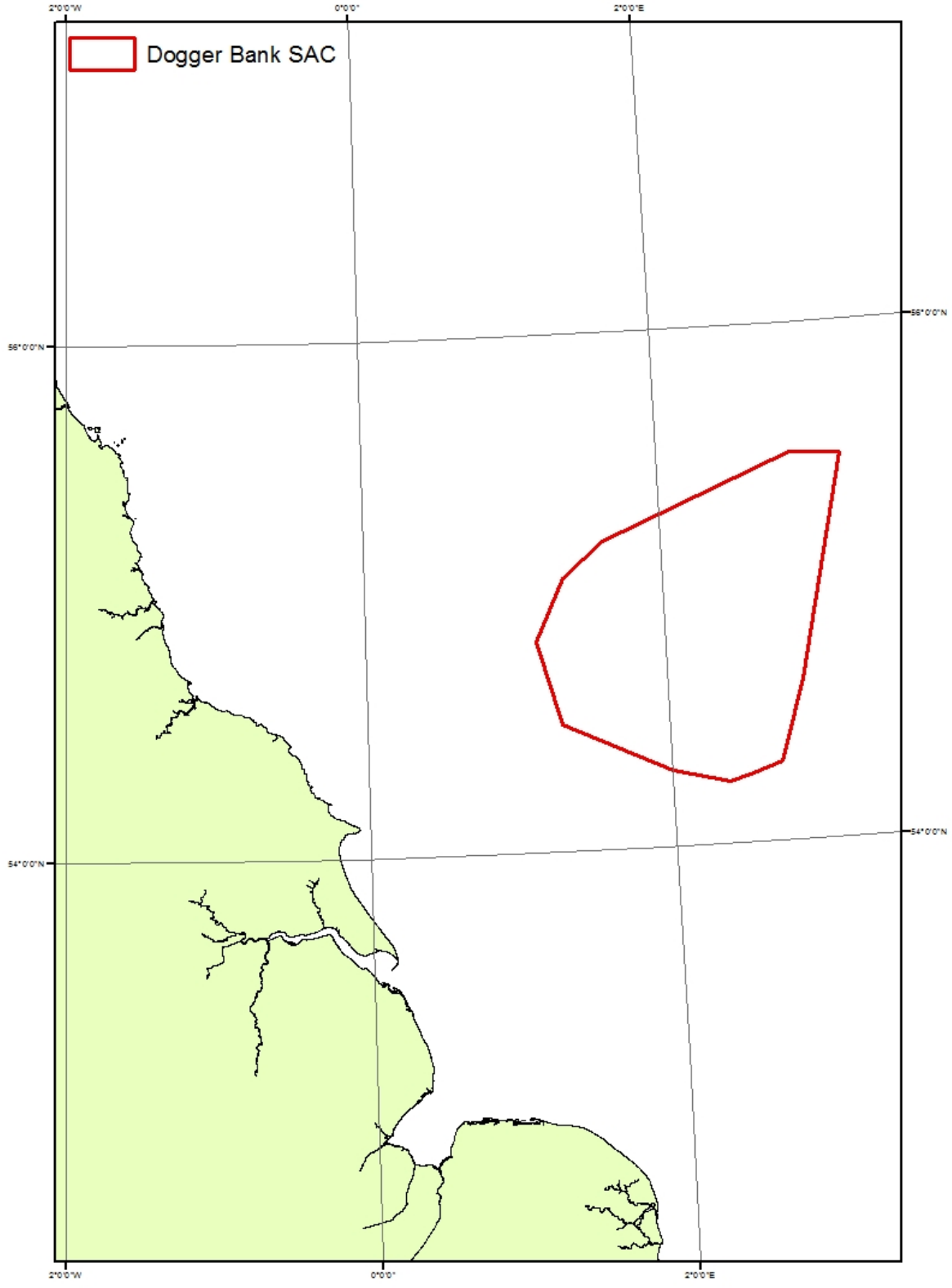

Figure 1. Location of Dogger Bank SAC survey area

AIMS:

- Establish a Type 1 monitoring survey across the UK Dogger Bank site. Collect both Hamon grab samples and seabed video/stills data (possible 2m beam trawl).
- Undertake a Type 2 monitoring survey across the UK Dogger Bank site to investigate the relationship between several metrics of interest and fishing pressure. Collect both Hamon grab samples and seabed video/stills data (possible 2m beam trawl).
- Establish BACI studies in the proposed fisheries closures which are currently fished. Collect both Hamon grab samples and seabed video/stills data (possible 2m beam trawl).
- Survey a sub-set of stations with at least two methods or possibly three (e.g. the 0.1m^2 Hamon grab and the 0.2m^2 Van Veen grab) (possibly revisit the Wieking and Kröncke sampling stations).

PLAN:

Depart Lowestoft on 17th May and transit to the Dogger Bank SAC. Proceed with survey to meet aims and objectives (as detailed above). The order with which survey stations are sampled will be guided by more detailed prioritisation of aims and objectives currently being drafted by the JNCC.

Type 1 Monitoring will comprise a broadscale characterisation study across the UK portion of the SAC employing Hamon grab sampling (PSA and infauna) and seabed video/still imagery (and possibly 2m beam trawl) for epifaunal characterisation. A number of historical stations (previously included in the Wieking and Kronke and/or Cefas survey grid) may be revisited (Figures 2 and 3).

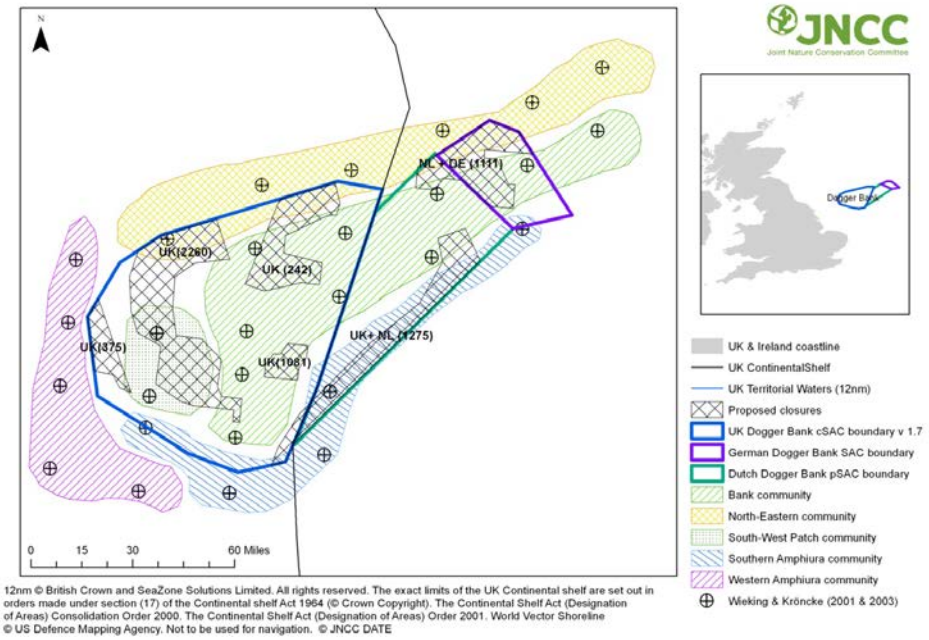

Figure 2. Wieking and Kröncke communities overlaid with the Wieking and Kröncke sampling points (using a 0.2 m^2 van-Veen-grab weighing 150 kg and washed over the same sieves with 1 mm mesh).

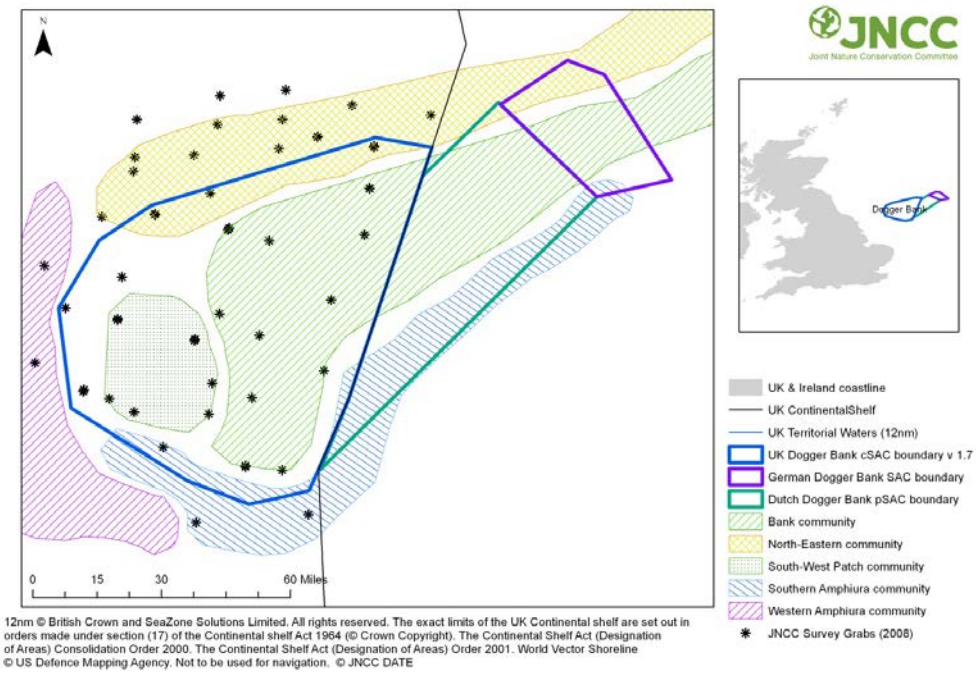

Figure 3. Wieking and Kröncke communities with JNCC data from 2008 Cefas survey. These samples were taken using the Hamon grab.

Type 2 monitoring will comprise a targeted survey (employing Hamon grab sampling, seabed video and still imagery techniques and possible 2m beam trawl sampling) to explore relationships between given faunal metrics and a fishing pressure gradient (inferred using VMS data).

Type 3 monitoring will comprise a BACI experimental design with survey data collected to comprise a baseline dataset against which the effectiveness of subsequent fishery closures may be assessed (Figure 4).

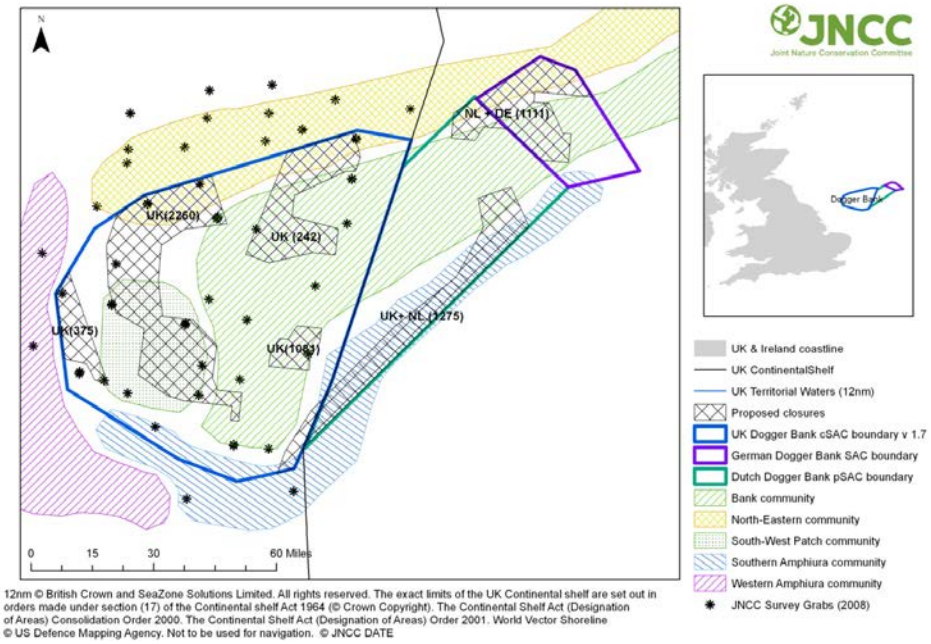

Figure 4. Proposed fisheries closures overlaying the Wieking & Kröncke communities and Cefas 2008 Hamon grab sampling points.

GEAR:

0.1m^2 Hamon grab
0.2m^2 Van Veen grab
Camera Sledge with video and stills system
Drop Camera with Video and still system
2m Beam trawl (possible)

Sue Ware
Scientist In Charge
22/04/14

INITIALLED:

DISTRIBUTION: