

NOTIFICATION OF PROPOSED RESEARCH CRUISE

GENERAL Part A

- | | | | | | | | | | | | | | | | | | | | | |
|---|--|---------------|---|---|-------------|----------------------------|----------------|--------|-----------------|--------------------------|---------------|---------------------|------------|--------|-----------|------|----------------|----------------|----------------|-------------------------|
| 1. Name of research ship | r/v Senckenberg | Cruise No. 12 | | | | | | | | | | | | | | | | | | |
| 2. Dates of cruise | from 17.5.16 | to 27.5.16 | | | | | | | | | | | | | | | | | | |
| 3. Operating authority | Senckenberg Gesellschaft für Naturforschung
Senckenberganlage 25
60325 Frankfurt a.M. | | | | | | | | | | | | | | | | | | | |
| 4. Owner (if different from para. 3) | | | | | | | | | | | | | | | | | | | | |
| 5. Particulars of ship: | <table border="0" style="width: 100%;"> <tr> <td style="width: 60%;">Name</td> <td>r/v Senckenberg</td> </tr> <tr> <td>Nationality</td> <td>German</td> </tr> <tr> <td>Overall length</td> <td>29.5 m</td> </tr> <tr> <td>Maximum draught</td> <td>3 m</td> </tr> <tr> <td>Gross tonnage</td> <td>55 BRZ</td> </tr> <tr> <td>Propulsion</td> <td>Diesel</td> </tr> <tr> <td>Call sign</td> <td>DDAW</td> </tr> <tr> <td>INMARSAT-Phone</td> <td>00881641440458</td> </tr> <tr> <td>INMARSAT-Email</td> <td>senckenberg@skyfile.com</td> </tr> </table> | | Name | r/v Senckenberg | Nationality | German | Overall length | 29.5 m | Maximum draught | 3 m | Gross tonnage | 55 BRZ | Propulsion | Diesel | Call sign | DDAW | INMARSAT-Phone | 00881641440458 | INMARSAT-Email | senckenberg@skyfile.com |
| Name | r/v Senckenberg | | | | | | | | | | | | | | | | | | | |
| Nationality | German | | | | | | | | | | | | | | | | | | | |
| Overall length | 29.5 m | | | | | | | | | | | | | | | | | | | |
| Maximum draught | 3 m | | | | | | | | | | | | | | | | | | | |
| Gross tonnage | 55 BRZ | | | | | | | | | | | | | | | | | | | |
| Propulsion | Diesel | | | | | | | | | | | | | | | | | | | |
| Call sign | DDAW | | | | | | | | | | | | | | | | | | | |
| INMARSAT-Phone | 00881641440458 | | | | | | | | | | | | | | | | | | | |
| INMARSAT-Email | senckenberg@skyfile.com | | | | | | | | | | | | | | | | | | | |
| 6. Crew | <table border="0" style="width: 100%;"> <tr> <td style="width: 60%;">Name of master</td> <td>Karl Baumann</td> </tr> <tr> <td>No. of crew</td> <td>5</td> </tr> </table> | | Name of master | Karl Baumann | No. of crew | 5 | | | | | | | | | | | | | | |
| Name of master | Karl Baumann | | | | | | | | | | | | | | | | | | | |
| No. of crew | 5 | | | | | | | | | | | | | | | | | | | |
| 7. Scientific personnel: | <table border="0" style="width: 100%;"> <tr> <td style="width: 60%;">Name and address of scientist in charge</td> <td>PD Dr. Ingrid Kröncke
Senckenberg am Meer
Dept for Marine Research
26382 Wilhelmshaven</td> </tr> <tr> <td></td> <td>Telephone +49-4421-9475250</td> </tr> <tr> <td></td> <td>Telex</td> </tr> <tr> <td></td> <td>Telefax +49-4421-9475299</td> </tr> <tr> <td></td> <td>No. of scientists 4</td> </tr> </table> | | Name and address of scientist in charge | PD Dr. Ingrid Kröncke
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Dept for Marine Research
26382 Wilhelmshaven | | Telephone +49-4421-9475250 | | Telex | | Telefax +49-4421-9475299 | | No. of scientists 4 | | | | | | | | |
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| | Telephone +49-4421-9475250 | | | | | | | | | | | | | | | | | | | |
| | Telex | | | | | | | | | | | | | | | | | | | |
| | Telefax +49-4421-9475299 | | | | | | | | | | | | | | | | | | | |
| | No. of scientists 4 | | | | | | | | | | | | | | | | | | | |
| 8. Geographical area in which ship will operate (with reference to latitude and longitude) | station list and chart attached as appendix | | | | | | | | | | | | | | | | | | | |
| 9. Brief description of purpose of cruise | Long-term changes in the biodiversity of benthic communities at Dogger Bank | | | | | | | | | | | | | | | | | | | |
| 10. Dates and names of intended ports of call | No ports | | | | | | | | | | | | | | | | | | | |
| 11. Any special logistic requirements at ports of call | No | | | | | | | | | | | | | | | | | | | |

DETAIL PART B

1. **Name of research ship** r/v Senckenberg Cruise No. 12
2. **Dates of cruise** from 17.5.16 to 27.5.16

3. **Purpose of research**
Long-term study of benthic communities at Dogger Bank

and general operational methods

0.2 m² van veen grabs

4. **Attach chart showing (on an appropriate scale) the geographical area of intended work, positions of intended stations, tracks of survey lines, positions of moored / seabed equipment**

station list and chart attached as appendix

5. **Types of samples required, e. g. geological/water/plankton/fish/radioactivity/ isotope/...**

benthos/sediment samples

and methods by which samples will be obtained (including dredging / coring / drilling /...)

0.2 m² van Veen grabs

6. **Details of moored equipment:**

Dates	Recovery	Description	Depth	Latitude	Longitude
Laying					

7. Explosives: No explosives

- (a) Type and trade name
- (b) Chemical content
- (c) Trade class and storage
- (d) Size
- (e) Depth of detonation
- (f) Frequency of detonation
- (g) Position in latitude and longitude
- (h) Dates of detonation

8. Details and references of**(a) Any relevant previous / future cruises**

Similar cruises in 2015, 2006-07, 1996-98, 1985-88

(b) Any previous published research data relating to the proposed cruise.

(Attach separate sheet if necessary)

Kröncke, I. (1992). Macrofauna standing stock of the Dogger Bank. A comparison: III. 1950-54 versus 1985-87. A final summary. *Helgoländer Meeresunters.* 46: 137-169.

Kröncke, I., Knust, R. (1995). The Dogger Bank: a special ecological region in the central southern North Sea. *Helgoländer Meeresunters.* 49: 335-353.

Wieking, G., Kröncke, I. (2001). Decadal changes in macrofauna communities on the Dogger Bank caused by large-scale climate variability. *Senckenbergiana marit.* 31(2): 125-141.

Wieking, G., Kröncke, I. (2003). Benthic communities of the Dogger Bank (central North Sea) in the late 90s: Spatial distribution, species composition and trophic structure. *Helgol. Mar. Res.* 57: 34-46.

Kröncke, I. (2011). Changes in Dogger Bank macrofauna communities in the 20th century caused by fishing and climate. *Estuar. Coast. Shelf Sci.* 94 (3): 234-245.

Sell, A.F., Kröncke, I. (2013). Correlations between benthic habitats and demersal fish assemblages - A case study on the Dogger Bank (North Sea). *J. Sea Res.* 80: 12-24.

9. Names and addresses of scientists of the coastal state in whose waters the proposed cruise takes place, with whom previous contact has been made

Dr Silvana Birchenough, Senior Benthic Ecologist, Cefas Marine Climate Change Centre (MC3)
Cefas Lowestoft Laboratory, Pakefield Road, Lowestoft NR33 0HT, Tel: 01502527786 (direct)

10. State: UK**(a) Whether visits to the ship in port by scientists of the coastal state concerned will be acceptable (Yes/No)**

Yes

(b) Whether it will be acceptable to carry on board an observer from the coastal state for any part of the cruise and dates and ports of embarkation / disembarkation (Yes/No)

Yes

(c) When research data from intended cruise is likely to be made available to the coastal state and if so by what means

after publication in scientific journals

SCIENTIFIC EQUIPMENT COASTAL STATE:

11. Complete the following table - SEPARATE COPY FOR EACH COASTAL STATE
(INDICATE 'YES' OR 'NO')

List of all major Marine Scientific Equipment it is proposed to use and indicate waters in which it will be deployed	Fisheries Research within Fishing Limits	Research concerning Continental Shelf out to Coastal State's Margin	DISTANCE FROM COAST			
			Within 3 NM	Between 3-12 NM	Between 12-50 NM	Between 50-200 NM
0.2 m ² van Veen grab	No	No	No	No	No	Yes

On behalf of the Principal Scientist: PD Dr. Ingrid Kröncke



Dated: 28.1.2016

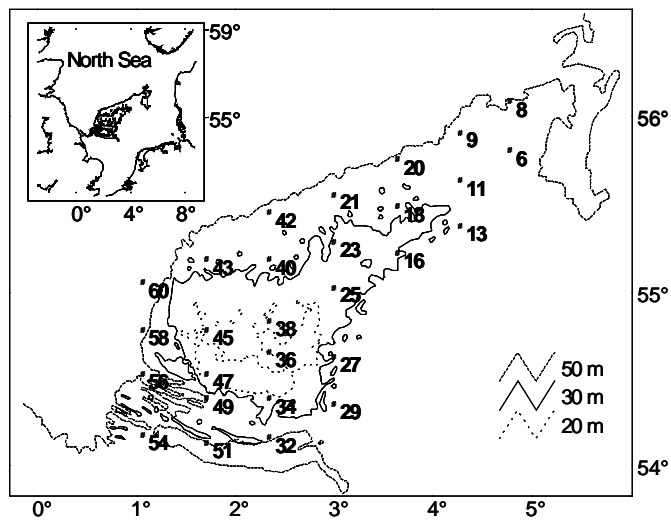


Fig. 1: Sampling stations at Dogger Bank with RV „Senckenberg“ in May/June 2015

Tab. 1: Coordinates of sampling stations

station	N	E	depth (m)
6	55° 48'	04° 51'	34
8	56° 04'	04° 51'	43
9	55° 54'	04° 20'	43
11	55° 38'	04° 20'	32
13	55° 22'	04° 20'	42
16	55° 13'	03° 40'	32
18	55° 29'	03° 40'	31
20	55° 45'	03° 40'	47
21	55° 33'	03° 00'	40
23	55° 17'	03° 00'	29
25	55° 01'	03° 00'	23
27	54° 37'	03° 00'	33
29	54° 21'	03° 00'	39
32	54° 09'	02° 20'	51
34	54° 23'	02° 20'	27
36	54° 39'	02° 20'	18
38	54° 50'	02° 20'	27
40	55° 11'	02° 20'	32
42	55° 27'	02° 20'	44
43	55° 11'	01° 40'	36
45	54° 47'	01° 40'	23
47	54° 31'	01° 40'	18
49	54° 23'	01° 40'	48
51	54° 07'	01° 40'	68
54	54° 10'	01° 00'	45
56	54° 31'	01° 00'	55
58	54° 47'	01° 00'	50
60	55° 03'	01° 00'	61