

## **„WALTHER HERWIG III"**

### **Cruise 241**

### **REPORT**

**19.7. – 16.8.2002**

#### **Personnel**

<b>Name</b>	<b>Institution</b>	<b>Part</b>
1. Dr. Siegfried Ehrich	ISH-BFA	I
2. Herr Dipl. Oz. Peter Cornus	ISH-BFA	II
3. Frau Svenja Cummerow	ISH-BFA	I + II
4. Frau Anna Schuhbauer	ISH-BFA	I + II
5. Herr Sascha Bednarz	ISH-BFA	I + II
6. Herr Ingo Wilhelms	ISH-BFA	I + II
7. Frau Sonja Walter	ISH-BFA	I + II
8. Herr Andreas Lemke	ISH-BFA	I + II
9. Herr Jens Ulleweit	ISH-BFA	I + II
10. Dr. Ingrid Kröncke	Forsch. Senckenberg	I
11. Herr Hermann Neumann	Forsch. Senckenberg	I + II
12. Frau Saskia Otto.	FU-Berlin	I + II
13. Herr Philipp Schwemmer	FTZ-Büsum	II
14. Herr Moritz Mercker	FTZ-Büsum	II
15. Frau Henrike Semmler	FU-Berlin	I + II

#### **Objectives**

1. To participate in the ICES co-ordinated 'International Bottom Trawl Survey' in the North Sea, 3. quarter
2. Biological monitoring of the fish fauna in 6 small areas (boxes)
3. Distribution of temperature, salinity and nutrients in the area of investigation
4. Monitoring of the benthic epi- and infauna in the boxes and in the German Bight

#### **Narrative**

The scientific programme started in the morning of 20<sup>th</sup> of July at ICES-rectangle 38F7. The vessel then sailed northwards to Boxes C, L, M and D and worked there for 3 days each. After finishing the program the 2<sup>nd</sup> of August in box D the Walther Herwig III stayed for the next 2 days in Aberdeen/Scotland. After having partly changed the scientific crew and having left Aberdeen we stayed for another 3 days in Box B (5.–7. of August). Then the vessel sailed into the German Bight fishing in 13 ICES-rectangles within the next 3 days.

The programme then was continued in Box A (3 days) and another 2 days for 6 ICES-rectangle in the inner part of the German Bight. The scientific program ended on the 15<sup>th</sup> of August. The 'W. Herwig III' docked at Bremerhaven on Friday, the 16<sup>th</sup> of August 2002.

## Results

A total of 152 half an hour and valid hauls were made using the GOV trawl equipped with the standard ground gear, of which 22 hauls were carried out in BOX C, 21 hauls in BOX L, 21 hauls in BOX M, 21 hauls in BOX D, 21 hauls in BOX B, 20 hauls in BOX A and 26 hauls in different ICES-rectangles, mainly within the German Bight (IBTS-3. Quarter). At 99 stations salinity, temperature and at 62 stations nutrients were measured. Epibenthos was sampled by a 2m beam trawl at 54 stations and additionally 54 grab samples were taken.

The preliminary number at age data for the recruiting year-classes of the commercial important species and the catch data were submitted to ICES to make these data available within due time.

Fig. 1 shows the area of investigation. The mean species composition in the 6 boxes and the variability within the time periods are shown in Figs.2 to 7.

Dr. S. Ehrich  
Dipl.-Oz. P. Cornus

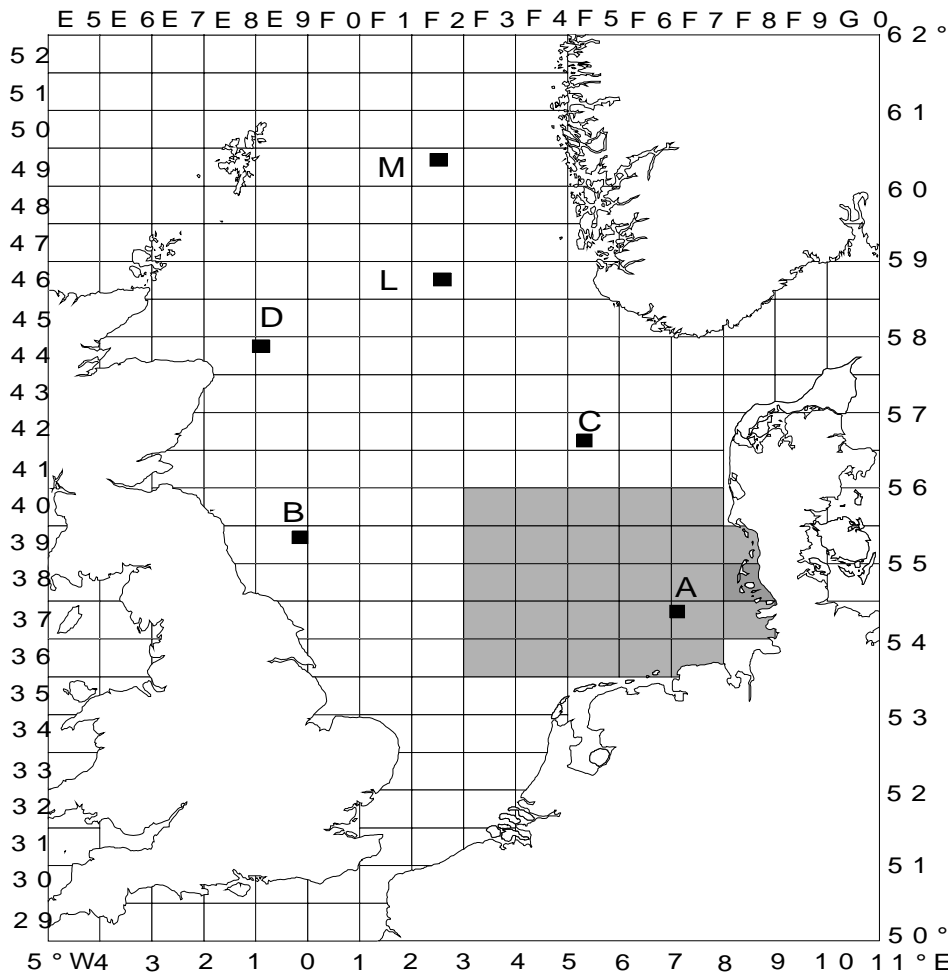


Fig. 1: „Walther Herwig III“. Cruise no. 241. Area of investigation and Boxes

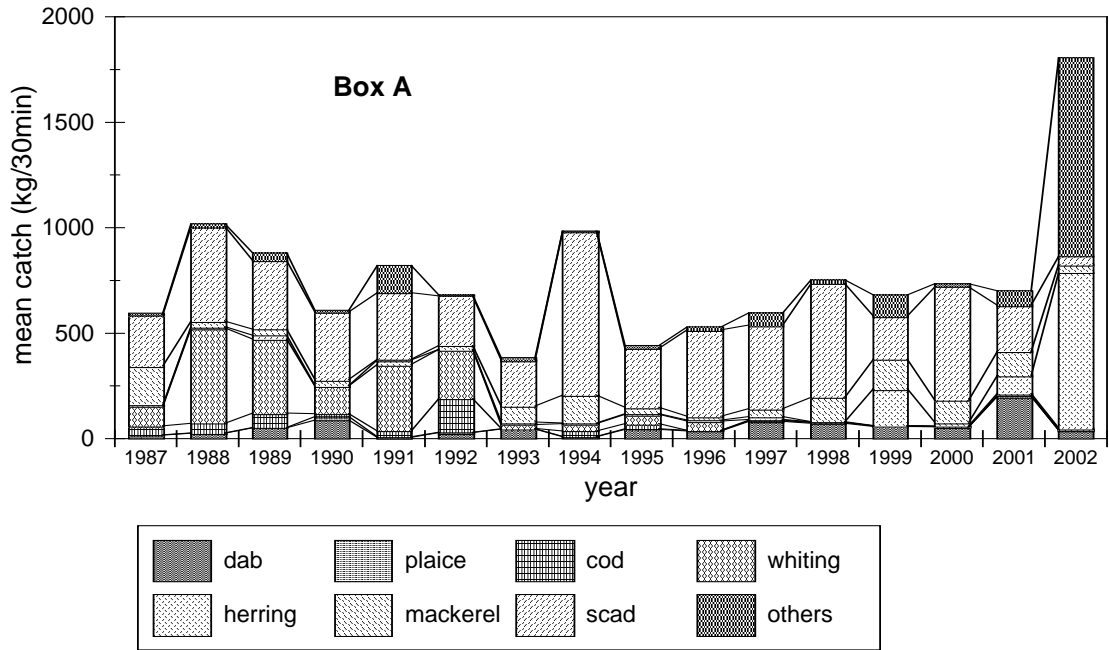


Fig. 2: Box A: German Bight: Main species composition (kg/30min) from 1987 to 2002 (summer). Others in 2002 are mainly sprat.

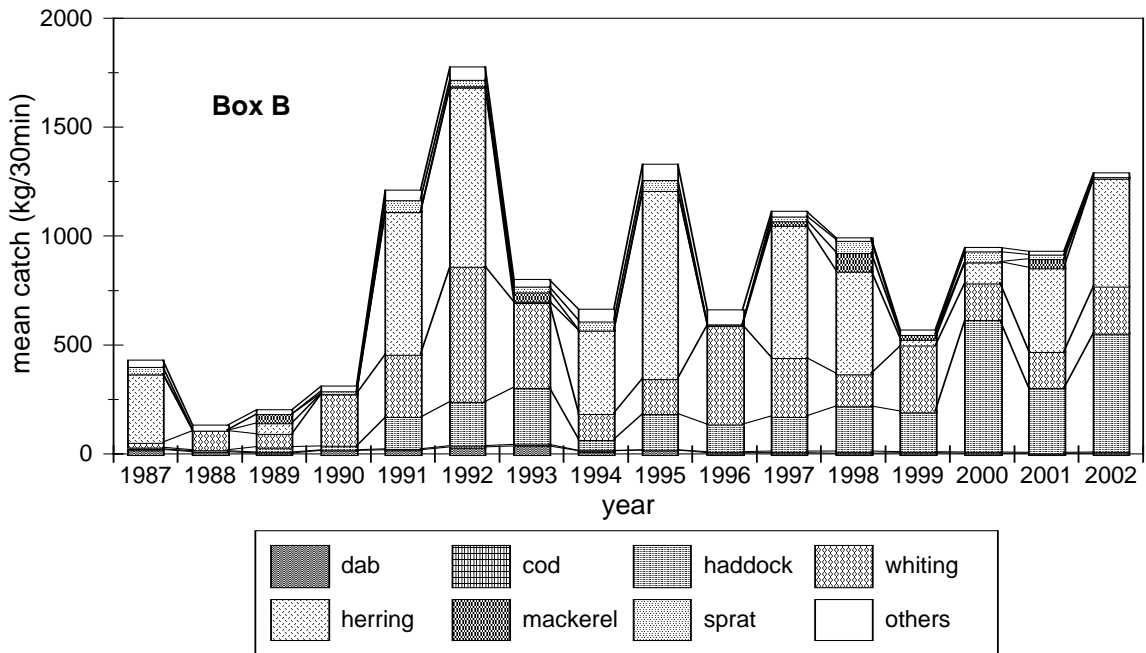


Fig. 3: Box B. English coast. Main species composition (kg/30min) from 1987 to 2002 (summer)

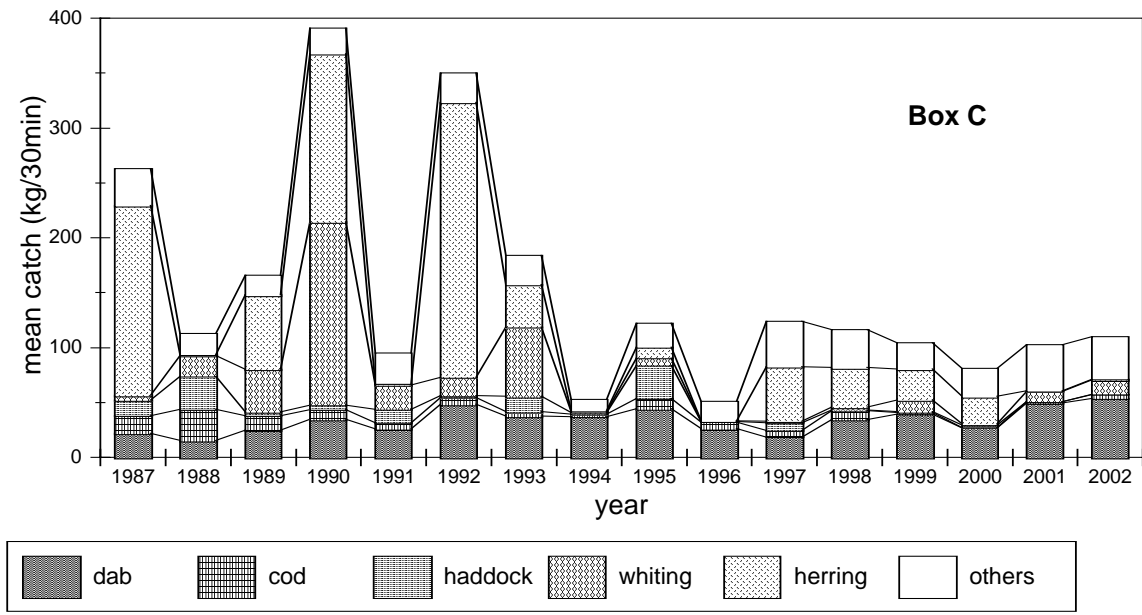


Fig. 4: Box C. Danish coast. Main species composition (kg/30min) from 1986 to 2002 (summer)

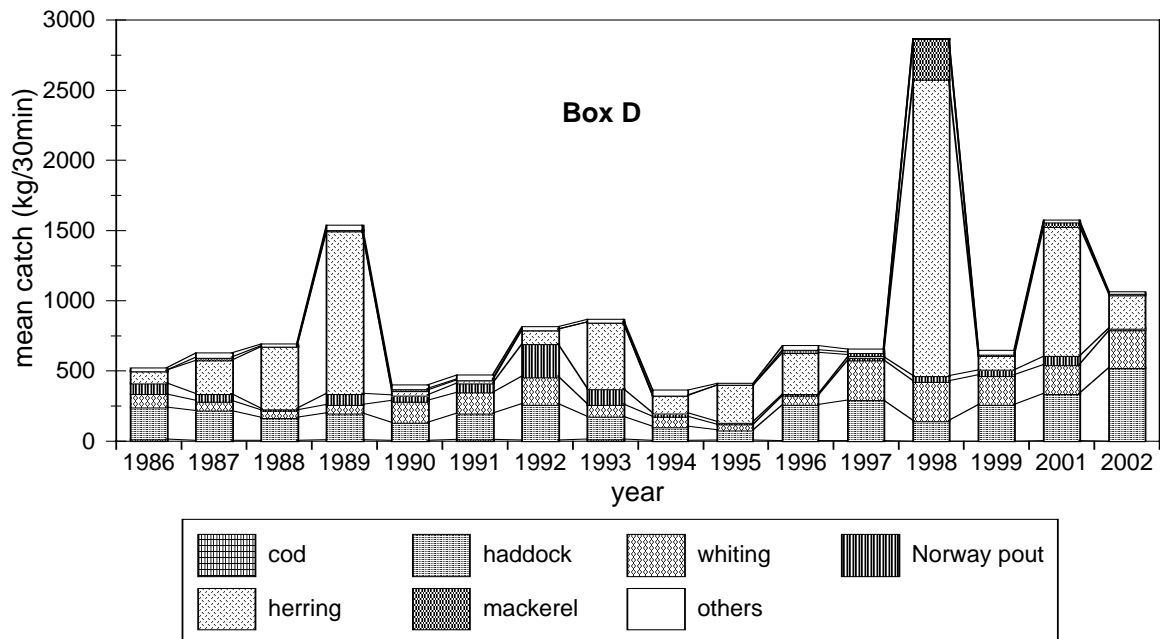


Fig. 5: Box D. Scottish coast. Main species composition (kg/30min) from 1986 to 2002 (summer)

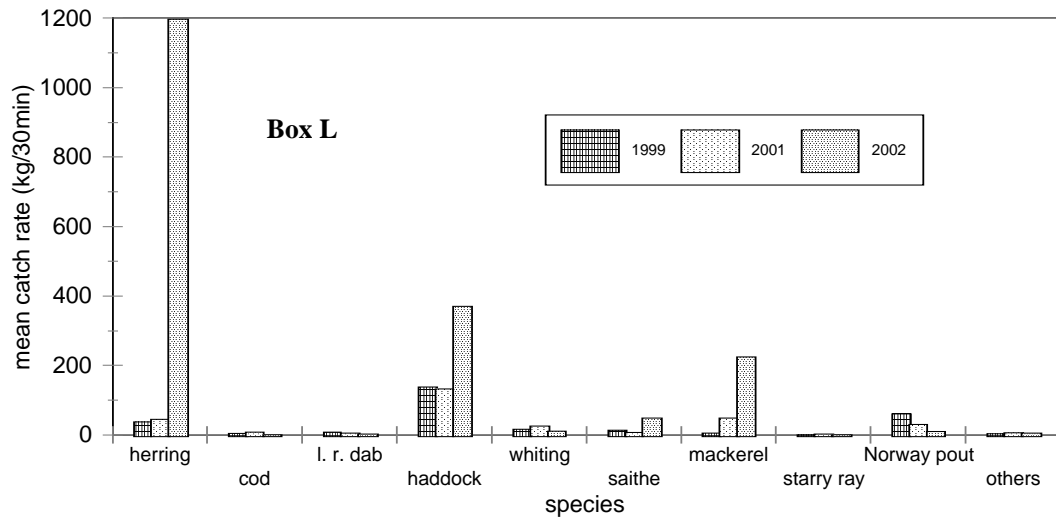


Fig. 6: Box L. Norwegian coast. Main species composition (kg/30min) in 1999, 2001 and 2002 (summer)

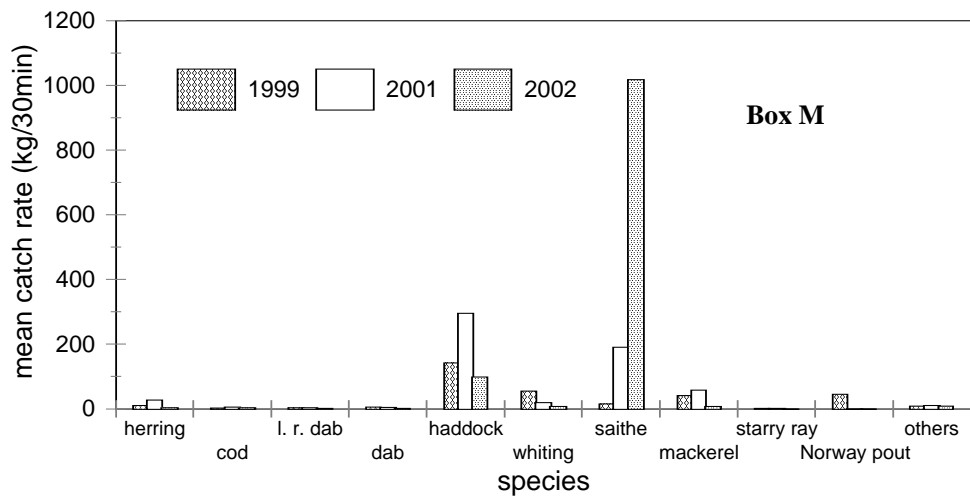


Fig. 7: Box M. Norwegian coast. Main species composition (kg/30min) in 1999, 2001 and 2002 (summer)