



**„SOLEA“  
Cruise 578  
REPORT  
16.08. - 30.08.2007**

**Personnel**

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**Objectives**

1. To participate in the ICES co-ordinated “International Beam Trawl Survey” in the North Sea
2. Biological monitoring of the fish fauna in proposed FFH protected areas in the German Bight
3. Distribution of temperature and salinity in the area of investigation

**Narrative (Fig. 1)**

The port of Cuxhaven was left on 16.8., steaming over night with strong north west wind to the area scheduled for the Beam Trawl Survey west of Jutland, north of the Danish border (ca. 55°N) and subsequently carrying out the work from south to north. In the following days the inshore stations were carried out depends on the weather from north to south. On August 25, the survey was finished and a call to Esbjerg Harbour was used for a staff exchange and the unloading of the aquarium stock

The FFH monitoring started on 27.8., in the sequence “Sylter Außenriff”, “Borkum Riffgrund” and “Dogger Tail End”. On August 30, the cruise ends in Cuxhaven.

## **Results (Fig. 2 – 10)**

A total of 47 half an hour and valid hauls were made using the 7m beam trawl. Additional 30 15min hauls were carried out in the FFH areas. At 56 stations salinity and temperature were measured.

The species composition distribution showed the usual geographic pattern with dab as the most frequent fish, followed by plaice.

Toward the north and the west soon the importance of long rough dab and starry ray in the biomass increases. Still, in the survey area some larger (up to 50 cm) plaice can be found, although quite sporadically.

Also in the FFH areas, nothing unusual was caught. In the Sylt area the common starfish (*Asterias rubens*) dominates with 80% in the catch composition.



Dipl.-Biol. K. Panten

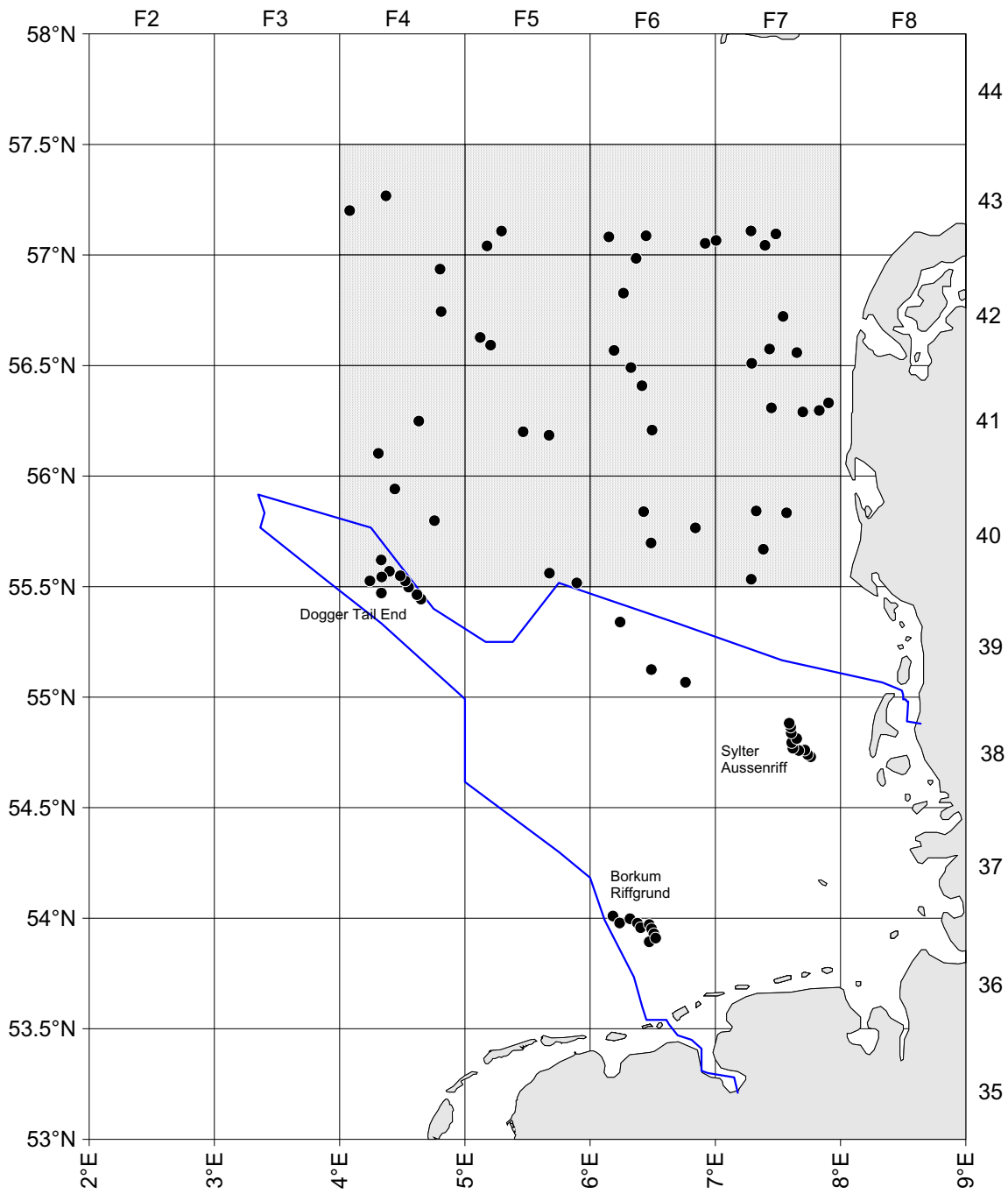
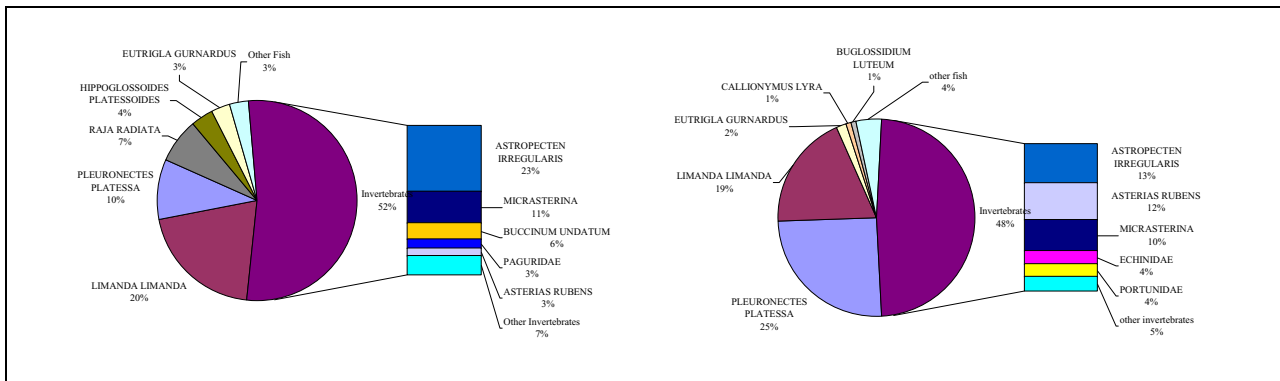


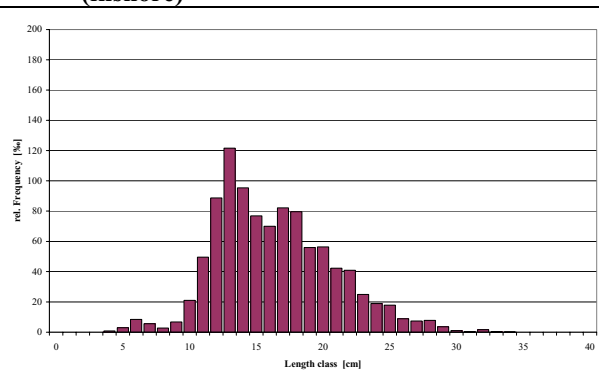
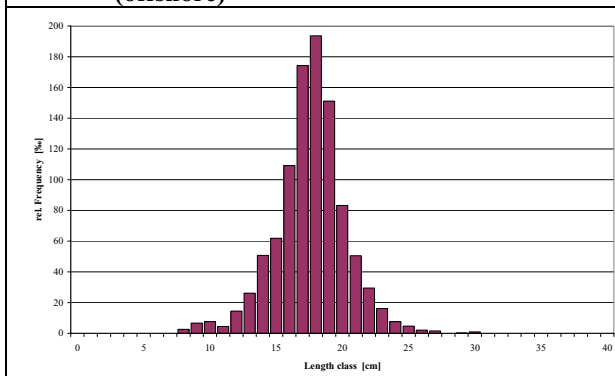
Fig. 1: “Solea“, Cruise no. 578 , Haul positions and area of investigation

# Catch composition and length distribution during Beam Trawl Survey



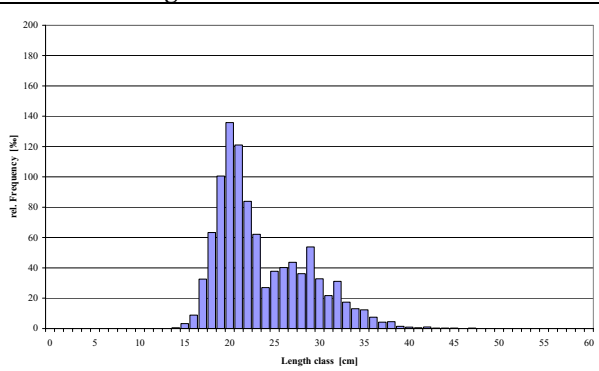
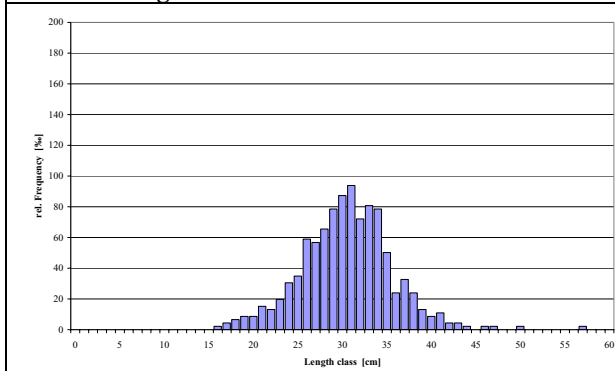
**Abb. 2: Catch composition in 40-43F4&5 (offshore)**

**Abb. 3: Catch composition in 40-43F6&7 (inshore)**



**Abb. 4: Length distribution of Dab in 40-43F4&5**

**Abb. 5: Length distribution of Dab in 40-43F6&7**



**Abb. 6: Length distribution of Plaice in 40-43F4&5**

**Abb. 7: Length distribution of Plaice in 40-43 F6&7**

## Catch composition and length distribution during FFH Monitoring

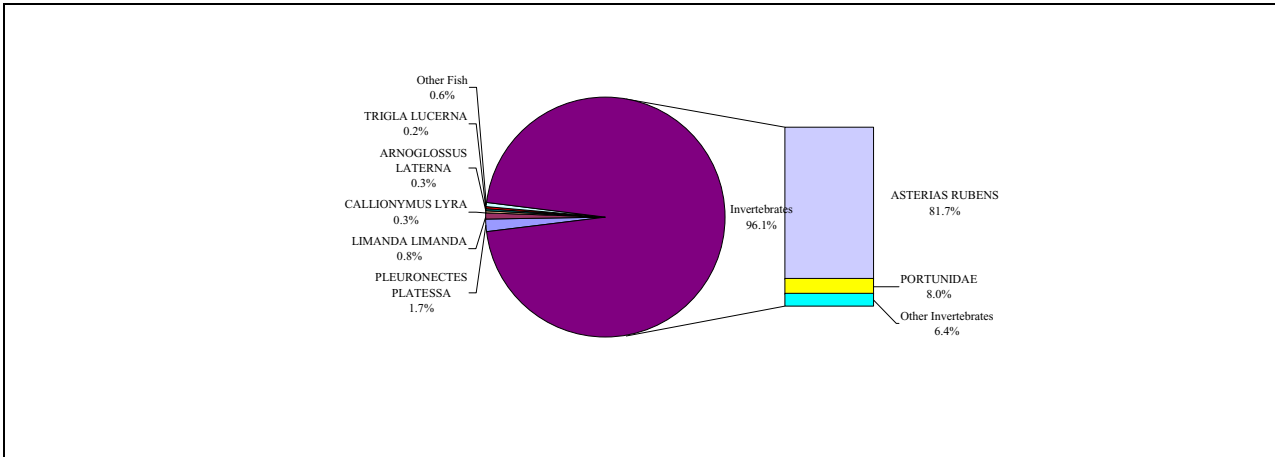


Abb. 8: Catch composition in FFH-Area „Sylter Aussenriff“

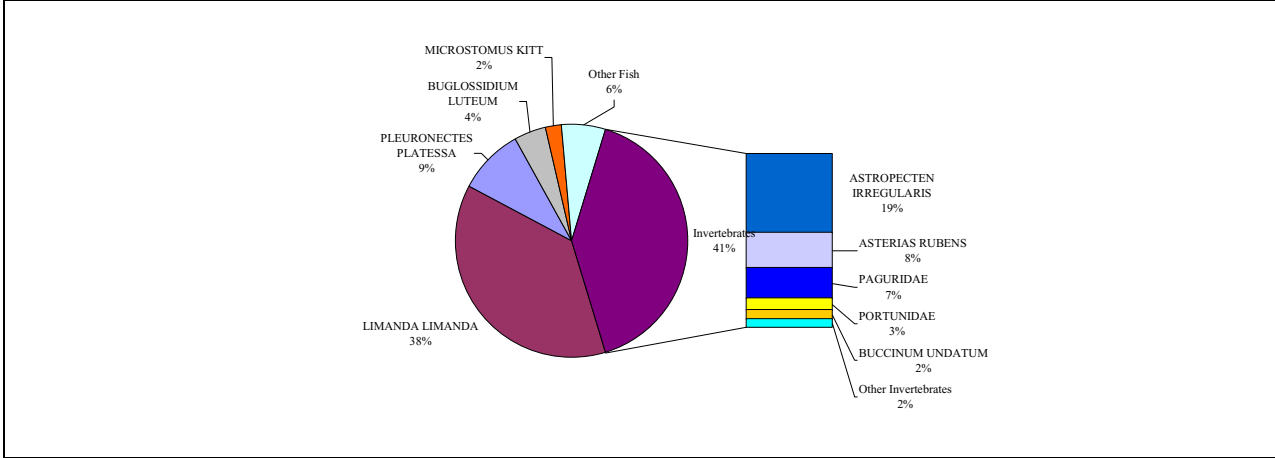


Abb. 9: Catch composition in FFH-Area „Dogger Tail End“

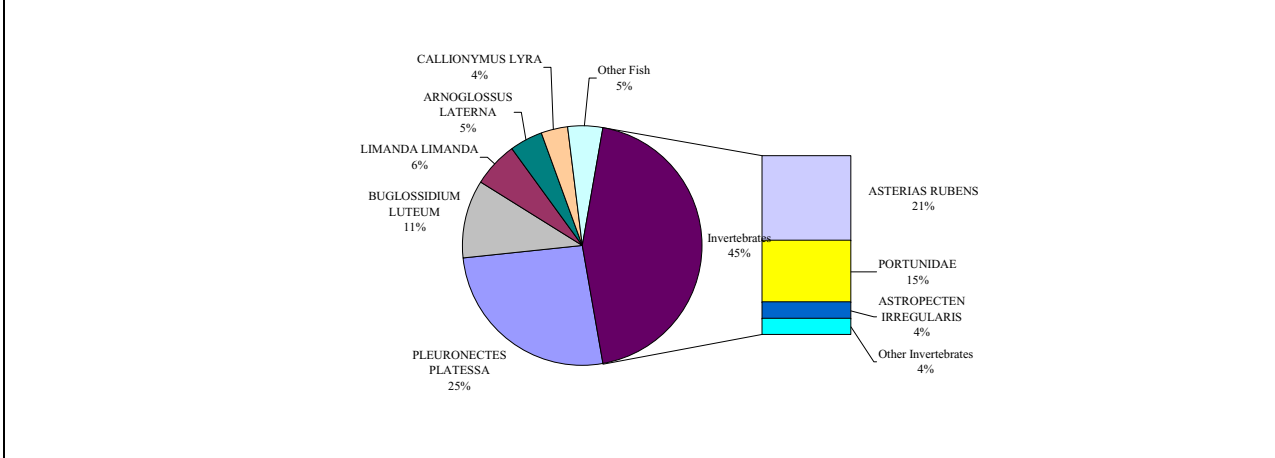


Abb. 10: Catch composition in FFH-Area „Borkum Riffgrund“