

## „SOLEA“

### Cruise 644

### REPORT

16.08. – 01.09.2011

#### Personnel

Name	Institution
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Theresa Conradi	SF
Birger Kreutz	Multimar

#### 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 good weather conditions to the area scheduled for the Beam Trawl Survey west of Sylt, north of the Danish border (ca. 55°N). On the fourth day of the survey priority was given to monitoring the FFH area “Dogger Tail End”. The following days the offshore stations were sampled with different courses depend on wind direction and wind force. On August 26 the BTS was finished and a gale-force wind forced the stay in Esbjerg Harbour for four days. With this opportunity the representative of multimar left the ship with the up to now attained aquarium stock. Back at sea the FFH monitoring was continued at “Sylter Außenriff”. Due to loss of time “Borkum Riffgrund” can’t carried out this year. The cruise ended in Cuxhaven in the evening on 31.8.

## **Results (Fig. 2 – 7)**

A total of 55 half an hour and valid hauls were made using the 7m beam trawl. Additional 22 15min hauls were carried out in the FFH areas. At 61 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 and grey gurnad.

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 more than 80% in the catch composition.



Dipl.-Biol. K. Panten

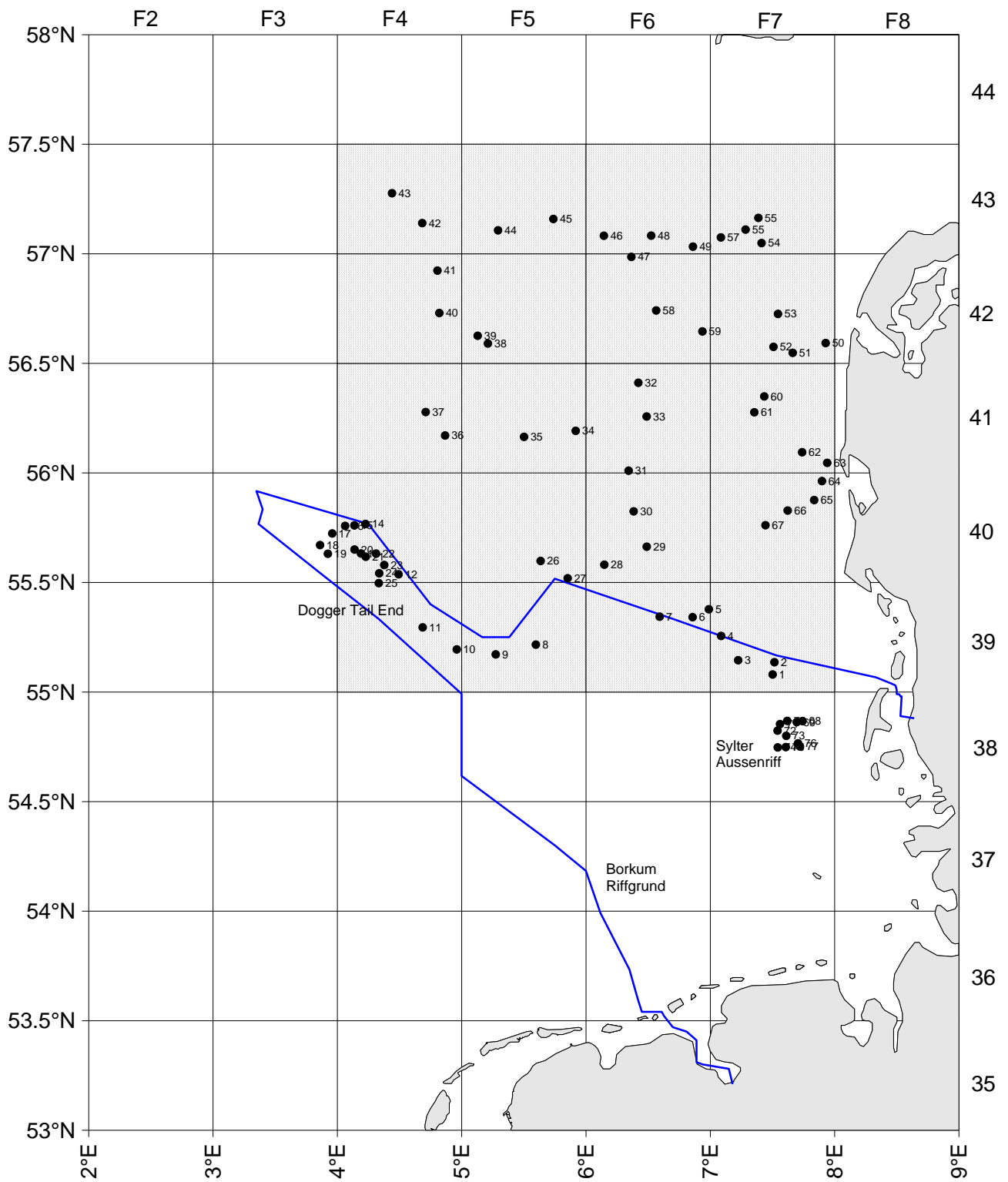
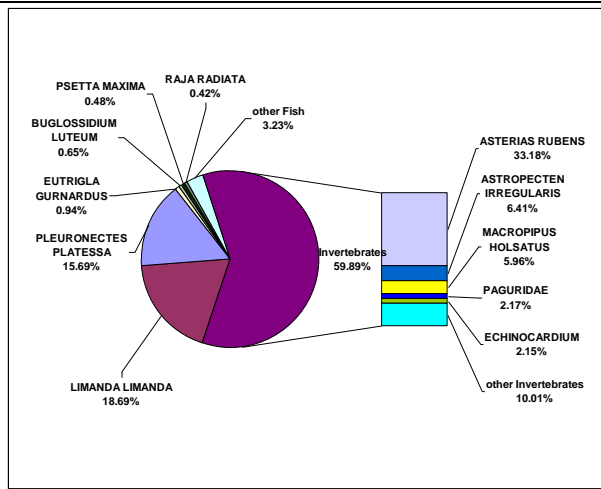
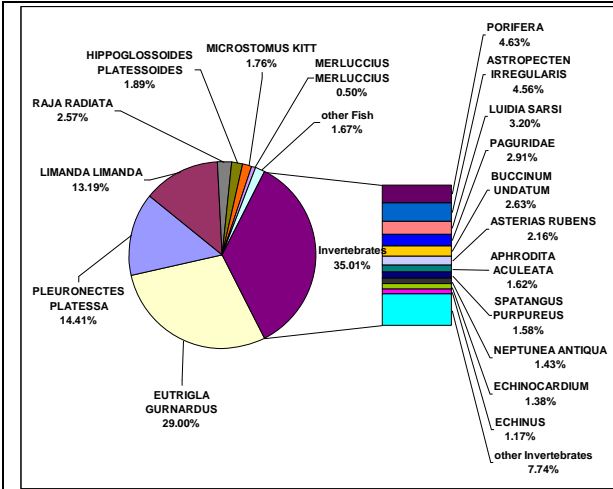


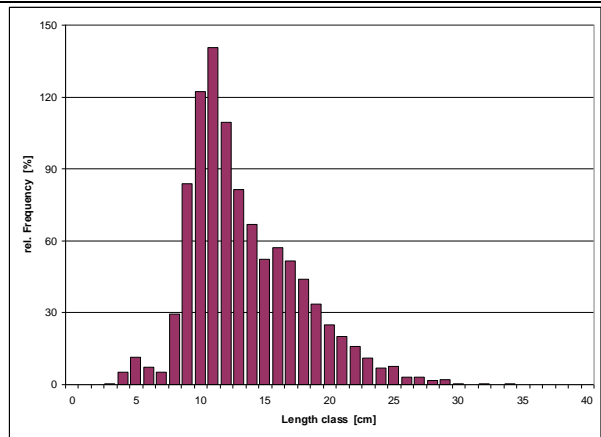
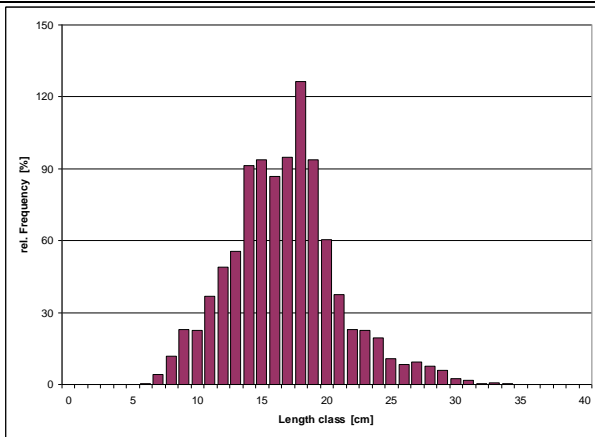
Fig. 1: “Solea“, Cruise no. 644 , Haul positions and area of investigation

# Catch composition and length distribution during Beam Trawl Survey



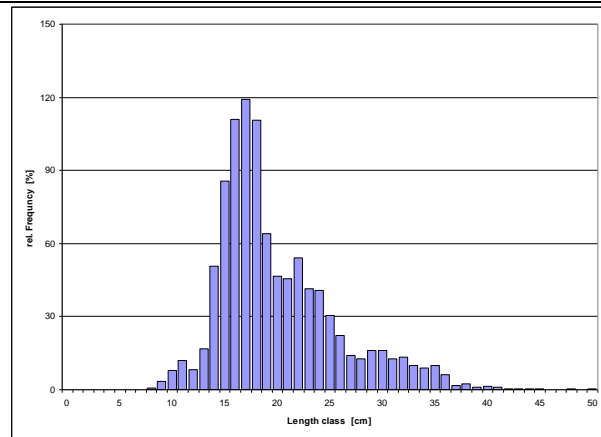
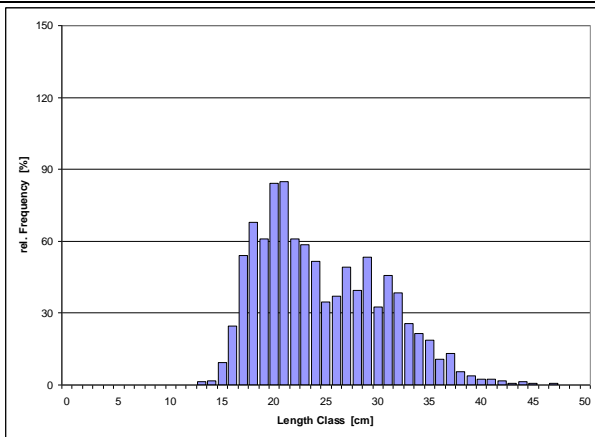
**Fig. 2: Catch composition in 39-43F4&5 (offshore)**

**Fig. 3: Catch composition in 39-43F6&7 (inshore)**



**Fig. 4: Length distribution of Dab in 39-43F4&5**

**Fig. 5: Length distribution of Dab in 39-43F6&7**



**Fig. 6: Length distribution of Plaice in 39-43F4&5**

**Fig. 7: Length distribution of Plaice in 39-43F6&7**

## Catch composition and length distribution during FFH Monitoring

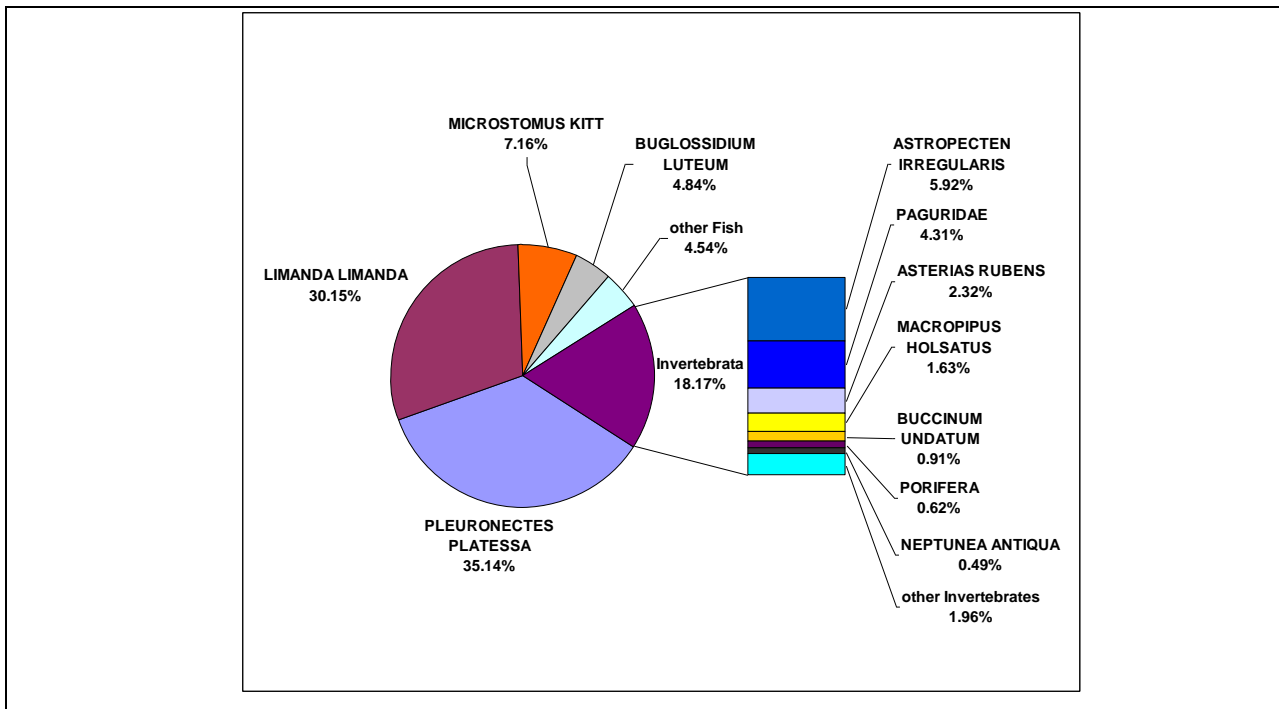


Fig. 8: Catch composition in FFH-Area „Dogger Tail End“

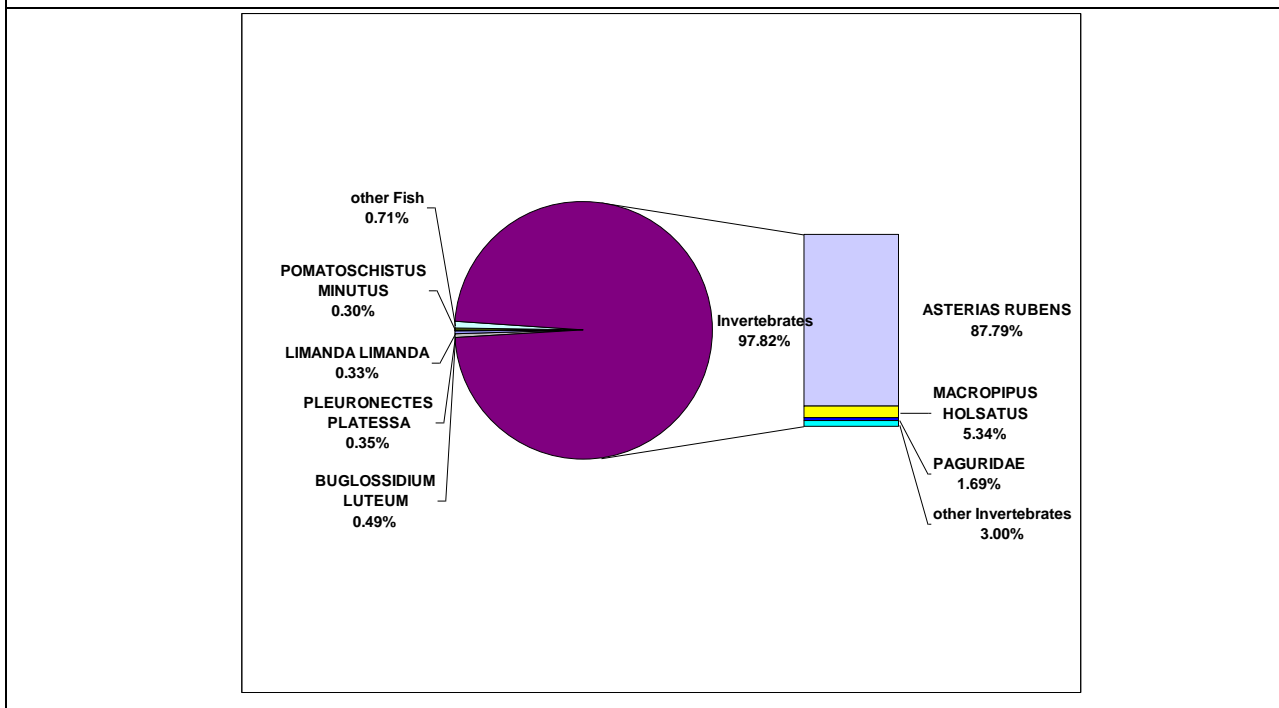


Fig. 9: Catch composition in FFH-Area „Sylter Aussenriff“