

**„SOLEA“**  
**Cruise 810**  
**REPORT**  
**22.08. – 02.09.2022**

**Personnel**

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**Objectives**

1. Participation in the ICES co-ordinated “International **B**eam **T**rawl **S**urvey” in the North Sea
2. Determination of temperature and salinity in the area of investigation

**Narrative (Fig. 1)**

After negative COVID-19 self-tests by the scientific crew and the crew, the voyage could begin as planned around noon on 22<sup>th</sup> August. A course was set for rectangle 39F6 and fishing began there the next morning. During the day, the southwestern stations were fished. This position was used to fish the FFH area "Dogger Tail End" the following day, thus saving long steaming distances at the end of the trip. The following day, the westerly stations were worked from south to north and sailed overnight in the direction of Horns Rev. Here, 6 more hauls could be made before Esbjerg was approached as a port of refuge due to an approaching storm depression in the BTS study area. The following morning, two COVID-19 infections were detected on board. FFS SOLEA was then transferred to

Cuxhaven. In the following four days, a total of eight members of the crew and scientific crew left the ship with a COVID-19 infection. On 2<sup>nd</sup> September, the voyage was terminated as it was no longer possible to staff the vessel with a deck crew experienced in fishing with the beam trawl. The remaining scientific participants returned to Bremerhaven in the late afternoon.

Due to the termination of the voyage, the work in the FFH areas "Borkum Riffgrund" and "Sylt Outer Reef" could no longer be carried out.

### **Results (Fig. 2 – 8)**

A total of 15 valid hauls with a standard duration of 30 minutes were conducted with the 7m beam trawl. Additional 10 15min hauls were carried out in the FFH area "Dogger Tailend". At 18 stations salinity and temperature were measured.

The distribution of species composition shows the usual geographic pattern with dab as the most frequent fish species, followed by plaice and lemon sole (offshore) or solenette (inshore).

Further statements cannot be made due to the low coverage of the study area.

In the only FFH area surveyed "Dogger Tailend" nothing unusual was caught. The fish fauna is dominated by plaice and dab. The invertebrate fauna is dominated by hermit crabs (*Pagurus bernhardus*) and starfish (*Asterias rubens* and *Astropecten irregularis*).



Dipl.-Biol. K. Panten

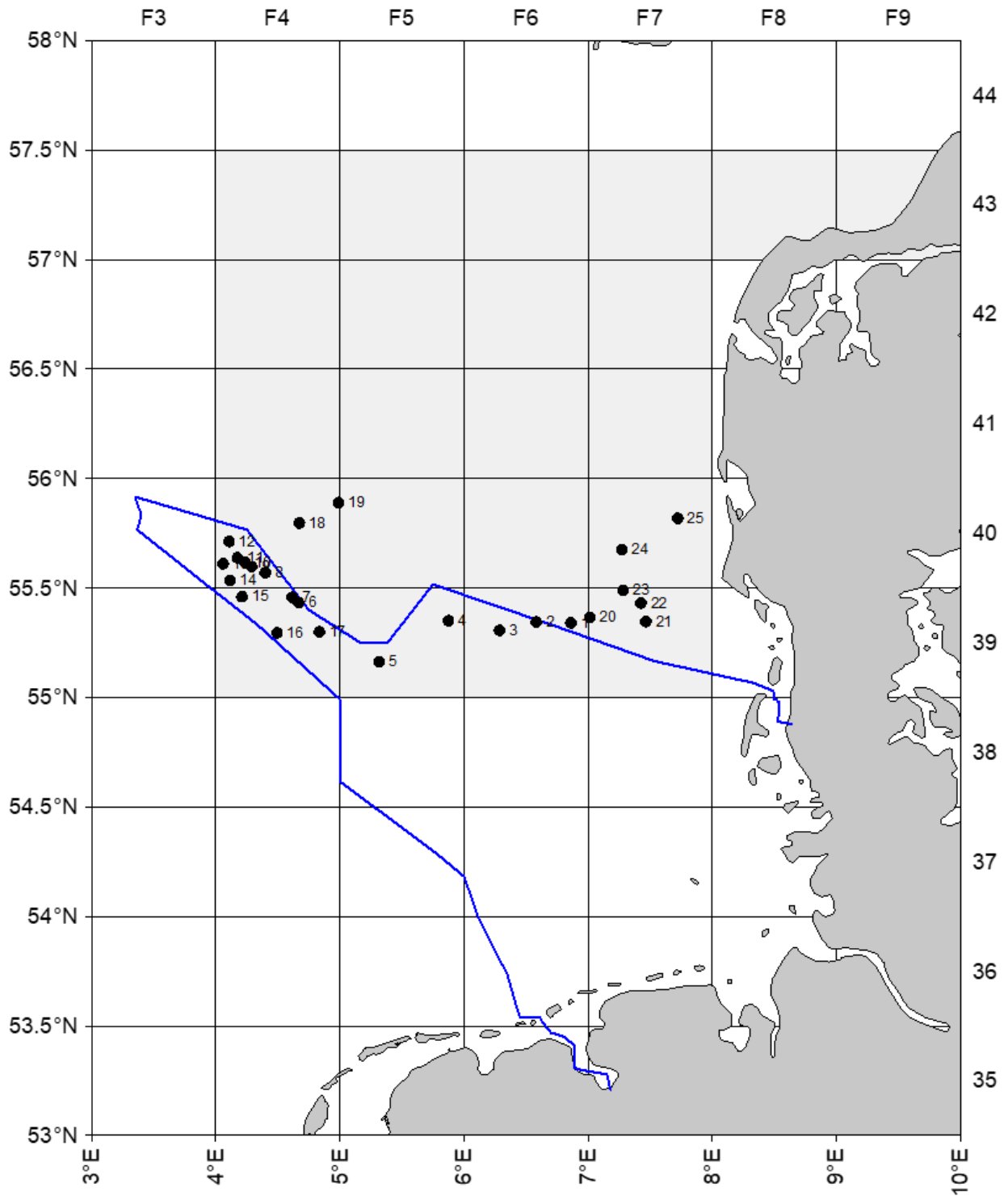
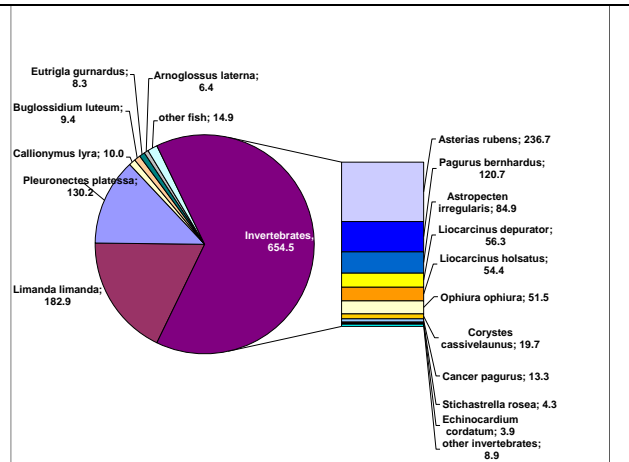
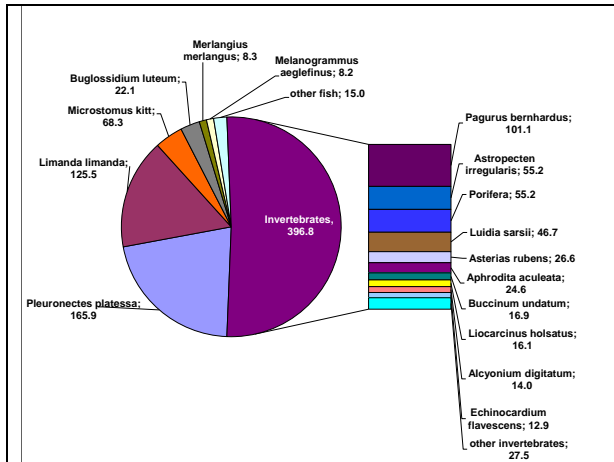


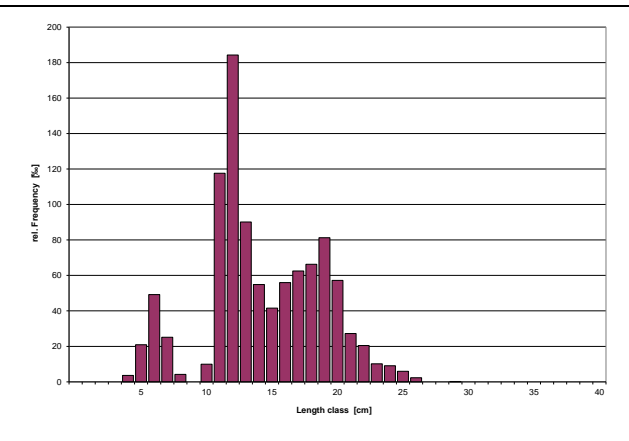
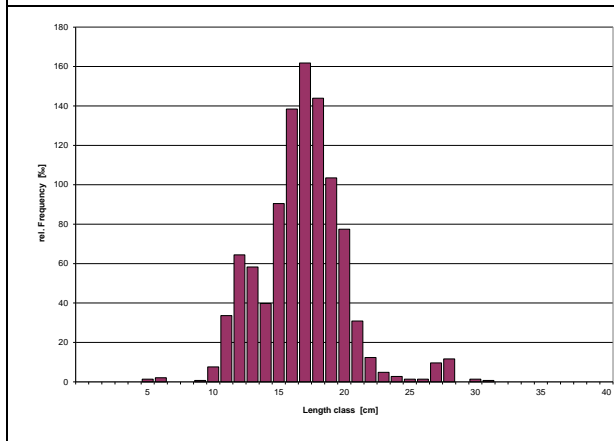
Fig. 1: "Solea", Cruise no. 810, Haul positions and area of investigation

## Catch composition in kg and length distribution during Beam Trawl Survey



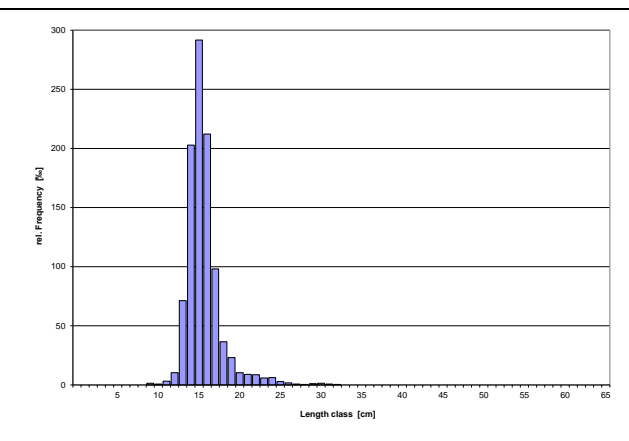
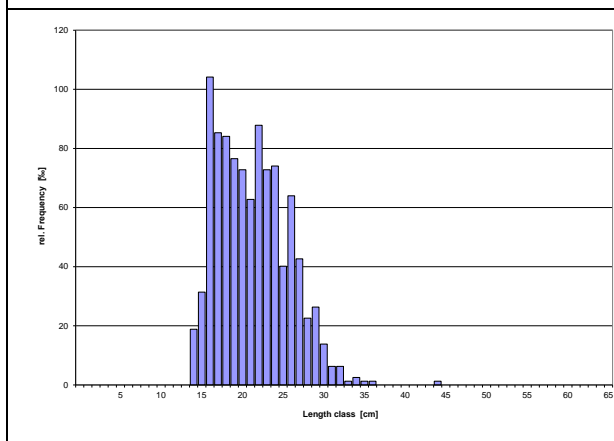
**Fig. 2: Catch composition in 39-43F4&5 (offshore)**

**Fig. 3: Catch composition in 39-43F6&7, 43F8&9 (inshore)**



**Fig. 4: Length distribution of Dab in 39-40F4&5**

**Fig. 5: Length distribution of Dab in 39-40F6&7**



**Fig. 6: Length distribution of Plaice in 39-40F4&5**

**Fig. 7: Length distribution of Plaice in 39-40 F6&7**

## Catch composition during FFH Monitoring

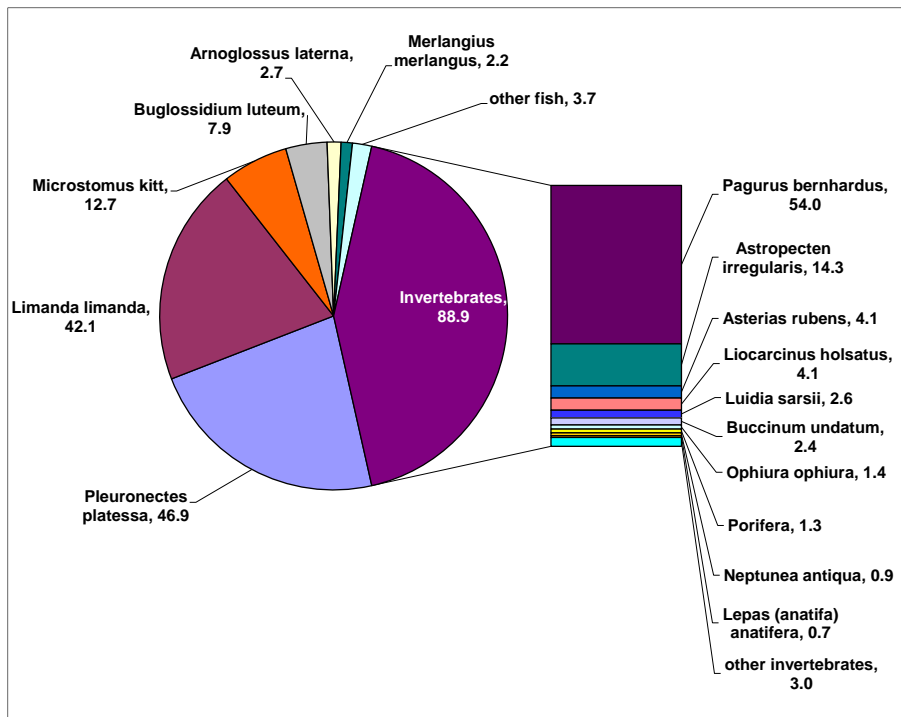


Abb. 8: Catch composition in FFH-Area „Dogger Tail End“