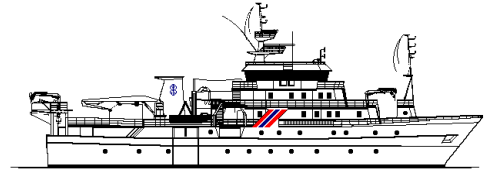


Country: Guinea Bissau, Guinea, Sierra Leone and Liberia.				
Research vessel: R/V DR. FRIDTJOF NANSEN				
Survey number: 2007405 GOG-W				
Number of days: 24				
General objectives: Survey of the pelagic and demersal resources of the Western Gulf of Guinea				
	Port	Date	Coverage	Specific objectives
Departure	Bissau, Guinea Bissau	5 May 2007	Guinea Bissau, Guinea, Sierra Leone and Liberia	<ul style="list-style-type: none"> to map the distribution and estimate the acoustic abundance of the main pelagic species / groups in the region to describe the distribution, composition and estimate the abundance of the main demersal species on the shelf by a swept-area trawl programme to collect bottom sediment samples to map the benthic biodiversity in the region. to collect zooplankton samples for distribution and species identification to map the general hydrographic regime by using a CTD-sonde to monitor the temperature, salinity and oxygen at bottom trawl stations
Arrival	Tema, Ghana	29 May 2007		
Cruise leader: Sigbjørn Mehl				
Participants:				
<p>From Guinea Bissau: Luis Malabe da Fonseca and Amadeu Mendes de Almeida</p> <p>From Guinea: Amadou Bah and Ousmane Tagbé Camara</p> <p>From Sierra Leone: Sheku Sei (Team Leader) and Ibrahim Turay (Local Cruise Leader)</p> <p>From Liberia: Alvin Jueseah and D.Weseh Kay (Team Leader)</p> <p>From Marine Fisheries Research Division, Tema, Ghana: Kofi Debrah-Mireku</p> <p>From Department of Oceanography and Fisheries, University of Ghana: Emmanuel Lamptey</p> <p>From Institute of Marine Research, Norway: Inger Marie Beck, Ole Sverre Fosshem, Thor Egil Johansson, Elisabeth Lundsør and Sigbjørn Mehl (Cruise Leader).</p>				
Summary of the results:				
<p>The total swept-area biomass estimates of main demersal species are also lower than in 2006, especially in Guinea Bissau and for sparids and sciaenids in general. For other species and countries the estimates from the two surveys are more comparable.</p> <p>The large quantity of jellyfish caught during trawl hauls is an indicator of ecosystem disturbance that may have affected the abundance of both pelagic and demersal resources. Jellyfish feeds on larvae and juvenile fish that otherwise may have recruited into the fishery (Mayell 2000) and competes for space and food with fishes. The mucous secreted by jellies makes the environment viscous, causing decline in fish food such as small crustaceans, zooplankton and fish larvae. Blooms of jellyfish can therefore displace fish assemblages. A rigorous environmental study is recommended, to evaluate the causes of jellyfish outbreak along the Gulf of Guinea. Temperature, salinity and food availability will be important to look at. Studies have shown that ephyra production increases when polyps are provided with more food (Purcell <i>et al.</i>, 1999). This may account for the variations in jellyfish abundance in trawl hauls, with high abundances in Sierra Leone and Liberia, where more juvenile fish were caught. Fish thrives more in areas where there is high food abundance. The highest temperature and salinities during the present survey was 29° C and 35.9 ppt,</p>				





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respectively. This is the same as what was obtained in 2006 and can therefore not alone explain the medusa bloom in 2007. If the outbreak is seasonal, then there may not be a scary concern but investigations are still required.

Report: status: final References:

S. Mehl and E. Lundsør, I. Turay, S. Sei, E. Lamptey (2007). **CRUISE REPORTS "DR. FRIDTJOF NANSEN", SURVEYS OF THE FISH RESOURCES OF THE WESTERN GULF OF GUINEA** (Guinea Bissau, Guinea, Sierra Leone and Liberia), Survey of the pelagic and demersal resources, 5 - 29 May 2007. Institute of Marine Research, Bergen.

Constraints/Comments:

