



# “El Cachucho”: a hotspot of biodiversity in the Bay of Biscay

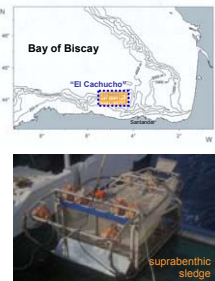


 Inmaculada FRUTOS<sup>1,2</sup> & Jean Claude SORBE<sup>1</sup>  
<sup>1</sup> Laboratoire d’Océanographie Biologique. UMR-EPOC. Station Marine d’Arcachon. 2,rue Jolyet. 33120 Arcachon, France. i.frutos@epoc.u-bordeaux1.fr  
<sup>2</sup> Dpto. Zoología y Antropología Física. Universidad de Alcalá. 28871 Alcalá de Henares

## Introduction

“El Cachucho” fishing grounds, also called Le Danois Bank (Le Danois, 1948) is a marginal shelf located in the southern Bay of Biscay. In a recent multidisciplinary survey of the bank ([www.ecomarg.net](http://www.ecomarg.net)), benthic and demersal communities were sampled with different gears. Suprabenthos includes all swimming bottom-dependant animals (mainly small crustaceans) which perform seasonal or daily vertical migrations above the sea floor (Brunel *et al.*, 1978). This study provides new insights on the structure of the suprabenthic communities from this area.

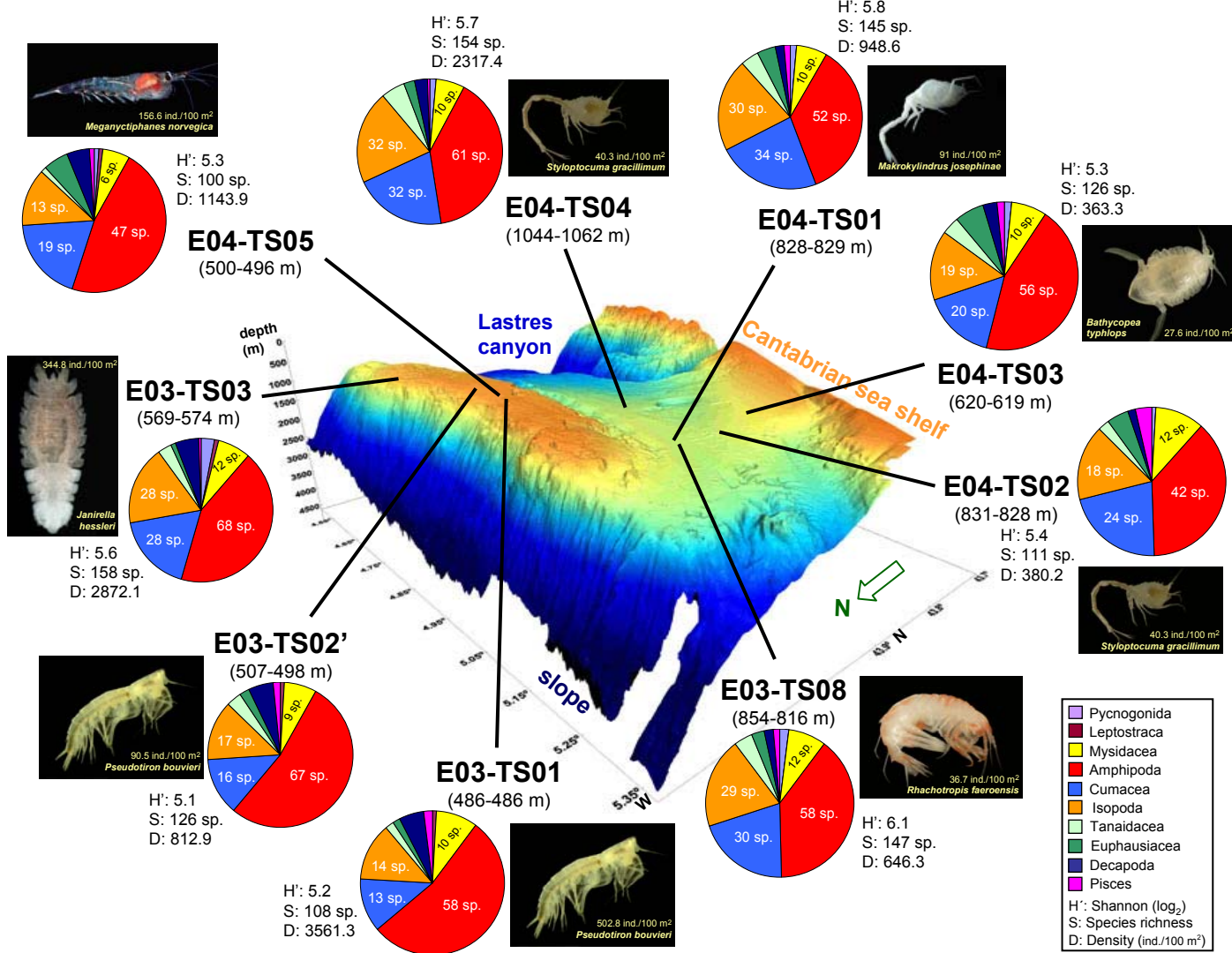
## Material & Methods

The suprabenthic fauna was sampled (9 stations) during daytime with a suprabenthic sledge towed at 1-2 knot over the bottom. This gear is equipped with two sets of superimposed nets (0.5 mm size) and allows quantitative sampling of the motile fauna in the 0-100 cm water layer above the sea floor.



## Results

A total of 37584 individuals belonging to 302 species and distributed in 10 zoological groups were identified: amphipods (121 sp.), cumaceans (55 sp.), isopods (50 sp.) mysids (21 sp.), decapods (17 sp.), tanaids (12 sp.), euphausiids (9 sp.), pycnogonids & pisces (8 sp.) and leptostracans (1 sp.). 43 species are probably new to Science and 2 species have been yet described: the amphipod *Liropus cachuchoensis* Guerra-García *et al.*, 2008 and the isopod *Haplomesus longiramus* Kavanagh & Sorbe, 2007.



## Conclusions

The comparison with other bathyal suprabenthic communities from the Bay of Biscay demonstrates that “El Cachucho” supports highly diverse suprabenthic communities. The species richness ranged between 100 sp. at E04-TS05 and 158 sp. at E03-TS03. All the Shannon index values are superior to 5.1 and the maximal value (6.1) was registered at E03-TS08. The cumulative curve of species with respect to number of samples shows that new species will be discovered with a higher sampling effort. We hope that the recent classification of the Le Danois Bank as Marine Protected Area will allow further investigations on the suprabenthic fauna of this exceptional area of the Cantabrian margin.

## Acknowledgements

Thanks to the crew of RV *Vizconde de Eza* and to all the participants in the ECOMARG cruises for their helpful assistance at sea. This study was included within the ECOMARG Project conducted by Dr. F. Sánchez (IEO Santander). I. Frutos is the recipient of a postdoctoral fellowship from Mutua Madrileña.