

# SOFT BODIES AND HARD STONES

images, documents and texts on marine soft-bodied fossils  
imagens, documentos e textos sobre fósseis marinhos de corpo mole  
CORPOS MOLES E PEDRAS DURAS

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## COLLABORATION REQUEST

I am a Portuguese film director and producer. At present I'm shooting a film in PENICHE [http://en.wikipedia.org/wiki/Peniche,\\_Portugal](http://en.wikipedia.org/wiki/Peniche,_Portugal) (my birth place), the theme of which is partly centred in locations where there is an important concentration of marine soft-bodied fossils.

I was not aware of this fact but knew that ammonites and belemnite rostra are common here. When filming, suspecting that others could be found, I collected a number of "stones" that, once cleaned, turned into complete animal bodies or part of them. In a few days I found many others. That's why, contacting people like you, I am attempting to confirm the interest for subsequent and qualified research in order to draw the attention of local authorities, of scientists and scientific institutions. I'm no scientist. My interest is no other than, showing evidence, collect credible opinion and useful guidance for future action and for the preservation of a unique and dazzling fossil bed.

Please tell me what you think about the contents of my request, comment whatever may seem pertinent or forward this message to anyone qualified to do that and help indentify and classify these fossils.

This document has been updated on **January 12, 2017**. It's a work in progress.

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## THE FINDINGS

The findings included in this list took place in two periods. The first one occurred between late April and July 1, 2015, on no more than 10 days, at about one hour per day work. The second one concerns no more than five days of short visits during identical time. I was the only person involved in this operation, occasionally assisted by a friend. The fossils were picked up on the ground, a few extracted with no big effort within a restricted area of nearly 110 per 30 meters.

The method we used to remove the clay block inside which the fossil was hidden consisted in plunging it in vinegar to soften the clay, clean, repeat this operation several times and then, step by step, eliminate the case as deep as possible until the fossil could be seen uncluttered.

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## FEATURED DOCUMENTS

21<sup>st</sup> Century Innovations in Cephalopod Fossil Research <http://rcfilms.dotster.com/arribas-ABALO-INNOVATIONS-CEPHALOPOD-RESEARCH.pdf>  
Sea Worm [http://rcfilms.dotster.com/arribas\\_ABALO\\_JURASSIC\\_SEA\\_WORM.pdf](http://rcfilms.dotster.com/arribas_ABALO_JURASSIC_SEA_WORM.pdf)  
Sea Annelids <http://rcfilms.dotster.com/ABALO-SEA-ANNELID-FOSSILS.pdf>  
Cephalopod Embryos <http://rcfilms.dotster.com/arribas-abalo-marine-cephalopod-fossil-embryos.pdf>

## GENERIC NOTES

1 – A pattern is common to MOST FOSSILS: they stand vertically on a flat surface. Put on a table, they keep upright, like statuettes.

2 – They certainly belong to marine animals buried on a flat surface of the seabed, suddenly covered with a huge mass of clay, probably collapsed from the coastline. This surface emerged when the sea level decreased and is part of the cliffs nowadays. Almost all these fossils reveal signs of body compression, nevertheless keeping significant features of their original shapes in three-dimensional format.

3 – An enormous concentration of such fossils may be found in a small clay ground north of the PENICHE peninsula ([https://en.wikipedia.org/wiki/Peniche,\\_Portugal](https://en.wikipedia.org/wiki/Peniche,_Portugal)). This region is well known by geologists and palaeontologists and considered as part of a unique prehistoric and geologic local treasure.

4 – Urgent action is needed to salvage this heritage. Thanks to a small yellowish strip of land, science research may lead to important discoveries in several areas.

## RELATED PAPERS

Palynomorph succession of the Upper Pliensbachian–Lower Toarcian of the Peniche section (Portugal) [http://www.lneg.pt/download/6618/8\\_ART\\_CG13\\_ESPECIAL\\_I\\_FINAL2\\_corr3.pdf](http://www.lneg.pt/download/6618/8_ART_CG13_ESPECIAL_I_FINAL2_corr3.pdf)

Geo-modelling of Small Scale Fluvial Bedform Architecture from the Lourinha Fm., Lusitanian Basin, Portugal <http://org.uib.no/cipr/Project/VOG/files/theses/pedersen2007.pdf>

## NOTAS GENÉRICAS

1 – Padrão em TODOS os fósseis: estão assentes numa superfície perfeitamente lisa. Colocados em cima de uma mesa, fazem lembrar estatuetas

2 – A superfície lisa do fundo sobre a qual se moviam animais marinhos terá ficado bruscamente debaixo de um manto de argila, talvez causado por desmoronamento da falésia, ficando soterrados e em compressão. Alguns dos animais sofreram menos os efeitos da compressão da argila, resultando em fósseis de corpo razoavelmente inteiro, em três dimensões, enquanto outros ficaram espalmados na rocha e reduzidos a uma película orgânica unidimensional. Quando o nível do mar desceu, essa superfície emergiu.

3 – Há uma enorme concentração de fósseis na costa norte de Peniche. Toda a orla costeira da península é considerada por cientistas como única a nível mundial e detentora de inestimável valor patrimonial.

4 – Urge que decisões importantes sejam tomadas para a salvaguarda deste inestimável património. Urge que pesquisas científicas intensivas aqui sejam feitas, dada a riqueza do que revelariam.

LER como introdução:

Lula jurássica desenhada com a própria tinta: [http://rcfilms.dotster.com/arribas\\_lula.pdf](http://rcfilms.dotster.com/arribas_lula.pdf)

Este documento de imagens e textos surgiu como consequência deste artigo.

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## PRESENT EMPLACEMENT of the fossils

The fossils have been placed at the Museu Municipal de Peniche [http://www.cm-peniche.pt/MuseuMunicipal\\_Informacoes](http://www.cm-peniche.pt/MuseuMunicipal_Informacoes) where they may be seen by students and researchers.

## LINKS TO IMAGES AND TEXTS

### FOSSILS COLLECTED ON THE FIRST FOUR DAYS fósseis recolhidos nos primeiros dois dias

[http://rcfilms.dotster.com/arribas\\_conjunto\\_PAN.jpg](http://rcfilms.dotster.com/arribas_conjunto_PAN.jpg)

### CEPHALOPODES

#### Cephalopode suckers and arms braços e ventosas de cefalópode

<http://rcfilms.dotster.com/arribas-ABALO-CEPHALOPODE-SUCKERS-AND-ARMS.pdf>

#### Octopuses polvos

TEXT <http://rcfilms.dotster.com/arribas-abalo-octopuses.pdf>

#### Squids lulas

TEXT <http://rcfilms.dotster.com/arribas-abalo-fossil-squid-tentacle-limps.pdf>

#### Embryos and eggs embriões e ovas

TEXT <http://rcfilms.dotster.com/arribas-abalo-marine-cephalopod-fossil-embryos.pdf>

### CONGERS congros

#### Conger 1 congro 1

TEXT [http://rcfilms.dotster.com/arribas\\_ABALO\\_JURASSIC\\_CONGER\\_1.pdf](http://rcfilms.dotster.com/arribas_ABALO_JURASSIC_CONGER_1.pdf)

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[http://rcfilms.dotster.com/arribas\\_ABALO\\_CONGER\\_1\\_MINI\\_BELEMNITE.jpg](http://rcfilms.dotster.com/arribas_ABALO_CONGER_1_MINI_BELEMNITE.jpg)

#### Conger 2 congro 2

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### BREAMS sargos

TEXT <http://rcfilms.dotster.com/SARGO.pdf> (needs update)

#### Bream 1 sargo 1

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### TINY FOSSILS WASTE

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