

# Essential

In the week of 6 - 12 of April, a Romanian crew sailed the waters of the Black Sea to make researches within the SESAME Project.

That is us (the crew), today we have reached the fifth day of the voyage and we are making some final tests. about the water of the Black Sea .



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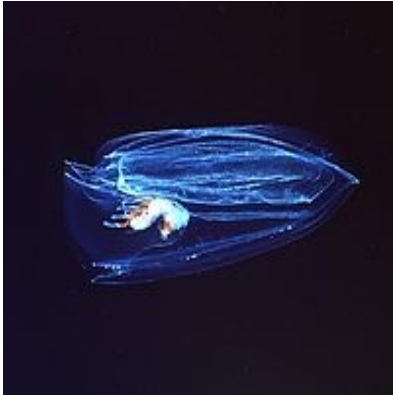
**The SESAME Project is trying to understand physical, chemical and biological processes on a large scale in the Southern European Seas . To do this, the Research Cruises were brought in !**

**Discover what happens onboard research cruises!**

If you would like to take part in an oceanographic expedition without getting wet, and from the comfort of your classroom or living room, we invite you to follow in almost 'real-time' the cruise diaries and interact with the scientists on research vessels.

The scientists will, among other things, sample sea water to measure the temperature, salinity, fluorescence, dissolved oxygen and the nutrient concentrations at the SESAME stations. What for? To find the answer, come aboard these cruises for a virtual trip along the Mediterranean and the Black Sea!

For the first 3 days, the whole crew was so enthusiastic that we didn't have the urge to sleep.... See what happened at the end of day 4 .



Plankton abundance and distribution are strongly dependent on factors such as ambient nutrients

concentrations, the physical state of the water column, and the abundance of other plankton.

Plankton are primarily divided into broad functional (or trophic level) groups:

- **Phytoplankton** (from Greek *phyton*, or plant), autotrophic, or eukaryotic algae that live near the water surface . Among the more important groups are the diatoms, cyanobacteria, and coccolithophores.
- **Zooplankton** (from Greek *zoon*, or animal), small protozoans or metazoans that feed on other plankton .
- **Bacterioplankton**, bacteria and archaea, which play an important role in remineralising organic material down the water column .
- This scheme divides the plankton community into broad **producer**, **consumer** and

Today, a team of researchers tried to measure the levels of plankton colonies in the area.

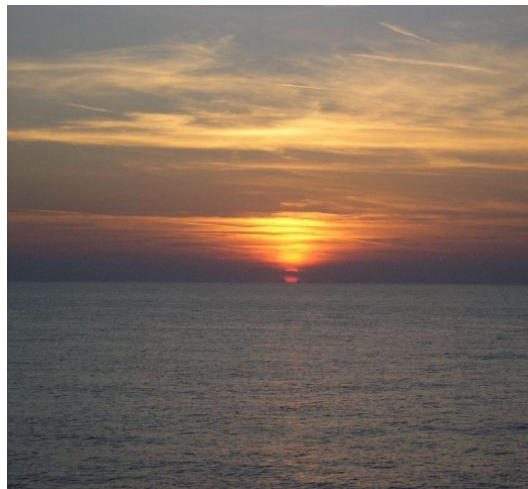
In order to accomplish this task, they gathered 6 samples of water from different depths , and started to watch them with the microscope to get a glimpse of the number of plankton that resides in every sample.

After this process, the team was so exhausted , that they didn't even want to share their results with the rest of the crew, all they wanted was to go to sleep...

Good night, sleep tight!



Photo of the day :



This is the last picture we have taken before going to sleep...

Some inspiration, isn't it?

These pictures that do NOT resemble sunset, are showing some types of plankton.

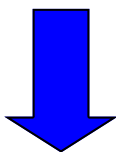
We had great trouble trying to capture these images because they (the plankton) didn't want to stay still.

Our fans back on the mainland keep sending us a lot of mail, asking if they can help us in some way Until now, we haven't answered them, because we don't know what to tell them...

Anyway, Thanks for the mail !

Today, we will interview one of our scientists, Patrick, who is in charge with the salinity tests. Let's see what he has to say....

If the increase of salinity isn't stopped, then the Black Sea should be known as the Dead Sea II .



R: Sir, I am Robert, a reporter of Essential newspaper. How do you do?

P: How do you do! I am Patrick, one of the scientists that are present here on this science vessel .

I am in charge with the salinity tests.

R: Let's just go to the subject of this interview... How do you find these numbers that show the salinity levels? How are they, large or small?

P: The numbers compared with the previous ones, are higher, due to the effects of global warming. The raise is about 0.025 % which is a great value.

R:How will it affect the life in the Black Sea?

P: Well, not quite much, but if the raise continues, then the flora and fauna will have to adapt, or to be destroyed. This will mean the death of this ecosystem.

R:That is bad news indeed...How will you try to stop this process?

P:I, alone can do almost nothing, but with the help of non-government organizations I think that this cause, to save the Black Sea environment, will have success.

R:Thank you for your contribution!

P:You're welcome!

Another objective of this exploration was to see whether in the Black Sea resided dinosaurs long ago...

Although we searched almost the entire seabed ( only where we sailed, that is ) we couldn't find anything worth telling.

So, before saying to you "Have a nice day, Thank you for reading our newspaper !" we tell you: " We know there were dinosaurs here, in the Black Sea and we will never stop



Today program :

7:30 breakfast

8:30 swim with the fishes

9:00 - 18:00 research

At 13:00 lunch

18:30 deck forum

20:00 dinner

21:00 sleep

Breakfast: anything you would expect from a breakfast

Lunch Chicken soup along with mashed potatoes.

Dinner a Romanian specialty: musaca .

Enjoy !

Today it's going to be a beautiful day, sun shining on the sky, the wind blowing with just 10 km per hour, the sea is going to rest for the whole day!

Couldn't be better for a day at sea !

Name and address of the class:  
10AD1, "Ovidius" Highschool  
Constanta, Romania, 2, Basarabi  
street, 900710

Age—16-17 years old

Number of students: 12

Coordinating teacher:

Carmen Bucovala