03-April-2009
Volume 1, Issue 1

Water Addicted

Sesame Project

SESAME is a 4-year European Union-funded project designed to study the Mediterranean and Black Sea ecosystems and their abilities to provide goods and services with high societal importance, such as tourism, fisheries and ecosystem stability through conservation of biodiversity. The need for consistent information, together with the indispensable linking of natural and socio-economic sciences, on these two ecosystems have mapped out SESAME's research path. Both the Mediterranean and Black Sea have been experiencing intensive development and exploitation due to their strategic geographical position, and are equally susceptible to human pressures and climate change. SESAME has been suitably created to assess the changes that have occurred in these ecosystems over the last 50 years.

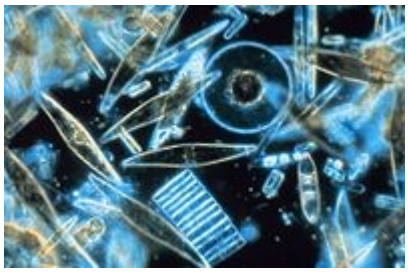
Issue content:

Autumn cruise:Sesame IT6

I dont know about other people but I think that for a sea lover or a scientist the water represents always something else.For this people water represents also temperature,salinity, oxygen,density,fluorescence (contents of chlorophyll in the water),physical parameters along the water column.

Those things where also the objectives of a research italian team composed of 16 scientist from several Italian scientific Institutions,who was cruising the Ionian Sea,on a vassel named Urania.The oceanographic cruise -Sesame-IT6, started on day 17th september.The chief scientist of the SESAME IT6 cruise is Maurizio Azzaro, a researcher at the Institute for the Marine Coastal Environment of Messina of National Research Council

Plankton



Plankton consist of any drifting organisms that inhabit the pelagic zone of oceans, seas, or bodies of fresh water.They provide a crucial source of food to more familiar aquatic organisms .The name **plankton** is derived from the Greek word πλαγκτος ("planktos"), meaning "wanderer" or "drifter". While some forms of plankton are capable of independent movement and can swim up to several hundreds of meters vertically in a single day , their horizontal position is primarily determined by currents in the body of water they inhabit. By definition, organisms classified as plankton are unable to resist ocean currents. This is in contrast to **nekton** organisms that can swim against the ambient flow of the water environment and control their position.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.

Picture of the day

While Yiannis Issaris was swimming in the calm sea in a reef with colorful fish ,a solitary pink jellyfish capted his attention.He got the wind up because this kind of jellyfish are poisonous and took this picture

Experiment of the cruise Sesame IT6

We are now proceeding along the Calabria coast, the sea is quite calm, but it's raining cats and dogs. The temperature has notably lowered since the beginning of the cruise and the air is fresher now. The past days have been quite busy, especially at the "biological" stations, the sites where we collected also various biological parameters in addition to the physical and chemical ones. Similarly to what I did during the SESAME Italian cruises last March and April, I have been in charge of the mesozooplankton, the community of microscopic animals that live in the water column. I collected samples with vertical tows in three layers (0-50m, 50-100m, 100-200m) for biomass measurements and species composition and abundance, and a supplementary integrated sample in the 0-200 m water column for genetic analyses on some target copepods. With the last sample, we have collected a very long chain of salps, the planktonic tunicates that are very efficient filter feeders of phytoplankton. That chain was very nice and composed by 266 individuals. Most probably it was even much longer in the sea! Because I felt sorry for the damage caused by my net, I returned most of these individuals to the sea, to their proper environment. "

Interview with Maurizio Azzaro

Today, our guest in the interview rubric is Maurizio Azzaro,a researcher at the Institute for the Marine Coastal Environment of Messina of National Research Council (CNR).He accepted to talk with us about his last expedition in the Ionian Sea,started on 17 th September.Could you tell our readers what was your role,what do you have to do in this expedition?As the chief scientist of the SESAME IT6 cruise,I cared of both the scientific and logistic organization of the survey.Moreover I performed the mesurements of microbial respiratory rates along the entire water column.My research team collected water samples to study dissolved organic matter (DOM) dynamics.Could you tell us what is DOM?DOM is the largest reservoir of organic carbon on the Earth, and it represents the source of food for heterotrophic bacteria, so it plays a key role in the global carbon cycle. Working with DOM we deal with much more questions than answers and this is the most exciting aspect, it is a continuous challenge.How many scientists worked on this project?16 scientists from several Italian scientific Institutions (CNR-IAMC,CNR-ISMAR,CNR-IBF,OGS,SZN,ENEA,LIPU) worked on this project.The group got on well together because they worked in the past in several multidisciplinary national and international projects .

Message send in a bottle

To support the team from the vassel Urania the representants of the newspaper “Water Addicted” have been visited the “Ovidius Highshool”.They talked with a few youngsters about the water and the sea life.They cooperated and came with a wondefull idea: they proposed to send to the team a mesagge snug in a bottle.We offered to send it and they wrote on a sheet :

“Congratulations for your courage and initiative to adventuring in to the mysterios sea for knowledge.With lots of thanks ,from the shore of Black Sea,the youngsters of <<Ovidius Highscool>>!“

Seashore over 50 years

The sea life represents 99% of the entire Earth life.At a fundamental level, marine life helps determine the very nature of our planet. Marine organisms contribute significantly to the oxygen cycle, and are involved in the regulation of the earth's climate. A seashore it usually consists of loose particles which are often composed of rock, such as sand, gravel, shingle, pebbles, or cobble. The particles of which the beach is composed can sometimes instead have biological origins, such as shell fragments or coralline algae fragments.

For us although the seashore represents more then a nice, warm place,where the sand responds instantly to the sun heat and where the water is the only thing refreshing . Maybe after 50 years when the glaciers have melt the water level will grow and the land will ocupe even a smaller surface of the Earth,all of us will learne how to care about the sea,how to attend it,how to be one with the life which dweels in it.

Flash news .Sesame IT6

Today is the last day of our oceanographic cruise. We are writing from Messina harbour where we arrived yesterday eveningent when we celebrated the end of the cruise in the large hall where we use to have our moments of relax. It was also the occasion to celebrate Stefano's birthday and Luciano's last cruise, since he will go on retirement soon."

Wheather forecast April 3, 2009,Constanța

5°C; A few clouds

Wind: NE 22km/h; **Relative Humidity**: 49%

Pressure: 101.90 kPa ; **Visibility**: 10.0 km

Menu of the day for the mess

Breakfast: Plateau de Fruits de Mer-
Lunch:Shellfish Bisque &Scottish Seafood with rouille & Croutons
Dinner:grilled Langoustines

Bibliography:www.wikipedia.org ,http://oceanworld.tamu.edu/NMEA_Talk/NMEA%20Talk%2020032.jpg,www.nationalgeographic.com

Name of the class: 10 AD2

Adress of the class:Constanta.Str.Basarbi,nr 2.

Age grup of the class: 16-17 years OLD

Number of children in the class:17

Name of the teacher:Bucovala Carmen

The Bermud Triangle.Atlantis?Still mistery.

The **Bermuda Triangle** is a region of the northwestern Atlantic Ocean in which a number surface vessels are alleged to have disappeared in mysterious circumstances .One explanation pins the blame on leftover technology from the mythical lost continent of Atlantis. In Plato's account, Atlantis was a naval power - approximately 9600 BC. In Plato's myth Poseidon fell in love with Cleito, who bore him five pairs of male twins. The eldest of these, Atlas, was made rightful king of the entire island and the ocean and was given the mountain of his birth and the surrounding area as his fiefdom. Atlas's twin Gadeirus, was given the extremity of the island towards the Pillars of Heracles.Poseidon carved the mountain where his love dwelt into a palace and enclosed it with three circular moats of increasing width, varying from one to three stadia and separated by rings of land proportional in size. The Atlanteans then built bridges northward from the mountain, making a route to the rest of the island. They dug a great canal to the sea, and alongside the bridges carved tunnels into the rings of rock so that ships could pass into the city around the The walls were constructed of red, white and black rock quarried from the moats.A war took place between those outside the Pillars of Hercules at the Strait of Gibraltar and those who dwelt within them. The Atlanteans had conquered the parts of Libya within the Pillars of Heracles as far as Egypt and the European continent as far as Tyrrhenia, and subjected its people to slavery. The Athenians led an alliance of resistors against the Atlantean empire, and as the alliance disintegrated, prevailed alone against the empire, liberating the occupied lands.But at a later time there occurred portentous earthquakes and floods, and one grievous day and night befell them, when the whole body of your warriors was swallowed up by the earth, and the island of Atlantis in like manner was swallowed up by the sea and vanished; wherefore also the ocean at that spot has now become impassable and unsearchable, being blocked up by the shoal mud which the island created as it settled down.