



GLOBE

In MACEDONIA

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National students research competition

On the occasion of the Earth Day, 22 April, the Ministry of Environment and Physical Planning took part in celebration activities of this World Day celebrating its 31 anniversary, as well as 6 anniversary from the commencement of the GLOBE Programme, representing global scientific and educational Programme coordinating the activities of students, teachers and scientists from all over the World.

The GLOBE Programme currently involves more than 90 countries and more than 8.500 schools, committed to study and supplement the image of the global environment of the Planet, in order to increase the global environmental awareness and global data collection.

For the above purpose, on 23 April this year, in the premises of the Public Relations Office within the Macedonian Environmental Center of the PEPP, national students, research competition under the GLOBE project was organized.

In this competition, for which we hope to become traditional, students from seven out of the nine secondary and primary schools involved in the Programme took part. Through research and data analysis, asking questions and developing hypothesis, as well as through developing methodologies and analyses with interpretation, conclusion and communication, they competed with a single goal to popularize and promote global learning and observation to benefit the environment.

Awarded

The first award at this students' research competition was won by the Public Secondary School "Niko Nestor" from Struga, for the Projects "Sateska River Major Polluter of the Lake of Ohrid" and "Crni Drim River Positive Sign of the Hydrological Status of the Struga Aquatic Eco-System". In the first project, students Kostadinka Naumovska and Vanco Kocovski, who have actually carried the project out, indicated the issue related with the pollution of the Sateska River in the area of Ohrid and Struga region. On the basis of executed Hydrological measurements of nitrates, phosphorus, dissolved oxygen and Suspended



solid matter in Sateska River, they refer to their increased concentration, making direct impact on the Ohrid Lake pollution. Student Kliment Sandzakovski, who applied with the second project, explained in his elaborate the importance of the quality of a river, such as Crn Drim, with regard to the temperature, composition, and Ph value, making impact on the survival of the flora and the fauna during a year.

The Project "The Impact of Agrochemicals on the Ichthyofauna in Strumica Area", of Secondary School "Dimitar Vlahov" was the second award on this GLOBE competition.




Namely, the developers of this Project, Stojkov Ivica, Mirceva Elisaveta, Pokrajcevalieva Aleksandra, Professor Daov Straso and the Volunteer Woodworth Paul, indicate the negative impacts from the excessive and uncontrolled use of chemicals by the man, which will undoubtedly have potential adverse impacts on the environment.


The third award of this students' research competition was won by the Public Secondary School "Goce Delcev" from Valandovo, for the Project "The Man as a Producer of Pollution of My Environment" developed by Dimova Daniela, Lazarova Saska, Donceva Katerina, Professors Gugicev Milan, Manolev Stojan i Kimov Naco. The objective of this elaborate was to inform the public of the possible consequences and anomalies related with the presence of various causers and sources of pollution in the Municipality of Valandovo.


Special prize was awarded to the students from the Primary School "Dimitar Miladinov" from Skopje, Igor Damcevski, Lina Nestorovska, Ivana Atanasoska, Professors Svetlana Filipovska and Anka Denkovska, for the exceptional effect achieved during the competition.

The following schools also participated in the competition:

"Aco Ruskovski" from Berovo, with the themes:

 "The Vine Grows Better in the Tikvesh than in Maleshevo Area", developed by Nikolovski Nikolco, Trosanski Goce i Bazlievski Dejan,

 "The Impact of the Bregalnica River Water on the Flora and Fauna in the Closest Environment", developed by Gerdovska Irena i Furnadziska Natasha,

 "There is no Green House in Maleshevo Area", developed by Malnovski Ilija, Ilievski Mitko and Miteva Elena, Professor Sloboda Pandov and the Volunteer Dena Olson.



Secondary School "Gjorce Petrov" from Kavadarci, with the theme:



The best participants in the competition were awarded with books from the production of "Detska Radost", and all attendants obtained CD Roms "Protection of the Landscape of Ohrid and Prespa Lakes".

E n v i r o n m e n t a l P a t r o l




On 24 March 2001, in honor of 22 March the Day of Water of the Earth, in the framework of the planned activities of the GLOBE students and Environmental Section which are active in the Secondary School "Gjorce Petrov" from Kavadarci, one day excursion environmental patrol on Tikvesh Lake, was carried out. The boat of the water management organization "Tikvesko Pole" took the environmental patrol on an interesting excursion from Resava Gulf to the Polog Monastery.

In the framework of the environmental patrol, several activities were envisaged and carried out, such as:

1. Students from the environmental section created placards placed on the board, visible from the Lake's shore for the visitors to the Lake, which come in highest number during the weekend days. The goal of placards was clear and undoubtful to raise the environmental awareness.
2. Professor Rizo Todorcev, Engineer of Hydromelioration, employed in the school centre, held a lecture in the Monastery of St. Gjorgji, so called Polog Monastery, on the significance of waters and the world day of waters of the Earth.
3. The GLOBE students carried out measurements of the water quality in this site. Measurements were carried out with regard to physical and chemical properties of the water, being standard measurements within the GLOBE Programme. The Tikvesh Lake's water temperature, muddiness, sols contents, conductivity and Ph value were measured. As it is known, this water is used for irrigation of the fertile Tikvesh fields.

4. Professor Menca Davidova, Principle of the school, introduced the students in the significance of the Polog Monastery as cultural and historical monument dating from XIV Century.

In addition to the good time spent together, students of this patrol wrote the following in their diary of activities:

-  A lot of plastic bottles float on the surface of the Lake. The shore and the area around the houses are ugly images because of the plastic bottles around. Various wastes can be noticed on the shore, such as flying plastic bags, ambalage, cigarette butts, remaining of cigarette boxes and other waste. This reflects the extremely neglecting attitude of visitors, with very low level of environmental awareness.
-  The members of the environmental section appeal to the visitors not only to the Tikves Lake, but anywhere in the nature, to develop self-control in their behavior, because they can contribute to the healthy environment, and, before all, to the wonderful enjoyment in the nature.
-  Organizations managing the water in the lakes should make efforts aimed at identifying sustainable solutions of the problem. The Lake should be cleaned up by means of donations or by employing one or more persons, and ultimately by enforcement of legal sanctions against those who pollute the Lake and its shore.

Environmental Section
of the Secondary school
"Gjorce Petrov" - Kavadarci