

THEORETICAL AND PRACTICAL ACTIVITIES CONCERNING THE DEVELOPMENT AT PUPILS OF CONSCIENCE CONCERNING THE PROTECTION OF FLORA FROM PROTECTED AREAS AND WETLANDS

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Abstract: The nature preservation is an major object which it must to concern the whole humanity in the conditions of important global transformations. Because the scientific and practical importance, the protected areas and wetlands occupy a special place in the world preoccupations of nature conservation. These constitute an ecological balance of the actions and retroactions from flora, fauna and climate. For this reason, it is imperative their sensible conservation and capitalisation. But, always, the man has intervened in their balance with the most negative results. In conservation preoccupation of protected and wet ecosystems, its frames the theoretical and practical activities carried out in the line of pupils by *G.C.E.E.M.* during 2006 - 2009. The major purpose was the develop a conscience of young generation concerning the importance of the protected areas and wetlands in sustenable maintenance. The present paper point same events went by the time of the Wetlands Day, of the Water Day and of during the spring and the summer.

Keywords: pupils, ecological education, wetlands, protected areas

Introduction

The projects adressed to middle school pupils (with age between 11–14 years) and high school pupils (with age between 15–18 years).

The purposes of projects was the developm a conscience of children concerning the protection and conservation of flora from protected areas and wetlands through: a) pupils examination concerning their knowledges about flora from protected areas and wetlands; b) delivering of conferences; c) lectures on flora of protected flora and wetlands; d) making study trips in various terrestrial and coastal protected lands from Constantza county; e) carrying out of pictures, drawings and grapfic arts competitions; f) drawing up, printing and the distribution of instructive teaching aids; g) seeing of documentary films [AXINI & BERCU, 2008; AXINI & al. 2008; CORNEANU & et al. 2005]

Results and discussions

Pupils examination. Pupils answers showed that they owned some knowledge about flora of protected areas and wetlands and nature, in general. But, they wish to know

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more about that and they will mixed up in projects concerning the knowledge, the protection and the rehabilitating of it (Fig. 1) [AXINI & al. 2008].

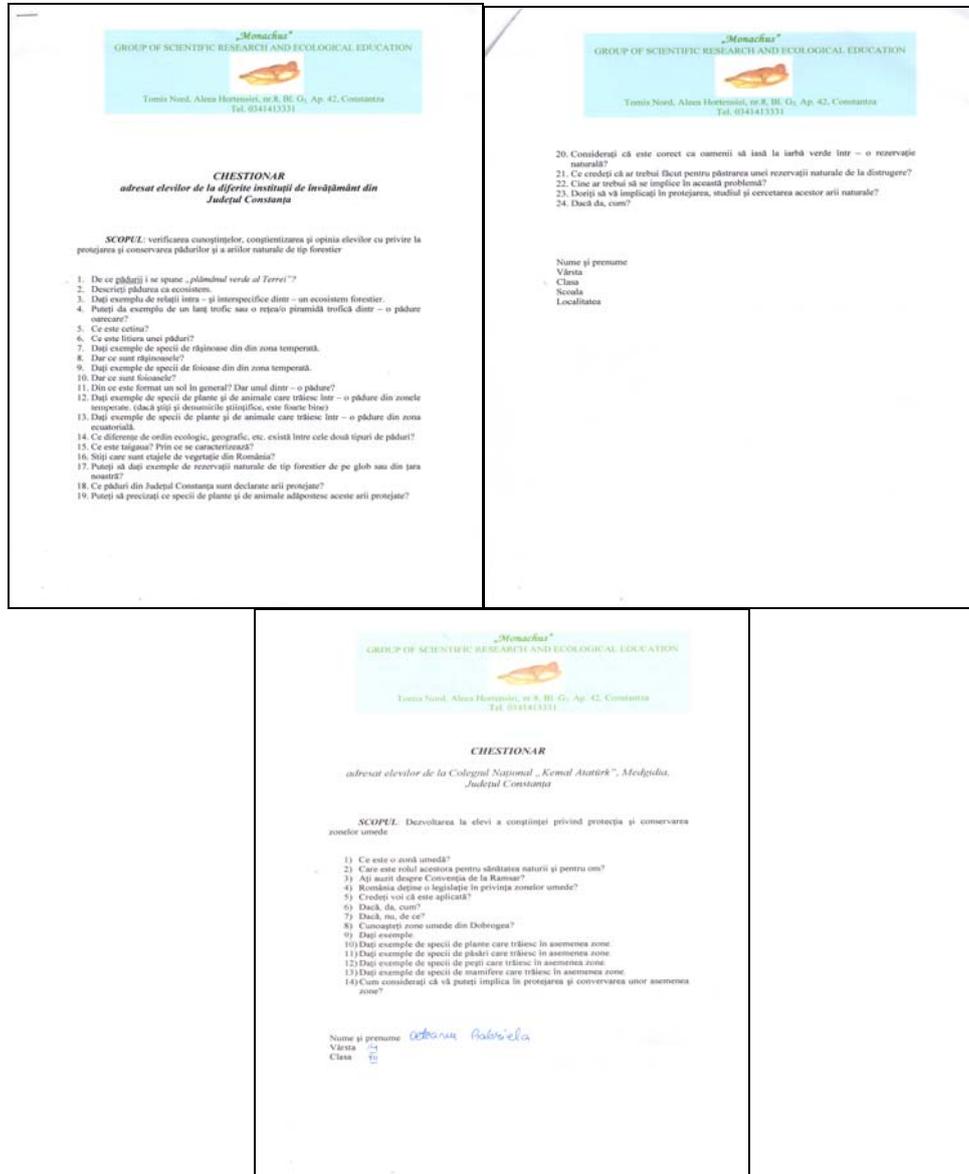


Fig. 1 –Pupils examination

Delivering of conferences. The participation in great number of pupils at conferences organized for them, showed their interest in theoretical and practical problems of nature in general and especially of flora, in these areas. The lectures were made by specialists and pupils. The pupils met scientists, which know their preoccupations and science problems from nowadays (Fig. 2) [AXINI & al. 2008].



Fig. 2. Delivering of conferences

Lectures on flora of protected areas and wetlands. In other stage, the pupils participated to lectures on flora from the nature reserves and wetlands. They learned: what is a protected area and how/why is founded; how are the wetlands and nature reserves in Dobrudja; the plants species which habits in such places, their adaptations at environment as well these threats and the protection measures that it will be taken; the international and national legislation with reference from these and their application; their statute. The lectures ended with pupils questions showing their interes about nature and protected flora in particular (Fig. 3) [AXINI & al. 2008].



Fig. 3. Making lectures

Study trips in various terrestrial and coastal protected lands from Constanța county. With such stock of knowledge concerning protected lands, children participated to study trips in various nature reserves from Constanța county (Fig. 3). The pupils received binoculars, cameras, cases for the measurement of physical and chemical parameters, botanical cases, etc. They achieved observations concerning the phenomenons which happened in these areas. They learned to collect and to identify plants from respective zones. They learned to make herbaria, to use different Flora Books to identify plant species. Finally, they understood the adaptations of plants to such environments and the need to protect them, proposing various conservation measures of those endangered and rare species, measures that could be put into practice in the future [AXINI & TOFAN, 2009].

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Carrying out pictures, drawings and graphic arts competitions. Its carried out competitions of pictures, drawings and graphic arts. The participants were a lot of middle school pupils from Constanța county schools and pre-school children from two nursery schools in Constanța town.

Drawing up, printing and distribution of instructive teaching aids. In the same projects, the pupils received teaching aids concerning the coastal lands: posters, leaflets, booklets, etc. In others projects, the pupils distributed the leaflets with coastal lands informations.

Seeing documentary films. The pupils saw documentary films concerning wild life of terrestrial and coastal nature reserves in Constanța county.

Granting of diplomae and prizes of participant pupils in projects. For the implication in conferences, we granted a number of: 6 excellent prizes, 7 prizes I, 6 prizes II, 6 prizes III, 11 mentions (Tab. 1). For participants to the competitions of making pictures, drawings and graphic arts, we granted a number of: 4 excellent prizes, 3 prizes I, 5 prizes II, 4 prizes III, 2 mentions (Tab. 2). The great number of diplomae and prizes shows the passion of the pupils and their wish for the knowledge and the protection of nature from protected areas and wetlands, of flora in particular. In general, the diplomae were made and financed by G.C.E.E.M. As prizes we gave: popularity science books, atlases, posters, leaflets, instructive teaching aids concerning biology and ecology of those areas.

Tab. 1. Diplomae given to the pupils for the active participation to conferences

PRIZE	NUMBER OF PRIZES		NUMBER OF PUPILS		NUMBER OF PAPERS	
	Middle School	High School	Middle School	High School	Middle School	High School
Excellent Prize	2	4	2	13	2	3
Prize I	5	2	5	2	5	4
Prize II	5	1	5	1	5	1
Prize III	-	6	-	15	-	6
Mentions	4	7	4	10	5	2
TOTAL	16	20	16	41	17	16

Tab. 2. Diplomae given to the pupils for the active participation to making pictures, drawings and in graphic arts competitions

PRIZE	NUMBER OF PRIZES		NUMBER OF PUPILS		NUMBER OF PAPERS	
	Middle School	Middle School	Middle School	High School	Middle School	High School
Excellent Prize	4	-	4	-	4	-
Prize I	3	-	3	-	3	-
Prize II	5	-	5	-	5	-
Prize III	4	-	4	-	4	-
Mentions	2	-	2	-	2	-
TOTAL	18	-	18	-	18	-

The Foundation of J. T. R. Group

In 2007, was born the group of Junior Terrestrial Rangers (J. T. R.), formed by middle school pupils, with age between 11 – 15 years. This group is composed by one leader, one spokesman, one environmental reporter and group members. Their mission is to study and protect nature reserves, in general, the nature of Dobrudja, by lands studies, discussions with public and the distribution of teaching aids concerning nature informations, etc.

Future views

Such projects, in special those with practic parts, were a success. All this, it advices us to change them into programms which we are going to develop year by year. The direct beneficiaries will be pupils from others schools from Constanța county.

In future, we are going to involve more pupils in J. T. R. group, to expand their action area and to achieve experience changes with similar groups, both in our country and in others.

Some of high school pupils would be involved in research projects and they even will develop a scientific profession.

Collaborations

In all of these projects, we collaborated with:

1) Environment Protection Agency of Constanța county – advicers: Zoica Călătoiu, Mihaela Condur, and Marcela Popovici;

2) National Institut for Marine Research and Development “Grigore Antipa”, Constanța, Romania – Strategy-Cooperation manager, Ph. D. Nicolae Papadopol, biologist Maria Moldoveanu, engineer Ph. D. Laura Alexandrov, engineer Ph. D. Tania Zaharia, and others;

3) Natural Sciences Museum Complex – general manager Decebal Făgădău, biologist Ph. D. Elena Șerbănescu, and biologist Adela Bologa;

4) The National Administration “Romanian Waters” “Dobrogea – Litoral” “Waters Directorate – Office leader Josefina Lipan;

5) The Romanian Naval League, Constanța Subsidiary – biologists Ph. D. Ioan and Florica Porumb, counter-admiral George Petre;

6) Consulate General of the Republic of Turkey, Constanța – general consul Haluk Ağca.

Collaborations with other schools from Constanța county:

1) “Dimitrie Cantemir” Middle School, Constanța – headmaster, teacher of history Teodora Maria Mușat, teacher of chemistry Marina Marinescu, teacher of geography Neriman Asan, teacher of drawing Bogdan Ionuț Ene, teacher of technological education Violeta Cojocar;

2) “Decebal” Theoretic High School, Constanța – teacher of biology Romica Milea;

3) “George Călinescu” Theoretic High School, Constanța – teacher of drawing Bogdan Ionuț Ene;

4) “Omnia” High School, Constanța – teacher Ph. D. Carmen Atanasiu;

5) “George Emil Palade” School Group, Constanța;

6) Middle School, Crucea – teacher of Romanian language and literature Carmen Maria Dumitrescu;

7) “Nicolae Bălcescu” Theoretic High School, Medgidia – teachers of geography Anca Elena Bălașa and Șeila Selim;

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8) “Kemal Atatürk” National College, Medgidia – teacher of geography Șeila Selim, teacher of drawing Iuliana Neacșu, schoolmaster Eugenia Ungureanu;

9) “Spiru Haret” Middle School, Medgidia – teacher of biology Felicia Simion, teacher of plasticdrawing Iuliana Neacșu;

10) “Lazăr Edeleanu” School Group, Năvodari – teacher of biology Corina Tudoraș;

11) Middle School No. 3, Năvodari.

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Conclusions

The participation of pupils at theoretical and practical activities of the projects show their interest concerning the flora in the protected areas, by their knowledge and protection activities. They wish to participate at various projects and programmes concerning the study, the research and the reconstruction of such areas.

Such educational projects must be a constant preoccupation of scientists because the childrens are the ruling force which it guide us to a most clear and healthy nature.

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