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„ЗАЩИТЕНИ КАРСТОВИ ТЕРИТОРИИ –
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(23-26 септември 2015 г., София)

ДОКЛАДИ



International
scientific and practical conference

„PROTECTED KARST TERRITORIES –
EDUCATION AND TRAINING”
(September 23-26, 2015, Sofia, Bulgaria)

PROCEEDINGS

ТерАрт
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TRAVELLING SUMMER SCHOOL OF KARST IN BULGARIA - FIRST RESULTS¹

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Annotation: In this paper are presented first summary results from the Travelling Summer School of karst put into practice in Bulgaria (22-31.07.2015 г.) financed by a project of UNESCO PARTICIPATION PROGRAMME 2014-2015. The results show impressions, opinions and evaluation of the participants based on the two inquiries filled by them - initial and exit one at the end of the Travelling Summer School for karst.

Key words: *education and training, informal karst education, protected karst territories, “Life-long education”, educational strategy ProKARSTerra-Edu*

The Travelling Summer School is the next stage of the strategy for including the karst topic in the educational system. The task is leading a specialized field training (with demonstrations of interdisciplinary methods of researches) for teachers, pupils, students and PhD students with interest in karsts. This form of training beside of its transience, provide summary knowledge gained intensively in a natural environment under the leading role of qualified specialists (Fig. 1).



Fig. 1. On the entrance of the cave Mandritza (Devetaki plateau) (photo P. Stefanov, 2015)

¹The paper is by a project of UNESCO Participation Programme 2014- 2015

What is important for the organizers of the Travelling Summer School of karst is the feedback from the participants which will give an opportunity for making a real evaluation of the training and will help the organization of future ones. That's why in the organization of the Travelling Summer School of karst is included also an express questionnaire surveying. The aim of the questionnaire surveying is to gather an authentic opinion of the direct participants with a view to the necessity, benefits and the effects of the Travelling Summer School of karst. For realization of the main task there are three tasks: 1. Development of two survey cards - initial and exit one for summarize the information; 2. Carrying out two questionnaires; 3. Analysis of the information.

For the realization of the first task were formulated some main topics for gathering information with concrete questions to each of the survey cards including:

Travelling Summer School of karst (2015) - survey card - first part (initial one):

- Knowledge about karst and karst sites;
- Visited karst sites;
- Previous participations in different forms of education connected to the karst;
- Relation between karst and human activity;
- Profile of the participants.

There are 22 questions formulated within the framework of these topics - combination of questions with closed (2), closed and open (14) and only open (16) answers.

Travelling Summer School of karst (2015) - survey card - second part (exit):

- What did you learn about the karst and the karst geo systems?
- Evaluation of the Travelling Summer Schools based on some criteria;
- Relation between karst and human activity;
- Presence of the karst in the education system;
- Development of the form Travelling Summer School of karst.

There are 25 questions formulated within the framework of these themes - combination of questions with closed (6), closed and open (6) and only open (13) answers.

All the information from both of the inquiry cards is systematized by participants' groups - students and teachers and Bulgarian and foreign participants. Summaries and first results are done in the following directions:

- Evaluation of the Travelling Summer School - according to the participants;
- Change in the knowledge of karst and the karst geosystems (Fig.2,3);
- Change in the attitude to the karst (Fig.4);
- Benefits for the participants (Fig. 4, 5);
- Is there a future for the Travelling Summer School?



Fig. 2. Field demonstration in front of the waterfall in NM "Maarata" (photo St. Dimitrov, 2015)



Fig. 3. Field demonstration of lizimetric ground in NP Shumensko plateau (photo St. Dimitrov, 2015)



Fig. 4. Experience exchange (info centre in NP Shumensko plateau) (photo P. Stefanov, 2015)



Fig. 5. Acquiring new skills (in front of the entrance of Orlova chukka cave) (photo P. Stefanov, 2015)

In conclusion - Travelling Summer School of karst provided for the participants an opportunity for an easy way of education in a short period of time (field demonstrations and experiments and in the following analyses and discussions) to get know in situ the most important characteristics of the main types of karst in the North Bulgaria and the evolution models of the karst genesis. This gave them the opportunity to increase their knowledge on different levels according to their initial competence, the essence, characteristics and the variety of karst and karst geosystems on the base of specific examples of the visited karst areas. Introduction in situ of the practical problems of different types of karst areas through direct participation in workshops and discussions with local administrations, companies and authorities, related to karst.

The results of the Travelling Summer School of karst prove that teachers of different subjects and different professional specialization could work in a team because of the specific of the karst and its interdisciplinary in this form of education. This, in turn, creates a real opportunity to test different options for cross-curricular connections – one of the latest contemporary educational problems.

A positive evaluation is made of the international group of participants which help for establishing international contacts (Fig. 6). Communication in the field conditions between the generations it is not a problem. Provide opportunities for individual expression of the participants and sharing experiences in a casual atmosphere. Opportunities for simulation of problem situations in model karst areas, with subsequent discussions, including from the point of view of the educational process feedback.



Fig. 6. Saying goodbye (photo P. Stefanov, 2015)

The Travelling Summer School of karst is one of the good opportunities for alternative informal karst education which could be developed and get wider international application.

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