

Natural Science Excursions in the Škocjan Caves Park

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Picture: J'kopin barn in Škocjan that houses an ethnological exhibition and is part of the Škocjan Education Trail

INTRODUCTION:

Education of young people and tourists during their **visit in protected area**, is exceedingly important and one of the goals of the park management. The programme of **natural science excursions** in the Škocjan Caves Park, the **UNESCO world heritage place** was launched in 2003 when a circuit trail "**Škocjan Education trail**" was set up in the heart of the Park. A natural science excursion is similar to field lessons with exercises (work sheets). **Natural and cultural heritage interpretation** is one of the main objectives of programme. Mostly we have geography or biology excursions (field exercises, nature protection, endangered species, and environmental education).

Various **karst phenomena** can be observed along the trail, the most important being the Okroglica abyss, Velika and Mala dolina (collapse dolines), the Reka River gorge, the Reka River sink and the view of the entrance of the Škocjan Caves and the nearby collapse dolines. Walking through the **karst forest**, visitors become acquainted with the typical karst vegetation and learn about the importance of protected areas, the life of people in the karst, protected plant and animal species, and **life underground** (what lives in caves and the characteristics of subterranean animals).

METHODS:

- **natural&cultural heritage interpretation**
- **work sheets**
- **Guidebook**
- **museum collections, models of the Cave**



Picture: Work sheets used during excursions in the Park. They are also available on the Internet together with the Škocjan Education Trail Guidebook

Work sheets are used in field work as teaching tools. They are **interdisciplinary**, comprise 10 main themes and enable visitors to familiarize themselves with karst world, flora and fauna, protected areas and cultural heritage of this area. **Museum collections** also include a section view model of the Škocjan Caves and a model of the central part of the Park, namely Velika and Mala dolina with the sink of the Reka River. Many natural phenomena are visited live, in the field, so that there is a link between the theory and phenomena observed in practice. Work sheets and the brochure Škocjan Education Trail **Guidebook** are also available on the Internet on the Škocjan Caves Park Web site.



OBJECTIVES:

- link with natural sciences
- nature protection values
- experiencing nature
- group work & independence of pupils



The objectives are mostly oriented towards **natural sciences** as they deal with learning and experiencing nature, those natural processes and phenomena about which pupils learn from literature (theory) in their schooling. We spend from two to four hours together with children and during this time we are the ones who transmit and present to them the values of nature (or an anti-thesis to a merely anthropocentric – exploitative attitude to nature). Education is defined as a systematic attempt to influence the development of an individual's personality and here we try to educate young people in a spirit of responsible action towards the environment and nature: the spirit of environmental education.

Excursions are designed in such a manner that they try to **focus on pupils/students** as much as possible. Our explanation is mostly intended for them as active participants, taking into account above all cognitive and psychological aspects of classes in nature because it is very important to positively experience what we learn (without fear). In doing so we take into account the principle of dialogue and two-way communication and try to solve set tasks or problems jointly so that pupils (as a group) find solutions – conclusions to set problems – by using previously learnt knowledge. The **independence of pupils** becomes evident with regard to open issues since these demand proper consideration and conclusions. The extensiveness and intensiveness of themes considered are adapted to the level of education of pupils or students.

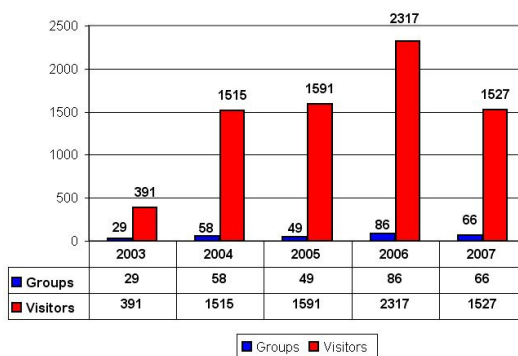
RESULTS:



Over 40 Slovenian and foreign educational institutions, primary schools, high schools, secondary schools and faculties have decided to take part in excursions around the Park and the Škocjan Education Trail. Numerous national and foreign delegations that visit the Park also decide to visit the education trail. The trail is designed in such a way that individual guests can also visit it unaccompanied or without guidance provided by Park's employees.

Since we began to offer **expert guidance** of excursions along the Škocjan Education Trail, we have been visited **by over 280 groups or over 7,300 pupils**, secondary school, university students and expert workers. Primary school pupils represented the largest share of visitors (55%).

Število skupin in število obiskovalcev na ekskurzijah po parku in na učni poti Škocjan v letih 2003 - 2007



CONCLUSIONS:

- young people will be ambassadors of nature protection values
- establishment of cross-border natural field classroom
- continue with work in this directions

Education of young people and tourists during their visit in protected area, is exceedingly important and one of the goals of the park management. Since the establishment of the Škocjan Education Trail project, which is primarily educational in nature, we have presented the unique beauty of this area to over 7,300 young people from Slovenia and abroad.

UNESCO definition of environmental education is » a permanent process in which individuals and the community become more fully aware of their environment and acquire the knowledge, values, skills, experience and also determination which will enable them to act individually and collectively to solve the present and future environmental problems«.

In our **project of excursions** in the protected area, which is also the UNESCO world heritage place, we try to contribute in the process of environmental education (awareness) of young people. For providing all these goals we use interpretation technique. Other important goal is teaching and learning process which develops dynamic qualities in students (willingness to become active in their environment, and accept responsibility for their actions). We try to **stimulate environmental consciousness** of

students, based on the »love of nature«, what is facilitated in such environment of outstanding natural beauties that Škocjan caves are.



We strongly believe that **young people are the driving force** of the world and that they will be our ambassadors of nature protection values in the future. The strength of this fact and its educational component are an invaluable part of the mission of the Škocjan Caves Park Public Service Agency.

We will strive to continue our successful work with young people with natural science excursions around the Škocjan Caves Park. Field work with young people requires professional collaborators who possess specific knowledge and are familiar with the ways children comprehend nature protection and learn about natural phenomena. An adequate number of professionals devoting sufficient attention to this activity is, therefore, central to the successful implementation of the natural science excursions project.

The translation of work sheets into other languages would enable us to better present the Karst and natural heritage protection to **numerous foreign** secondary school and university students who also visit the Park on excursions. The Škocjan Caves Park is gradually establishing a "natural science field classroom" which is accessible, open and presented to a wide circle of visitors to this unique UNESCO site.

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