

TOWARDS A NETWORK ON THE DEVELOPMENT AND PROTECTION OF THE CAVES OF ARCHAEOLOGICAL AND PALEONTOLOGICAL INTEREST IN THE ISLAND OF CRETE

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Abstract: The department of Paleoanthropology-Speleology of the Greek Ministry of Culture has proposed the creation of a network on the development and the protection of 8 caves of archaeological and paleontological interest in the island of Crete. The aim of this project is the promotion of the speleotourism in Crete, the scientific study of caves as physical and archaeological monuments and the protection of their environment.

Keywords: development, protection, archaeology, paleontology, Crete

The department of Palaeoanthropology-Speleology of the Greek Ministry of Culture is responsible for the research, the study and the protection of the Greek caves. Among the research programs of this department, a project for the creation of a network on the development and protection of the caves of Crete has been undertaken. The aims of this program are primarily the protection of the caves and secondly the augmentation of the speleotourism.

The island of Crete has been chosen for two reasons:

1. Crete is an island which receives more than 2,000,000 visitors, with a permanent stay of 7 to 10 days.
2. There are more than 6,000 caves, with speleological interest, most of them having also archaeological or paleontological interest.

The network includes 8 caves: 3 already developed archaeological caves, 4 caves of archaeological interest, visited by people and 1 cave of



Fig. 1. The island of Crete and the caves of the network

paleontological interest (Fig. 1). The particularity of each cave and its special characteristics must be taken under consideration, in order to attain the proper development.

The first group includes three already developed caves:

1. Zoniana Cave. This cave has been opened to the public in 1996, after an excavation research which has brought to light archaeological remains from neolithic to roman period. The cave receives more than 30,000 visitors per year.

2. Melidoni Cave. The cave has been developed in 1988 and receives about 10.000 visitors per year. The excavation that took place in the cave has also revealed archaeological remains from neolithic to roman period.

3. Diktaion Andron (Psychro). This cave is related to the Greek mythology and to the myth of Zeus (Davaras, 1989). The excavation research has proved that the cave has been used as a sanctuary of Zeus, fact that is strongly supported by the large number of findings, such as pots, votive figurines, ornaments, etc., dating mostly from Minoan to archaic period (1800 BC-700 BC). The cave became touristic in 1976, and receives more than 100,000 visitors per year.

In the second group, there are four caves which present archaeological interest and are visited by people, without been developed:

1. Idaion Andron. The cave is connected with the myth of the birth of Zeus. The excavation research brought to light very rich archaeological remains from neolithic to roman period, among them many votive items of silver and gold (Sakellarakis, 1996). Nowadays, works of development are in progress, including the improvement of the access to the cave and the construction of a ramp inside the first chamber of it. These works are undertaken by the local Municipality in collaboration with the Greek Ministry of Culture.

2. Milatos Cave. The cave of Milatos presents archaeolo-

gical and historical interest and there is a small chapel inside it. A stone path leading to the cave has been constructed by the Municipality and excavations are in progress, revealing findings from minoan to byzantine period.

3. Pelekita Cave. This cave has archaeological remains dating from the minoan period. An archaeological research has been planned, while studies in collaboration with the University of Crete, the Ministry of Culture and the Municipality of the region are in progress, in order to develop the cave.

The main suggestions for these two groups of caves which present archaeological interest are the followings:

- More scientific work must be done aiming both to the protection of the environment of the caves and the safety of the visitors. Geological and static studies, biological research and environmental studies are some of the works that will contribute to the better development of the caves.

- The archaeological research is planned to continue in the caves where it is not yet accomplished. Anyhow, the excavation research must come before the development, although the two works can take place at the same time.

- Information must be given to the visitors about the history of each cave and its use during the ancient times. The planning of educational material and posters, the establishing of tables with pictures, photos and



Fig. 2. Draft of the cave of elephants

informative texts, as well as the setting of models and representations of the archaeological finds in some cases are some of the aims of this project.

THE CAVE OF ELEPHANTS

In the third group there is a cave of very important paleontological interest. Its entrance is now 10 m under the sea level and leads to a main chamber, yet above sea level, 125 m length and 20 m width (Fig. 2).

The “cave of elephants”, at Vamos in Chania, presents a great interest, both as a natural monument and a scientific finding. The underwater geological and paleontological research brought to light a large number of elephant bones (Symeonidis *et al.* 2001), which associated with the rich stalagmitic decoration and generally the morphology of the cave, made it unique. Therefore, the touristic development of the cave has been proposed, using new methods, making the cave a very important site for the tourism (Giannopoulos, 2006).

A suggestion for the construction of an underwater transparent corridor for entering the cave has been made (Fig.3). This solution permits the visitors to have a unique view of an underwater cave and at the same time prevents the damage of the speleo-environment caused by the entrance of people. It is self-evident

that environmental studies will precede the realization of this project, along with a number of other studies, such as geological, hydrogeological and seismic studies.

SOME GENERAL PROPOSALS

In addition, some general proposals have been submitted:

- The establishment of a central administration for the management and the promotion of the network.
- The publication of a guide book with all the information concerning the caves and their history.
- The motivation of the public to visit the caves of the network, establishing reduced prices, one ticket for all caves, etc.

This project will hopefully contribute to the conservation and protection of these caves, as well as to the increase of the speleotourism in Crete, making some of the most important Greek caves well known to the large public.



Fig. 3. Representation of the underwater corridor in the cave of elephants

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