

NOMINATION TO THE WORLD HERITAGE LIST

Convention concerning the Protection of the World Cultural and Natural Heritage

Name: SKOCJAN CAVES

Identification No: 390

Date received by WH Secretariat: 31.12.85

Contracting State Party having submitted the nomination of the property in accordance with the Convention: YUGOSLAVIA

Summary prepared by IUCN (April 1986) based on the original nomination submitted by Yugoslavia. This original and all documents presented in support of this nomination will be available for consultation at the meetings of the Bureau and the Committee.

1. LOCATION:

In the commune of Sezana, east of Trieste. 45°40'N, 14°00'E.

2. JURIDICAL DATA:

A major part of the grotto system is located within the protected site and is considered to be a natural and cultural monument. The legislation which applies to the area is the Law of Protection of Natural and Cultural Heritage and by a Decree giving specific protection to the grottos.

The protected area is in public ownership except for a small number of parcels which remain in private hands. The area is open to public access and the acquisition of the private enclaves is not envisaged in the management documents.

3. IDENTIFICATION:

The protected area extends over 200ha and includes four deep and picturesque chasms, Sokolak in the south, Globocak in the west Sapen dol and Lisicina in the north. They are components of the system of grottos and are alike floristically. Apart from the 2.5km of river the Mahorcic grotto is included which has several underground lakes and five cascades.

The grottos are a karst feature and are the beginning of a system of underground passages from their source to the Gulf of Trieste in Italy. In places the surfaces of the galleries at several levels have collapsed and give the appearance of deep chasms. The river enters the Skocjan grotto in an underground passage 350m long, reappearing in the bottom of a 150m deep and 300m long chasm, before disappearing into a passage 2km long. This passage reaches heights of up to 148m and widths of 100m. There are five galleries and a canal. A gallery (500m long) of stalactites and stalagmites leads to the surface. The total length of the grottos in Skocjan is over 5km with a depth of 230m in certain places. In total there are 25 cascades along the river. A.C. Waltham in his book The World of Caves noted 'its enormous river galleries make it one of the wonders of the world' (p. 98). The surroundings of the grotto consists of 30 areas of archeological excavation revealing that the site has been occupied for more than 10,000 years. A further 18 areas exist in the peripheral region.

A mixture of habitats are represented corresponding to the floras of Central Europe, the Mediterranean, Submediterranean, Ilyrian and Alpine all of which are present side by side in the Great Valley. This unique combination allows Mediterranean species (such as Adiantum capillus veneris to grow next to Alpine species (such as Primula auricula). The endemic Campanula justiniana is present here at its type locality. It is classified as Rare by IUCN.

The system of grottos is rich in speleofauna and a major habitat for Microtus nivalis and the endemic Proteas anguinus. The underground galleries hold five species of wintering bat in large numbers. The area is a wintering site for Tichodroma muraria.

4. STATE OF PRESERVATION/CONSERVATION:

The grottos, chambers and entrances of the Skocjan Caves are very well preserved despite the large numbers of visitors. The only building work carried out has been safety walkways and bridges. The entrances are locked to permit control of visitor numbers. Ever since the first scientific studies were carried out in the 19th century the grotto system has been considered an important karst phenomena in Europe and all organizations responsible for it have maintained it intact.

The total population of 400 people are present in three villages (Skocjan pri Divaci, Matavan and Betanja) within the protected area. Pollution of the river Reka, caused by industrial discharges 30km away once threatened the Skocjan grottos. At the end of 1982 an agreement was signed to combat degradation of the river. Measures taken should restore the quality of the river to pre-industrial levels before 1990.

5. JUSTIFICATION FOR INCLUSION ON THE WORLD HERITAGE LIST:

The Skocjan Caves System nomination, as presented by the Government of Yugoslavia provides the following justification for designation as a World Heritage property:

a) Natural property

(iii) Superlative Natural Phenomena, formations or features. Skocjan Caves are a well preserved unique example of Karstic erosion. The underground river galleries, of impressive size are unique in the world. The area is important for fundamental research on Karst which has been going on since the 19th Century. The geological terms "karst" and "dolina" originated there.

(iv) Rare and Endangered Species. The ecosystem preserved in the dolinas contains a number of rare and endangered species. In the cave systems live several rare animal species.

b) Cultural values of the area are being reviewed by ICOMOS.

WORLD HERITAGE NOMINATION -- IUCN TECHNICAL EVALUATION390 SKOCJAN CAVES (YUGOSLAVIA)1. DOCUMENTATION:

- (i) Consultations: Yugoslavian Government Officials (16), H. Bibelriether, B. Sket, F. Howarth, A. Cigna, H. Trimmel, P. Chapman.
- (ii) Site visit 15 July 1986.
- (iii) Literature Consulted: Waltham, The World of Caves; Resumes of International Symposium on Protection of Karst, 1982.

2. COMPARISON WITH OTHER AREAS

Karst cave systems are found in many locations throughout Europe and the world. There are another 5000 caves in the Republic of Slovenia alone. The most comparable notable site is the Postojna caves (on the Yugoslavian indicative list as Notranjski Karst). These later caves are larger and longer and have a richer fauna than Skocjan but have been modified significantly by tourism development and much higher pollution levels. In terms of its ecological, research and educational values Skocjan is considered a superior example of on-going natural processes due to less degraded conditions and to its more exceptional display of formation and erosional features at different levels. Other caves in Yugoslavia that are also worthy of special note are found north of Dubrovnik, in the interior of Hercegovina, and at Pivka, Krizna and Planina. The dimensions of the dolines and the subterranean canyon at Skocjan, however, are most exceptional and it is judged as the most suitable for World Heritage consideration within Yugoslavia.

Other particularly significant caves in Europe occur at Punkevní in Czechoslovakia, Gaping Gill in the UK, Vercours and Trou du Glaz in France, Castellana in Italy and Pierre St. Martin in Spain. Many of these also contain unique features and many are deeper and longer than those at Skocjan. None however, have the long tradition of scientific research that gave rise to the geological terms "karst" and "doline" as have the cave systems found in Slovenia. The archeological values of the caves may also be among the most significant in Europe. Skocjan's special significance is further reflected in the proceedings of the International Symposium on Protection of Karst which was held there in 1982.

3. INTEGRITY

Cave systems are sensitive to disturbance and public use of the caves at Skocjan is closely controlled and regulated. Cave entrances can be locked and all groups are accompanied by guides. A short and unobtrusive outdoor escalator has been installed to facilitate exit from the caves and this will lead to increasing levels of visitor use (in 1985, 50,000 tourists visited the caves) which could result in greater impacts in future.

There are two important issues relating to integrity that will require careful monitoring. The first is industrial water pollution of the Reka River, which flows through the caves. Organic wastes from a fibreboard factory accounted for one-half of the pollution and this will cease this year with the opening of a new factory which will not pollute. An agreement with Italy to clean up the river by 1990 should restore water quality to acceptable levels.

A second concern is the possibility of inappropriate developments in the surface zone surrounding the underground caves. The three small villages here are being restored and tourism parking is being developed. Careful planning to ensure that the 200 ha cultural landscape of the site remains authentic and natural must be strengthened. Both the commune of Sezana and the Institute for Preservation of Monuments have responsibility for protection. The possibility of a more extensive regional park is a welcome initiative.

4. ADDITIONAL COMMENTS

The map submitted in the nomination does not indicate that the underground chamber of Hanke Canal extending in the direction of Druskovec is a part of the site. This should be corrected to ensure that this Canal is included as a part of the property inscribed.

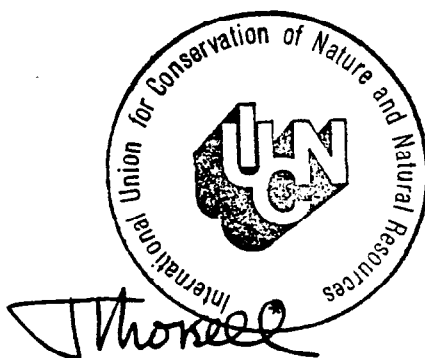
5. EVALUATION

Of the many thousands of limestone cave systems in existence the Skocjan group is certainly one of the most unique. Its relatively natural condition and array of underground features have made it one of the most famous study localities for classical karst in the world. It thus meets criteria ii for natural sites as it provides an exceptional display of on-going geological processes. The collapsed dolines and underground caverns and waterfalls also merit its inclusion on the basis of criteria iii. With regard to its integrity the main concerns are its small size, the need for protection of the surrounding cultural landscape, the reduction of water pollution levels, and careful controls on visitor use.

6. RECOMMENDATIONS

The Skocjan caves should be inscribed on the World Heritage list as a natural property. The Committee should endorse planned improvements in water quality and encourage strengthened land use planning of the surrounding zone.

(1) (11/1)



**Območje naravnega in
kulturnega spomenika
Škocjanske jame**

**Territoire du monument
naturel et culturel
Škocjanske jame**

