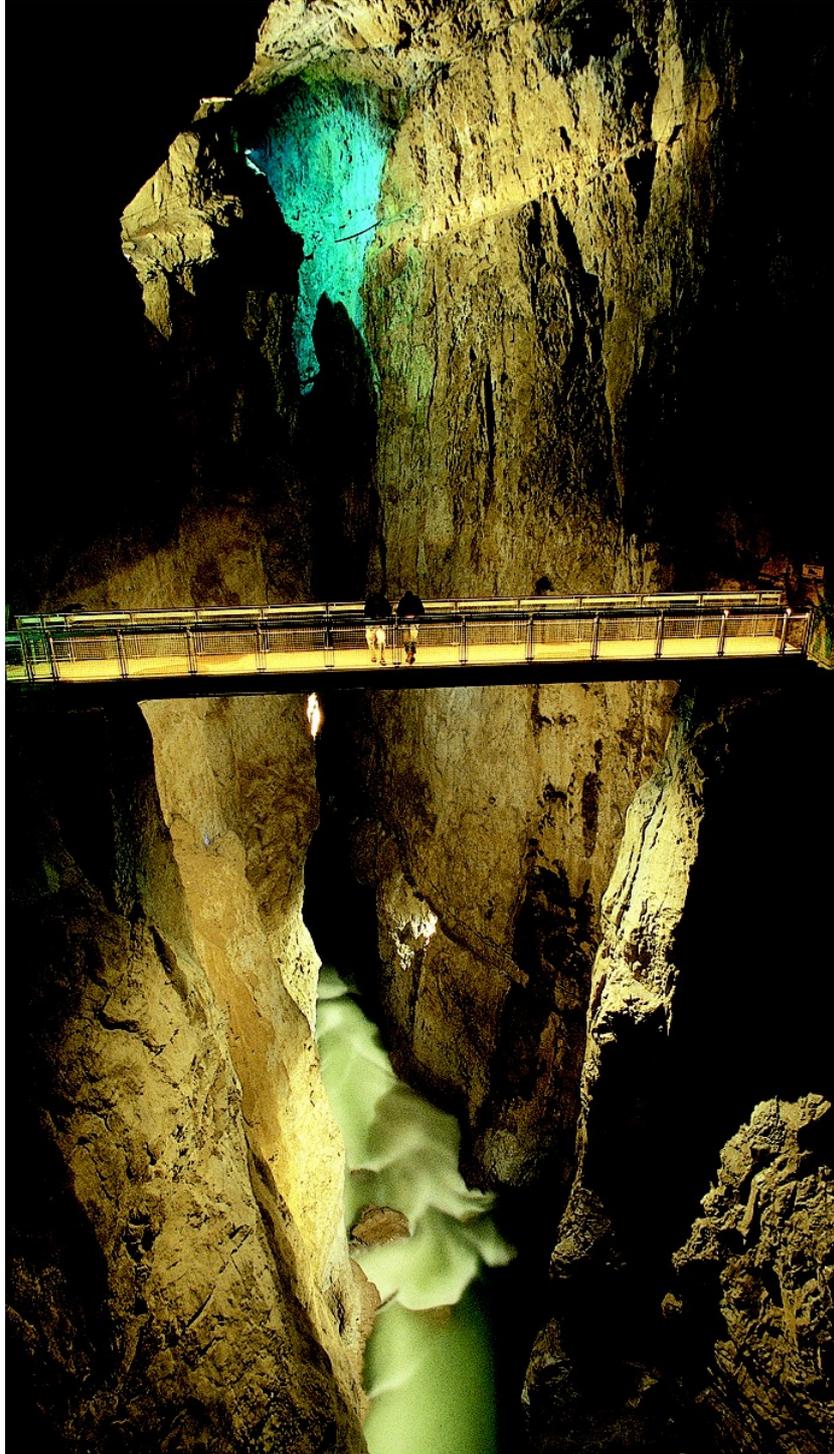


Wetland Tourism: Slovenia - Škocjan Caves



Slovenia, Bridge over the Reka River © Borut Lozej, Archive of the Park Skocjan Caves

The Ramsar Secretariat selected 14 case studies for a publication on wetlands and sustainable tourism, to be launched at the 11th Conference of Parties, July 2012. www.ramsar.org/tourism

Škocjan Caves are not only one of the three Slovenian Ramsar Sites (1999), but also a World Heritage Property (1986) and a karst UNESCO MAB Biosphere Reserve (2004). The area includes one of the largest known underground canyons in the world, as well as two spectacular dolines where the Reka River enters the cave system. The caves and the landscape that surrounds them are settings of extraordinary natural beauty. The sinking river within immense dolines, large underground chambers, and caves in the area are great attractions for visitors. They form the protected area of the Škocjan Caves Regional Park covering 413 hectares (4.13 km²), whilst the buffer zone covers another 45,000 hectares (450 km²) and extends over the entire Reka River basin.

The Reka River is the greatest Slovenian sinking river. Just before the river disappears underground the average discharge of the Reka River is 9 m³/s, though that varies between the minimum of 0.16 m³/s and the maximum discharge of almost 400 m³/s. The Reka River is thus a typical torrent, and after heavy rains the floods can appear unexpectedly. Entering the cave

system the flood water can rise more than 100 metres.

The caves and the Ramsar Site support numerous endemic (crustaceans, cave beetles) and endangered animal species (such as *Miniopterus schreibersi*, one of the rare bat species), and they are the first underground wetland in the world to have received Ramsar status.

The buffer zone encompasses a remarkable contact of karst and non-karst bedrock in the southwestern foothills of the high Dinaric karst plateau. At the far eastern corner of the buffer zone there is the highest non-Alpine mountain in Slovenia, Mount Snežnik, which at 1,796 meters reigns over the area. From its springs in Croatia, the river flows northwest across Slovenia to Italy. Along its course it is joined by a number of tributaries – from the karst area to the right and from the flysch Brkini Hills to the left of its main stream. After a 50 km long surface course, it sinks into the Škocjan Cave systems and flows underground towards the Timavo springs (in Italy) at the western edge of the Kras.



Slovenia, Underground Canyon © Borut Lozej, Archive of the Park Škocjan Caves

The huge forests of Mount Snežnik, understood to be one of the largest non-settled areas in Europe, provide habitat for bears, wolves, lynx and several other animals in an area where the Mediterranean, Central European, and Alpine ecosystems intermingle. These extensive mostly natural forests are managed with minimal human interference. Meadow and wetland habitats support rich bird life, including corncrake (*Crex crex*), a globally endangered species, little bittern (*Ixobrychus minutus*), common quail (*Coturnix coturnix*), kingfisher (*Alcedo atthis*), bee-eater (*Merops apiaster*) and other rare bird species, as well as a population of the globally endangered butterfly species, the Scarce Large Blue (*Maculinea teleius*). The region has great cultural and historical significance as it has been inhabited since the Neolithic period. The long-term coexistence of nature and people is also reflected in the settlement patterns and buildings.

Legal framework

The Škocjan Caves Regional Park Act, adopted at the national level, established a strict protection regime for the cave system and its immediate surroundings (413 ha), and a rather soft regime in the buffer zone covering the river basin of the Reka River (45,000 ha). The Regional Park is managed by the Public Agency (Park Škocjanske jame, Slovenija) responsible for the protection, management and supervision of the protected area, conservation of nature, maintenance and restoration of cultural monuments and sights within the protected area; continuous monitoring and analysis of the state of the natural and cultural heritage; coordination or organization of research related to the Park; participation in international projects; promotion, presentation and raising public awareness about the Regional Park; organization of informal education; close collaboration with the owners of individual cultural monuments located in the protected area; provision of professional assistance and counselling; and performance of guide visits around the Park and in the caves.

According to the legislation, all activities in the buffer zone that are likely to alter the water

regime and the water quality of the Reka River are prohibited, with the exception of flood protection measures. Additionally, any other activity affecting the environment, representing a risk or danger to the environment, or causing harmful impacts to the protected area are also forbidden.

The water regime in the caves has been affected by the barrages upstream in the Reka River, which have been designed to control flow volumes. On the one hand, the purpose is to ensure that the river flow downstream is maintained above the ecological minimum; on the other hand, it is to prevent flooding and provide water supplies for some areas. The Park has provided guidelines and has been actively involved in the expert group working on establishing the flow levels required to support ecosystems along the river and in the caves. The Park is also collaborating with the Environmental Agency of the Republic of Slovenia to monitor the river flow and the overall water regime in the Reka River watershed.

In consultation with the local municipalities and other stakeholders, the Park prepares and implements five-year management plans approved by the Slovenian government and the Parliament. The Park also cooperates closely with the Slovenian National Commission for UNESCO and other specialized organizations and agencies, such as the Karst Research Institute of the Slovenian Academy of Sciences and Arts, the Slovenian Environmental Agency, the Institute of the Republic of Slovenia for Nature Conservation, and the Institute for the Protection of Cultural Heritage of Slovenia, as well as with a number of nongovernmental organizations. Moreover, regular meetings with local people throughout the year and common activities help provide for the development of the area.

The Park successfully obtained European funds for the restoration of four buildings now housing the offices of the Public Agency and museum collections of ethnological heritage, history of cave exploration, and natural science heritage of the area. The most recent achievements co-financed by the European Structural Funds include restoration of the pathway in the cave below the

village of Škocjan, which was reopened in spring 2011 after being closed for 46 years, and the restoration of a cultural monument used as a promotion and congress centre to enrich the possible uses of the Park in the development of sustainable tourism.

The Park also works with individual ministries and locals to keep traditional agricultural practices alive and market local food products to tourists, to develop new tourist products based on the region's heritage, and to support establishment of local tourism businesses, such as small accommodation facilities.



Slovenia, Mahorčič Cave, © Borut Lozej, Archive of the Park Škocjan Caves

Tourism is the most important economic activity in the area, and the Park Škocjanske jame plays a key role in the local economy. In cooperation with local stakeholders, particularly the community of Divača, where the caves are located, and the local tourist association –

Turistično društvo Škocjan (Škocjan Tourist Association) – the area has been promoted in different ways, for example, with a website, brochures, books and other publications, workshops, tourism fairs, and advertisements. The Park also works closely with the Slovenian

The Ramsar Secretariat selected 14 case studies for a publication on wetlands and sustainable tourism, to be launched at the 11th Conference of Parties, July 2012. www.ramsar.org/tourism



A Ramsar Case Study on Tourism and Wetlands

Tourist Board (Slovenska turistična organizacija – STO) and the Tourist Association of Slovenia (TZS).

In cooperation with other protected areas in Slovenia, including UNESCO World Heritage Sites and other Ramsar Sites, the Park is promoting the conservation of nature and cultural heritage as well as sustainable development. The caves' international recognition as a World Heritage Site and Ramsar Site helps to increase the significance of the caves to visitors, and at the same time the image that the visitors collect when visiting the area also helps them to understand the meaning of the world heritage and internationally important wetland areas – i.e., the work of these international conventions. As part of its work on tourism, the Regional Park is recognized in Slovenia and abroad and new opportunities have thus been identified to expand and enrich sustainable tourism activities and increase local employment. This is linked with the Park's work to support economic, social and cultural development of local communities, for example, by working with local tourist associations to improve tourism products, and by encouraging traditional agriculture and ecologically-oriented food production for tourists. Training, education and awareness-raising programmes are organized to highlight the significant nature, natural resources, and cultural heritage.

The caves receive between 95,000 and 100,000 visitors each year. Three-quarters of these are international tourists and the remaining one quarter are Slovenian residents. The highest number of visitors is in the summer period, particularly during July and August, although the Park is endeavouring to distribute the numbers of visitors more evenly throughout the whole year. All visitors are guided through the caves by trained guides. The carrying capacity of the protected area and the cave system is assessed, and it depends on a number of factors. There is a tendency to limit the number of visitors to 50 persons per tour. In the Park's experience, subject to the availability of guides, up to 1,000 visitors per day can be guided through the cave system without causing adverse effects on nature and the

cave environment. Additionally, there are also other trails in the protected area that the visitors can take – in fact, the Škocjan Education Trail was awarded recognition as the best thematic trail in Slovenia in 2011.

Presently, the entrance fee is EUR 15.00 per person for a guided tour of the cave system, with a reduced price for children, students and senior citizens. The yearly income generated from the entrance fees and souvenirs can provide for almost two-thirds of the Park's annual budget. Since its establishment the Park has been growing in the number of its employees, and increasingly it has provided financial resources for the improvement of infrastructure in the three villages within the protected area. On the one hand, Park has improved existing or developed new tourist facilities, including a visitor centre and museum collections, as well as walking and cycling trails. These facilities, combined with excellent information and interpretation of the heritage for visitors, are important in maintaining the caves as a major tourist attraction, and consequently, for generating significant income that is used for the management of the Regional Park. On the other hand, a part of the income is also distributed to local inhabitants for the maintenance of typical karst architecture and cultural landscape. Therefore, in addition to its own developments, the Park has invested from its own revenues more than 430,000 € between 1999 and 2011 into buildings, better appearance, and infrastructure of the three villages within the protected area.

The main tourist attractions in the buffer zone include the Snežnik Mountain with its foothills, Vremščica Mountain and Brkini Hills, and a number of valuable natural sites, as well as cultural monuments, such as the Prem Castle. Well preserved nature offers a possibility for active weekend tourism as well as stationary tourism. There are several international cycling and walking trails crossing the area, including the Slovenian Mountain Trail, the E6 European Long Distance Trail, and the Via Alpina. Sawmills and flour mills used to be important along the Reka River and some of them have been restored and

can be visited. The area is also known for its gastronomy and local products, such as apples and plums, plum and juniper brandy, cheese, honey, vinegar and local dishes. There are more than ten tourist farms offering typical local dishes and accommodation for visitors.

Having been included in the Biosphere Reserve Programme in 2004, the Park also enlarged the sphere of sustainable development and education. In 2011, the Ramsar Convention on Wetlands and MAB Programme were celebrating forty years of raising awareness of the importance of nature as well as of the necessity to conserve and use the

natural resources in a sustainable way. It also provides the key link for the Schools Network of the Park Škocjanske jame, including primary schools in the catchment area as well as two schools downstream from the protected area in Italy. The Park is successfully developing its materials for education, training, and awareness raising of the importance of nature and of the cultural heritage. The most obvious results of these efforts are shown every year by the activities of the schools network and, in general, by the increasing numbers of school children visiting the protected area.



Slovenia, Viewpoint © Borut Lozej, Archive of the Park Skocjan Caves

The Ramsar Secretariat selected 14 case studies for a publication on wetlands and sustainable tourism, to be launched at the 11th Conference of Parties, July 2012. www.ramsar.org/tourism



Sources:

Information provided by Rosana Cerkvnik, Park Škocjanske jame, Slovenija / Škocjan Caves Regional Park

The Programme for Protection and Development of the Škocjan Caves Regional Park for the 2006–2010 Period

The Programme for Protection and Development of the Škocjan Caves Regional Park for the 2011–2015 Period

Periodical (Yearly) Reports of the Škocjan Caves Regional Park

Magazine Kras, November 2011, No 113 (a special issue dedicated to 25 years of Škocjanske jame being inscribed into UNESCO World Heritage List and 15 years of Škocjanske Jame Regional Park)

Web: UNESCO World Heritage (<http://whc.unesco.org/en/list/390>)

Wikipedia (http://en.wikipedia.org/wiki/%C5%A0kocjan_Caves)

Park's website (<http://www.park-skocjanske-jame.si>)