

## THE REVIEW OF SPELEOLOGICAL RESEARCHES IN BOSNIA AND HERCEGOVINA UNTIL 1914

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The first speleological researches had been taking place in Bosnia and Hercegovina as early as second half of the XVIIth century, thanks to the scientist and philosopher from Dubrovnik *Nikola Gučetić* (1549-1610) who had published his discourse titled "Sopra le Metheore d'Aristotile" in Venice in 1584, and an unchanged edition in 1585 (*DADIĆ 1984*). He had given descriptions of two caves from the surroundings of Dubrovnik, i.e. the phenomenon of wind in one of them. Although he hadn't mentioned it's name, the cave can rather precisely be identified as Vjetrenica Cave on Popovo Polje. The phenomenon of wind Gučetić had explained reposing on Aristotels natural philosophy. This has been the first scientific interpretation of a natural phenomenon in caves.

Turkish traveller and chronicler from XVIIth century *Evlija ČELEBIJA* (1979) gave description of greater number of caves, upon his arrival in our parts in 1660 and again in 1664. He didn't go inside these caves, but gave only descriptions of their entrances and surroundings.

From XVIII century Sarajevo's chronicler *M. M. BAŠESKIJA* (1968) has to be mentioned for he gave descriptions of several caves in Sarajevo and it's surroundings.

Western Europe had rapidly increased it's interest in European part of Turkish Empire in XIXth century, as a result of which there is a greater number of works about Bosnia and Hercegovina from that period. Among the first, there is a large chronicle by *A. BOUÉ* (1840), where he describes rivers which disappear into earth, sinkholes and caves in Hercegovina. There are two other authors that have to be mentioned from this period, both writing about Vjetrenica Cave: Jesuit *AYALE* (1851), and Russian scientist *GILJFERDING* (1859), the latter crossed first 100-120 meters of the cave in 1858.

Austro-Hungarian Empire has gotten the rule over Bosnia and Hercegovina on Berlin Convention held in 1878. After this many specialists of different profiles simply rushed into these undiscovered parts. Thanks to them a significant improvement in speleological researches has been made throughout the Bosnia and Hercegovina. The first to actually research speleological objects were geodesists and surveyors from Military-Geographical Institute Wien (*MALEZ 1988*). They were all engaged in geographical mapping of the new region, and published their articles in the review "Mitteilungen der Section für Höhlenkunde des Oesterreichischen Touristen-Club" between 1884 and 1888. There are numerous signs of their presence kept until today. One of the most distinctive among them is the sign inscribed in the cave on the hill Piligrad over the village Dobro Polje: "INSURGENTEN HÖHLE 30.3.1883."

Initiation of domestic scientific periodical, especially *Glasnik Zemaljskog muzeja* (Herald of the National Museum) whose first issue was published in 1889, enabled publication of results of speleological researches "at home". The impuls for researches is obvious from the proposition of scientific researches of Vjetrenica Cave sent by the National Government of Bosnia and Hercegovina to the Common Ministry of Finances in Wien. The answer from the ministry was confirmative (*KAPIDŽIĆ 1973*).

Numerous caves and other karst phenomena attracted many explorers, one of them was *MARTEL* (1894), during his excursion in 1893 on the Dinaric karst.

Problems of overflow of Hercegovinian fields, their melioration and water supply in Hercegovina inspired many researchers especially *KARLINSKI* (1892, 1893), *BALLIF* (1896, 1899), *RIEDL* (1897) and *DOLEŽAL* (1899) to explore sinkholes, pits and caves.

Engineers of Railway Management for Bosnia and Hercegovina working in Hercegovina in 1904, and exploring Vjetrenica Cave once again total length 1350 meters. They are the first to come to the Great Lake (RADOVANOVIĆ 1929).

Famous explorer Absolon came to Vjetrenica for the first time in 1912. Two years later, together with Czech teacher Kral, he discovered hidden main channel of the Vjetrenica Cave, and reached the distance of 2500 meters from the entrance (Deep Lake). Absolon said that the process of discovering the main channel was the most difficult in the history of exploration of underground karst so far (ABSOLON 1916). Speleoarchaeological researches commenced soon after the National Museum had been formed in 1888. Until 1914 only about 10 objects have been researched (BASLER, MULAOMEROVIĆ 1986).

Biospeleological researches in caves of Bosnia and Hercegovina begin with MILLER (1861). Since the space doesn't allow to mention all involved in gathering and working on the material from caves (MIKŠIĆ 1979; BUTUROVIĆ 1951), only the most important will be mentioned. Among the collectors that is Lucian Matulić from Trebinje, who researched over 200 caves and sinkholes and discovered many new species.

Two speleobiologists are taking distinctive places in the speleology of Bosnia and Hercegovina: Victor Apfelbeck and Karel Absolon.

The first had researched more than 20 caves near Sarajevo, Višegrad and Konjic in 1888. (APFELBECK 1889), collecting large entomological material. It can be said that "Order for protection of Bosnia and Hercegovinan caves, their fauna and other scientific objects found in them" issued by National Government of Bosnia and Hercegovina in 1914 (BASLER, MULAOMEROVIĆ 1986) has been inspired by discoveries of V. Apfelbeck. He was the only member of Martel's "Société de Spéléologie" from Bosnia and Hercegovina (SHAW 1988).

K. Absolon also collected large zoological material from Bosnia and Hercegovina (ABSOLON 1900a, 1900b, 1912, 1913). During the period from 1908-1922 he came to these parts very often. He had been to Vjetrenica more than 27 times.

That would be all on this occasion, bearing in mind that this is only a modest attempt to extract the most important researchers, from the wide majority, on different fields of Bosnia and Hercegovinan speleology. Hoping, of course, that this is only the first conference of this kind; and I would have a chance to compensate omitted.

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