

Discovery and Management of Georgian Caves

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Georgian caves, as natural phenomena, have attracted many researchers for a long time. They were often mentioned in old Georgian chronicles literary sources (Juansheri-11th century, Rustaveli-12th century, Sulkhan-Saba Orbeliani-17th century, etc.) and also in the works of foreign researchers and the records of travelers (Arkanjelo Lamberti-17th century, Diubua De mompere-19th century, Eduard Alpred Martel-20th century, etc.). An especially notable geographer, Vakhushti Bagrationi (18th century) wrote the encyclopedic work "Geography of Georgia," in which there are many interesting facts about Georgian karst and caves. It can be said that the Georgian cave survey began during the era of Vakhushti Bagrationi.

The limestone area of Georgia extends along the southern slope of the Caucasus at a distance of 325 km from the Psou River to the east of the Ertso Lake vicinity and vertically reaches about 2,705 m above sea level (Speleologist's Peak). The total karst area is 4,475 sq. km, or 6.4% of the whole territory of Georgia. It is estimated that karst formation occurs at a depth that exceeds 4,000 meters. Due to such deep conditions of karst formation, Georgia's mountain karst is one of the unique karst regions on Earth. It can be noted that the first three deepest abysses in the world are located in Georgia's high mountainous, Bzipi and Arabika limestone

massifs. The abyss of Krubera, which is the world's deepest cave (2,197 m), was discovered by Georgian researchers in 1960 under the leadership of Professors Levan Maruashvili, Sarma (1,830m), and Ilyuzia-Tovliani-mezheni (1,753m). Therefore, the world's record of karst depth penetration is in Georgia, which was established in the Krubera (Voronja) abyss by the Ukrainian Speleological Association.

The karst and caves are of major importance to Georgia due to both their unique geomorphology and diversity. Many of them have diverse and unique speleothems. Researchers discovered the remains of primitive humans living and traces of their activity in many caves. Kudaro, Tsona, Tsutskhvati, Dzudzuana and Jruchula caves are of world importance as archaeological monuments and need to be managed and protected accordingly. Over the years, scientists at Vakhushti Bagrationi Institute of Geography made important discoveries through scientific study of Akhali Athoni, Sataplia, Tskaltubo (Prometheus) and other cave systems. Their research contributed to tourism development of these beautiful karst features, yet more work is needed to fully understand and protect the cave systems. Through the continued work of researchers at the Vakhushti Bagrationi Institute of Geography, the number of documented caves exceeds 1,500 in Georgia and more work remains to be done.