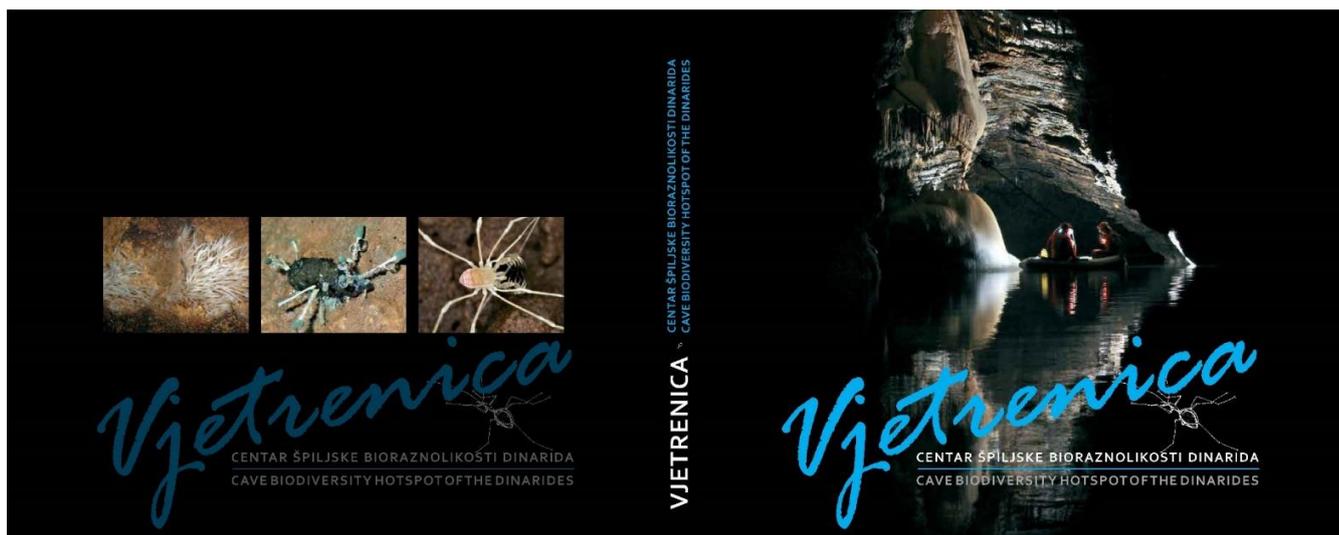


# NEWLY PUBLISHED MONOGRAPH VJETRENICA

By: R. Ozimec & L. Knight



The institutional-development project “Inventory, mapping and monitoring populations of the Natura species the olm (*Proteus anguinus*) and congeria (*Congerius kusceri*) and Natura habitat 8310 (Caves not open to the public) in the future protected area Popovo polje-Vjetrenica” was supported by the Environmental Protection Fund of the BiH Federation, through 2019 and 2020, and conducted by Public Enterprise Vjetrenica from Ravno and ADIPA: Society for Research and Preservation of the Natural Diversity of Croatia. Amongst numerous other activities, as part of the project the monograph **VJETRENICA: Cave Biodiversity hotspot of the Dinarides** was prepared and published at the beginning of 2021.

The bilingual Croatian-English monograph is in horizontal format, printed on HQ paper, vacuum packed in transparent foil, with 356 pages and a hard cover. Along with the text, the monograph includes 323 photographs, 20 drawings, 27 copies, 27 maps, 32 tables and 2 graphs.

## T.1. Vjetrenica Monograph: Basic

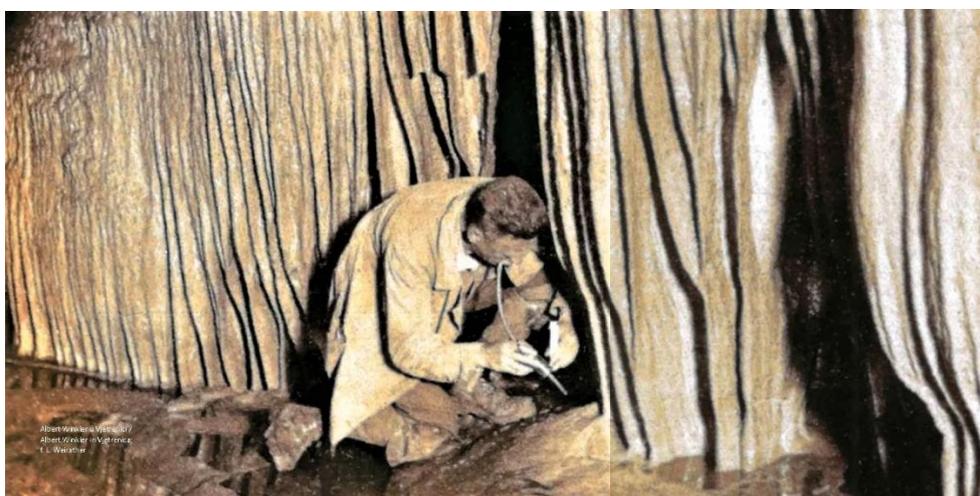
Name	VJETRENICA: Cave Biodiversity hotspot of the Dinarides
Format	240 x 196 mm, landscape
Paper	135 g/m <sup>2</sup>
Cover	Hard 2,5 mm, rounded spine, vacuum packed in transparent foil
Printed	Grafotisak, Grude, BIH; 2000 pcs
Year	2021.
Language	Bilingual, Croatian / English
Pages Nr	356
Attachments	Photos: 323; drawings: 20; Copies: 27; maps: 27; Tables: 32; Graphs: 2
Weight	1375 g
Authors	31 from 12 states
Chapters	7
Subchapters	19
Patron	Environmental Protection Fund of the BiH Federation
Publisher	Public Enterprise Vjetrenica, Ravno, BIH
Co-publisher	ADIPA: Society for Research and Preservation of Natural Diversity of Croatia
Graphic design	Marijana Pekas Lana

The monograph is the work of eminent experts, as many as 31 authors, from 12 countries (in alphabetical order): **Austria, Belgium, Bosnia and Herzegovina, Montenegro, Croatia, Italy, northern Macedonia, Germany, United States, Slovakia, Slovenia, Serbia** and about 20 other contributors of photographs and other material listed in the imprint.

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The monograph begins with the **chapter PREFACES** consisting of the Publisher's preface written by the director of JP Vjetrenica Nikša Vuletić and the Editor's foreword, signed by the editor-in-chief of the monograph Roman Ozimec.



UVOD  
INTRODUCTION

Chapter **2 INTRODUCTION** follows, in which we present the basic framework of Vjetrenica, first the fascinating geo-tectonic system of the Dinarides, then the elements of the Dinaric karst, and Popovo polje and its fantastic speleological features. The following is a concise, very interesting historical overview of the researchers and research in Vjetrenica, and finally, the cave's description.



OPĆI DIO  
GENERAL PART

Within Chapter 3, **GENERAL PART**, the geographical location of Vjetrenica is described, along with extensive information on its speleogenesis, speleomorphology and hydrology, with the latest topographic plan of the cave, which is very elegantly technically incorporated into the book. The microclimate and ecology of Vjetrenica are described, along with all documented habitats, some of which are published here for the first time, along with proposed future classifications. Finally, the previously known paleontological value of Vjetrenica is highlighted, as well as newly discovered archaeological finds, indicating the potential that awaits further researchers.



SPECIJALNI DIO  
SPECIAL PART

The middle Chapter 4 **SPECIAL PART** gives an insight into the great hidden treasure of Vjetrenica, its exceptional biodiversity. The chapter begins with a systematic review of Vjetrenica biodiversity, followed by specialist subchapters dealing with the bacterial / microbial communities of Vjetrenica and, for the first time, its protists, and fungi. The most comprehensive subchapter of the monograph - the animals of Vjetrenica, deals with as many as 40 taxonomic groups (T.3.), some of taxa still not yet scientifically described.

### T.3. Vjetrenica Monograph: List of processed Taxonomical groups of Animals

Turbellaria	Arachnida: Pseudoscorpiones	Myriapoda: Chilopoda
Tricladida	Arachnida: Scorpiones	Myriapoda: Diplopoda
Trematoda	Crustacea: Amphipoda	Entognatha: Collembola
Nematoda	Crustacea: Copepoda	Entognatha: Diplura
Nemertina	Crustacea: Ostracoda	Insecta, Coleoptera
Mollusca: Eupulmonata	Crustacea: Decapoda	Insecta: Orthoptera
Mollusca: Prosobranchia	Cnidaria	Insecta: Diptera, Hemiptera, Lepidoptera, Psocoptera, Trichoptera, Zygentoma
Mollusca: Bivalvia	Annelida: Clitellata	Vertebrata: Pisces
Arachnida: Acari	Annelida: Polychaeta	Vertebrata: Amphibia
Arachnida: Araneae	Crustacea: Mysida	Vertebrata: Reptilia
Arachnida: Opiliones	Crustacea: Isopoda terrestria	Vertebrata: Mammalia
Arachnida: Palpigradi	Crustacea: Isopoda aquatica	



SINTEZE  
SYNTHESIS

Chapter **5 SYNTHESIS** evaluates the speleological and biospeleological features of Vjetrenica and the Popovo polje-Vjetrenica area, for which a Speleological and Biospeleological Catalogue has been prepared and extended to include the entire municipality of Ravno. Threats to and protection of Vjetrenica and its ecological and genetic biodiversity are analysed. This is followed by an interesting overview of completed development projects at Vjetrenica, including the establishment of the first Biospeleological museum in the world. The chapter concludes with a very interesting and possible futuristic vision for Vjetrenica.

Chapter **6 ADDITION** provides a detailed taxonomic list of the entire currently known biodiversity of Vjetrenica, which includes as many as 230 species, of which 96 are obligatory cave species (stygobionts and troglobionts). The monograph concludes with Chapter **7 LITERATURE** for which more than 530 references relating to Vjetrenica have been collected, and partly, together with other specialist references are included in this Chapter with finally about 400 references.

#### T.4. Vjetrenica Monograph: Chapters & Subchapters

- |   |  |
|---|--|
| <b>1. PREDGOVORI (PREFACES)</b>         | <b>1.1. Predgovor izdavača</b> (Publisher's preface)   |
|   | <b>1.2. Predgovor urednika</b> (Editor's foreword)   |
| <b>2. UVOD (INTRODUCTION)</b>           | <b>2.1. Okvir Vjetrenice: Dinaridi, dinarski krš, špilje Popova polja</b> ( <i>Vjetrenica frame: Dinarids, Dinaric karst, caves of Popovo polje</i> ); |
|   | <b>2.2. Sažeti pregled istraživanja Vjetrenice</b> ( <i>Summary of Vjetrenica research</i> )   |
|   | <b>2.3. Vjetrenica: Osobna karta</b> (Personal card)   |
| <b>3. OPĆI DIO (GENERAL PART)</b>       | <b>3.1. Prirodno-geografske značajke šireg područja Vjetrenice</b> ( <i>Natural-geographical characteristics of the Vjetrenica wider area</i> )        |
|   | <b>3.2. Speleogeneza, speleomorfologija i hidrologija Vjetrenice</b> ( <i>Speleogenesis, speleomorphology and hydrology of Vjetrenica</i> )            |
|   | <b>3.3. Mikroklima i ekologija Vjetrenice</b> ( <i>Microclimate and ecology of Vjetrenica</i> )  |
|   | <b>3.4. Paleontologija i arheologija Vjetrenice</b> ( <i>Palaeontology &amp; Archaeology of Vjetrenica</i> )   |
| <b>4. SPECIJALNI DIO (SPECIAL PART)</b> | <b>4.1. Sistematski pregled bioraznolikosti Vjetrenice</b> (Systematic list of Vjetrenica biodiversity)  |
|   | <b>4.2. Bakterijske / mikrobne zajednice u Vjetrenici</b> (Bacterial / Microbial communities in Vjetrenica)  |
|   | <b>4.3. Protisti Vjetrenice</b> (Protista of Vjetrenica)   |
|   | <b>4.4. Gljive Vjetrenice</b> (Fungi of Vjetrenica)  |
|   | <b>4.5. Životinje Vjetrenice</b> (Animals of Vjetrenica)   |
| <b>5. SINTEZE (SYNTHESIS)</b>           | <b>5.1. Valorizacija Vjetrenice i područja Popovo polje-Vjetrenica</b> ( <i>Evaluation of Vjetrenica &amp; Popovo polje-Vjetrenica area</i> )          |
|   | <b>5.2. Ugroženost i zaštita bioraznolikosti Vjetrenice</b> ( <i>Threats &amp; protection of Vjetrenica biodiversity</i> )                             |
|   | <b>5.3. Razvojni projekti Vjetrenice</b> (Vjetrenica development projects)   |
|   | <b>5.4. Vizija budućnosti Vjetrenice</b> (Future vision for Vjetrenica)  |
| <b>6. DODATAK (ADDITION)</b>            | <b>6.1. Bioraznolikost Vjetrenice</b> (Vjetrenica biodiversity)  |
| <b>7. LITERATURA (REFERENCES)</b>       |  |

In conclusion, the episodic, but persistent and professional multidisciplinary research, conducted by many researchers, mostly authors of the monograph, over the last 20 years, has produced many new insights into the unique cave system Vjetrenica, which have been translated into this unique and extensive monograph. Finally, we hope that the published monograph will be a motivation for further research and discoveries in the miraculous **Queen of the Dinarides - Vjetrenica, Speleological Eldorado - Popovo polje**, but also in all other parts of the **Middle-Earth of Europe - the Dinarides**.

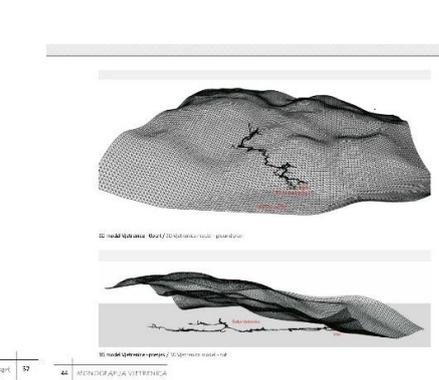
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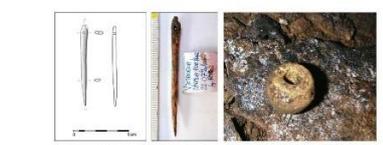
182. **Mapa Vjetrenice** / Map of Vjetrenica. The map shows the geographical location of the Vjetrenica cave system in the Dinarides region, highlighting its unique features and the surrounding landscape.



183. **Ulaz u Vjetrenicu** / Entrance to Vjetrenica. A photograph capturing the entrance to the Vjetrenica cave, showcasing the natural rock formations and the narrow passage leading into the cave's interior.



184. **3D model Vjetrenice** / 3D model of Vjetrenica. A 3D topographic map of the Vjetrenica cave system, illustrating its complex structure and the depth of its various chambers and passages.



185. **Alatarije** / Tools. A collection of speleological tools and equipment, including ropes, ladders, and specialized gear used for cave exploration and research.



186. **Fosilna levača** / Fossilized fly. A photograph of a fossilized fly, showing its preserved structure within a rock matrix, providing valuable insights into the cave's paleoenvironment.



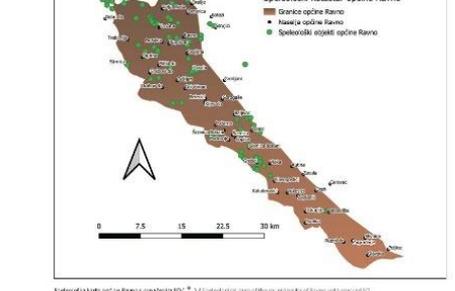
187. **Fosilna levača** / Fossilized wasp. A photograph of a fossilized wasp, showing its preserved structure within a rock matrix, offering a glimpse into the cave's ancient insect life.



188. **Fosilna levača** / Fossilized beetle. A photograph of a fossilized beetle, showing its preserved structure within a rock matrix, highlighting the diversity of ancient life in the cave.



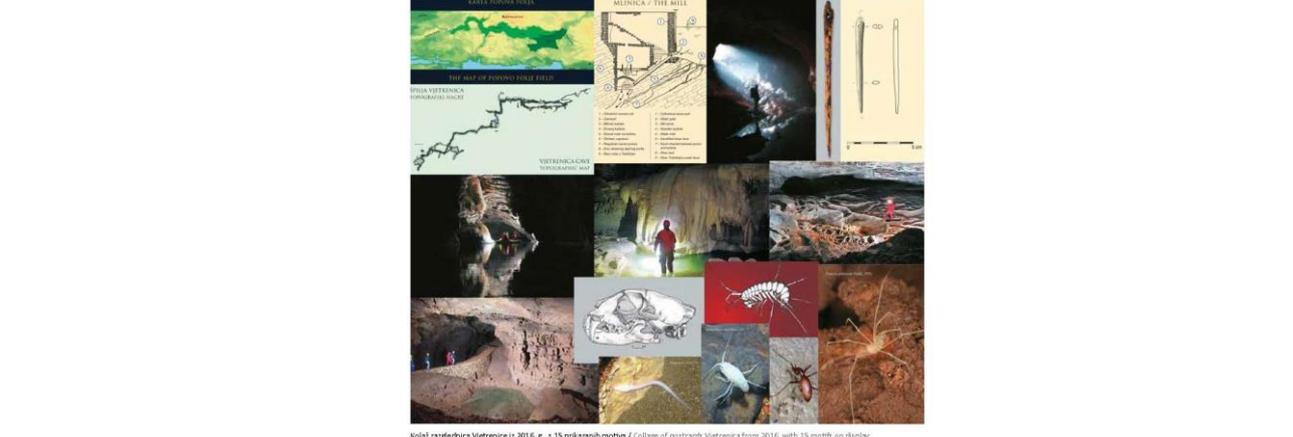
189. **Školjke** / Shells. A collection of fossilized shells and shells of different sizes and shapes, likely belonging to various species of mollusks that once inhabited the cave.



190. **Speleološki katastar općine Ravno** / Speleological map of Ravno. A map of the Vjetrenica cave system, showing its various chambers and passages, and its location within the Ravno municipality.



191. **Unutrašnjost Vjetrenice** / Interior of Vjetrenica. A photograph of the interior of the Vjetrenica cave, showing the rocky walls and the cave's atmosphere, providing a sense of the cave's scale and depth.



192. **Kolaj razglednica Vjetrenice iz 2016. g., s 15 prikazanih motiva** / Collage of postcards of Vjetrenica from 2016, with 15 motifs on display. A collage of 15 postcards from 2016, showcasing various scenes and motifs from the Vjetrenica cave system.